



# Transportation Appendix

## ➤ **Scoping Document**

Boston Transportation Department Transportation Access Plan  
Scope, January 31, 2008

## ➤ **Traffic Counts**

Turning Movement Counts (TMCs)

Automatic Traffic Recorder (ATR) Counts

## ➤ **Trip Generation**

## ➤ **Synchro Level of Service (LOS) Analysis**

LOS Analysis Summary Tables

Existing 2008

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Build Alternatives 2018

## ➤ **Boston College Parking Supply Inventory**

# Scoping Document

January 31, 2008

John Fitzgerald, Senior Management Economic Development  
Boston Redevelopment Authority  
Boston City Hall, 9<sup>th</sup> Floor  
Boston, MA 02201

RE: Boston College Amendment to the IMP Brighton Campus

Dear John:

Thank you for the opportunity to comment on the Institutional Master Plan Notification Form/Project Notification Form ("IMP/NF/PNF") for Boston College's proposed IMP 10 year plan.

Boston College's Institutional Master Plan presents plans for the physical development of Boston College's Chestnut Hill, Brighton and Newton CAMPUSES. The main components of the ten-year Institutional Master Plan are the construction of four new academic buildings, a Recreation Center, UNIVERSITY Center, a fine arts theatre, parking facilities, new and replacement on-campus student housing, and renovations of existing .

The Boston Transportation Department (BTD) has reviewed the Institutional Master Plan Notification Form/Project Notification Form ("IMP/NF/PNF") for Boston College's proposed IMP 10 year plan and has the following comments/concerns:

TRIP GENERATION

- Page 6-11 states that there could be some limited trip generation associated with the retail portions of the projects located on Commonwealth Avenue. Clarification as to what type of retail is being proposed and where along with mitigation measures, analysis and results of the analysis.
- The proponent should be using BT's mode share XX for this area.

## TRANSIT

- The purpose of evaluating the existing routes, ridership, and hours of operation of the MBTA service and Boston College shuttle is to identify redundancies in service and be able to develop recommendations to improve transit services and ridership on the vicinity of Boston College. Please clarify your findings and recommendations on this issue.
- Has the proponent thought about consolidating the MBTA service with the Boston College Shuttle service!?
- Would residents in the area be able to ride the shuttle service?

## PARKING

- What are the current parking fee policies for Boston College and how do they compare to other colleges in the area? What are the new fees and what is the parking fee plan for the next 10 years? Are students offered a discount?
- There are currently 788 parking spaces on the Brighton Campus. The proponent is proposing on building a parking garage for 500 new spaces and displacing 425 spaces. How soon would the 425 spaces be displaced? Immediately or over time?
- The proponent should clearly illustrate the off-campus on-street and off-street parking spaces and on-campus on-street and off-street spaces. This illustration should also include regulatory parking such as; Resident Parking.
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## TRANSPORTATION INFRASTRUCTURE CHANGES

- The propose relocation of St. Thomas More Road needs to be supported by a full traffic analysis showing proposed and existing traffic volumes for all of the proposed options.
- The proponent proposes to enter the Brighton Campus via Lake Street. There are currently 3 entrances via Lake Street. The community has expressed concern about vehicles using these locations. The proponent should clearly indentify what location are going to be used by whom, as well as, submitting a proposed traffic analysis.
- BTD would like to see the proponent tighten up St. Thomas More Road, Fr. Herlihy Drive and Commonwealth Avenue Intersection.
- The proponent should clarify any right of way issues that are associated with the relocation of St. Thomas More Road.
- There is currently an entrance to the Brighton Campus form Foster Street. What will the overall use of the entrance be?

## MBTA Boston College Green Line Station

- The proponent should include a detail design and analysis of the proposed center platform alternative on Commonwealth Avenue. This design and analysis is critical to the traffic management of the intersections of St. Thomas More Road/Commonwealth Avenue, Lake Street/Commonwealth Ave, as well as, the surrounding Community.

### PEDESTRIAN/BIKE PATHS

- The proponent should show in detail how the continuous pedestrian corridor is going to tie all the campuses together.
- The proponent is currently showing a pedestrian bridge at the proposed intersection of St. Thomas Moore Road and Commonwealth Avenue. What was the thought process as to who would use it and will it be handicapped accessible?
- Will bicycle paths and/or lanes be a part of this continuous corridor between campuses?
- BTD would like to see a bicycle lane installed on Beacon Street between Chestnut HILL Avenue and St. Thomas More Road.

BTD looks forward in working with Boston College and the BRA in developing a traffic management plan that will help minimize traffic impacts and improve transportation conditions in the area.

In conclusion I have attached BTD's standard Scope of Work. BTD looks forward in working with Boston College to identify specific components of the Scope of Work that will need to be done. BTD looks forward in working with Harvard University in expediting the submittal of a Draft Project Impact Report (DPIR) and Preliminary Adequacy Determination (PAD).

Sincerely,

William H. Conroy IV,  
Senior Planner

- Cc: Vineet Gupta, Director of Policy and Planning
- John DeBenedictis, Director of Engineering

**BOSTON TRANSPORTATION DEPARTMENT**  
**TRANSPORTATION ACCESS PLAN GUIDELINES**

**And**

**SCOPE OF WORK**

Boston is a dense city, with high levels of vehicular congestion, pedestrian traffic, and parking demand. New development of all types increases travel demand, and will have transportation impacts that require analysis, review, and mitigation. Through the City of Boston's Article 80 development review process, the Boston Transportation Department (BTD) works with development team (the "project proponent") to ensure that they thoroughly evaluate the transportation impacts associated with the proposed project, propose and analyze ways to mitigate these transportation impacts, and implement appropriate mitigation measures.

The project proponent is responsible for assessing and mitigating the short-term and long-term impacts of the proposed project. Submitting the following documentation to BTD:

1. Transportation Access Plan. The Transportation Access Plan shall fully describe all transportation-related issues surrounding the proposed project. It should include the following principal components:
  - Description of Existing Transportation Conditions. A summary of existing traffic, public transit, pedestrian, bicycle, and parking conditions in the study area.
  - Evaluation of the Proposed Project's Long-Term Transportation Impacts. A detailed description of the proposed project and a detailed analysis of the project's long-term impacts on traffic, public transit, pedestrian, bicycle, and parking conditions.
  - Mitigation of the Project's Long-Term Transportation Impacts. Identification of appropriate measures to mitigate project impacts, including physical and operational improvements, travel demand management (TDM), and long-term project impact monitoring.
  - Description of the Project's Short-Term Construction Impacts and Proposed Mitigation. General overview of the project's construction impacts, construction schedule and phasing, and measures to mitigate the short-term impacts. This is a summary of the more detailed Construction Management Plan (CMP) to be submitted to BTD under separate cover.

The Access Plan typically comprises the transportation component(s) of the proposed project's various environment filings, such as the Draft Project Impact Report (DPIR) or the Final Project Impact Report (FPIR); in special cases, the Access Plan may be a separate document. In any case, the Access Plan should adhere to the guidelines and scope of work set forth below. The analysis and reporting guidelines below are designed to be general enough that they will apply to most or all major development projects; they are also designed to be specific enough to ensure adequate information and equitable review of all development projects. These guidelines shall be followed as closely as possible. If the project proponent believes that certain provisions are not applicable to the development in question, the proponent shall obtain BTD's explicit approval to forego those provisions.

2. Construction Management Plan. The Construction Management Plan (CMP) shall include a detailed proposal for the proposed project's construction: schedule, phasing, and occupancy of the public right-of-way, access and delivery requirements, transportation impacts, and mitigation. The proponent shall submit the CMP to BTB, under separate cover from the Access Plan. The project's general contractor typically prepares the CMP. Guidelines for preparation of the CMP are available from BTB. The CMP shall be completed prior to the issuance of a Building Permit from the City of Boston's Inspectional Services Department (ISD).
3. Transportation Access Plan Agreement. The Transportation Access Plan Agreement (TAPA) is a formal legal agreement between the project developer and BTB. The TAPA formalizes the findings of the Access Plan, the mitigation commitments, elements of access and physical design, and any other responsibilities of the developer and BTB. Since the TAPA must incorporate the results of the technical analysis, physical design, and assessment of mitigation requirements, it must be executed after these processes have been completed. However, the TAPA must be executed prior to approval of the project's design through the City of Boston's Public Improvements Commissioner (PIC). An electronic copy of the basic TAPA form is available from BTB. It is the proponent's responsibility to complete the TAPA so that it reflects the specific findings and commitments for the project, and to get BTB review and approval of the document.

## STUDY AREA

The Access Plan shall consist of a thorough analysis of the proposed project's transportation impacts throughout the relevant study area. The study area shall comprise the public right-of-way and important transportation elements of the area described by the following list of intersections:

- a. Commonwealth Avenue @ Lake Street/St. Thomas More Road
- b. Commonwealth Avenue @ Foster Street
- c. Commonwealth Avenue @ Chestnut Hill Ave.
- d. Commonwealth Avenue @ Old Colony
- e. Commonwealth Avenue @ South Street
- f. Commonwealth Avenue @ Brighton Campus Driveway
- g. Proposed St. Thomas Road @ Commonwealth Avenue
- h. Beacon Street @ St. Thomas Moore Road/Chestnut Hill Driveway
- i. St. Thomas Moore Road @ Chestnut Hill Driveway
- j. Father Herilhy Way @ St. Thomas Moore Road
- k. Beacon Street @ College Road/Hammond Street
- l. Beacon Street @ Chestnut Hill Avenue
- m. Beacon Street @ Reservoir Avenue
- n. Lake Street @ Washington Street
- o. Lake Street/Kenrick Street/Glenmont Road
- p. Foster Street @ Rogers Park Avenue
- q. Foster Street Brighton Campus Drive
- r. Foster Street @ Washington Street
- s. Washington Street/ Chestnut Hill Avenue/Market Street

The proponent shall review all relevant project proposals and planning studies that would affect the study area, and incorporate these into the transportation analysis, as appropriate.

## DEFINITION OF TASKS

### Task 1. Description of Existing Transportation Conditions

The Existing Conditions component shall summarize the current status of the transportation system within the study area. It shall focus on the issues listed below, and shall identify any existing problems or deficiencies in the transportation system. The Existing Conditions analysis will form the basis for projecting future conditions, and enable comprehensive assessment of the proposed project's transportation impacts.

- 1.1 Project Site Conditions. Describe general conditions in the vicinity of the project site, including:
  - Existing land use, including existing site square footage, building square footage, number of employees or residents, zoning provisions, and other applicable information
  - Physical condition of the site, existing access and egress
  - Major streets and intersections in the vicinity of the site
  - On-street regulationsInclude a survey of existing conditions.
- 1.2 Traffic. The Access Plan shall include traffic volume counts at the study area intersections for weekday morning and evening peak periods under existing conditions. These shall be classification counts in areas with high volumes of heavy vehicles. The morning and evening peak volumes represent a minimum for traffic impact analysis. Depending upon the nature of the proposed project or local conditions, BTD may require traffic analysis for additional conditions, such as the Saturday afternoon peak.

Existing capacity analyses shall be performed to determine level of service at all study area intersections. Analyses shall reflect realistic peak period characteristics, including pedestrian volumes, requirements for pedestrian phases, curb operations (bus stops, pick-up / drop-off), usable lanes, grade, and percentage of heavy vehicles. Appropriate traffic models will be discussed below.

- 1.3 Parking. The Access Plan shall summarize the parking supply within ¼ mile of the project site. The parking inventory shall focus on publicly available spaces, but shall also include private resident or employee spaces as well, if the information is available. The parking inventory shall include:
  - a. Location (block face for on-street spaces, facility for off-street spaces). Include a graphic representation of the parking supply locations with respect to the project.
  - b. Type of Space
    - On-street (metered, resident parking, unregulated, etc.)
    - Off-street (surface lot or garage, user type: resident, employee, commercially-available, customer, etc.)
  - c. Parking Fees, by Type of Space
  - d. Percentage Utilization During Parking Peak (assume 12 noon)

This inventory can be supplemented with data from published sources such as the BTD's 1987 Downtown Parking Inventory Study, updated as necessary with survey data.



If there is currently parking associated with the project site, the Access Plan shall summarize the parking use and management. The description of existing on-site parking use shall include: number of spaces; occupation of spaces by user type, hour of peak occupancy, turnover rate, parking fees, and any high-occupancy vehicle spaces.

1.4 Transit. The Access Plan shall describe the study area's mass transit system:

a. Transit Supply

- Massachusetts Bay Transportation Authority (MBTA) services, proximity to site
  - Service (mode of transit, line, closest station stop)
  - Service characteristics (frequency during peak periods, geographic connections)
  - Physical characteristics (station conditions, rolling stock)
  - Private transit services (summarize characteristics above)
  - Other transit and high-occupancy vehicle (HOV) services

b. System Utilization

- Capacity by line during peak periods
- Current ridership and percentage capacity utilization by line during peak periods

1.5 Pedestrians. The Access Plan shall include a description of pedestrian conditions on sidewalks and intersections adjacent to the site, including major pedestrian routes and desire lines in and around the site, volumes of pedestrians on these routes, and the conditions of these corridors, including any deficiencies or barriers.

Pedestrian volumes shall be counted and pedestrian level of service shall be calculated at the following intersection crossings and sidewalk locations:

- a. Commonwealth Avenue @ Lake Street/St. Thomas More Road
- b. Commonwealth Avenue @ Foster Street
- c. Commonwealth Avenue @ Chestnut Hill Ave.
- d. Commonwealth Avenue @ Old Colony
- e. Commonwealth Avenue @ South Street
- f. Commonwealth Avenue @ Brighton Campus Driveway
- g. Proposed St. Thomas Road @ Commonwealth Avenue
- h. Beacon Street @ St. Thomas Moore Road/Chestnut Hill Driveway
- i. St. Thomas Moore Road @ Chestnut Hill Driveway
- j. Father Herilhy Way @ St. Thomas Moore Road
- k. Beacon Street @ College Road/Hammond Street
- l. Beacon Street @ Chestnut Hill Avenue
- m. Beacon Street @ Reservoir Avenue
- n. Lake Street @ Washington Street
- o. Lake Street/Kenrick Street/Glenmont Road
- p. Foster Street @ Rogers Park Avenue
- q. Foster Street Brighton Campus Drive
- r. Foster Street @ Washington Street
- s. Washington Street/ Chestnut Hill Avenue/Market Street

Describe pedestrian accommodation at signalized intersections in the study area (i.e. exclusive vs. concurrent, crossing time provided).

- 1.6 Bicycles. The Access Plan shall describe existing bicycle usage, primary bicycle routes, Accommodation of bicycles in the public right-of-way, and the current supply and location of any existing bicycle racks on or adjacent to the project site. On a day with good weather (record date and weather conditions), survey bicycle rack utilization by location. Document storage of bicycles in locations without bicycle racks. Include bicycle volume counts at the following intersections and bike routes:

- a. Commonwealth Avenue @ Lake Street/St. Thomas More Road
- b. Commonwealth Avenue @ Foster Street
- c. Commonwealth Avenue @ Chestnut Hill Ave.
- d. Commonwealth Avenue @ Old Colony
- e. Commonwealth Avenue @ South Street
- f. Commonwealth Avenue @ Brighton Campus Driveway
- g. Proposed St. Thomas Road @ Commonwealth Avenue
- h. Beacon Street @ St. Thomas Moore Road/Chestnut Hill Driveway
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- r. Foster Street @ Washington Street
- s. Washington Street/ Chestnut Hill Avenue/Market Street

- 1.7 Off-Street Loading Guidelines – Harvard University needs to adhere to BTD's 'Off-Street Loading Guidelines', a copy of which is attached for reference. The guidelines can also be accessed from the City of Boston website at [http://www.cityofboston.gov/transportation/off\\_street.asp](http://www.cityofboston.gov/transportation/off_street.asp). Adherence to the 'Off-Street Loading Guidelines' will ensure safe and efficient loading access, minimize adverse impacts on traffic-flow and pedestrian safety, and provide consistent guidelines

## **Task 2. Evaluation of Proposed Project's Long-Term Transportation Impacts**

The central component of the Access Plan is the evaluation of the proposed project's long-term transportation impacts. The Access Plan must evaluate these impacts in detail, for all the transportation modes and aspects that will be affected, including traffic, parking, public transit, pedestrians, bicycles, and service and loading. These impacts must be compared to the appropriate baseline condition, the Future No-Build Condition. The following are the principal issues, modes, and conditions that must be analyzed.

- 2.1 Project Description. The Access Plan shall include a summary of the key project characteristics that are relevant to the project's transportation impacts. These include:
- Project name and street address
  - Study area, including critical intersections
  - Anticipated construction start and completion dates
  - Relevant zoning regulations with respect to use, parking and other characteristics
  - Required permits, variances, and licenses
  - Site area
  - Project's gross square footage and floor-area ratio (FAR)
  - Gross square footage by use
  - Other relevant variables (e.g. number of dwelling units, number of hotel rooms, number of employees)
  - Number of parking spaces, specified by use type
  - Number of loading bays, dimensions of bays, design loading vehicle

- 2.2 Trip Generation Analysis. The Access Plan shall include a clear and detailed trip generation analysis for the proposed uses of the site. This analysis shall include:

- a. Person-Trip Generation. The Access Plan shall summarize the proposed project's person-trip generation, for daily, AM peak, and PM peak trips. For certain uses, person-trips shall also be calculated for other time periods, such as Saturday afternoon peak hour (e.g. cultural or entertainment use in an area with significant weekend congestion).

The person-trip calculations shall be based on appropriate trip generation rates, typically the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 6<sup>th</sup> Edition*. The ITE manual includes comprehensive vehicle-trip generation rates based on surveys in suburban locations throughout the United States. Because Boston benefits from an excellent public transit system and pedestrian access, ITE vehicle-trip generation rates are not directly applicable to resulting vehicle trips. ITE rates shall be used to generate total person-trips by correcting for vehicle occupancy rate (VOR). Appendix xx includes a compilation of the most common ITE trip generation rates and corresponding VOR. The proponent shall use these trip generation rates whenever possible. Where necessary, these trip generation rates may be supplemented by survey data or information from other sources (subject to BTM requirement and/or approval). The person-trip generation analysis shall be summarized in a clear table, in the body of the Access Plan, including all of the following information:

- Land use type
- Square footage, by land use type
- Vehicle-occupancy rate (VOR) assumption, by land use type (for translation of vehicle-trip rates to person-trip rates)
- Daily person-trip generation (by land use and overall)
  - Daily person-trip generation rate (per 1,000 square feet, or per unit)
  - Resulting daily person-trip ends
- AM peak hour person-trip generation (by land use and overall)
  - AM peak hour person-trip generation rate
  - AM peak hour person-trips, entering

- AM peak hour person-trips, exiting
  - PM Peak Hour person-trip generation (by land use and overall)
    - PM peak hour person-trip generation rate
    - PM peak hour person-trips, entering
    - PM peak hour person-trips, exiting
  - Source for trip generation rates
- b. Mode Split and Vehicle Occupancy Rate. Person-trips shall be apportioned among the various principal modes (automobile, public transit, walking, bicycling) using an appropriate mode split. The mode split shall be presented as percentages of automobile, public transit, and walk / bicycle travel. Working with BTM, the Central Transportation Planning Staff (CTPS) has compiled appropriate mode split assumptions for various sections of Boston, according to trip type. Zone 10 should be used to determine these mode splits, along with VOR for automobile trips, are included in Appendix xx. The mode split calculation shall be based upon these assumptions. If the proponent wishes to adjust these mode splits based upon specific project characteristics, the adjustment must be supported by accepted evidence and by appropriate mitigation commitments (e.g. enhanced travel demand management to justify a higher public transit mode share). BTM must approve any adjustments to the mode split and VOR assumptions in Appendix xx. The Access Plan shall include a clear, easily understood table that summarizes the assumptions and the resulting trips by land use type, by trip purpose, and by mode.
- c. Trip Distribution. The trip distribution shall identify the directional split (i.e. north, south, west) of person-trips and vehicle-trips for the specific location and trip types of the proposed project. Detailed trip distribution information for trips to and from all areas of Boston is included in Appendix xx. The trip distribution is allocated by individual mode, and should be applied to the resulting trip totals by mode. The Access Plan shall use this information for trip distribution assumptions, unless BTM recommends or approves other trip distribution assumptions.
- d. Trip Assignment. The distributed trips shall be assigned to the appropriate means of accessing the project: highway routes, surface streets, surface intersections, sidewalks, crosswalks, site access / egress points, and public transit lines. If the project expects to rely upon an off-site parking supply, trips shall be assigned appropriately to these locations. Drop-off, pick-up, and valet trips shall also be assigned appropriately, i.e. both entering and exiting the site access, and entering or exiting an off-site parking area.

Attached appendices include the base assumptions that the project proponent shall use for trip generation rates, mode splits, trip distribution, and vehicle occupancy rate for specified areas of Boston. The proponent may believe that other assumptions should be used due to specific circumstances, such as proximity to public transit (not relevant for downtown zones) or exceptional travel demand management commitments. Where such special circumstances warrant, the proponent may propose alternative assumptions, which are subject to explicit BTM approval.

- 2.3 Future No-Build Condition. The analysis of the proposed project's transportation impacts must be based on a comparison with an appropriate baseline condition. The proposed project's impacts would be felt fully during some future "horizon year" when the

project is expected to be complete, occupied, and operating. The effects of the proposed project (under the "Future Build Condition") are most appropriately demonstrated in comparison to projected transportation conditions during the horizon year without the effects of the proposed project.

- The horizon year shall be five years in the future, unless specific circumstances require that a different time frame be used.
- The Future No-Build Condition shall be based on the Existing Conditions assessment, with the addition of development and infrastructure projects that have been proposed and are expected to be complete and operational by the horizon year (per BTD and BRA instructions).
- The Future No-Build Condition traffic, transit, and pedestrian volumes shall also include a background growth rate of 1 – 1 ½ % per year (depending upon local conditions) added to existing traffic volume counts, transit ridership, and pedestrian counts, unless otherwise specified by BTD.

2.4 Future Build Condition. The central component of the Access Plan is the assessment of the proposed project's long-term impacts. This shall include evaluations of the project's effects on all transportation modes and aspects, throughout the study area.

a. Traffic Impacts.

- i) Traffic Volumes. The traffic analysis shall include diagrams of turning movement volumes generated by the proposed project at all study area intersections, and total turning movement volumes for the Future Build Condition. Therefore, the Access Plan shall include turning movement volume diagrams for AM peak volumes, PM peak volumes, and any other required period, of each of the following:
  - a) Existing Conditions (based on current traffic counts)
  - b) Future No-Build Conditions (Existing Conditions, plus appropriate future changes and growth factor)
  - c) Project-Generated Traffic Volumes (based on trip generation)
  - d) Future Build Conditions (Future No-Build Conditions, plus Project-Generated Traffic Volumes)
  - e) Future Build Conditions with Mitigation (if the proponent plans to undertake any roadway or signalization changes in order to mitigate traffic impacts of the proposed project)
- ii) Traffic Capacity Analysis Software. The Access Plan shall include traffic capacity analyses for Existing Conditions, Future No-Build Conditions, and Future Build Conditions. The capacity analysis shall be performed using an approved and appropriate capacity analysis software program.
  - For intersections that are widely spaced and will operate in isolation, the proponent shall use software based upon the *Highway Capacity Manual* (HCS), 1997 edition.
  - For closely-spaced intersections with long queues that create interaction between intersections, the proponent shall use a computer model, such as Transyt-7F (version 8) or Synchro, that can accurately model these effects. In such cases, the proponent shall model all of the intersections that would interact.

The computer model output shall be attached to the Access Plan as an appendix.

- iii) **Traffic Capacity Analysis Results Summary.** The Access Plan shall include a tabular summary of the traffic capacity analysis, for all conditions (Existing, No-Build, Build) for each intersection as a whole and for each approach of every intersection. The summary shall include the volume-to-capacity ratio (v/c), level of service (LOS), delay, and estimated queue lengths for each study intersection, and for each approach of every intersection. The summary table shall also highlight changes to intersection and individual approach LOS that result from site-generated traffic.
  - iv) **Traffic Counts.** The proponent shall submit, under separate cover, turning movement count summary sheets for each intersection in the study area.
- b. **Parking Impacts.** The Access Plan shall include an analysis of projected parking demand and proposed parking supply.
- i) **Parking Demand Analysis.** The Access Plan shall include an analysis of total parking demand in the horizon year, broken down by land use and user type (e.g. office employee vs. visitor, hotel employee vs. guest, retail employee vs. patron). The parking demand analysis shall include
    - Daily vehicle-trip generation by land use and user type (consistent with mode split and VOR)
    - Parking turnover by land use and user type (cite source)
    - Parking demand peaks by land use and user type
    - Overall parking demand and peak parking demand, based on shared parking among all land uses and user types included in the proposed projectd
  - ii) **Proposed Parking Supply.** The Access Plan shall include a summary of the project's proposed off-street parking supply. Parking supply, and parking costs, plays a central role in determining mode split and vehicular traffic impact. In general, parking shall be limited to minimum supply that is appropriate to the neighborhood, the project's transit access, and the project's mode split. Appendix xx includes a map of parking ratio guidelines by land use and area of the city. The project's parking ratio shall remain within these guidelines. If the parking supply exceeds these guidelines, the proponent must justify the excess parking based on circumstances specific to the project. Higher parking ratios may increase transportation impacts, and necessitate enhanced mitigation measures. The information below shall be summarized in a clear table.
    - Total Spaces
      - Existing
      - Future No-Build (if applicable)
      - Future Build Parking Conditions
    - Parking Allocation
      - Space allocation among various land uses
      - Parking ratios: spaces per thousand square feet or per unit, by land use
      - Specially-designated parking spaces, e.g. vanpools, livery vehicles, rental cars, car-sharing

- Treatment of existing parking spaces, including displacement of existing parking spaces and how the parking demand for these spaces would be met in the Future Build Condition
  - Comparison of Parking Supply and Demand
    - Projected shortfall or surplus of parking spaces, by land use
    - Proposed management of shortfall or surplus
  - Provide a plan of all parking facilities, including layout, access, and size of spaces.
- iii) Off-Site Parking Supply. Describe any anticipated utilization of off-site parking supply (as described in the Existing Conditions section, amended to reflect Future No-Build Conditions) required to satisfy project-generated parking demand.
- On-Street Parking Supply
  - Off-Street Parking Supply
    - Number and type of spaces required (i.e. publicly-available, employee, residential)
    - Resulting parking utilization at 12 noon on a weekday (additional parking survey times may be required, depending upon the nature of the project)
- iv) Proposed Parking Management Plan
- Description of Proposed Parking Operations
    - Access control
    - Valet operations
    - Pass or payment medium
    - Management of operations to prevent illegal parking, violation of 5-minute idling law
  - Parking Fees
  - Management of Specially-Designated Parking Spaces (e.g. vanpool, carpools, rental cars, car-sharing)
    - Location
    - Parking fees
    - Accommodation of increased supply if demand warrants
- c. Transit Impacts. Describe the anticipated impacts of the project on the mass transit system, based on the information about Existing Conditions and the projected transit person-trips (based on trip generation – trip distribution – mode split calculations). Future transit conditions shall be based on transit supply and capacity that is expected to be available in the horizon year; if there is some doubt, the proponent shall consult with BTM and/or the MBTA. The proponent may use generally available MBTA ridership data as a basis for this analysis. The Access Plan shall include the following information:
- i) Transit Trip Distribution
- Distribution of project-generated transit trips by zone
  - Distribution of project-generated transit trips by transit line / route
- ii) System Utilization
- Existing Conditions: Capacity and utilization by line

- No-Build Conditions: Capacity and utilization by line
- Build Conditions: Capacity and utilization by line

d. Pedestrian Impacts. Describe future pedestrian conditions in the study area:

- Pedestrian access to and from the project, pedestrian circulation routes
- Pedestrian accommodation in the project's public spaces (e.g. sidewalk, adjacent intersections, plaza spaces, benches, etc.)
- Pedestrian level of service (LOS) at all surveyed crosswalks, sidewalks and other locations
  - Existing Conditions
  - Future No-Build Conditions
  - Future Build Conditions

NOTE: The traffic capacity analyses must also assume appropriate accommodation of pedestrians in all signalization assumptions. The pedestrian impacts analysis shall describe the assumptions regarding accommodation of pedestrians in the traffic analysis, i.e. pedestrian walk rate and percentage of cycles in which pedestrian phase is called (verify with BTM).

e. Bicycles. Describe bicycle access to, from, and within the project site. Describe bicycle storage and other amenities (e.g. shower and changing facilities) to be provided. BTM will provide guidelines on bicycle storage requirements based on project type and size.

f. Loading and Service. The project must accommodate loading and service facilities in an off-street location. The loading and service plan shall not rely upon loading facilities and truck back-up maneuvers in the public right-of-way. Describe service and loading requirements:

- Number of loading bays
- Services to be provided (e.g. garbage compactor, garbage collection, restaurant service, move-in / move-out, etc.)
- Level of loading and service activity (number of trucks per day or per week)
- Loading and service schedule, schedule restrictions (proponent shall prohibit or strictly limit loading and service activities during peak periods)
- Design vehicle(s)
- Required truck turning movements (show design vehicle turning movements on site plan)
- Major loading and service vehicle routes for site access and egress
- Access for emergency vehicles

2.5 Site Plan. Provide an engineered site plan showing Build Conditions (contrast with existing conditions):

- Public right-of-way layout
  - Roadways
  - Sidewalks
- Vehicular access and circulation
- Service and loading



- Parking
- Bicycle storage
- Proposed on-street regulations

### **Task 3. Mitigation of the Project's Long-Term Transportation Impacts**

Major development projects offer benefits, but they also consume public services and create impacts on public resources. Chief among these impacts is a development's effect on the transportation system. The project proponent is required to quantify and analyze these impacts through the Access Plan. It is then the responsibility of the project proponent, working with BTM, to develop strategies for reducing and mitigating these impacts. These strategies will typically include travel demand management (TDM) measures and improvements to Boston's transportation system.

These transportation system improvements and mitigation measures have associated costs. The proponent should view these costs as an integral component of the overall project cost, necessary to enable the transportation system to accommodate the project's impacts. The mitigation measures benefit the users of the transportation system, in particular the new users associated with the proposed project. Project proponents shall allocate appropriate funding for the mitigation. The mitigation measures associated with a development project will be specified in the project's Transportation Access Plan Agreement (TAPA) between the proponent and BTM.

- 3.1 Travel Demand Management (TDM). Travel demand management comprises a variety of strategies designed to reduce single-occupancy vehicle (SOV) travel and encourage "alternate modes" of transportation (public transit, walking, bicycling). TDM programs are critical due to the disproportionate impacts of SOV travel on congestion, parking demand, air quality, and quality of life. TDM programs are especially important for projects that generate higher trip volumes, create concentrated peaks of demand, and create more impacts related to roadway congestion, parking demand, and vehicle emissions. TDM programs are required even when proponent uses the default analysis assumptions for mode split and VOR, since these default assumptions reflect long-standing TDM efforts and Transportation Management Association programs.

Appropriate TDM measures and requirements will vary depending upon the type of development, the neighborhood, the impact analysis assumptions, and other circumstances. For example, many of the measures below would not apply to a residential development. In the case of commercial office development, some (but not all) of the measures below would be the responsibility of the tenants, rather than the proponent. The proponent will be required to implement those TDM measures that are within its control, and should at least encourage and facilitate such measures. However, if the proponent seeks to base its impact analysis on aggressive assumptions (e.g. a high transit mode share), the proponent must require appropriate TDM measures in its lease agreements with tenants.

In the TAPA, the proponent will be required to implement the following TDM measures (as appropriate to the specific project):

- a. Transportation Coordinator. Designate a full-time, on-site employee as the development's transportation coordinator. The transportation coordinator shall

oversee all transportation issues. This includes managing vehicular operations, service and loading, parking, and TDM programs. In addition, the transportation coordinator will be responsible for the monitoring program and will serve as the contact and liaison for BTD and the Transportation Management Association (TMA)

- b. Ridesharing / Carpooling. Facilitate ridesharing through geographic matching, parking fee discounts, and preferential parking for carpools / vanpools. May be accomplished through membership in a TMA, participation in CARAVAN for Commuters, and/or use of computerized ridesharing software.
- c. Guaranteed Ride Home Program. Offer a "guaranteed ride home" in order to remove an obstacle to transit use and ridesharing
- d. Transit Pass Programs. Encourage employees to use transit through the following measures:
  - Offer on-site transit pass sales or participate in the MBTA Corporate T-Pass Program
  - Offer federal "Commuter Choice" programs, including pre-tax deductions for transit passes and subsidized transit passes
- e. Information and Promotion of Travel Alternatives
  - Provide employees and visitors with public transit system maps and other system information
  - Provide an annual (or more frequent) newsletter or bulletin summarizing transit, ridesharing, bicycling, alternative work schedules, and other travel options
  - Sponsor an annual (or more frequent) "Transportation Day" at which employees may obtain information on travel alternatives and register to participate in ridesharing programs
  - Provide information on travel alternatives for employees and visitors via the Internet
  - Provide information on travel alternatives to new employees
- f. Transportation Management Association (TMA) Membership. Investigate joining a Transportation Management Association. Encourage tenants to join the TMA as well. If no TMA is established in the project area, investigate starting a new TMA or becoming affiliated with an existing TMA. A TMA can provide many of these TDM measures, including ridematching, guaranteed ride home, and transit information and promotional materials.
- g. Bicycle Facilities and Promotion
  - Provide secure bicycle storage (number of spaces will be specified depending upon size of development and type of land use)
  - Provide additional publicly-accessible bicycle storage (number of spaces will be specified)
  - Provide shower and changing facilities for bicycle commuters
  - Promote bicycles as an alternative to SOV travel, provide promotional material on bicycle commuting and bicycle safety, and provide incentives for bicycle use

h. Parking Management

- Charge market-rate parking fees
- Offer preferential parking to carpools and vanpools
- Offer reduced parking rates to carpools and vanpools
- Offer parking "cash-out" option
- Offer garage space for car rentals
- Offer parking space for car-sharing
- Offer parking space, charging facilities for electric vehicles
- Offer parking / layover space for livery vehicles (hotel development)
- Enforce a 5-minute limit on vehicle idling for all users of the Development, in accordance with Massachusetts state law

i. Trip Reduction Strategies. To the degree possible, the Developer shall implement the following strategies for its own on-site employees. The Developer shall also encourage tenants to implement these strategies as well.

- Telecommuting. Reduce overall trip demand by enabling employees to telecommute.
- Flexible Work Schedules. Reduce peak hour and overall trip demand by enabling employees to telecommute, work a compressed workweek, or work hours that enable off-peak commuting.
- Local Hiring. Recruit and hire employees from the local area. Such local employees can more easily use alternatives to SOV travel, including walking, bicycling, and transit.

j. Transportation Monitoring and Annual Reporting. Monitor transportation conditions, conduct employee transportation surveys, and provide BTM with an annual report on findings. This information will be useful to BTM in identifying and addressing issues with travel and access, including transit service, pedestrian and bicycle access, parking, and traffic. This information will enable BTM to pursue improved access for the project, and provide benefits to the proponent. BTM will provide employee survey forms and transportation monitoring forms to ensure uniformity of data.

3.2 Transportation System Improvements. In order to meet Boston's mobility needs as its population, density, and land development increase, Boston's transportation system requires improvements. These improvements offset the transportation impacts of new development. In addition, these improvements can make the traveling experience easier in the vicinity of the project, which accrues to the benefit of the proponent and the development's users.

- a. Geometric Changes and Improvements to the Public Right-of-Way. The proponent may be required to make geometric changes and improvements to roadways, sidewalks, and other elements in the vicinity of the proposed project. These changes and improvements may be necessary in order to enable new circulation patterns resulting from the project and mitigate impacts of new vehicle or pedestrian trips. Changes and improvements shall be designed by the proponent's consultant in consultation with BTM. The project proponent will be required to directly fund and implement all changes and improvements to the public right-of-way, and to obtain any required permits. The proponent shall obtain the approval of the City of Boston's Public Improvements Commission (PIC) for any changes to the public right-of-way. These improvements shall be made with input from BTM, per specifications provided

by BTB, by a contractor approved by BTB, and subject to final BTB inspection and approval.

- b. Traffic Signal Improvements. BTB operates most of the traffic signals in Boston. Improvements to traffic signals in the vicinity of the proposed project may be necessary to manage the increased travel demands placed on the intersection. Improving the operations of these signals can reduce congestion and improve conditions for pedestrians, bicycles, transit vehicles, and general traffic. Typical traffic signal improvements that BTB may require include:

- i) Traffic signal equipment
  - Signal controller
  - Signal heads and pedestrian heads
  - Signal poles and mast arms
- ii) Traffic monitoring equipment
  - System detectors
  - Video monitoring cameras
- iii) Traffic signal communications equipment
  - Communications conduit (4" PVC)
  - Signal interconnect cable

The project proponent will be required to directly fund and implement all traffic signal improvements, and to obtain any required permits. These improvements shall be made with input from BTB, per specifications provided by BTB, by a contractor approved by BTB, and subject to final BTB inspection and approval.

- c. Public Transit System Improvements. New development can add significantly to public transit demand and have other impacts on the transit system. In order to manage this demand and mitigate the impacts, the proponent may be required to make or contribute to transit system improvements. These improvements shall be determined in consultation with BTB and the MBTA. Improvements may include:
- Physical improvements to MBTA system stations and stops
  - Water transportation
    - Dock and/or landside infrastructure improvements
    - Operating subsidy for water transportation services
  - Supplemental transit services. Public transit is the most desirable means of achieving transit access, and the proponent shall make every effort to facilitate transit access to the proposed project via public services. However, there may be some situations in which private supplemental transit services, such as shuttle buses, are necessary.
    - Overall transit demand in the area is too low to justify public transit service, but the proposed project requires transit access
    - The proposed project generates a concentration of trips to and from certain locations, such that a shuttle is feasible and useful in reducing auto trips (e.g. a hotel with airport and/or convention shuttles)

#### **Task 4. Description of the Project's Short-Term Construction Impacts and Proposed Mitigation**

The Access Plan shall include an overview of construction period transportation impacts and proposed short-term mitigation. This shall be a summary of the more detailed Construction Management Plan (CMP) that must be submitted to BTB under separate cover. The

construction management summary in the Access Plan shall provide an appropriate level of information regarding the analysis and proposed management of the impacts of the project during the construction period, including:

- The need for full or partial street closures, street occupancy, sidewalk closures, and/or sidewalk occupancy during construction
- Frequency and schedule for truck movements and construction materials deliveries, including designated and prohibited delivery times
- Designated truck routes
- Plans for maintaining pedestrian and vehicle access during each phase of construction
- Parking provisions for construction workers
- Mode of transportation for construction workers, initiatives for reducing driving and parking demands
- Coordination with other construction projects in the area
- Distribution of information regarding construction conditions and impact mitigation to abutters

# Traffic Counts

# Turning Movement Counts (TMCs)

N/S Street : Lake St / St Thomas Moore  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

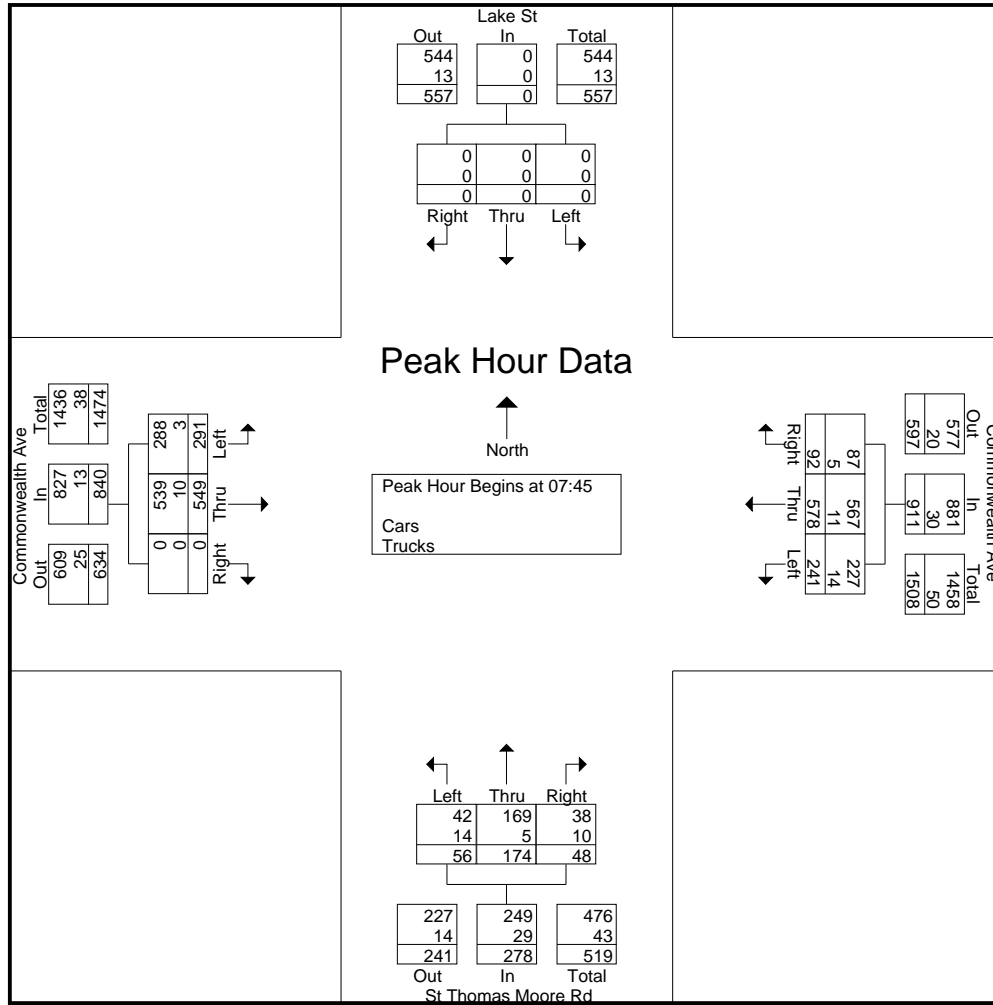
File Name : 39000001  
 Site Code : 39000001  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Lake St From North				Commonwealth Ave From East					St Thomas Moore Rd From South				Commonwealth Ave From West					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	U-Trn	Left	Thru	Right	Peds	Left	Thru	Right	Peds	U-Trn			
07:00	0	0	0	4	33	58	13	0	1	7	35	11	1	32	48	0	0	1	7	237	244
07:15	0	0	0	2	37	102	26	2	2	14	42	11	5	60	64	1	0	0	11	357	368
07:30	0	0	0	5	49	126	13	4	1	18	36	7	2	46	84	1	0	1	13	380	393
07:45	0	0	0	4	56	127	20	2	2	20	56	10	5	72	148	0	3	0	16	509	525
Total	0	0	0	15	175	413	72	8	6	59	169	39	13	210	344	2	3	2	47	1483	1530
08:00	0	0	0	2	54	152	27	6	1	8	37	6	9	75	157	0	2	1	21	516	537
08:15	0	0	0	3	61	155	25	4	1	14	44	13	9	64	121	0	2	1	20	497	517
08:30	0	0	0	12	70	144	20	29	0	14	37	19	31	80	123	0	4	0	76	507	583
08:45	0	0	0	9	93	140	14	34	6	20	27	19	39	72	108	2	5	1	94	495	589
Total	0	0	0	26	278	591	86	73	8	56	145	57	88	291	509	2	13	3	211	2015	2226
Grand Total	0	0	0	41	453	1004	158	81	14	115	314	96	101	501	853	4	16	5	258	3498	3756
Apprch %	0	0	0		28	62.2	9.8			21.9	59.8	18.3		36.9	62.8	0.3					
Total %	0	0	0		13	28.7	4.5			3.3	9	2.7		14.3	24.4	0.1			6.9	93.1	
Cars	0	0	0		426	985	149			90	308	78		495	836	4			0	0	3627
% Cars	0	0	0	100	94	98.1	94.3	100	100	78.3	98.1	81.2	99	98.8	98	100	100	80	0	0	96.6
Trucks	0	0	0		27	19	9			25	6	18		6	17	0			0	0	129
% Trucks	0	0	0	0	6	1.9	5.7	0	0	21.7	1.9	18.8	1	1.2	2	0	0	20	0	0	3.4

Start Time	Lake St From North				Commonwealth Ave From East				St Thomas Moore Rd From South				Commonwealth Ave From West				Int. Total
	Left	Thru	Right	App. Total				App. Total				App. Total			App. Total		
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	0	0	0	0	56	127	20	203	20	56	10	86	72	148	0	220	509
08:00	0	0	0	0	54	152	27	233	8	37	6	51	75	157	0	232	516
08:15	0	0	0	0	61	155	25	241	14	44	13	71	64	121	0	185	497
08:30	0	0	0	0	70	144	20	234	14	37	19	70	80	123	0	203	507
Total Volume	0	0	0	0	241	578	92	911	56	174	48	278	291	549	0	840	2029
% App. Total	0	0	0		26.5	63.4	10.1		20.1	62.6	17.3		34.6	65.4	0		
PHF	.000	.000	.000	.000	.861	.932	.852	.945	.700	.777	.632	.808	.909	.874	.000	.905	.983
Cars	0	0	0	0	227	567	87	881	42	169	38	249	288	539	0	827	1957
% Cars	0	0	0	0	94.2	98.1	94.6	96.7	75.0	97.1	79.2	89.6	99.0	98.2	0	98.5	96.5
Trucks	0	0	0	0	14	11	5	30	14	5	10	29	3	10	0	13	72
% Trucks	0	0	0	0	5.8	1.9	5.4	3.3	25.0	2.9	20.8	10.4	1.0	1.8	0	1.5	3.5





Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00				08:00				07:45				07:45			
+0 mins.	0	0	0	0	54	152	27	233	20	56	10	86	72	148	0	220
+15 mins.	0	0	0	0	61	155	25	241	8	37	6	51	75	157	0	232
+30 mins.	0	0	0	0	70	144	20	234	14	44	13	71	64	121	0	185
+45 mins.	0	0	0	0	93	140	14	247	14	37	19	70	80	123	0	203
Total Volume	0	0	0	0	278	591	86	955	56	174	48	278	291	549	0	840
% App. Total	0	0	0	0	29.1	61.9	9		20.1	62.6	17.3		34.6	65.4	0	
PHF	.000	.000	.000	.000	.747	.953	.796	.967	.700	.777	.632	.808	.909	.874	.000	.905
Cars	0	0	0	0	265	580	81	926	42	169	38	249	288	539	0	827
% Cars	0	0	0	0	95.3	98.1	94.2	97	75	97.1	79.2	89.6	99	98.2	0	98.5
Trucks	0	0	0	0	13	11	5	29	14	5	10	29	3	10	0	13
% Trucks	0	0	0	0	4.7	1.9	5.8	3	25	2.9	20.8	10.4	1	1.8	0	1.5



N/S Street : Lake St / St Thomas Moore  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

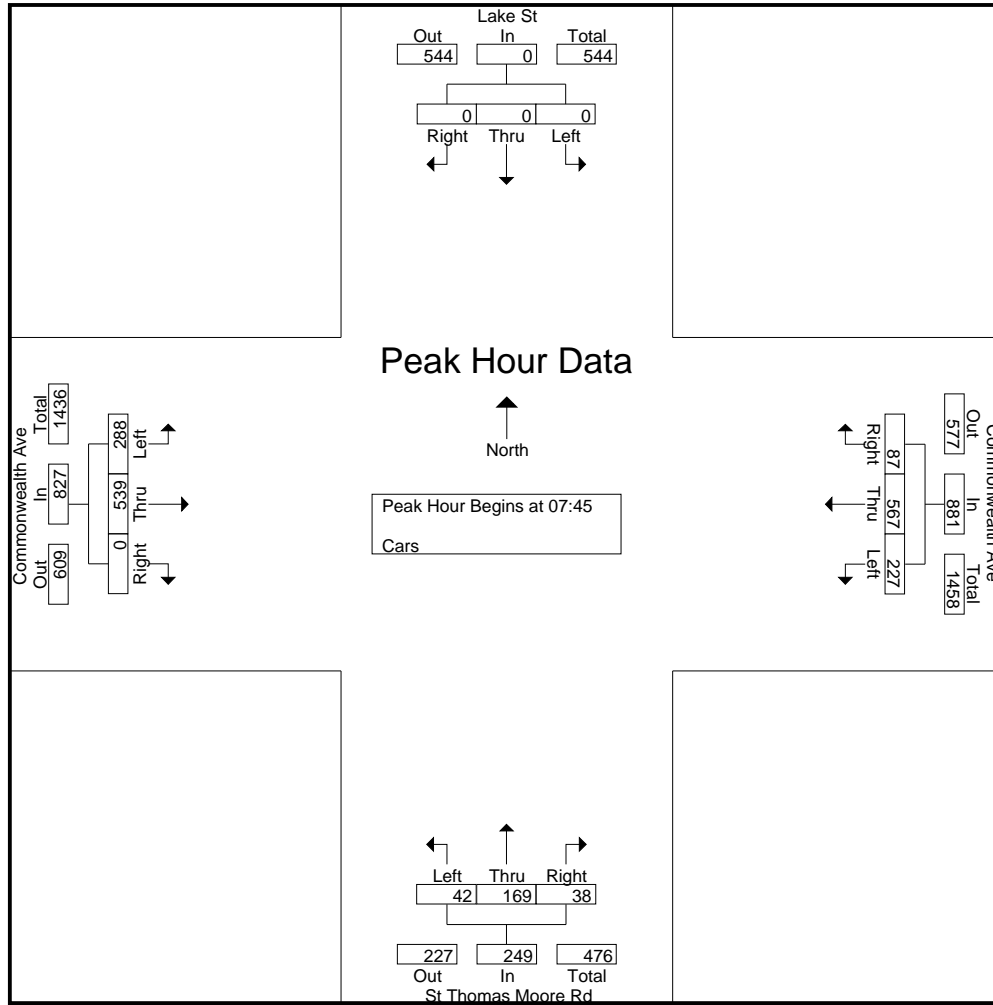
Accurate Counts  
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File Name : 39000001  
 Site Code : 39000001  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Lake St From North				Commonwealth Ave From East					St Thomas Moore Rd From South				Commonwealth Ave From West					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	U-Trn	Left	Thru	Right	Peds	Left	Thru	Right	Peds	U-Trn			
07:00	0	0	0	4	29	57	12	0	1	5	34	9	0	32	47	0	0	0	5	225	230
07:15	0	0	0	2	35	101	24	2	2	11	42	9	5	59	64	1	0	0	11	346	357
07:30	0	0	0	5	45	123	13	4	1	15	36	5	2	45	81	1	0	1	13	364	377
07:45	0	0	0	4	52	124	19	2	2	15	56	8	5	71	144	0	3	0	16	489	505
Total	0	0	0	15	161	405	68	8	6	46	168	31	12	207	336	2	3	1	45	1424	1469
08:00	0	0	0	2	53	150	27	6	1	6	36	4	9	75	155	0	2	1	21	506	527
08:15	0	0	0	3	56	153	22	4	1	10	43	11	9	64	120	0	2	1	20	479	499
08:30	0	0	0	12	66	140	19	29	0	11	34	15	31	78	120	0	4	0	76	483	559
08:45	0	0	0	9	90	137	13	34	6	17	27	17	39	71	105	2	5	1	94	479	573
Total	0	0	0	26	265	580	81	73	8	44	140	47	88	288	500	2	13	3	211	1947	2158
Grand Total	0	0	0	41	426	985	149	81	14	90	308	78	100	495	836	4	16	4	256	3371	3627
Apprch %	0	0	0		27.3	63.1	9.6			18.9	64.7	16.4		37.1	62.6	0.3					
Total %	0	0	0		12.6	29.2	4.4			2.7	9.1	2.3		14.7	24.8	0.1			7.1	92.9	

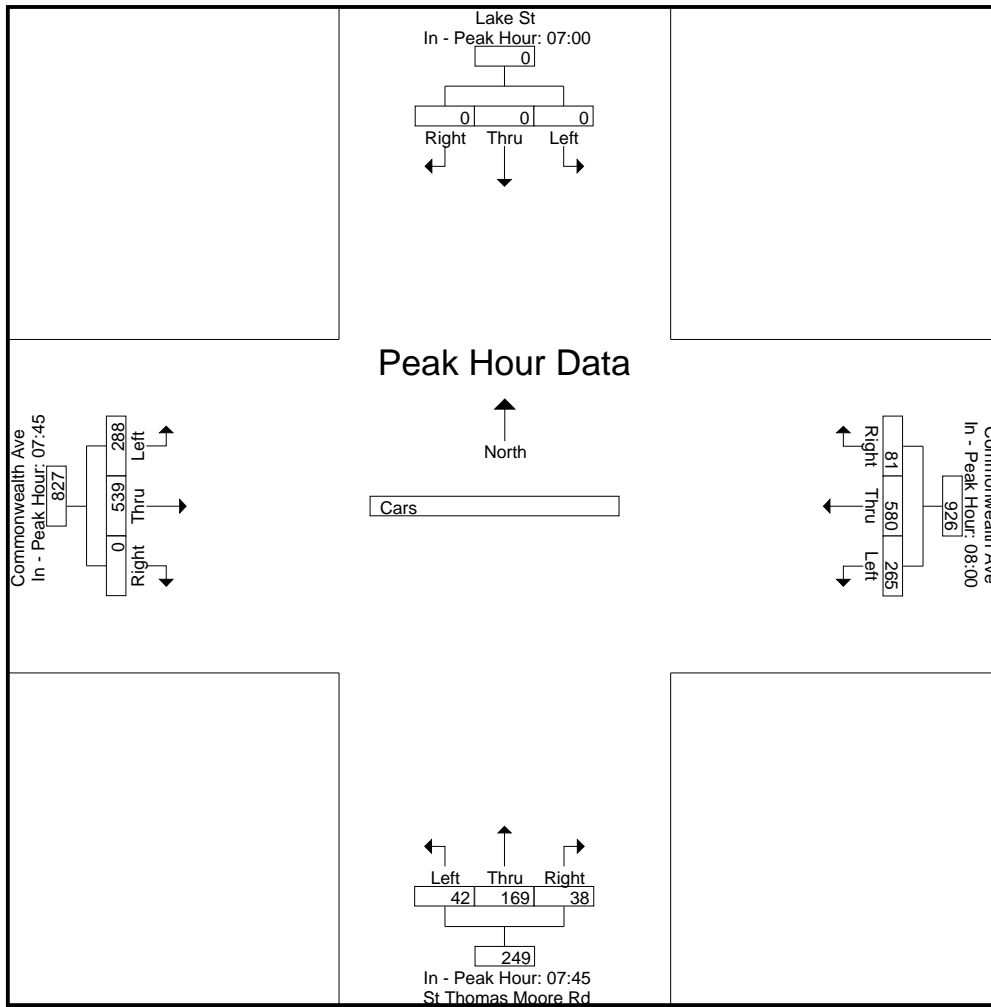
Start Time	Lake St From North				Commonwealth Ave From East				St Thomas Moore Rd From South				Commonwealth Ave From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	0	0	0	0	52	124	19	195	15	56	8	79	71	144	0	215	489
08:00	0	0	0	0	53	150	27	230	6	36	4	46	75	155	0	230	506
08:15	0	0	0	0	56	153	22	231	10	43	11	64	64	120	0	184	479
08:30	0	0	0	0	66	140	19	225	11	34	15	60	78	120	0	198	483
Total Volume	0	0	0	0	227	567	87	881	42	169	38	249	288	539	0	827	1957
% App. Total	0	0	0		25.8	64.4	9.9		16.9	67.9	15.3		34.8	65.2	0		
PHF	.000	.000	.000	.000	.860	.926	.806	.953	.700	.754	.633	.788	.923	.869	.000	.899	.967



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00				08:00				07:45				07:45			
+0 mins.	0	0	0	0	53	150	27	230	15	56	8	79	71	144	0	215
+15 mins.	0	0	0	0	56	153	22	231	6	36	4	46	75	155	0	230
+30 mins.	0	0	0	0	66	140	19	225	10	43	11	64	64	120	0	184
+45 mins.	0	0	0	0	90	137	13	240	11	34	15	60	78	120	0	198
Total Volume	0	0	0	0	265	580	81	926	42	169	38	249	288	539	0	827
% App. Total	0	0	0	0	28.6	62.6	8.7		16.9	67.9	15.3		34.8	65.2	0	
PHF	.000	.000	.000	.000	.736	.948	.750	.965	.700	.754	.633	.788	.923	.869	.000	.899



N/S Street : Lake St / St Thomas Moore  
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 City/State : Brighton, MA  
 Weather : Clear

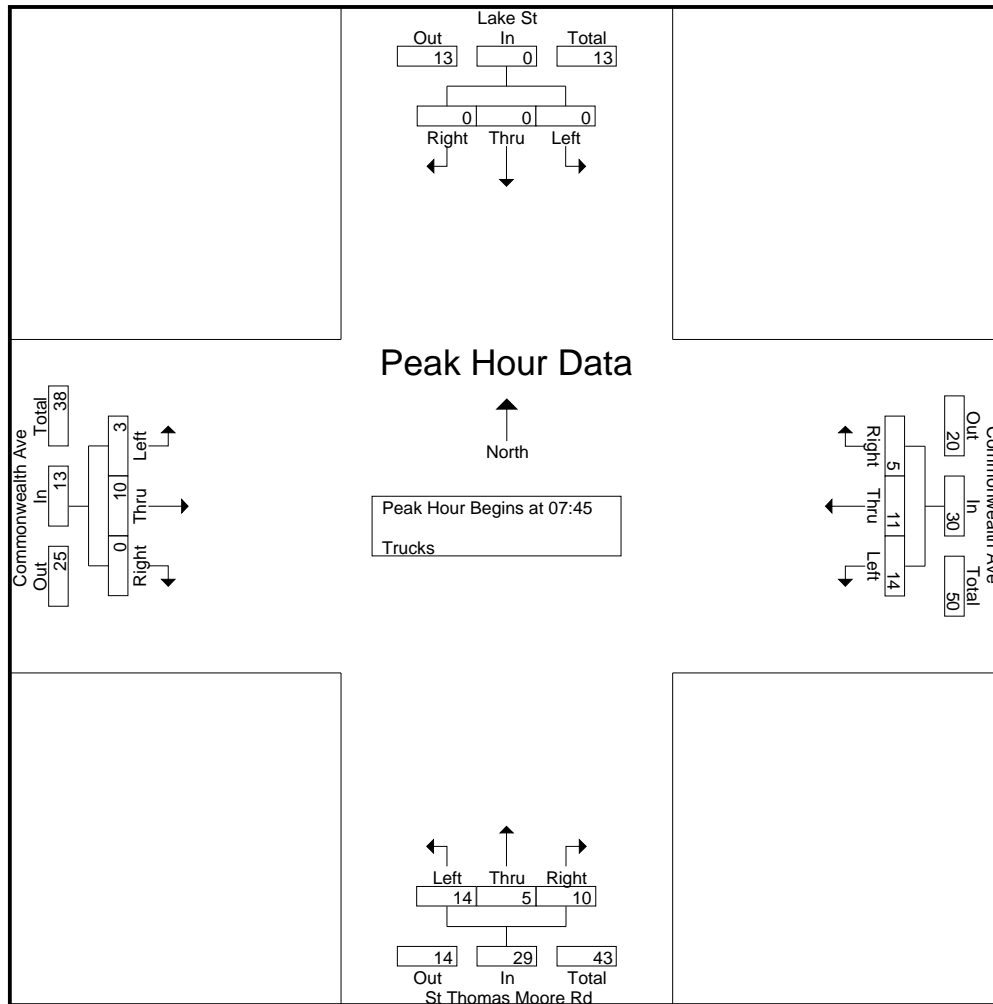
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File Name : 39000001  
 Site Code : 39000001  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Lake St From North				Commonwealth Ave From East					St Thomas Moore Rd From South				Commonwealth Ave From West					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	U-Trn	Left	Thru	Right	Peds	Left	Thru	Right	Peds	U-Trn			
07:00	0	0	0	0	4	1	1	0	0	2	1	2	1	0	1	0	0	1	2	12	14
07:15	0	0	0	0	2	1	2	0	0	3	0	2	0	1	0	0	0	0	0	11	11
07:30	0	0	0	0	4	3	0	0	0	3	0	2	0	1	3	0	0	0	0	16	16
07:45	0	0	0	0	4	3	1	0	0	5	0	2	0	1	4	0	0	0	0	20	20
Total	0	0	0	0	14	8	4	0	0	13	1	8	1	3	8	0	0	1	2	59	61
08:00	0	0	0	0	1	2	0	0	0	2	1	2	0	0	2	0	0	0	0	10	10
08:15	0	0	0	0	5	2	3	0	0	4	1	2	0	0	1	0	0	0	0	18	18
08:30	0	0	0	0	4	4	1	0	0	3	3	4	0	2	3	0	0	0	0	24	24
08:45	0	0	0	0	3	3	1	0	0	3	0	2	0	1	3	0	0	0	0	16	16
Total	0	0	0	0	13	11	5	0	0	12	5	10	0	3	9	0	0	0	0	68	68
Grand Total	0	0	0	0	27	19	9	0	0	25	6	18	1	6	17	0	0	1	2	127	129
Apprch %	0	0	0		49.1	34.5	16.4			51	12.2	36.7		26.1	73.9	0					
Total %	0	0	0		21.3	15	7.1			19.7	4.7	14.2		4.7	13.4	0			1.6	98.4	

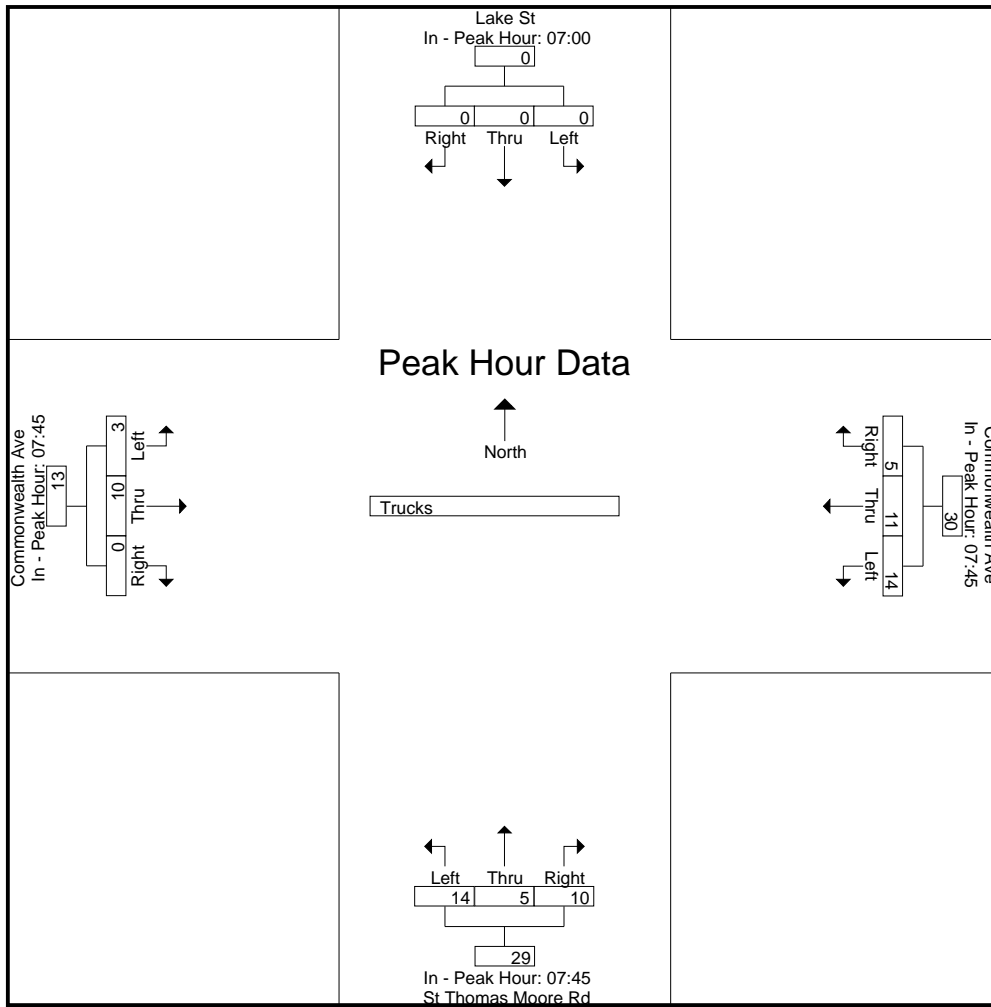
Start Time	Lake St From North				Commonwealth Ave From East				St Thomas Moore Rd From South				Commonwealth Ave From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	0	0	0	0	4	3	1	8	5	0	2	7	1	4	0	5	20
08:00	0	0	0	0	1	2	0	3	2	1	2	5	0	2	0	2	10
08:15	0	0	0	0	5	2	3	10	4	1	2	7	0	1	0	1	18
08:30	0	0	0	0	4	4	1	9	3	3	4	10	2	3	0	5	24
Total Volume	0	0	0	0	14	11	5	30	14	5	10	29	3	10	0	13	72
% App. Total	0	0	0		46.7	36.7	16.7		48.3	17.2	34.5		23.1	76.9	0		
PHF	.000	.000	.000	.000	.700	.688	.417	.750	.700	.417	.625	.725	.375	.625	.000	.650	.750



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00				07:45				07:45				07:45			
+0 mins.	0	0	0	0	4	3	1	8	5	0	2	7	1	4	0	5
+15 mins.	0	0	0	0	1	2	0	3	2	1	2	5	0	2	0	2
+30 mins.	0	0	0	0	5	2	3	10	4	1	2	7	0	1	0	1
+45 mins.	0	0	0	0	4	4	1	9	3	3	4	10	2	3	0	5
Total Volume	0	0	0	0	14	11	5	30	14	5	10	29	3	10	0	13
% App. Total	0	0	0	0	46.7	36.7	16.7		48.3	17.2	34.5		23.1	76.9	0	
PHF	.000	.000	.000	.000	.700	.688	.417	.750	.700	.417	.625	.725	.375	.625	.000	.650





N/S Street : Lake St / St Thomas Moore  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

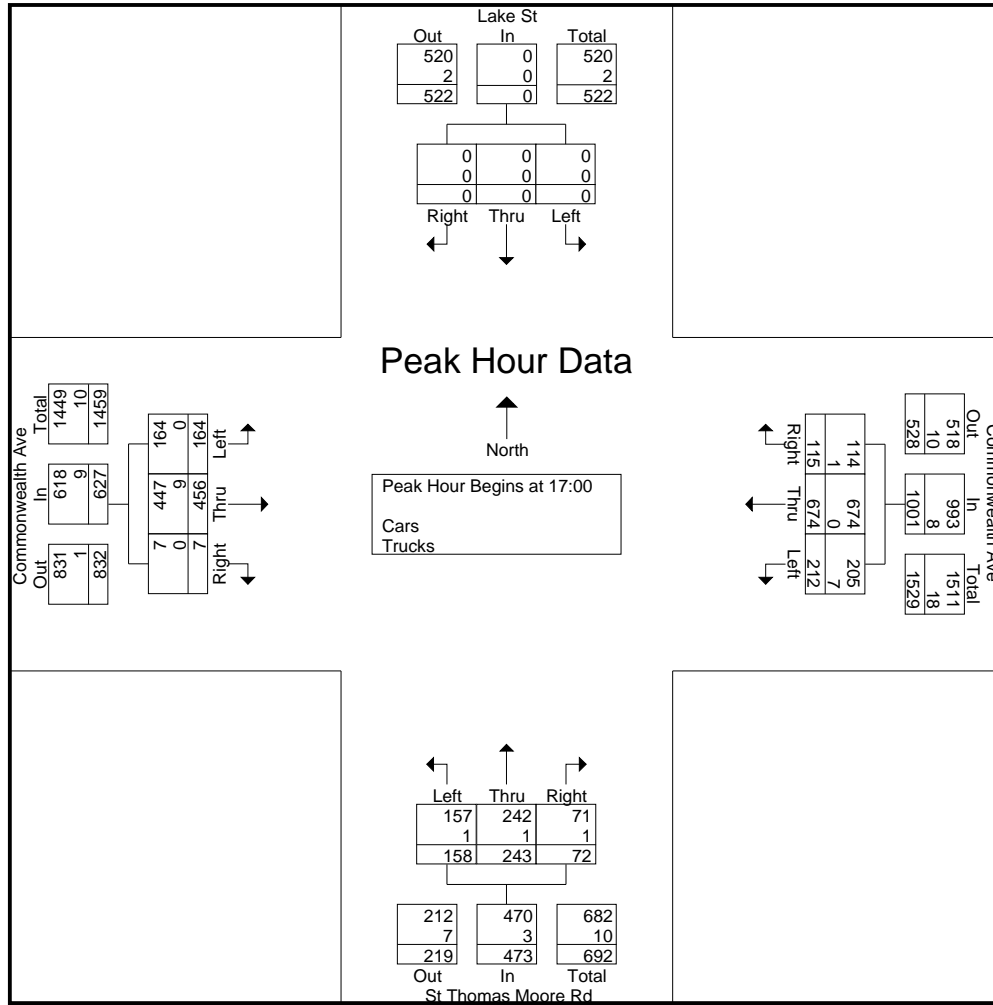
Accurate Counts  
 978-664-2565

File Name : 39000001  
 Site Code : 39000001  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Lake St From North				Commonwealth Ave From East					St Thomas Moore Rd From South				Commonwealth Ave From West					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	U-Trn	Left	Thru	Right	Peds	Left	Thru	Right	Peds	U-Trn			
16:00	0	0	0	14	61	123	28	13	4	34	68	17	8	32	68	2	10	0	49	433	482
16:15	0	0	0	10	59	169	22	30	5	32	53	21	19	42	79	2	18	2	84	479	563
16:30	0	0	0	11	46	109	19	14	2	36	46	13	7	41	109	0	13	0	47	419	466
16:45	0	0	0	14	38	143	24	10	2	31	46	15	8	36	111	4	13	0	47	448	495
Total	0	0	0	49	204	544	93	67	13	133	213	66	42	151	367	8	54	2	227	1779	2006
17:00	0	0	0	10	39	175	27	11	9	47	72	15	13	35	101	1	16	0	59	512	571
17:15	0	0	0	15	57	185	33	12	6	40	54	15	8	41	113	0	11	0	52	538	590
17:30	0	0	0	7	52	150	28	11	3	41	60	24	6	47	100	3	9	2	38	505	543
17:45	0	0	0	22	64	164	27	15	1	30	57	18	9	41	142	3	6	0	53	546	599
Total	0	0	0	54	212	674	115	49	19	158	243	72	36	164	456	7	42	2	202	2101	2303
Grand Total	0	0	0	103	416	1218	208	116	32	291	456	138	78	315	823	15	96	4	429	3880	4309
Apprch %	0	0	0		22.6	66.1	11.3			32.9	51.5	15.6		27.3	71.4	1.3					
Total %	0	0	0		10.7	31.4	5.4			7.5	11.8	3.6		8.1	21.2	0.4			10	90	
Cars	0	0	0		400	1212	205			290	455	137		314	806	15			0	0	4263
% Cars	0	0	0	100	96.2	99.5	98.6	100	100	99.7	99.8	99.3	100	99.7	97.9	100	100	100	0	0	98.9
Trucks	0	0	0		16	6	3			1	1	1		1	17	0			0	0	46
% Trucks	0	0	0	0	3.8	0.5	1.4	0	0	0.3	0.2	0.7	0	0.3	2.1	0	0	0	0	0	1.1

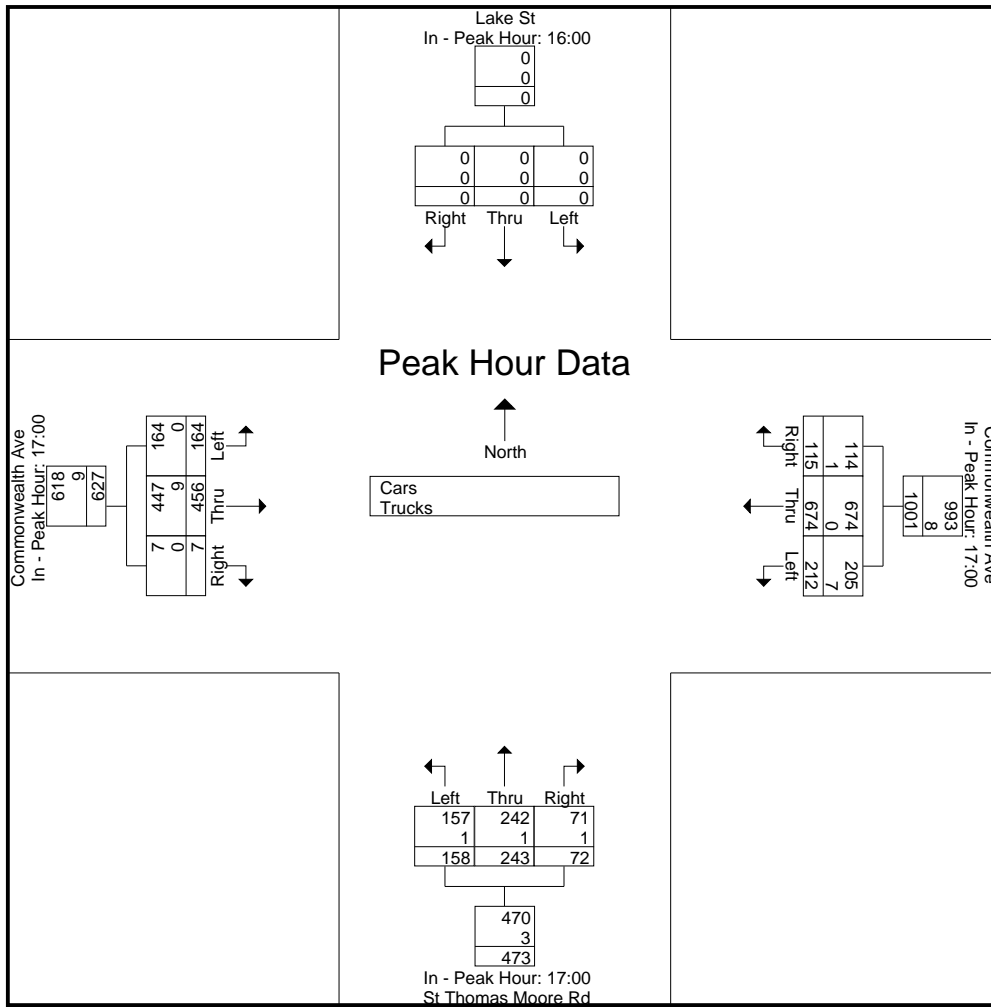
Start Time	Lake St From North				Commonwealth Ave From East				St Thomas Moore Rd From South				Commonwealth Ave From West				Int. Total
	Left	Thru	Right	App. Total				App. Total				App. Total				App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	0	0	0	0	39	175	27	241	47	72	15	134	35	101	1	137	512
17:15	0	0	0	0	57	185	33	275	40	54	15	109	41	113	0	154	538
17:30	0	0	0	0	52	150	28	230	41	60	24	125	47	100	3	150	505
17:45	0	0	0	0	64	164	27	255	30	57	18	105	41	142	3	186	546
Total Volume	0	0	0	0	212	674	115	1001	158	243	72	473	164	456	7	627	2101
% App. Total	0	0	0	0	21.2	67.3	11.5		33.4	51.4	15.2		26.2	72.7	1.1		
PHF	.000	.000	.000	.000	.828	.911	.871	.910	.840	.844	.750	.882	.872	.803	.583	.843	.962
Cars	0	0	0	0	205	674	114	993	157	242	71	470	164	447	7	618	2081
% Cars	0	0	0	0	96.7	100	99.1	99.2	99.4	99.6	98.6	99.4	100	98.0	100	98.6	99.0
Trucks	0	0	0	0	7	0	1	8	1	1	1	3	0	9	0	9	20
% Trucks	0	0	0	0	3.3	0	0.9	0.8	0.6	0.4	1.4	0.6	0	2.0	0	1.4	1.0



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00				17:00				17:00				17:00			
+0 mins.	0	0	0	0	39	175	27	241	47	72	15	134	35	101	1	137
+15 mins.	0	0	0	0	57	185	33	275	40	54	15	109	41	113	0	154
+30 mins.	0	0	0	0	52	150	28	230	41	60	24	125	47	100	3	150
+45 mins.	0	0	0	0	64	164	27	255	30	57	18	105	41	142	3	186
Total Volume	0	0	0	0	212	674	115	1001	158	243	72	473	164	456	7	627
% App. Total	0	0	0	0	21.2	67.3	11.5		33.4	51.4	15.2		26.2	72.7	1.1	
PHF	.000	.000	.000	.000	.828	.911	.871	.910	.840	.844	.750	.882	.872	.803	.583	.843
Cars	0	0	0	0	205	674	114	993	157	242	71	470	164	447	7	618
% Cars	0	0	0	0	96.7	100	99.1	99.2	99.4	99.6	98.6	99.4	100	98	100	98.6
Trucks	0	0	0	0	7	0	1	8	1	1	1	3	0	9	0	9
% Trucks	0	0	0	0	3.3	0	0.9	0.8	0.6	0.4	1.4	0.6	0	2	0	1.4



N/S Street : Lake St / St Thomas Moore  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

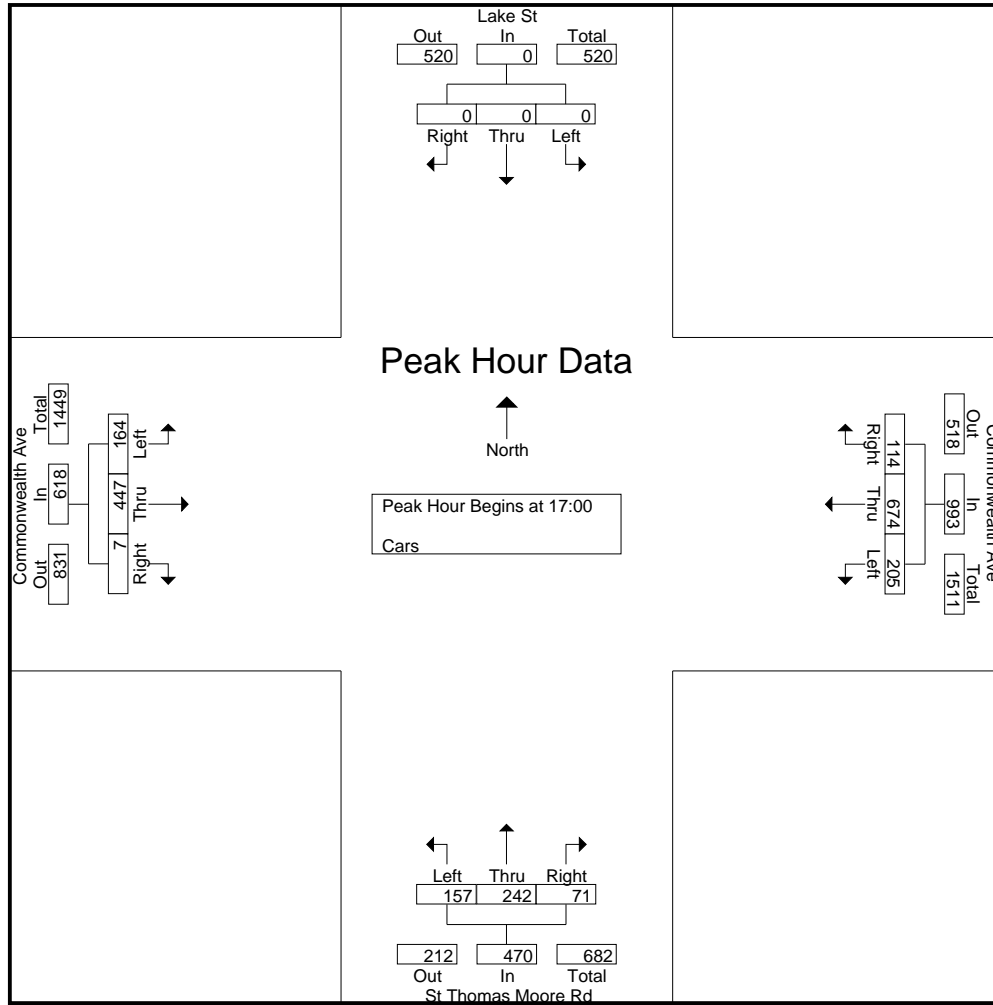
Accurate Counts  
 978-664-2565

File Name : 39000001  
 Site Code : 39000001  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Lake St From North				Commonwealth Ave From East					St Thomas Moore Rd From South				Commonwealth Ave From West					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	U-Trn	Left	Thru	Right	Peds	Left	Thru	Right	Peds	U-Trn			
16:00	0	0	0	14	59	121	27	13	4	34	68	17	8	32	66	2	10	0	49	426	475
16:15	0	0	0	10	57	168	22	30	5	32	53	21	19	42	78	2	18	2	84	475	559
16:30	0	0	0	11	43	107	19	14	2	36	46	13	7	40	106	0	13	0	47	410	457
16:45	0	0	0	14	36	142	23	10	2	31	46	15	8	36	109	4	13	0	47	442	489
Total	0	0	0	49	195	538	91	67	13	133	213	66	42	150	359	8	54	2	227	1753	1980
17:00	0	0	0	10	37	175	27	11	9	47	72	15	13	35	99	1	16	0	59	508	567
17:15	0	0	0	15	55	185	33	12	6	40	54	15	8	41	110	0	11	0	52	533	585
17:30	0	0	0	7	50	150	28	11	3	40	59	24	6	47	98	3	9	2	38	499	537
17:45	0	0	0	22	63	164	26	15	1	30	57	17	9	41	140	3	6	0	53	541	594
Total	0	0	0	54	205	674	114	49	19	157	242	71	36	164	447	7	42	2	202	2081	2283
Grand Total	0	0	0	103	400	1212	205	116	32	290	455	137	78	314	806	15	96	4	429	3834	4263
Apprch %	0	0	0		22	66.7	11.3			32.9	51.6	15.5		27.7	71	1.3					
Total %	0	0	0		10.4	31.6	5.3			7.6	11.9	3.6		8.2	21	0.4			10.1	89.9	

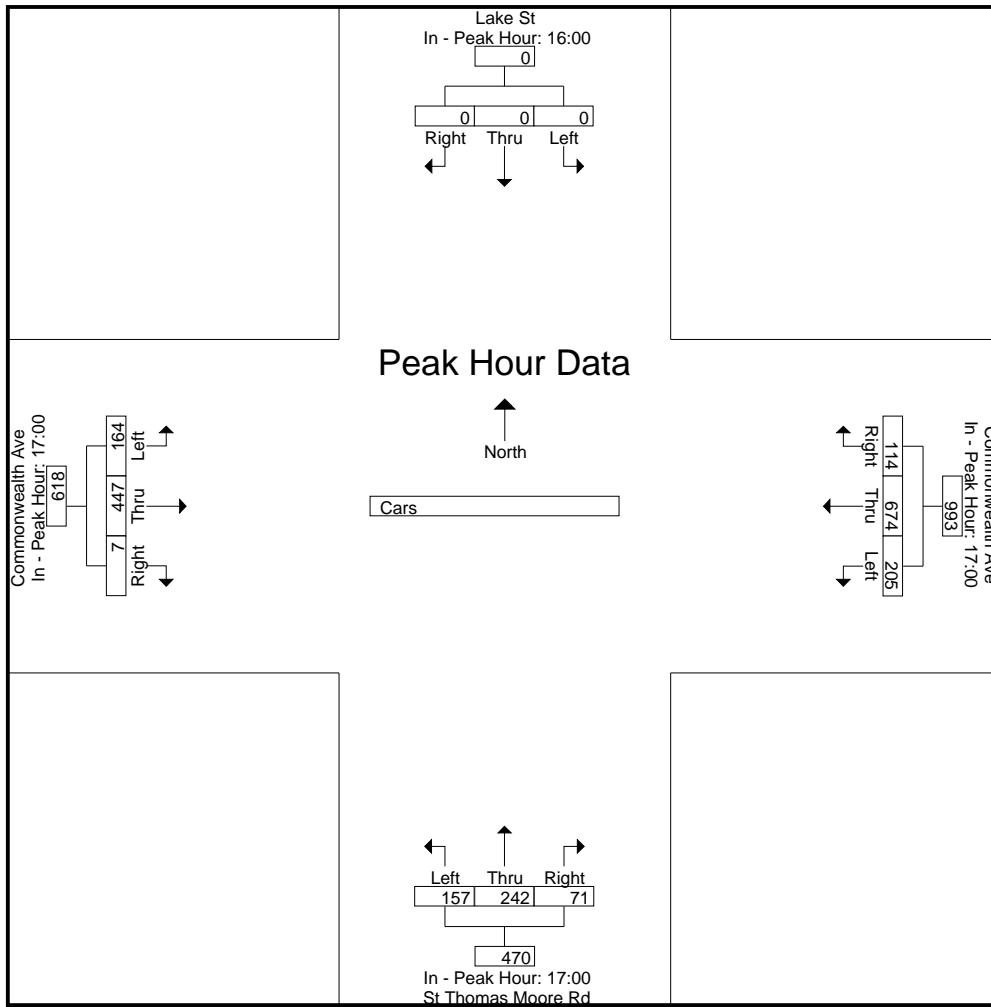
Start Time	Lake St From North				Commonwealth Ave From East				St Thomas Moore Rd From South				Commonwealth Ave From West				Int. Total
	Left	Thru	Right	App. Total				App. Total				App. Total				App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	0	0	0	0	37	175	27	239	47	72	15	134	35	99	1	135	508
17:15	0	0	0	0	55	185	33	273	40	54	15	109	41	110	0	151	533
17:30	0	0	0	0	50	150	28	228	40	59	24	123	47	98	3	148	499
17:45	0	0	0	0	63	164	26	253	30	57	17	104	41	140	3	184	541
Total Volume	0	0	0	0	205	674	114	993	157	242	71	470	164	447	7	618	2081
% App. Total	0	0	0	0	20.6	67.9	11.5		33.4	51.5	15.1		26.5	72.3	1.1		
PHF	.000	.000	.000	.000	.813	.911	.864	.909	.835	.840	.740	.877	.872	.798	.583	.840	.962



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00				17:00				17:00							
+0 mins.	0	0	0	0	37	175	27	239	47	72	15	134	35	99	1	135
+15 mins.	0	0	0	0	55	185	33	273	40	54	15	109	41	110	0	151
+30 mins.	0	0	0	0	50	150	28	228	40	59	24	123	47	98	3	148
+45 mins.	0	0	0	0	63	164	26	253	30	57	17	104	41	140	3	184
Total Volume	0	0	0	0	205	674	114	993	157	242	71	470	164	447	7	618
% App. Total	0	0	0	0	20.6	67.9	11.5		33.4	51.5	15.1		26.5	72.3	1.1	
PHF	.000	.000	.000	.000	.813	.911	.864	.909	.835	.840	.740	.877	.872	.798	.583	.840



N/S Street : Lake St / St Thomas Moore  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

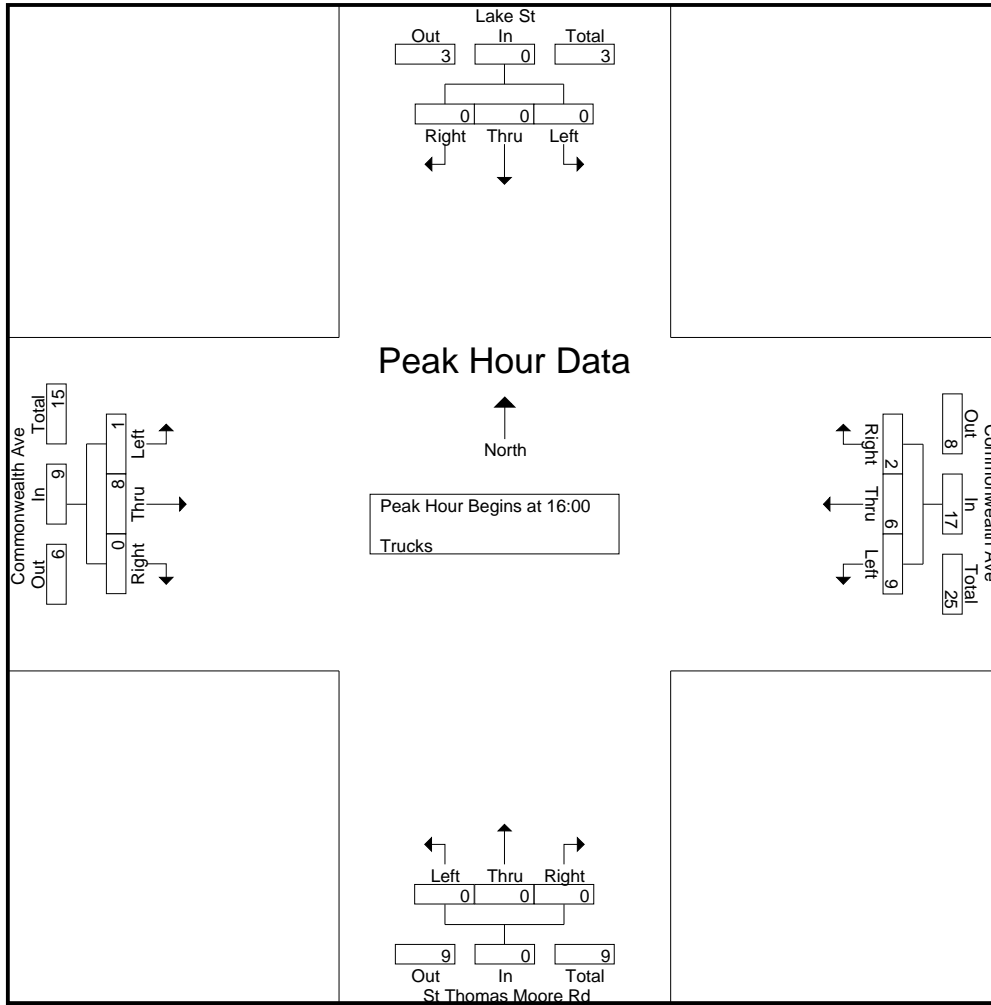
Accurate Counts  
 978-664-2565

File Name : 39000001  
 Site Code : 39000001  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Lake St From North				Commonwealth Ave From East					St Thomas Moore Rd From South				Commonwealth Ave From West					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	U-Trn	Left	Thru	Right	Peds	Left	Thru	Right	Peds	U-Trn			
16:00	0	0	0	0	2	2	1	0	0	0	0	0	0	0	2	0	0	0	0	7	7
16:15	0	0	0	0	2	1	0	0	0	0	0	0	0	0	1	0	0	0	0	4	4
16:30	0	0	0	0	3	2	0	0	0	0	0	0	0	1	3	0	0	0	0	9	9
16:45	0	0	0	0	2	1	1	0	0	0	0	0	0	0	2	0	0	0	0	6	6
Total	0	0	0	0	9	6	2	0	0	0	0	0	0	1	8	0	0	0	0	26	26
17:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	4	4
17:15	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0	0	0	0	5	5
17:30	0	0	0	0	2	0	0	0	0	1	1	0	0	0	2	0	0	0	0	6	6
17:45	0	0	0	0	1	0	1	0	0	0	0	1	0	0	2	0	0	0	0	5	5
Total	0	0	0	0	7	0	1	0	0	1	1	1	0	0	9	0	0	0	0	20	20
Grand Total	0	0	0	0	16	6	3	0	0	1	1	1	0	1	17	0	0	0	0	46	46
Apprch %	0	0	0		64	24	12			33.3	33.3	33.3		5.6	94.4	0					
Total %	0	0	0		34.8	13	6.5			2.2	2.2	2.2		2.2	37	0			0	100	

Start Time	Lake St From North				Commonwealth Ave From East				St Thomas Moore Rd From South				Commonwealth Ave From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:00																	
16:00	0	0	0	0	2	2	1	5	0	0	0	0	0	2	0	2	7
16:15	0	0	0	0	2	1	0	3	0	0	0	0	0	1	0	1	4
16:30	0	0	0	0	3	2	0	5	0	0	0	0	1	3	0	4	9
16:45	0	0	0	0	2	1	1	4	0	0	0	0	0	2	0	2	6
Total Volume	0	0	0	0	9	6	2	17	0	0	0	0	1	8	0	9	26
% App. Total	0	0	0		52.9	35.3	11.8		0	0	0		11.1	88.9	0		
PHF	.000	.000	.000	.000	.750	.750	.500	.850	.000	.000	.000	.000	.250	.667	.000	.563	.722

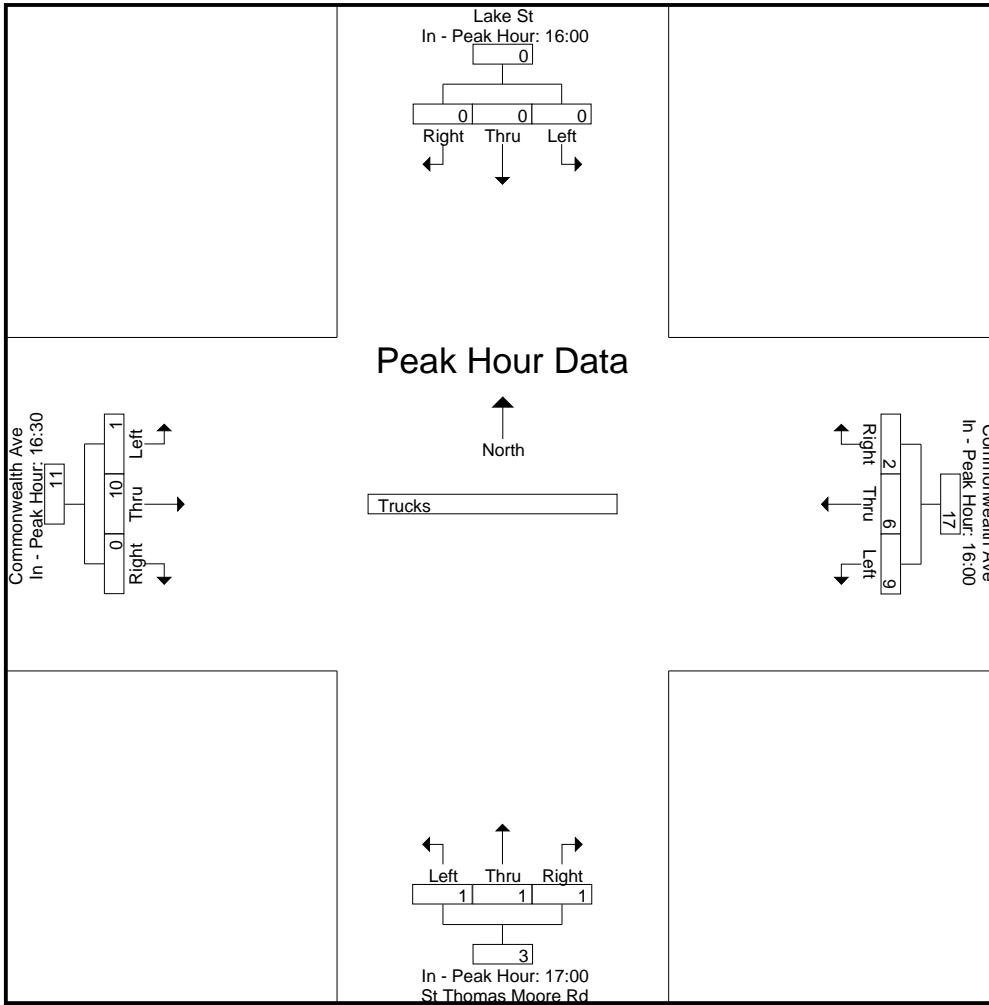


Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00				16:00				17:00				16:30			
+0 mins.	0	0	0	0	2	2	1	5	0	0	0	0	1	3	0	4
+15 mins.	0	0	0	0	2	1	0	3	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	3	2	0	5	1	1	0	2	0	2	0	2
+45 mins.	0	0	0	0	2	1	1	4	0	0	1	1	0	3	0	3
Total Volume	0	0	0	0	9	6	2	17	1	1	1	3	1	10	0	11
% App. Total	0	0	0	0	52.9	35.3	11.8		33.3	33.3	33.3		9.1	90.9	0	
PHF	.000	.000	.000	.000	.750	.750	.500	.850	.250	.250	.250	.375	.250	.833	.000	.688





N/S Street : Foster Street  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

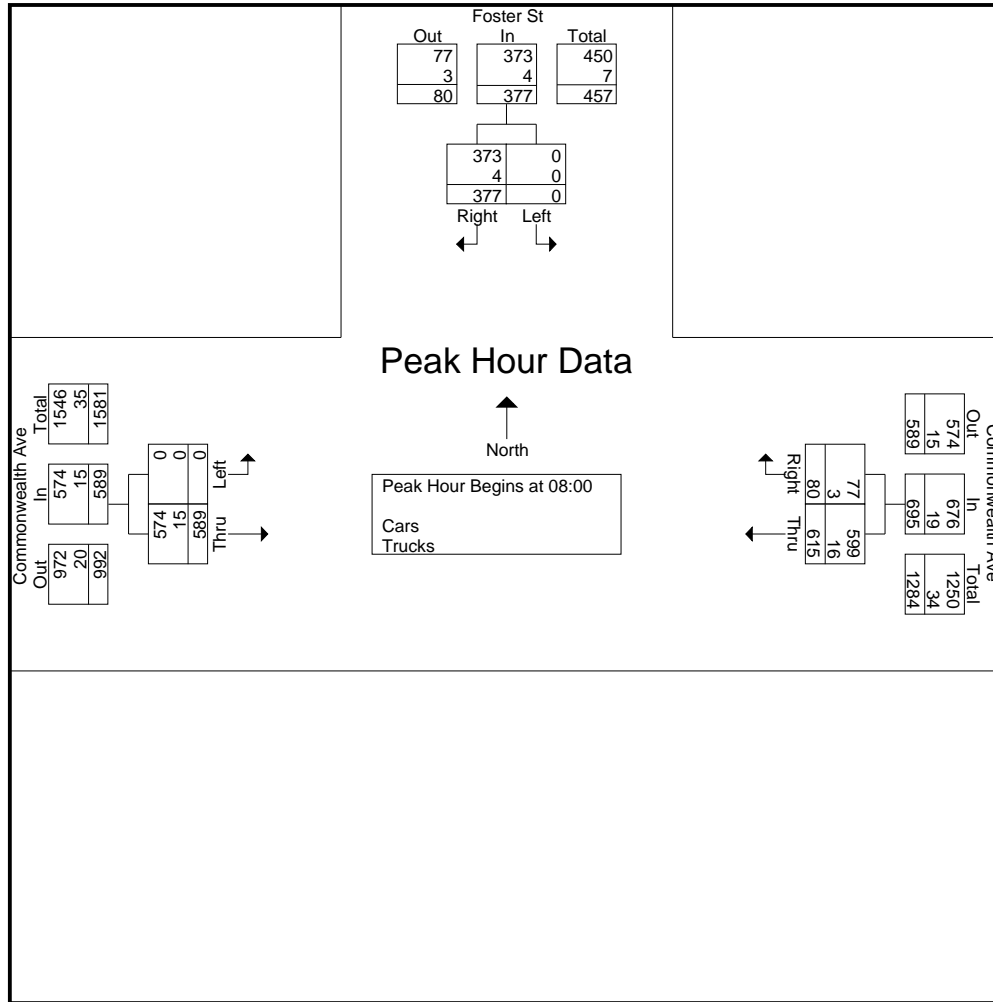
Accurate Counts  
 978-664-2565

File Name : 39000002  
 Site Code : 39000002  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Foster St From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	0	45	5	65	10	0	0	73	0	5	193	198
07:15	0	66	8	115	15	0	0	86	0	8	282	290
07:30	0	92	9	114	17	0	0	109	0	9	332	341
07:45	0	79	15	142	19	0	0	160	0	15	400	415
Total	0	282	37	436	61	0	0	428	0	37	1207	1244
08:00	0	76	6	156	26	0	0	165	0	6	423	429
08:15	0	97	9	160	16	0	0	145	0	9	418	427
08:30	0	99	29	155	19	0	0	146	0	29	419	448
08:45	0	105	18	144	19	0	0	133	0	18	401	419
Total	0	377	62	615	80	0	0	589	0	62	1661	1723
Grand Total	0	659	99	1051	141	0	0	1017	0	99	2868	2967
Apprch %	0	100		88.2	11.8		0	100				
Total %	0	23		36.6	4.9		0	35.5		3.3	96.7	
Cars	0	648		1022	138		0	985		0	0	2892
% Cars	0	98.3	100	97.2	97.9	0	0	96.9	0	0	0	97.5
Trucks	0	11		29	3		0	32		0	0	75
% Trucks	0	1.7	0	2.8	2.1	0	0	3.1	0	0	0	2.5

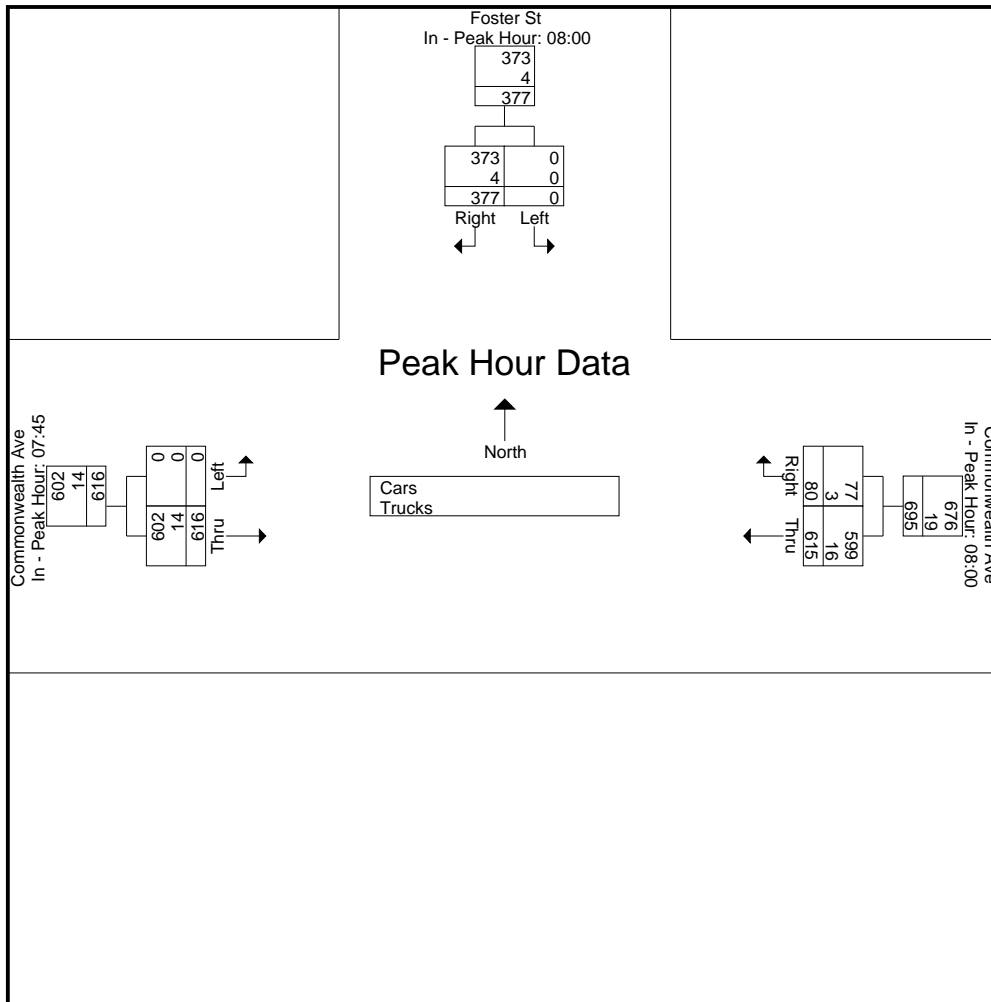
Start Time	Foster St From North			Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00										
08:00	0	76	76	156	26	182	0	165	165	423
08:15	0	97	97	160	16	176	0	145	145	418
08:30	0	99	99	155	19	174	0	146	146	419
08:45	0	105	105	144	19	163	0	133	133	401
Total Volume	0	377	377	615	80	695	0	589	589	1661
% App. Total	0	100		88.5	11.5		0	100		
PHF	.000	.898	.898	.961	.769	.955	.000	.892	.892	.982
Cars	0	373	373	599	77	676	0	574	574	1623
% Cars	0	98.9	98.9	97.4	96.3	97.3	0	97.5	97.5	97.7
Trucks	0	4	4	16	3	19	0	15	15	38
% Trucks	0	1.1	1.1	2.6	3.8	2.7	0	2.5	2.5	2.3



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00			08:00			07:45		
+0 mins.	0	76	76	156	26	182	0	160	160
+15 mins.	0	97	97	160	16	176	0	165	165
+30 mins.	0	99	99	155	19	174	0	145	145
+45 mins.	0	105	105	144	19	163	0	146	146
Total Volume	0	377	377	615	80	695	0	616	616
% App. Total	0	100		88.5	11.5		0	100	
PHF	.000	.898	.898	.961	.769	.955	.000	.933	.933
Cars	0	373	373	599	77	676	0	602	602
% Cars	0	98.9	98.9	97.4	96.2	97.3	0	97.7	97.7
Trucks	0	4	4	16	3	19	0	14	14
% Trucks	0	1.1	1.1	2.6	3.8	2.7	0	2.3	2.3



N/S Street : Foster Street  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

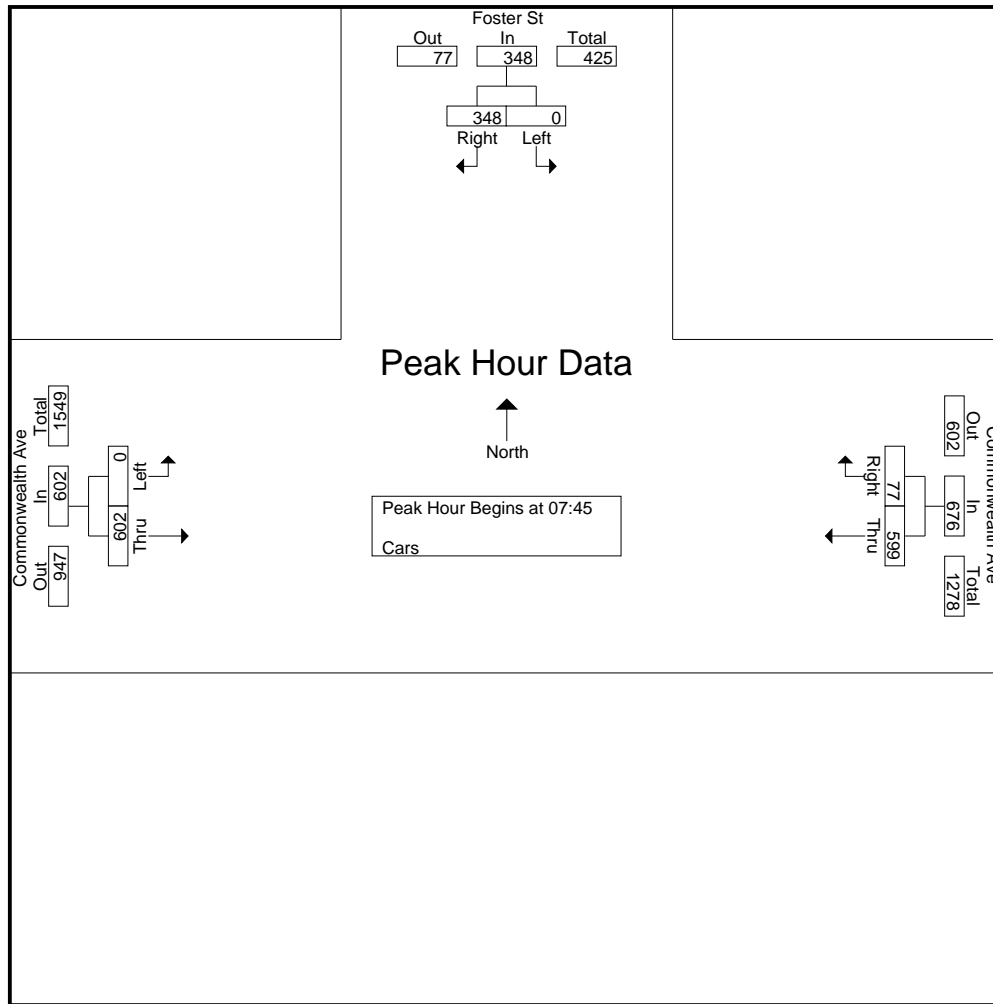
File Name : 39000002  
 Site Code : 39000002  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Foster St From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	0	44	5	62	10	0	0	70	0	5	186	191
07:15	0	64	8	111	15	0	0	83	0	8	273	281
07:30	0	89	9	111	17	0	0	102	0	9	319	328
07:45	0	78	15	139	19	0	0	156	0	15	392	407
Total	0	275	37	423	61	0	0	411	0	37	1170	1207
08:00	0	76	6	153	25	0	0	162	0	6	416	422
08:15	0	96	9	155	14	0	0	143	0	9	408	417
08:30	0	98	29	152	19	0	0	141	0	29	410	439
08:45	0	103	18	139	19	0	0	128	0	18	389	407
Total	0	373	62	599	77	0	0	574	0	62	1623	1685
Grand Total	0	648	99	1022	138	0	0	985	0	99	2793	2892
Apprch %	0	100		88.1	11.9		0	100				
Total %	0	23.2		36.6	4.9		0	35.3		3.4	96.6	

Start Time	Foster St From North			Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:45	0	78	78	139	19	158	0	156	156	392
08:00	0	76	76	153	25	178	0	162	162	416
08:15	0	96	96	155	14	169	0	143	143	408
08:30	0	98	98	152	19	171	0	141	141	410
Total Volume	0	348	348	599	77	676	0	602	602	1626
% App. Total	0	100		88.6	11.4		0	100		
PHF	.000	.888	.888	.966	.770	.949	.000	.929	.929	.977

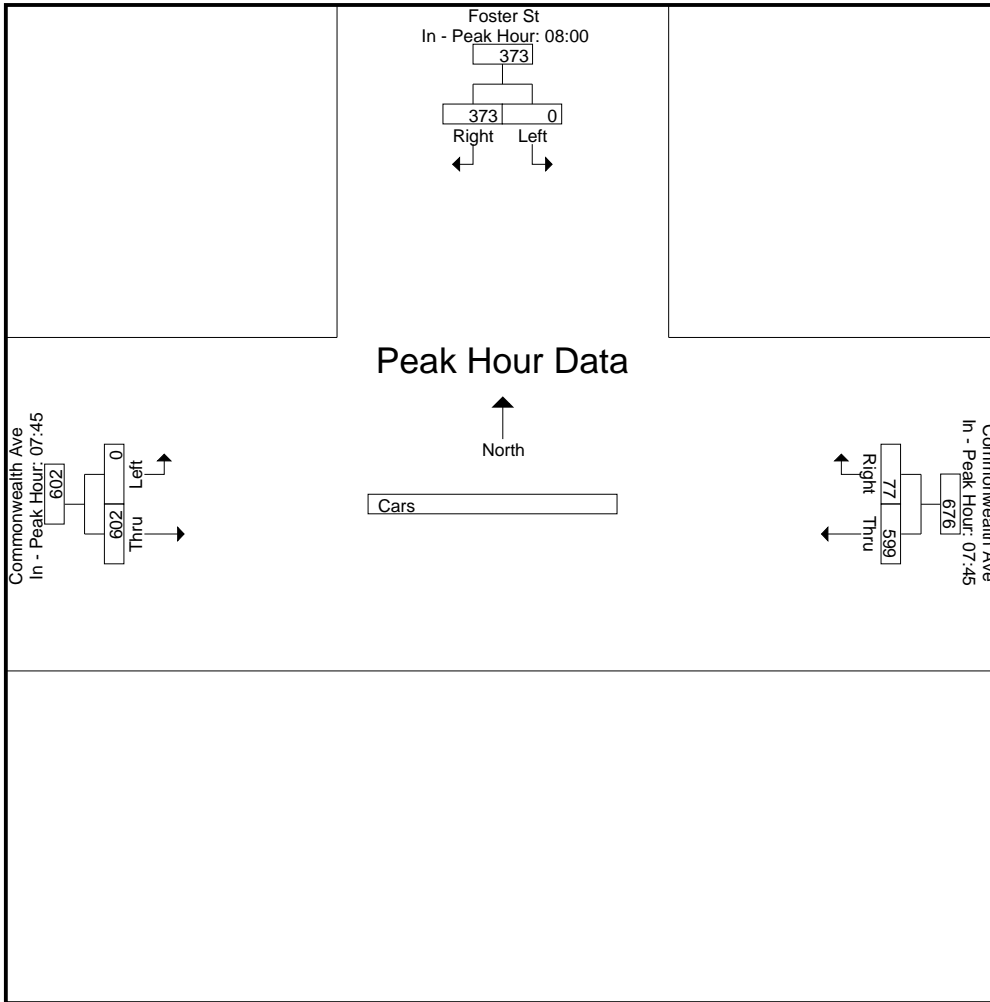
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:45



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00			07:45			07:45		
+0 mins.	0	76	76	139	19	158	0	156	156
+15 mins.	0	96	96	153	25	178	0	162	162
+30 mins.	0	98	98	155	14	169	0	143	143
+45 mins.	0	103	103	152	19	171	0	141	141
Total Volume	0	373	373	599	77	676	0	602	602
% App. Total	0	100		88.6	11.4		0	100	
PHF	.000	.905	.905	.966	.770	.949	.000	.929	.929



N/S Street : Foster Street  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000002  
 Site Code : 39000002  
 Start Date : 3/11/2008  
 Page No : 1

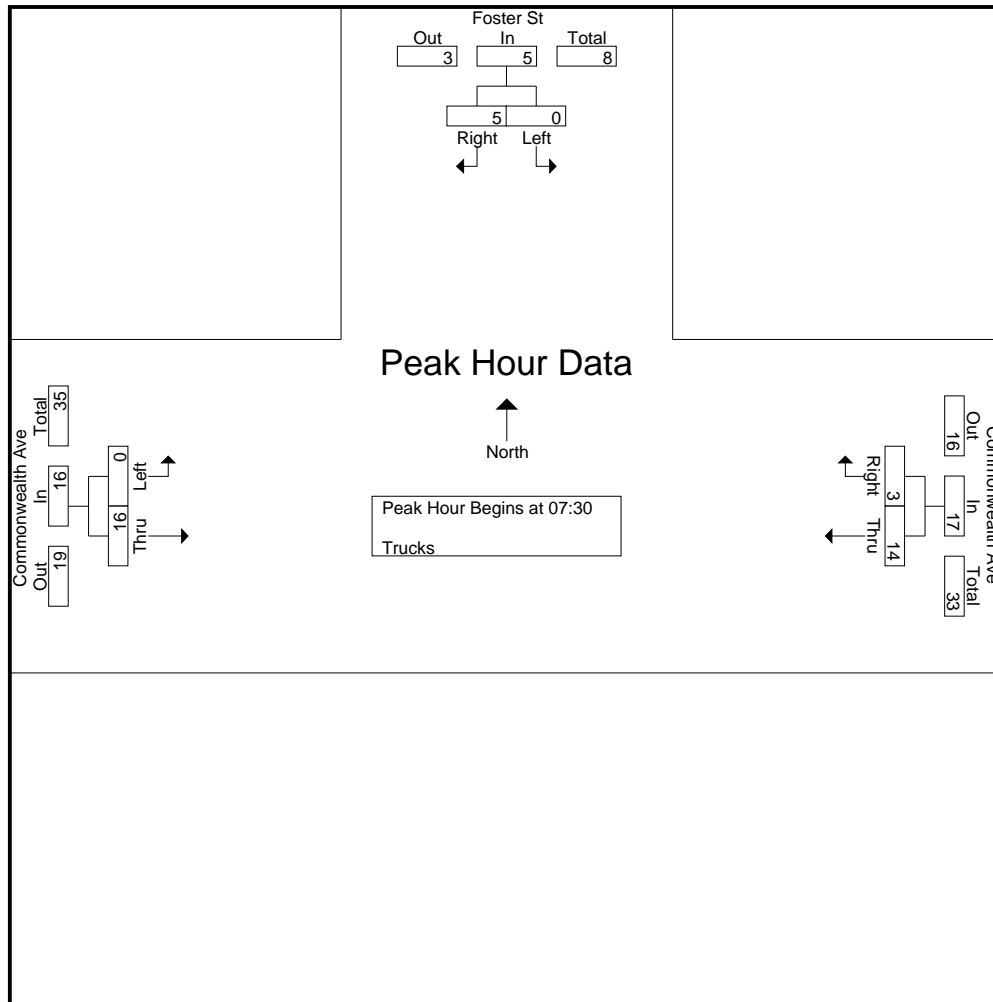
Groups Printed- Trucks

Start Time	Foster St From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	0	1	0	3	0	0	0	3	0	0	7	7
07:15	0	2	0	4	0	0	0	3	0	0	9	9
07:30	0	3	0	3	0	0	0	7	0	0	13	13
07:45	0	1	0	3	0	0	0	4	0	0	8	8
Total	0	7	0	13	0	0	0	17	0	0	37	37
08:00	0	0	0	3	1	0	0	3	0	0	7	7
08:15	0	1	0	5	2	0	0	2	0	0	10	10
08:30	0	1	0	3	0	0	0	5	0	0	9	9
08:45	0	2	0	5	0	0	0	5	0	0	12	12
Total	0	4	0	16	3	0	0	15	0	0	38	38
Grand Total	0	11	0	29	3	0	0	32	0	0	75	75
Apprch %	0	100		90.6	9.4		0	100				
Total %	0	14.7		38.7	4		0	42.7		0	100	

Start Time	Foster St From North			Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:30	0	3	3	3	0	3	0	7	7	13
07:45	0	1	1	3	0	3	0	4	4	8
08:00	0	0	0	3	1	4	0	3	3	7
08:15	0	1	1	5	2	7	0	2	2	10
Total Volume	0	5	5	14	3	17	0	16	16	38
% App. Total	0	100		82.4	17.6		0	100		
PHF	.000	.417	.417	.700	.375	.607	.000	.571	.571	.731

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:30

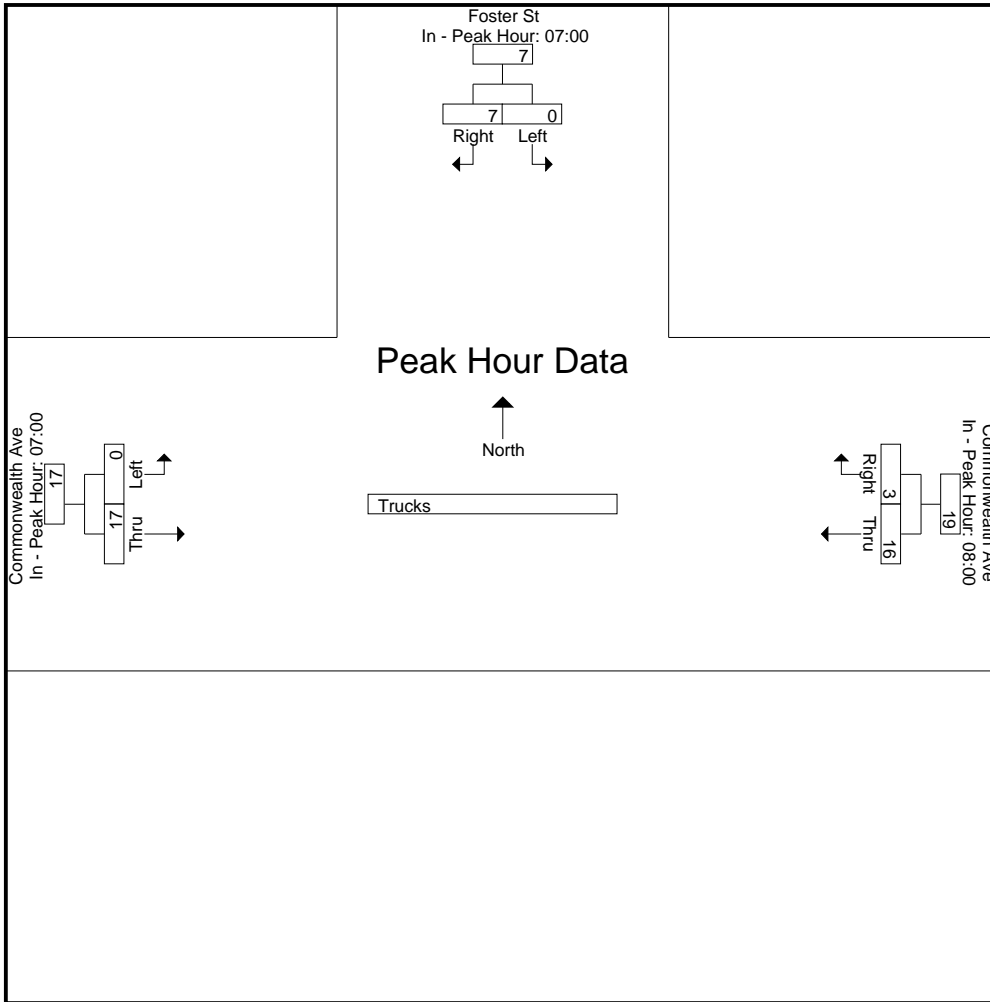




Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00			08:00			07:00		
+0 mins.	0	1	1	3	1	4	0	3	3
+15 mins.	0	2	2	5	2	7	0	3	3
+30 mins.	0	3	3	3	0	3	0	7	7
+45 mins.	0	1	1	5	0	5	0	4	4
Total Volume	0	7	7	16	3	19	0	17	17
% App. Total	0	100		84.2	15.8		0	100	
PHF	.000	.583	.583	.800	.375	.679	.000	.607	.607



N/S Street : Foster Street  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

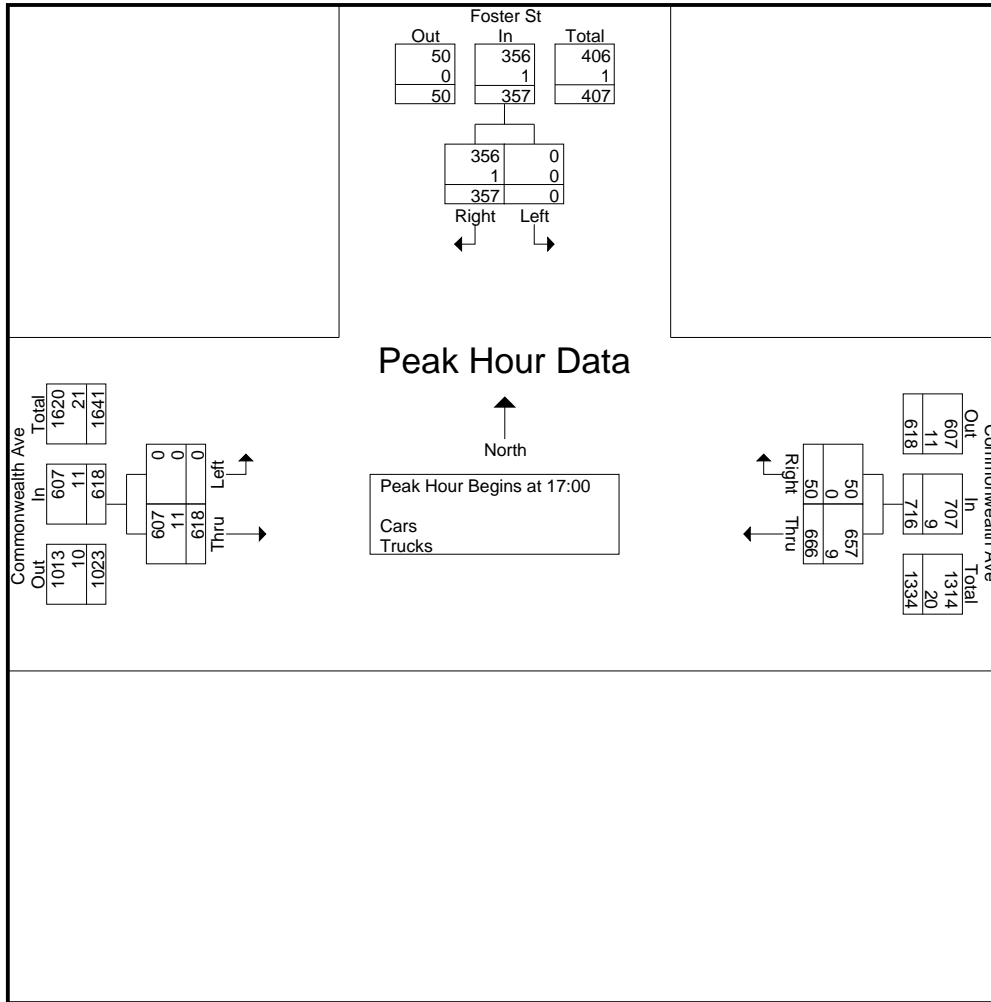
File Name : 39000002  
 Site Code : 39000002  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Foster St From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	0	83	13	128	10	4	0	97	0	17	318	335
16:15	0	82	11	164	14	0	0	114	0	11	374	385
16:30	0	76	14	114	12	0	0	130	0	14	332	346
16:45	0	84	14	144	14	0	0	146	0	14	388	402
Total	0	325	52	550	50	4	0	487	0	56	1412	1468
17:00	0	79	14	161	9	0	0	147	0	14	396	410
17:15	0	100	9	178	11	0	0	145	0	9	434	443
17:30	0	88	20	160	13	0	0	140	0	20	401	421
17:45	0	90	22	167	17	0	0	186	0	22	460	482
Total	0	357	65	666	50	0	0	618	0	65	1691	1756
Grand Total	0	682	117	1216	100	4	0	1105	0	121	3103	3224
Apprch %	0	100		92.4	7.6		0	100				
Total %	0	22		39.2	3.2		0	35.6		3.8	96.2	
Cars	0	681		1194	100		0	1086		0	0	3182
% Cars	0	99.9	100	98.2	100	100	0	98.3	0	0	0	98.7
Trucks	0	1		22	0		0	19		0	0	42
% Trucks	0	0.1	0	1.8	0	0	0	1.7	0	0	0	1.3

Start Time	Foster St From North			Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
17:00	0	79	79	161	9	170	0	147	147	396
17:15	0	100	100	178	11	189	0	145	145	434
17:30	0	88	88	160	13	173	0	140	140	401
17:45	0	90	90	167	17	184	0	186	186	460
Total Volume	0	357	357	666	50	716	0	618	618	1691
% App. Total	0	100		93	7		0	100		
PHF	.000	.893	.893	.935	.735	.947	.000	.831	.831	.919
Cars	0	356	356	657	50	707	0	607	607	1670
% Cars	0	99.7	99.7	98.6	100	98.7	0	98.2	98.2	98.8
Trucks	0	1	1	9	0	9	0	11	11	21
% Trucks	0	0.3	0.3	1.4	0	1.3	0	1.8	1.8	1.2

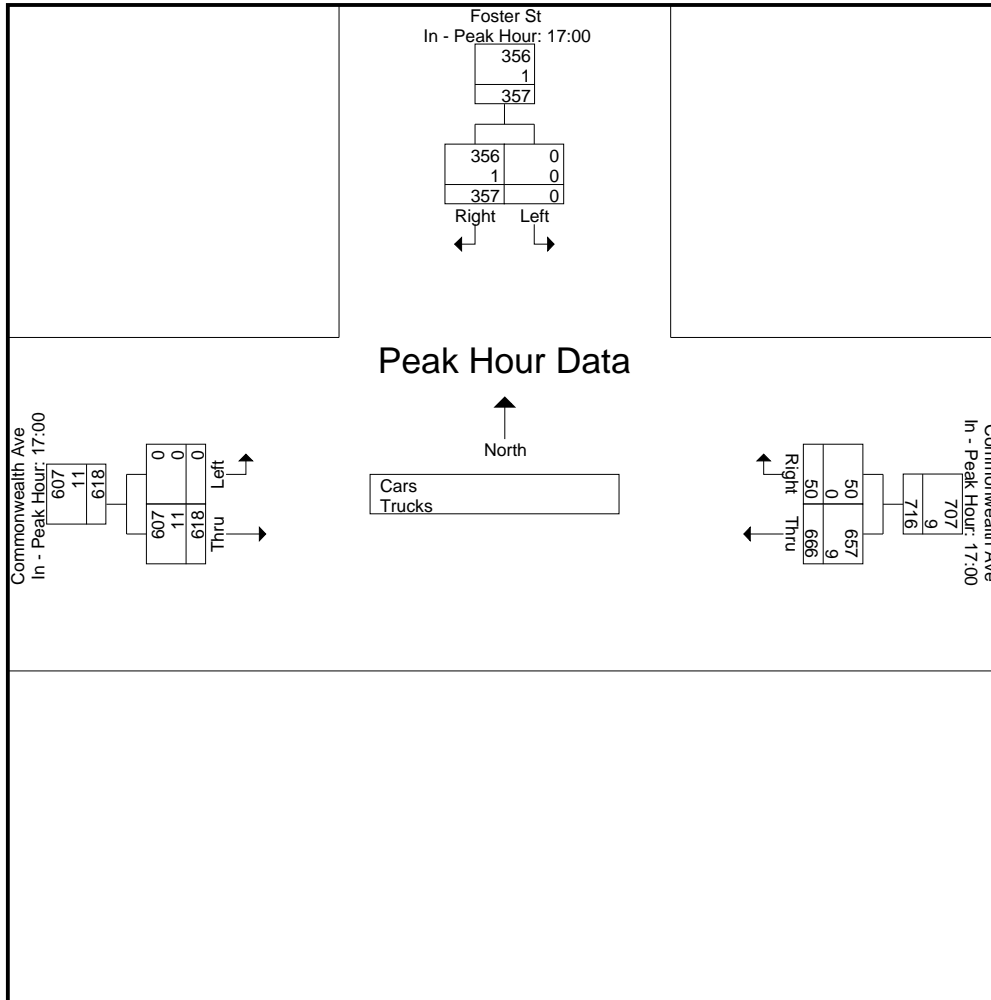
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 17:00



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00			17:00			17:00		
+0 mins.	0	79	79	161	9	170	0	147	147
+15 mins.	0	100	100	178	11	189	0	145	145
+30 mins.	0	88	88	160	13	173	0	140	140
+45 mins.	0	90	90	167	17	184	0	186	186
Total Volume	0	357	357	666	50	716	0	618	618
% App. Total	0	100		93	7		0	100	
PHF	.000	.893	.893	.935	.735	.947	.000	.831	.831
Cars	0	356	356	657	50	707	0	607	607
% Cars	0	99.7	99.7	98.6	100	98.7	0	98.2	98.2
Trucks	0	1	1	9	0	9	0	11	11
% Trucks	0	0.3	0.3	1.4	0	1.3	0	1.8	1.8



N/S Street : Foster Street  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

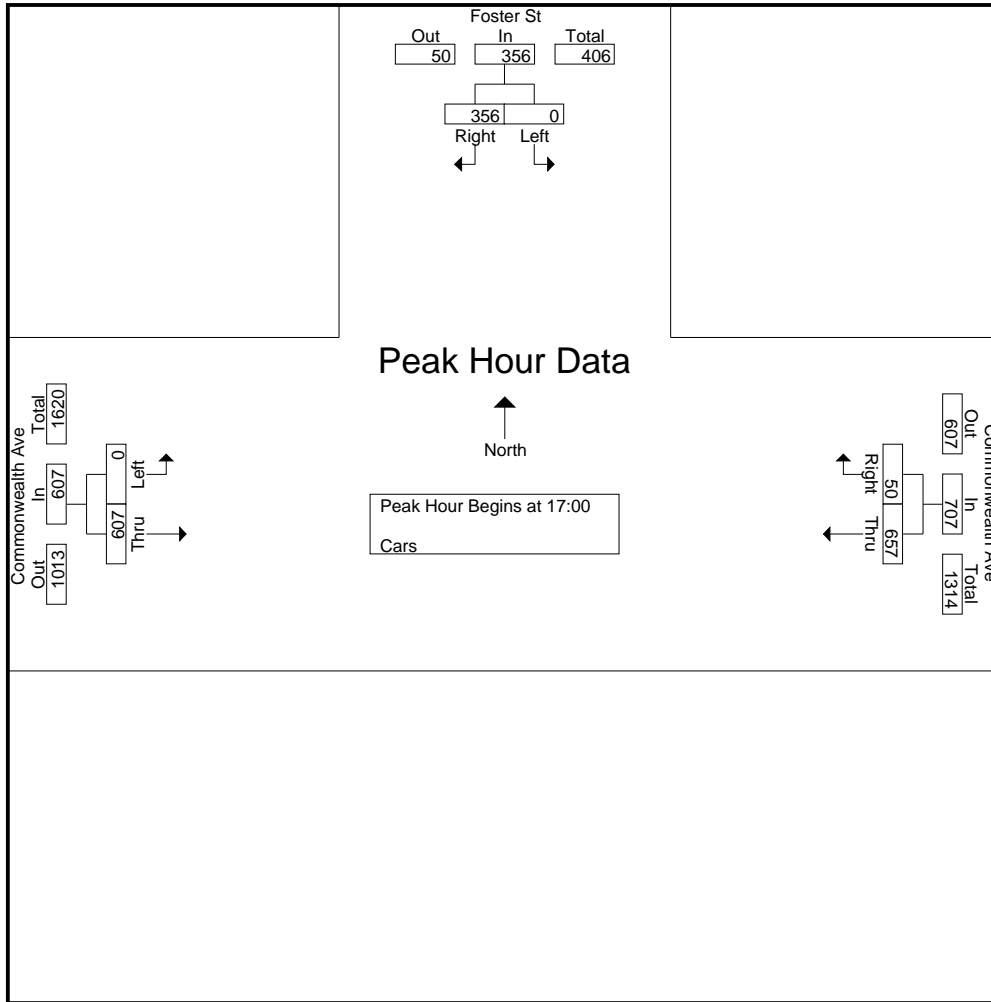
File Name : 39000002  
 Site Code : 39000002  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Foster St From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	0	83	13	124	10	4	0	95	0	17	312	329
16:15	0	82	11	162	14	0	0	113	0	11	371	382
16:30	0	76	14	110	12	0	0	127	0	14	325	339
16:45	0	84	14	141	14	0	0	144	0	14	383	397
Total	0	325	52	537	50	4	0	479	0	56	1391	1447
17:00	0	78	14	159	9	0	0	144	0	14	390	404
17:15	0	100	9	176	11	0	0	142	0	9	429	438
17:30	0	88	20	157	13	0	0	138	0	20	396	416
17:45	0	90	22	165	17	0	0	183	0	22	455	477
Total	0	356	65	657	50	0	0	607	0	65	1670	1735
Grand Total	0	681	117	1194	100	4	0	1086	0	121	3061	3182
Apprch %	0	100		92.3	7.7		0	100				
Total %	0	22.2		39	3.3		0	35.5		3.8	96.2	

Start Time	Foster St From North			Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
17:00	0	78	78	159	9	168	0	144	144	390
17:15	0	100	100	176	11	187	0	142	142	429
17:30	0	88	88	157	13	170	0	138	138	396
17:45	0	90	90	165	17	182	0	183	183	455
Total Volume	0	356	356	657	50	707	0	607	607	1670
% App. Total	0	100		92.9	7.1		0	100		
PHF	.000	.890	.890	.933	.735	.945	.000	.829	.829	.918

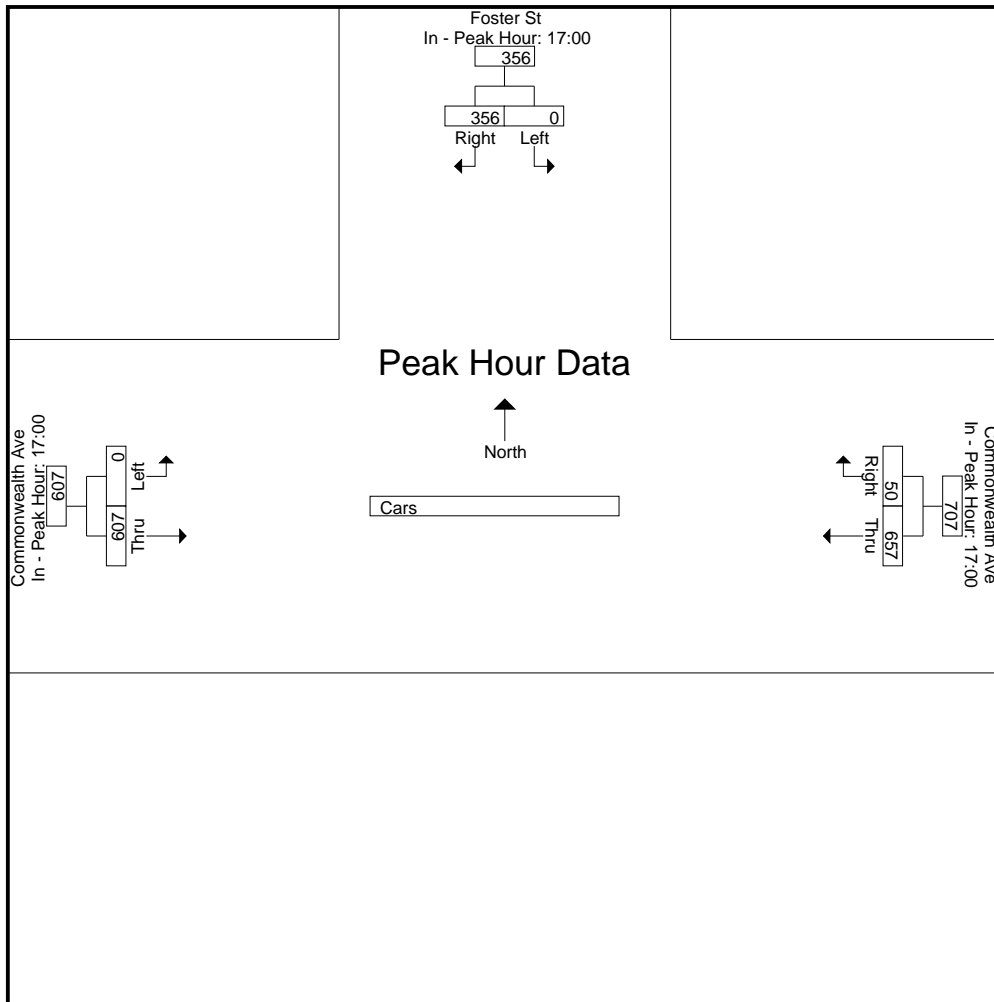
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 17:00



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00			17:00			17:00		
+0 mins.	0	78	78	159	9	168	0	144	144
+15 mins.	0	100	100	176	11	187	0	142	142
+30 mins.	0	88	88	157	13	170	0	138	138
+45 mins.	0	90	90	165	17	182	0	183	183
Total Volume	0	356	356	657	50	707	0	607	607
% App. Total	0	100		92.9	7.1		0	100	
PHF	.000	.890	.890	.933	.735	.945	.000	.829	.829





N/S Street : Foster Street  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

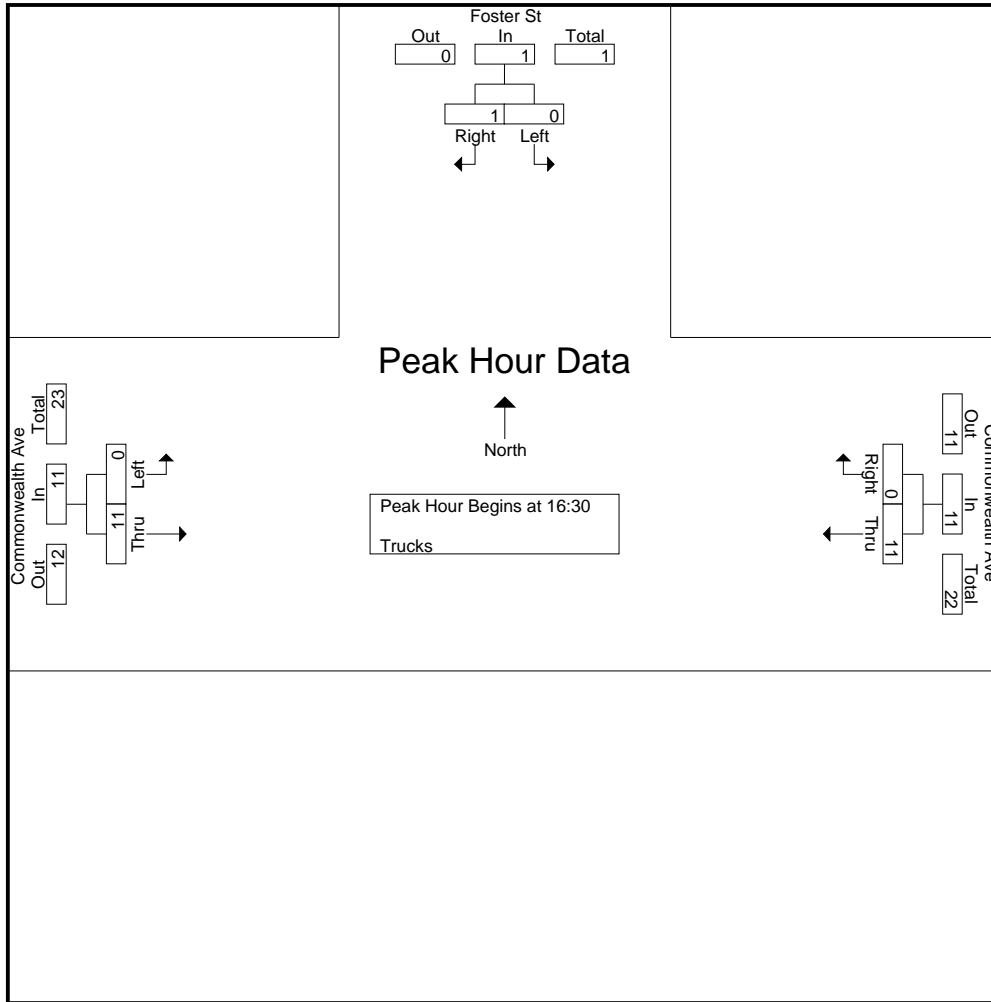
File Name : 39000002  
 Site Code : 39000002  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Foster St From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	0	0	0	4	0	0	0	2	0	0	6	6
16:15	0	0	0	2	0	0	0	1	0	0	3	3
16:30	0	0	0	4	0	0	0	3	0	0	7	7
16:45	0	0	0	3	0	0	0	2	0	0	5	5
Total	0	0	0	13	0	0	0	8	0	0	21	21
17:00	0	1	0	2	0	0	0	3	0	0	6	6
17:15	0	0	0	2	0	0	0	3	0	0	5	5
17:30	0	0	0	3	0	0	0	2	0	0	5	5
17:45	0	0	0	2	0	0	0	3	0	0	5	5
Total	0	1	0	9	0	0	0	11	0	0	21	21
Grand Total	0	1	0	22	0	0	0	19	0	0	42	42
Apprch %	0	100		100	0		0	100				
Total %	0	2.4		52.4	0		0	45.2		0	100	

Start Time	Foster St From North			Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
16:30	0	0	0	4	0	4	0	3	3	7
16:45	0	0	0	3	0	3	0	2	2	5
17:00	0	1	1	2	0	2	0	3	3	6
17:15	0	0	0	2	0	2	0	3	3	5
Total Volume	0	1	1	11	0	11	0	11	11	23
% App. Total	0	100		100	0		0	100		
PHF	.000	.250	.250	.688	.000	.688	.000	.917	.917	.821

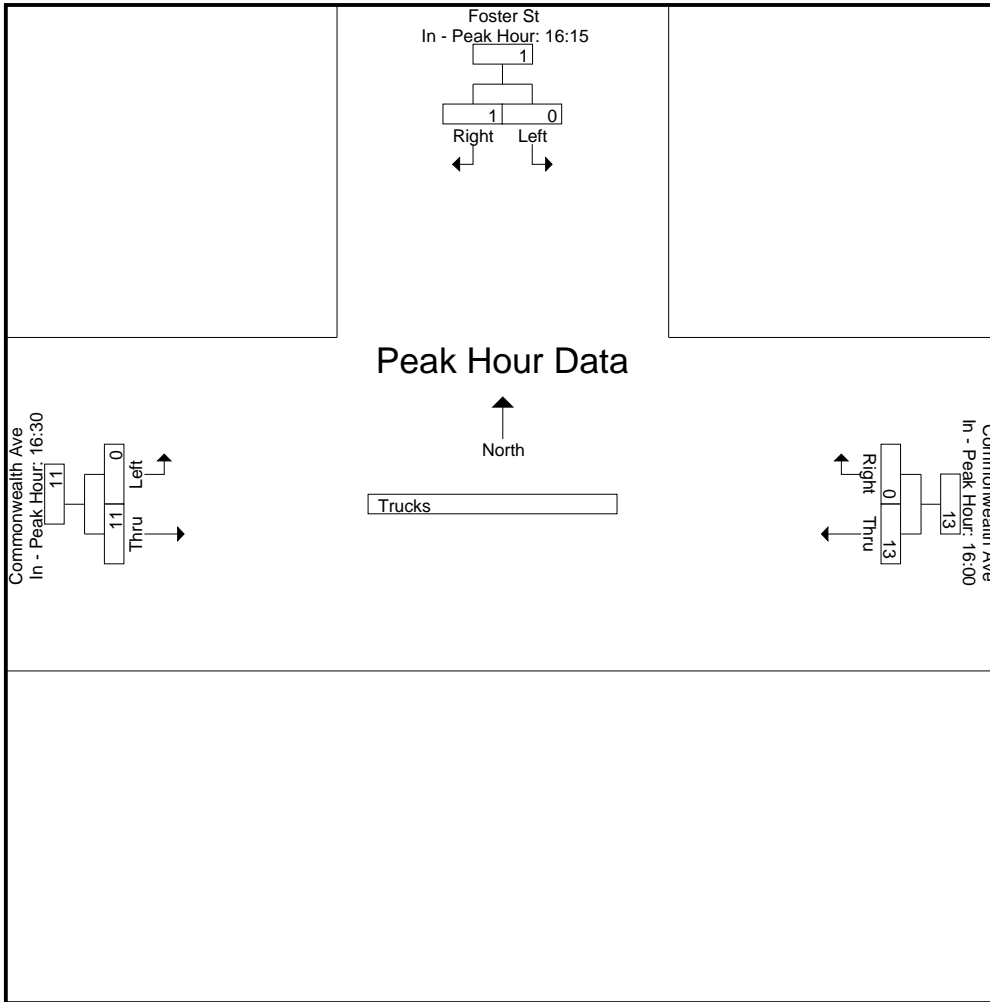
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 16:30



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:15			16:00			16:30		
+0 mins.	0	0	0	4	0	4	0	3	3
+15 mins.	0	0	0	2	0	2	0	2	2
+30 mins.	0	0	0	4	0	4	0	3	3
+45 mins.	0	1	1	3	0	3	0	3	3
Total Volume	0	1	1	13	0	13	0	11	11
% App. Total	0	100		100	0		0	100	
PHF	.000	.250	.250	.813	.000	.813	.000	.917	.917



N/S Street : Chestnut Hill Avenue  
 E/W Street: Commonwealth Avenue  
 City/State : Boston, MA  
 Weather : Clear

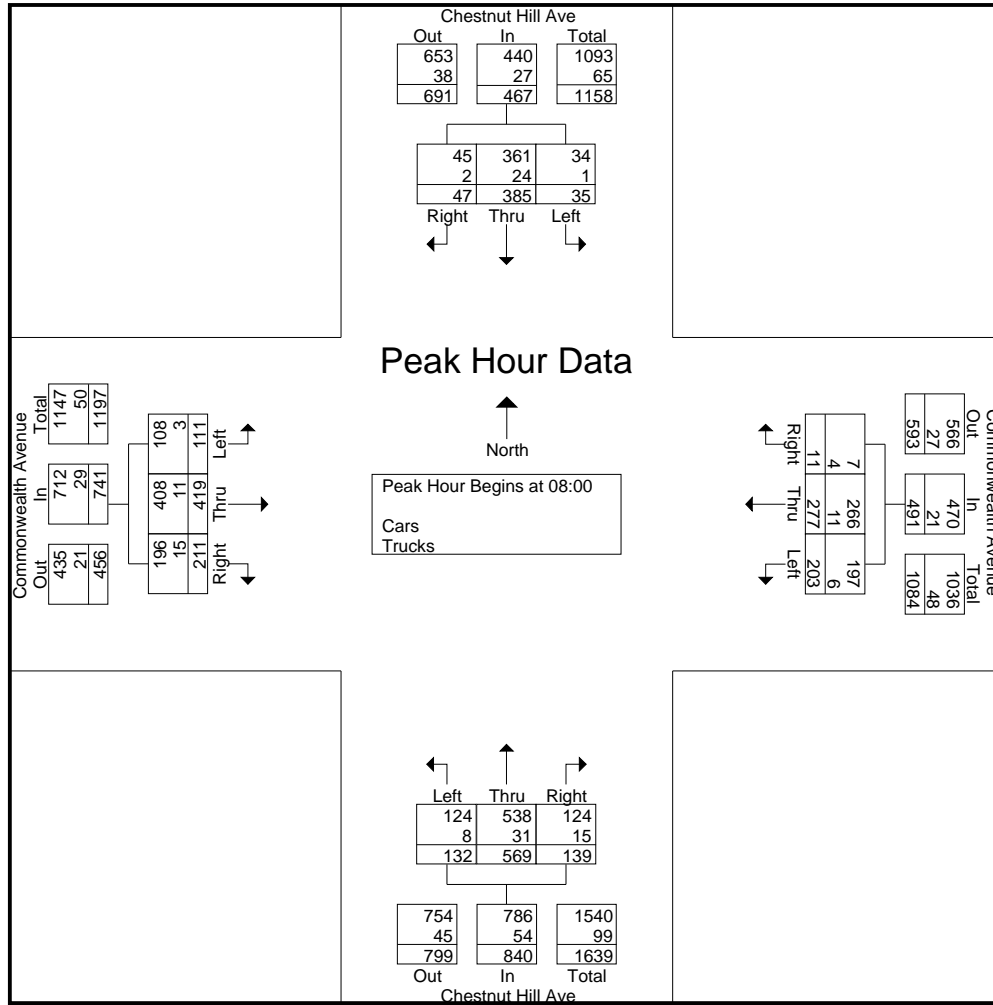
Accurate Counts  
 978-664-2565

File Name : 3900003  
 Site Code : 3900003  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Chestnut Hill Ave From North				Commonwealth Avenue From East					Chestnut Hill Ave From South				Commonwealth Avenue From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	U-Trn	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	5	75	2	6	37	32	2	1	35	24	100	26	4	7	47	23	9	55	380	435
07:15	8	118	6	7	51	52	7	1	49	32	124	31	1	23	54	31	2	60	537	597
07:30	4	112	4	13	66	66	2	1	73	29	115	43	18	22	65	56	7	112	584	696
07:45	5	133	9	18	39	54	4	0	96	27	118	45	8	27	69	66	5	127	596	723
Total	22	438	21	44	193	204	15	3	253	112	457	145	31	79	235	176	23	354	2097	2451
08:00	3	106	8	31	54	90	6	1	65	44	131	36	5	41	129	65	7	109	713	822
08:15	18	102	13	16	52	75	5	2	47	23	149	47	7	16	96	47	0	72	643	715
08:30	8	88	9	19	52	64	0	2	7	35	115	38	2	27	69	40	1	31	545	576
08:45	6	89	17	5	45	48	0	1	0	30	174	18	2	27	125	59	2	10	638	648
Total	35	385	47	71	203	277	11	6	119	132	569	139	16	111	419	211	10	222	2539	2761
Grand Total	57	823	68	115	396	481	26	9	372	244	1026	284	47	190	654	387	33	576	4636	5212
Apprch %	6	86.8	7.2		43.9	53.3	2.9			15.7	66	18.3		15.4	53.1	31.4				
Total %	1.2	17.8	1.5		8.5	10.4	0.6			5.3	22.1	6.1		4.1	14.1	8.3		11.1	88.9	
Cars	55	782	66		384	461	22			232	979	253		186	639	360		0	0	4995
% Cars	96.5	95	97.1	100	97	95.8	84.6	100	100	95.1	95.4	89.1	100	97.9	97.7	93	100	0	0	95.8
Trucks	2	41	2		12	20	4			12	47	31		4	15	27		0	0	217
% Trucks	3.5	5	2.9	0	3	4.2	15.4	0	0	4.9	4.6	10.9	0	2.1	2.3	7	0	0	0	4.2

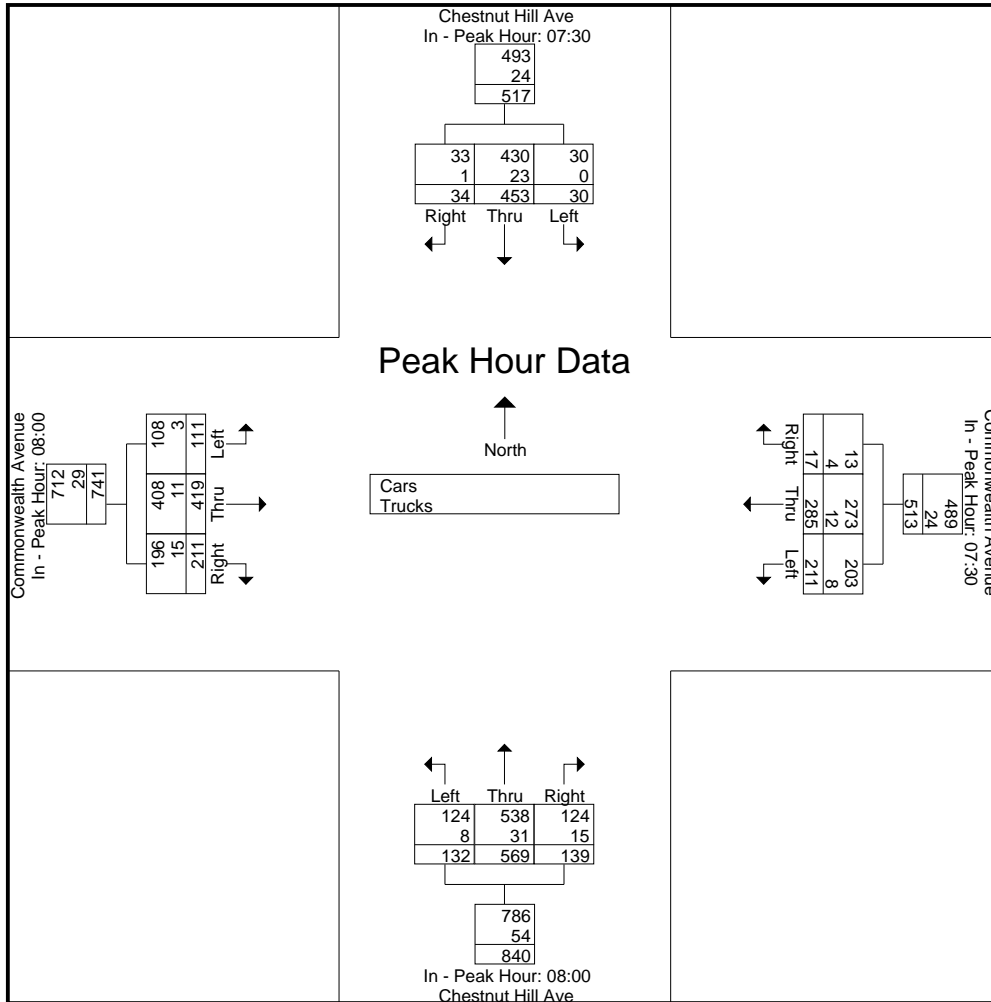
Start Time	Chestnut Hill Ave From North				Commonwealth Avenue From East				Chestnut Hill Ave From South				Commonwealth Avenue From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00																	
08:00	3	106	8	117	54	90	6	150	44	131	36	211	41	129	65	235	713
08:15	18	102	13	133	52	75	5	132	23	149	47	219	16	96	47	159	643
08:30	8	88	9	105	52	64	0	116	35	115	38	188	27	69	40	136	545
08:45	6	89	17	112	45	48	0	93	30	174	18	222	27	125	59	211	638
Total Volume	35	385	47	467	203	277	11	491	132	569	139	840	111	419	211	741	2539
% App. Total	7.5	82.4	10.1		41.3	56.4	2.2		15.7	67.7	16.5		15	56.5	28.5		
PHF	.486	.908	.691	.878	.940	.769	.458	.818	.750	.818	.739	.946	.677	.812	.812	.788	.890
Cars	34	361	45	440	197	266	7	470	124	538	124	786	108	408	196	712	2408
% Cars	97.1	93.8	95.7	94.2	97.0	96.0	63.6	95.7	93.9	94.6	89.2	93.6	97.3	97.4	92.9	96.1	94.8
Trucks	1	24	2	27	6	11	4	21	8	31	15	54	3	11	15	29	131
% Trucks	2.9	6.2	4.3	5.8	3.0	4.0	36.4	4.3	6.1	5.4	10.8	6.4	2.7	2.6	7.1	3.9	5.2



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30				07:30				08:00				08:00			
+0 mins.	4	112	4	120	66	66	2	134	44	131	36	211	41	129	65	235
+15 mins.	5	133	9	147	39	54	4	97	23	149	47	219	16	96	47	159
+30 mins.	3	106	8	117	54	90	6	150	35	115	38	188	27	69	40	136
+45 mins.	18	102	13	133	52	75	5	132	30	174	18	222	27	125	59	211
Total Volume	30	453	34	517	211	285	17	513	132	569	139	840	111	419	211	741
% App. Total	5.8	87.6	6.6		41.1	55.6	3.3		15.7	67.7	16.5		15	56.5	28.5	
PHF	.417	.852	.654	.879	.799	.792	.708	.855	.750	.818	.739	.946	.677	.812	.812	.788
Cars	30	430	33	493	203	273	13	489	124	538	124	786	108	408	196	712
% Cars	100	94.9	97.1	95.4	96.2	95.8	76.5	95.3	93.9	94.6	89.2	93.6	97.3	97.4	92.9	96.1
Trucks	0	23	1	24	8	12	4	24	8	31	15	54	3	11	15	29
% Trucks	0	5.1	2.9	4.6	3.8	4.2	23.5	4.7	6.1	5.4	10.8	6.4	2.7	2.6	7.1	3.9



N/S Street : Chestnut Hill Avenue  
 E/W Street: Commonwealth Avenue  
 City/State : Boston, MA  
 Weather : Clear

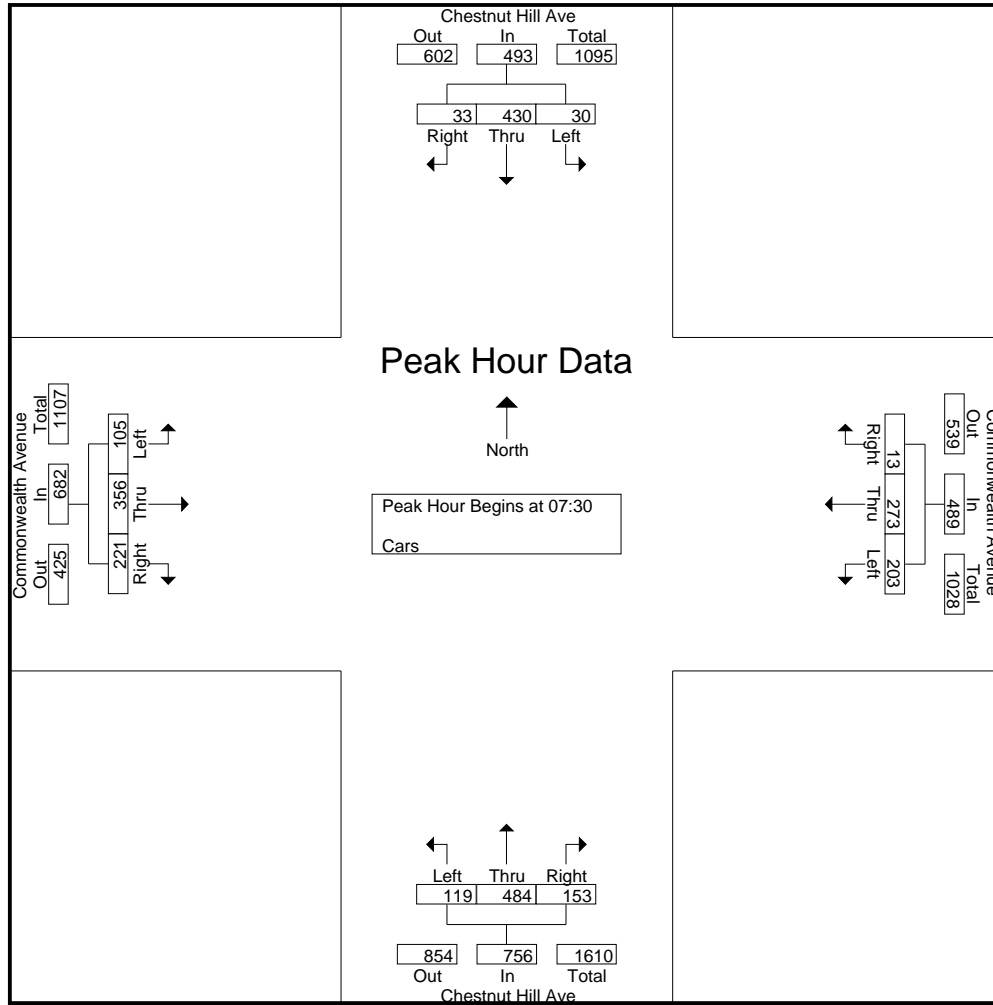
Accurate Counts  
 978-664-2565

File Name : 3900003  
 Site Code : 3900003  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Chestnut Hill Ave From North				Commonwealth Avenue From East					Chestnut Hill Ave From South				Commonwealth Avenue From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	U-Trn	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	4	70	2	6	36	30	2	1	35	24	95	23	4	7	44	19	9	55	356	411
07:15	8	116	6	7	49	50	7	1	49	29	121	29	1	22	54	30	2	60	521	581
07:30	4	106	4	13	63	62	2	1	73	28	111	38	18	22	64	52	7	112	556	668
07:45	5	129	9	18	39	53	4	0	96	27	114	39	8	27	69	63	5	127	578	705
Total	21	421	21	44	187	195	15	3	253	108	441	129	31	78	231	164	23	354	2011	2365
08:00	3	100	8	31	51	89	4	1	65	42	120	34	5	40	127	62	7	109	680	789
08:15	18	95	12	16	50	69	3	2	47	22	139	42	7	16	96	44	0	72	606	678
08:30	8	83	9	19	51	64	0	2	7	32	110	34	2	26	66	38	1	31	521	552
08:45	5	83	16	5	45	44	0	1	0	28	169	14	2	26	119	52	2	10	601	611
Total	34	361	45	71	197	266	7	6	119	124	538	124	16	108	408	196	10	222	2408	2630
Grand Total	55	782	66	115	384	461	22	9	372	232	979	253	47	186	639	360	33	576	4419	4995
Apprch %	6.1	86.6	7.3		44.3	53.2	2.5			15.8	66.9	17.3		15.7	53.9	30.4				
Total %	1.2	17.7	1.5		8.7	10.4	0.5			5.3	22.2	5.7		4.2	14.5	8.1		11.5	88.5	

Start Time	Chestnut Hill Ave From North				Commonwealth Avenue From East				Chestnut Hill Ave From South				Commonwealth Avenue From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	4	106	4	114	63	62	2	127	28	111	38	177	22	64	52	138	556
07:45	5	129	9	143	39	53	4	96	27	114	39	180	27	69	63	159	578
08:00	3	100	8	111	51	89	4	144	42	120	34	196	40	127	62	229	680
08:15	18	95	12	125	50	69	3	122	22	139	42	203	16	96	44	156	606
Total Volume	30	430	33	493	203	273	13	489	119	484	153	756	105	356	221	682	2420
% App. Total	6.1	87.2	6.7		41.5	55.8	2.7		15.7	64	20.2		15.4	52.2	32.4		
PHF	.417	.833	.688	.862	.806	.767	.813	.849	.708	.871	.911	.931	.656	.701	.877	.745	.890

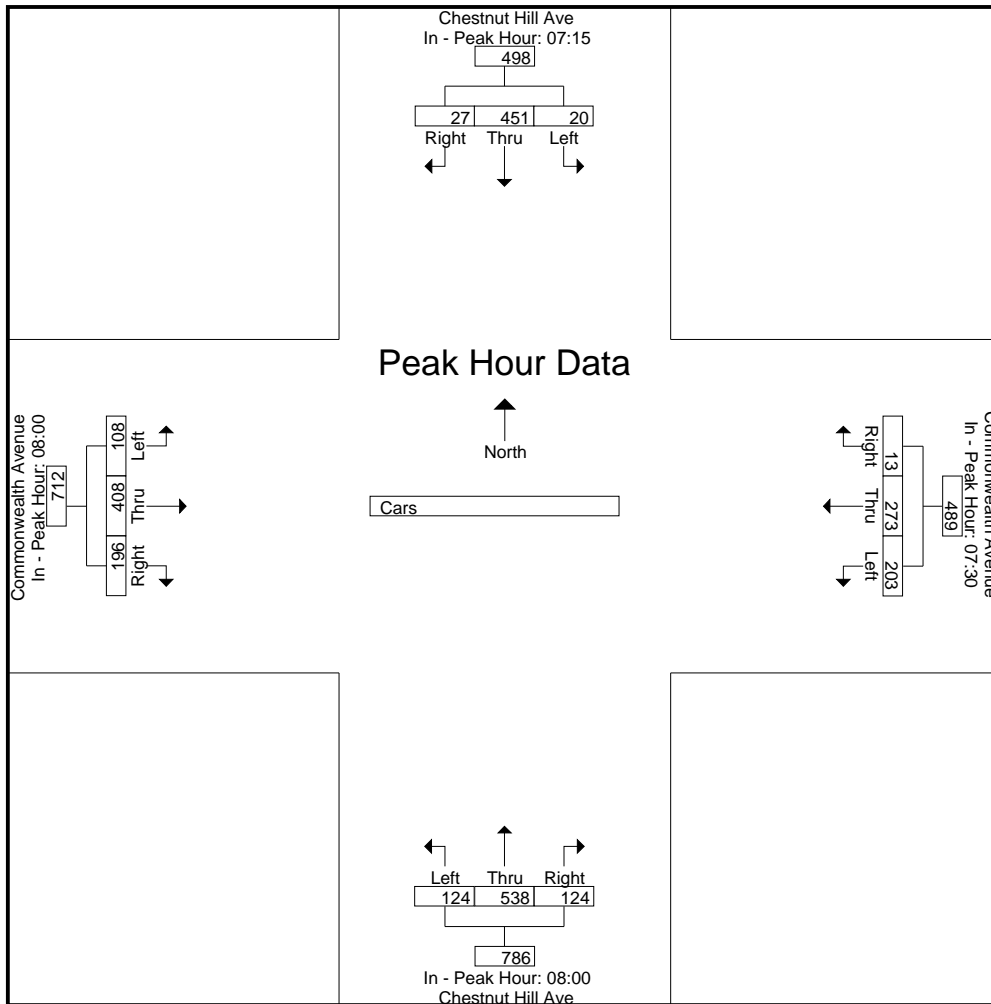


Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15				07:30				08:00				08:00			
+0 mins.	8	116	6	130	63	62	2	127	42	120	34	196	40	127	62	229
+15 mins.	4	106	4	114	39	53	4	96	22	139	42	203	16	96	44	156
+30 mins.	5	129	9	143	51	89	4	144	32	110	34	176	26	66	38	130
+45 mins.	3	100	8	111	50	69	3	122	28	169	14	211	26	119	52	197
Total Volume	20	451	27	498	203	273	13	489	124	538	124	786	108	408	196	712
% App. Total	4	90.6	5.4		41.5	55.8	2.7		15.8	68.4	15.8		15.2	57.3	27.5	
PHF	.625	.874	.750	.871	.806	.767	.813	.849	.738	.796	.738	.931	.675	.803	.790	.777





N/S Street : Chestnut Hill Avenue  
 E/W Street: Commonwealth Avenue  
 City/State : Boston, MA  
 Weather : Clear

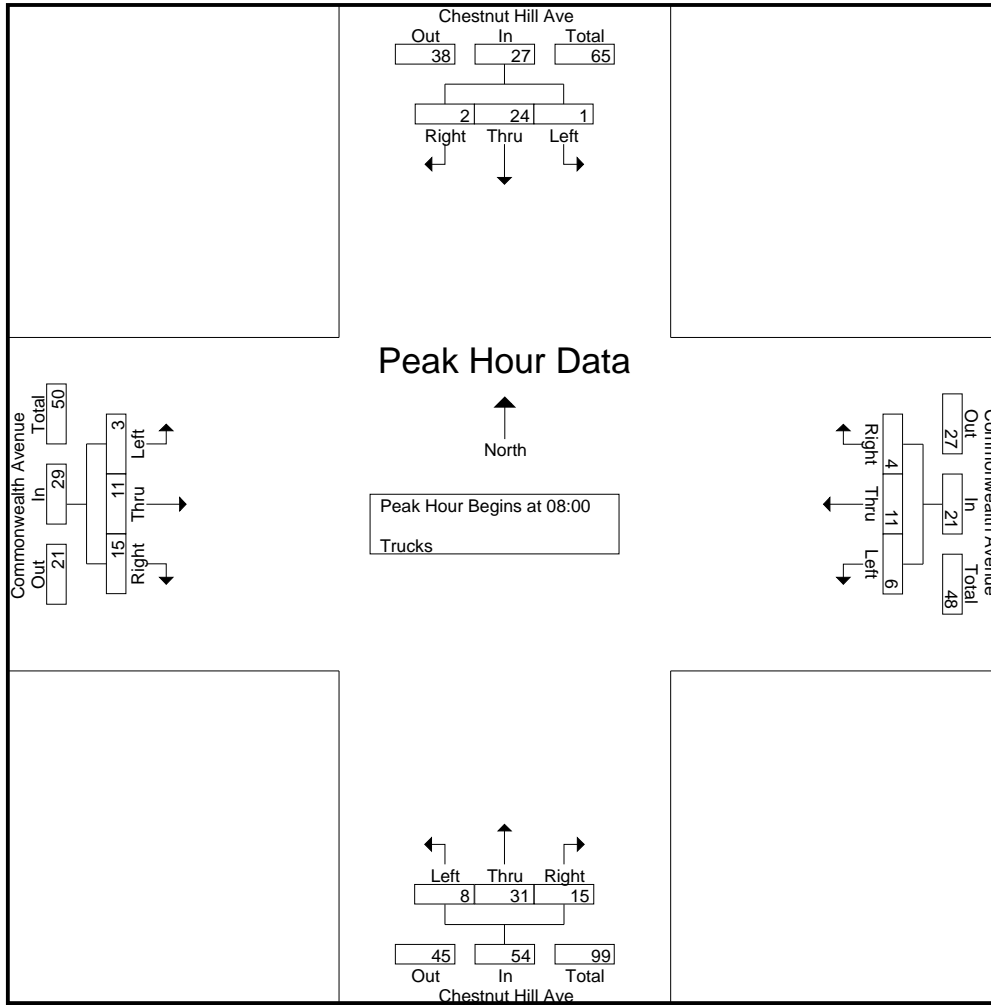
Accurate Counts  
 978-664-2565

File Name : 3900003  
 Site Code : 3900003  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Chestnut Hill Ave From North				Commonwealth Avenue From East					Chestnut Hill Ave From South				Commonwealth Avenue From West				Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	Peds	Left	Thru	Right	U-Trn	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds				
07:00	1	5	0	0	1	2	0	0	0	0	5	3	0	0	3	4	0	0	0	24	24
07:15	0	2	0	0	2	2	0	0	0	3	3	2	0	1	0	1	0	0	0	16	16
07:30	0	6	0	0	3	4	0	0	0	1	4	5	0	0	1	4	0	0	0	28	28
07:45	0	4	0	0	0	1	0	0	0	0	4	6	0	0	0	3	0	0	0	18	18
Total	1	17	0	0	6	9	0	0	0	4	16	16	0	1	4	12	0	0	0	86	86
08:00	0	6	0	0	3	1	2	0	0	2	11	2	0	1	2	3	0	0	0	33	33
08:15	0	7	1	0	2	6	2	0	0	1	10	5	0	0	0	3	0	0	0	37	37
08:30	0	5	0	0	1	0	0	0	0	3	5	4	0	1	3	2	0	0	0	24	24
08:45	1	6	1	0	0	4	0	0	0	2	5	4	0	1	6	7	0	0	0	37	37
Total	1	24	2	0	6	11	4	0	0	8	31	15	0	3	11	15	0	0	0	131	131
Grand Total	2	41	2	0	12	20	4	0	0	12	47	31	0	4	15	27	0	0	0	217	217
Apprch %	4.4	91.1	4.4		33.3	55.6	11.1			13.3	52.2	34.4		8.7	32.6	58.7					
Total %	0.9	18.9	0.9		5.5	9.2	1.8			5.5	21.7	14.3		1.8	6.9	12.4				0	100

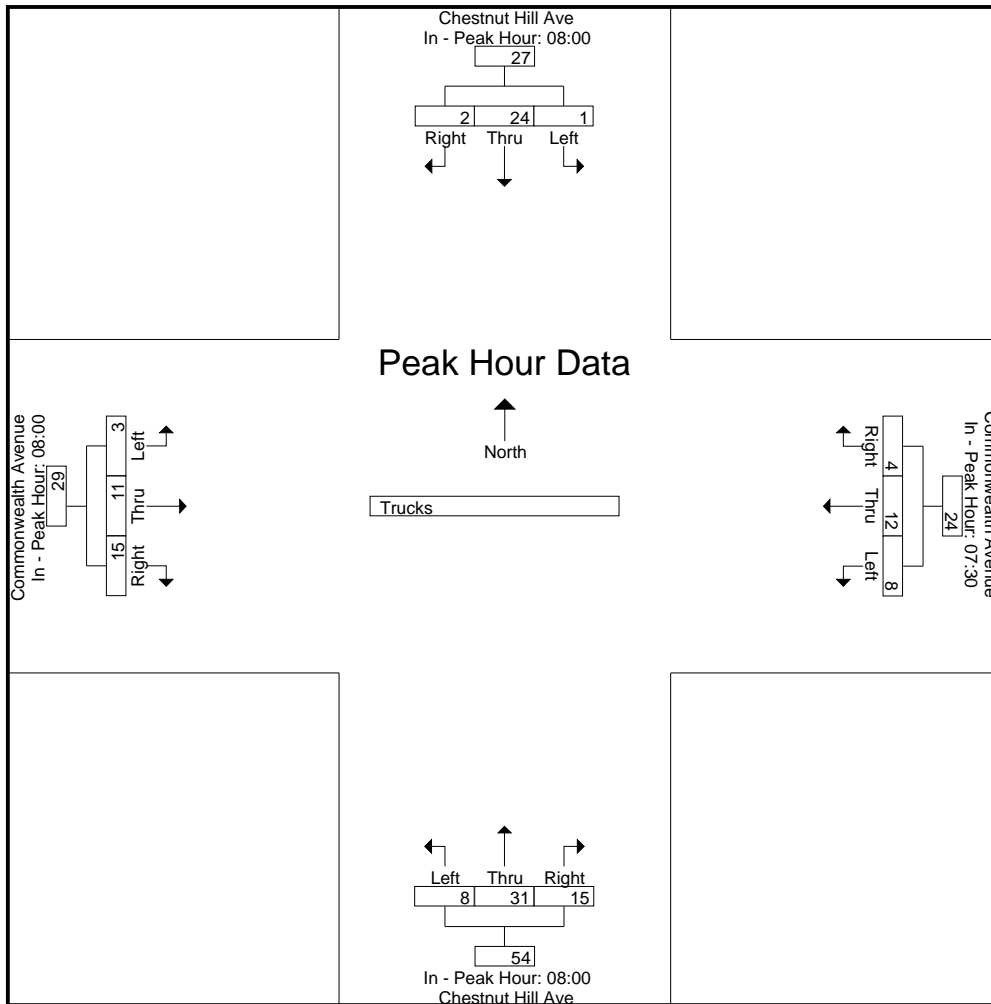
Start Time	Chestnut Hill Ave From North				Commonwealth Avenue From East				Chestnut Hill Ave From South				Commonwealth Avenue From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00																	
08:00	0	6	0	6	3	1	2	6	2	11	2	15	1	2	3	6	33
08:15	0	7	1	8	2	6	2	10	1	10	5	16	0	0	3	3	37
08:30	0	5	0	5	1	0	0	1	3	5	4	12	1	3	2	6	24
08:45	1	6	1	8	0	4	0	4	2	5	4	11	1	6	7	14	37
Total Volume	1	24	2	27	6	11	4	21	8	31	15	54	3	11	15	29	131
% App. Total	3.7	88.9	7.4		28.6	52.4	19		14.8	57.4	27.8		10.3	37.9	51.7		
PHF	.250	.857	.500	.844	.500	.458	.500	.525	.667	.705	.750	.844	.750	.458	.536	.518	.885



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00				07:30				08:00				08:00			
+0 mins.	0	6	0	6	3	4	0	7	2	11	2	15	1	2	3	6
+15 mins.	0	7	1	8	0	1	0	1	1	10	5	16	0	0	3	3
+30 mins.	0	5	0	5	3	1	2	6	3	5	4	12	1	3	2	6
+45 mins.	1	6	1	8	2	6	2	10	2	5	4	11	1	6	7	14
Total Volume	1	24	2	27	8	12	4	24	8	31	15	54	3	11	15	29
% App. Total	3.7	88.9	7.4		33.3	50	16.7		14.8	57.4	27.8		10.3	37.9	51.7	
PHF	.250	.857	.500	.844	.667	.500	.500	.600	.667	.705	.750	.844	.750	.458	.536	.518



N/S Street : Chestnut Hill Avenue  
 E/W Street: Commonwealth Avenue  
 City/State : Boston, MA  
 Weather : Clear

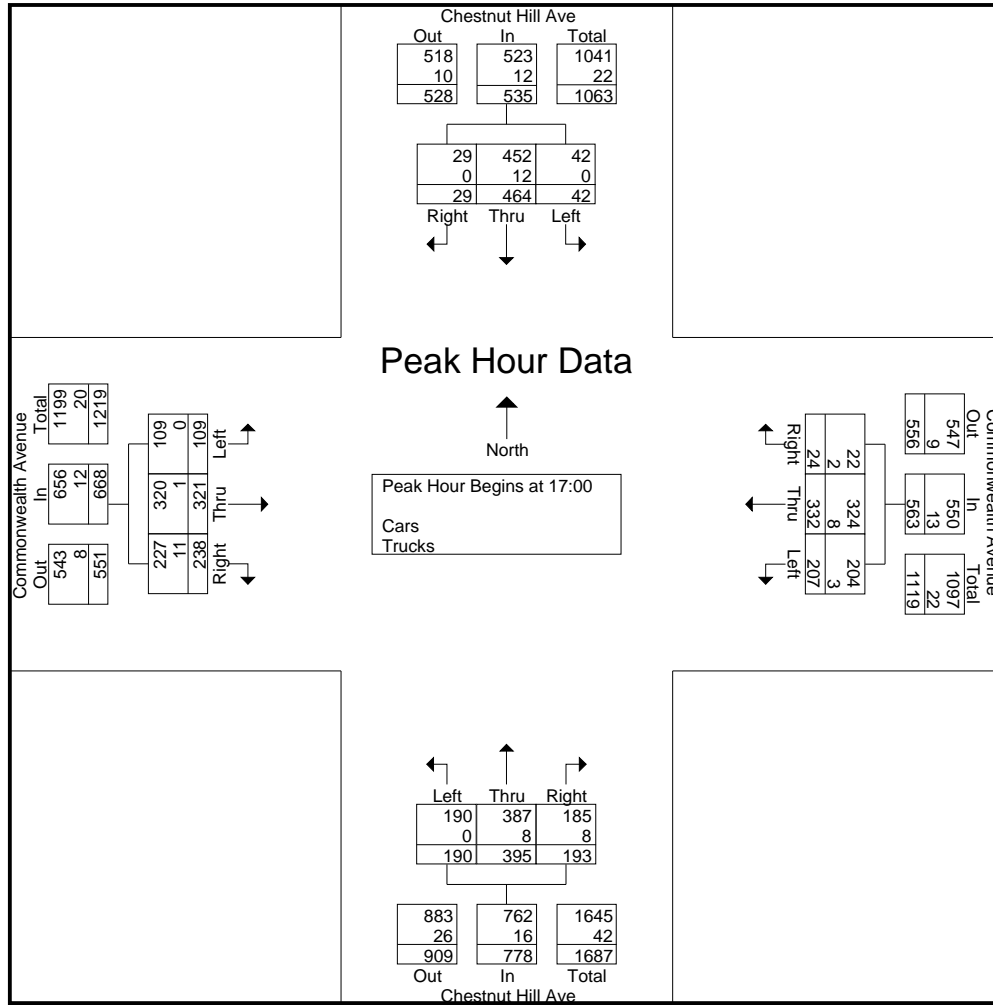
Accurate Counts  
 978-664-2565

File Name : 3900003  
 Site Code : 3900003  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Chestnut Hill Ave From North				Commonwealth Avenue From East					Chestnut Hill Ave From South				Commonwealth Avenue From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	U-Trn	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	13	98	1	15	48	49	5	1	37	47	102	31	14	7	55	40	7	74	496	570
16:15	9	102	8	17	56	73	9	0	44	36	75	32	8	23	65	29	1	70	517	587
16:30	7	109	10	8	47	50	5	2	59	28	106	45	10	24	67	46	2	81	544	625
16:45	6	90	4	19	55	70	5	2	60	36	102	35	20	26	82	42	10	111	553	664
Total	35	399	23	59	206	242	24	5	200	147	385	143	52	80	269	157	20	336	2110	2446
17:00	14	127	7	8	49	74	4	0	35	54	105	38	29	34	78	52	0	72	636	708
17:15	7	116	7	0	57	92	2	0	47	43	80	46	27	29	83	65	1	75	627	702
17:30	9	122	10	24	52	71	6	1	42	39	115	55	10	16	71	54	5	82	620	702
17:45	12	99	5	16	49	95	12	0	93	54	95	54	11	30	89	67	0	120	661	781
Total	42	464	29	48	207	332	24	1	217	190	395	193	77	109	321	238	6	349	2544	2893
Grand Total	77	863	52	107	413	574	48	6	417	337	780	336	129	189	590	395	26	685	4654	5339
Apprch %	7.8	87	5.2		39.9	55.5	4.6			23.2	53.7	23.1		16.1	50.3	33.6				
Total %	1.7	18.5	1.1		8.9	12.3	1			7.2	16.8	7.2		4.1	12.7	8.5		12.8	87.2	
Cars	77	840	52		406	559	46			334	760	317		189	589	377		0	0	5231
% Cars	100	97.3	100	100	98.3	97.4	95.8	100	100	99.1	97.4	94.3	100	100	99.8	95.4	100	0	0	98
Trucks	0	23	0		7	15	2			3	20	19		0	1	18		0	0	108
% Trucks	0	2.7	0	0	1.7	2.6	4.2	0	0	0.9	2.6	5.7	0	0	0.2	4.6	0	0	0	2

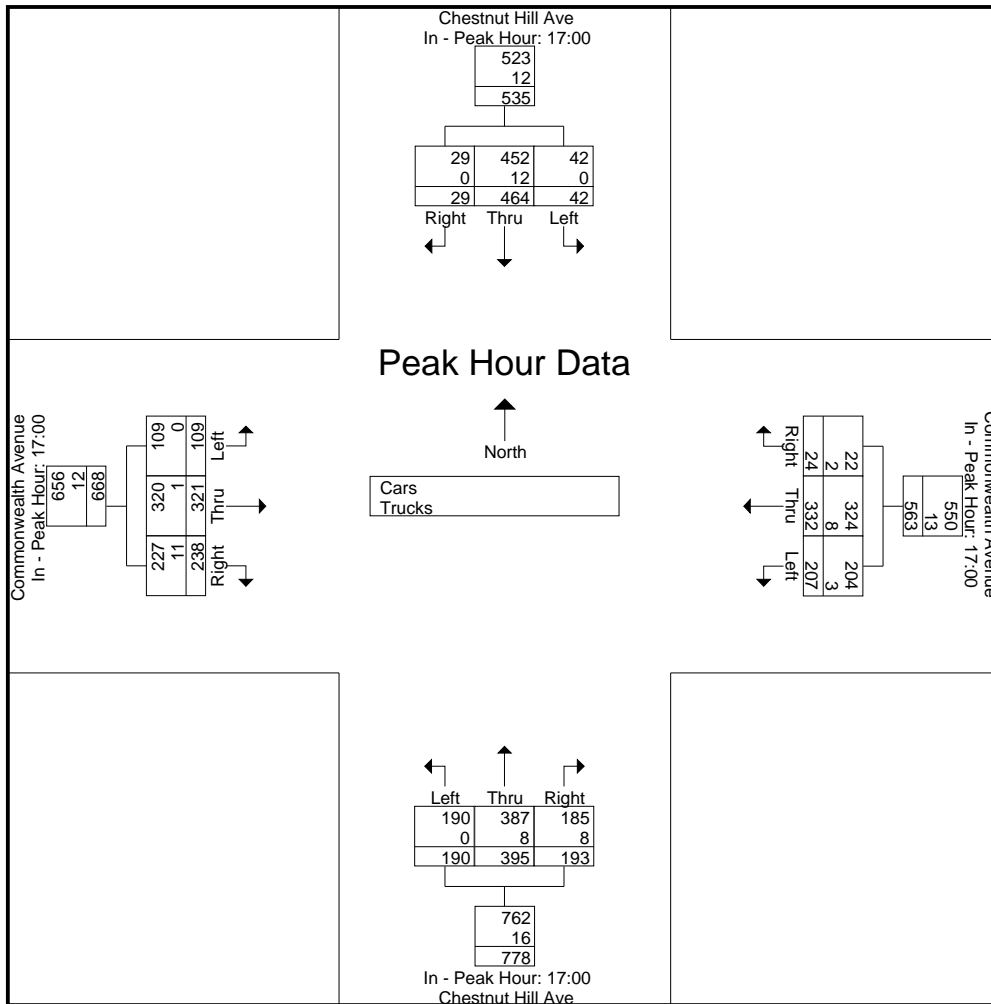
Start Time	Chestnut Hill Ave From North				Commonwealth Avenue From East				Chestnut Hill Ave From South				Commonwealth Avenue From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	14	127	7	148	49	74	4	127	54	105	38	197	34	78	52	164	636
17:15	7	116	7	130	57	92	2	151	43	80	46	169	29	83	65	177	627
17:30	9	122	10	141	52	71	6	129	39	115	55	209	16	71	54	141	620
17:45	12	99	5	116	49	95	12	156	54	95	54	203	30	89	67	186	661
Total Volume	42	464	29	535	207	332	24	563	190	395	193	778	109	321	238	668	2544
% App. Total	7.9	86.7	5.4		36.8	59	4.3		24.4	50.8	24.8		16.3	48.1	35.6		
PHF	.750	.913	.725	.904	.908	.874	.500	.902	.880	.859	.877	.931	.801	.902	.888	.898	.962
Cars	42	452	29	523	204	324	22	550	190	387	185	762	109	320	227	656	2491
% Cars	100	97.4	100	97.8	98.6	97.6	91.7	97.7	100	98.0	95.9	97.9	100	99.7	95.4	98.2	97.9
Trucks	0	12	0	12	3	8	2	13	0	8	8	16	0	1	11	12	53
% Trucks	0	2.6	0	2.2	1.4	2.4	8.3	2.3	0	2.0	4.1	2.1	0	0.3	4.6	1.8	2.1



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00				17:00				17:00							
+0 mins.	14	127	7	148	49	74	4	127	54	105	38	197	34	78	52	164
+15 mins.	7	116	7	130	57	92	2	151	43	80	46	169	29	83	65	177
+30 mins.	9	122	10	141	52	71	6	129	39	115	55	209	16	71	54	141
+45 mins.	12	99	5	116	49	95	12	156	54	95	54	203	30	89	67	186
Total Volume	42	464	29	535	207	332	24	563	190	395	193	778	109	321	238	668
% App. Total	7.9	86.7	5.4		36.8	59	4.3		24.4	50.8	24.8		16.3	48.1	35.6	
PHF	.750	.913	.725	.904	.908	.874	.500	.902	.880	.859	.877	.931	.801	.902	.888	.898
Cars	42	452	29	523	204	324	22	550	190	387	185	762	109	320	227	656
% Cars	100	97.4	100	97.8	98.6	97.6	91.7	97.7	100	98	95.9	97.9	100	99.7	95.4	98.2
Trucks	0	12	0	12	3	8	2	13	0	8	8	16	0	1	11	12
% Trucks	0	2.6	0	2.2	1.4	2.4	8.3	2.3	0	2	4.1	2.1	0	0.3	4.6	1.8



N/S Street : Chestnut Hill Avenue  
 E/W Street: Commonwealth Avenue  
 City/State : Boston, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

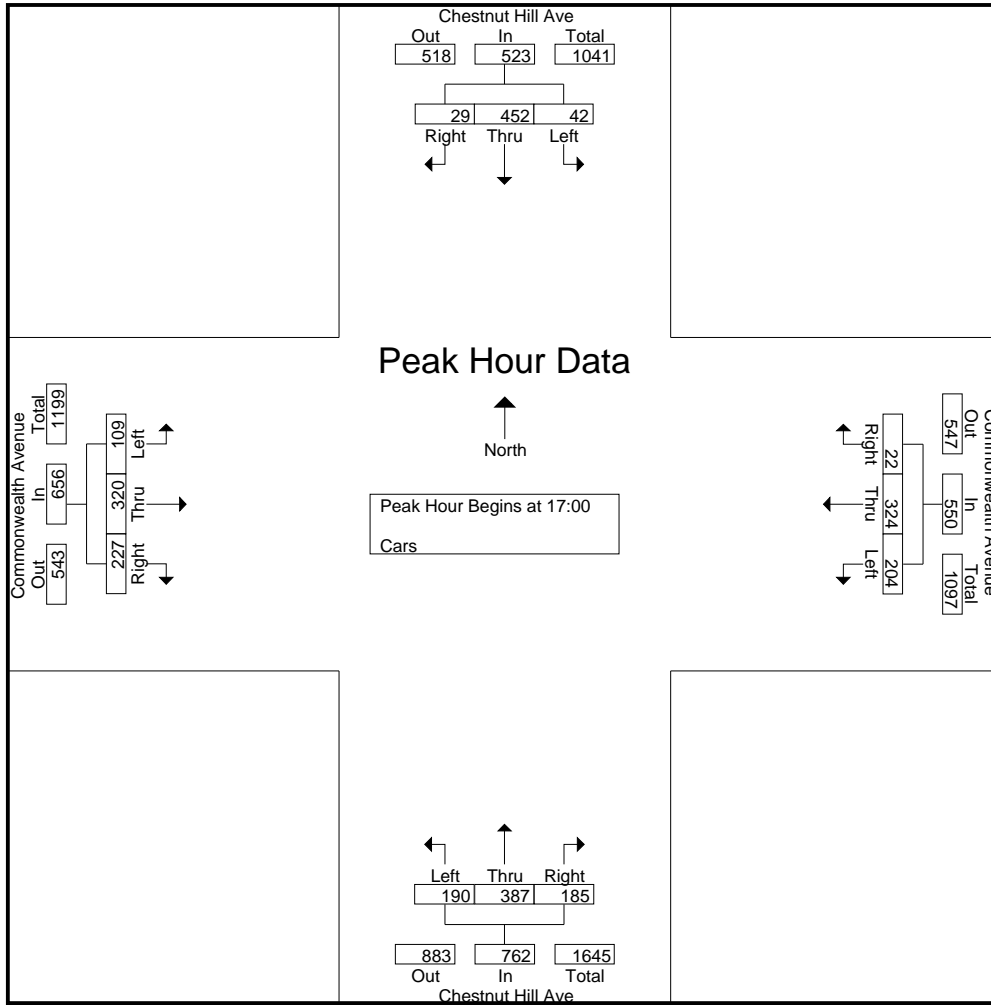
File Name : 3900003  
 Site Code : 3900003  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Chestnut Hill Ave From North				Commonwealth Avenue From East					Chestnut Hill Ave From South				Commonwealth Avenue From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	U-Trn	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	13	93	1	15	46	48	5	1	37	46	100	29	14	7	55	38	7	74	481	555
16:15	9	99	8	17	55	72	9	0	44	36	72	31	8	23	65	27	1	70	506	576
16:30	7	108	10	8	47	48	5	2	59	27	102	41	10	24	67	45	2	81	531	612
16:45	6	88	4	19	54	67	5	2	60	35	99	31	20	26	82	40	10	111	537	648
Total	35	388	23	59	202	235	24	5	200	144	373	132	52	80	269	150	20	336	2055	2391
17:00	14	124	7	8	46	72	4	0	35	54	102	36	29	34	78	48	0	72	619	691
17:15	7	114	7	0	57	90	2	0	47	43	79	45	27	29	83	62	1	75	618	693
17:30	9	119	10	24	52	69	6	1	42	39	114	52	10	16	71	52	5	82	609	691
17:45	12	95	5	16	49	93	10	0	93	54	92	52	11	30	88	65	0	120	645	765
Total	42	452	29	48	204	324	22	1	217	190	387	185	77	109	320	227	6	349	2491	2840
Grand Total	77	840	52	107	406	559	46	6	417	334	760	317	129	189	589	377	26	685	4546	5231
Apprch %	7.9	86.7	5.4		40.2	55.3	4.5			23.7	53.9	22.5		16.4	51	32.6				
Total %	1.7	18.5	1.1		8.9	12.3	1			7.3	16.7	7		4.2	13	8.3		13.1	86.9	

Start Time	Chestnut Hill Ave From North				Commonwealth Avenue From East				Chestnut Hill Ave From South				Commonwealth Avenue From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	14	124	7	145	46	72	4	122	54	102	36	192	34	78	48	160	619
17:15	7	114	7	128	57	90	2	149	43	79	45	167	29	83	62	174	618
17:30	9	119	10	138	52	69	6	127	39	114	52	205	16	71	52	139	609
17:45	12	95	5	112	49	93	10	152	54	92	52	198	30	88	65	183	645
Total Volume	42	452	29	523	204	324	22	550	190	387	185	762	109	320	227	656	2491
% App. Total	8	86.4	5.5		37.1	58.9	4		24.9	50.8	24.3		16.6	48.8	34.6		
PHF	.750	.911	.725	.902	.895	.871	.550	.905	.880	.849	.889	.929	.801	.909	.873	.896	.966

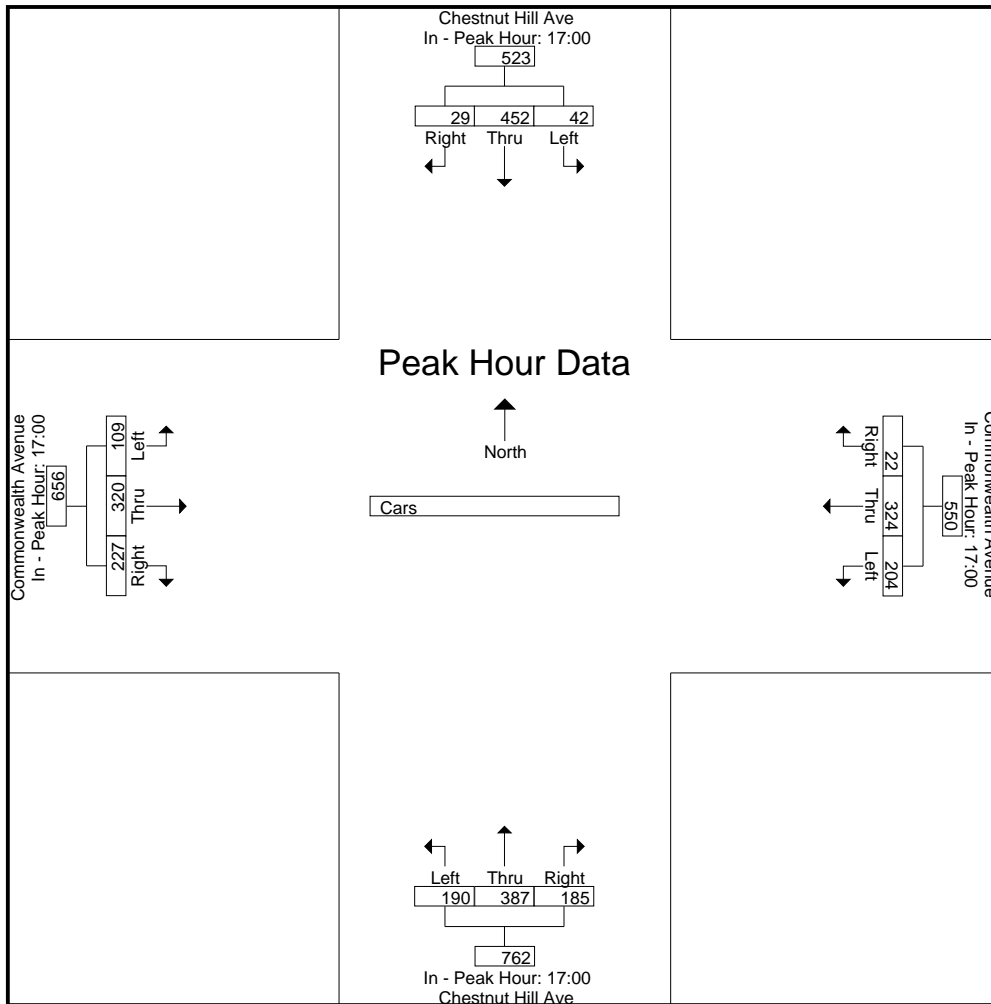




Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00				17:00				17:00							
+0 mins.	14	124	7	145	46	72	4	122	54	102	36	192	34	78	48	160
+15 mins.	7	114	7	128	57	90	2	149	43	79	45	167	29	83	62	174
+30 mins.	9	119	10	138	52	69	6	127	39	114	52	205	16	71	52	139
+45 mins.	12	95	5	112	49	93	10	152	54	92	52	198	30	88	65	183
Total Volume	42	452	29	523	204	324	22	550	190	387	185	762	109	320	227	656
% App. Total	8	86.4	5.5		37.1	58.9	4		24.9	50.8	24.3		16.6	48.8	34.6	
PHF	.750	.911	.725	.902	.895	.871	.550	.905	.880	.849	.889	.929	.801	.909	.873	.896



N/S Street : Chestnut Hill Avenue  
 E/W Street: Commonwealth Avenue  
 City/State : Boston, MA  
 Weather : Clear

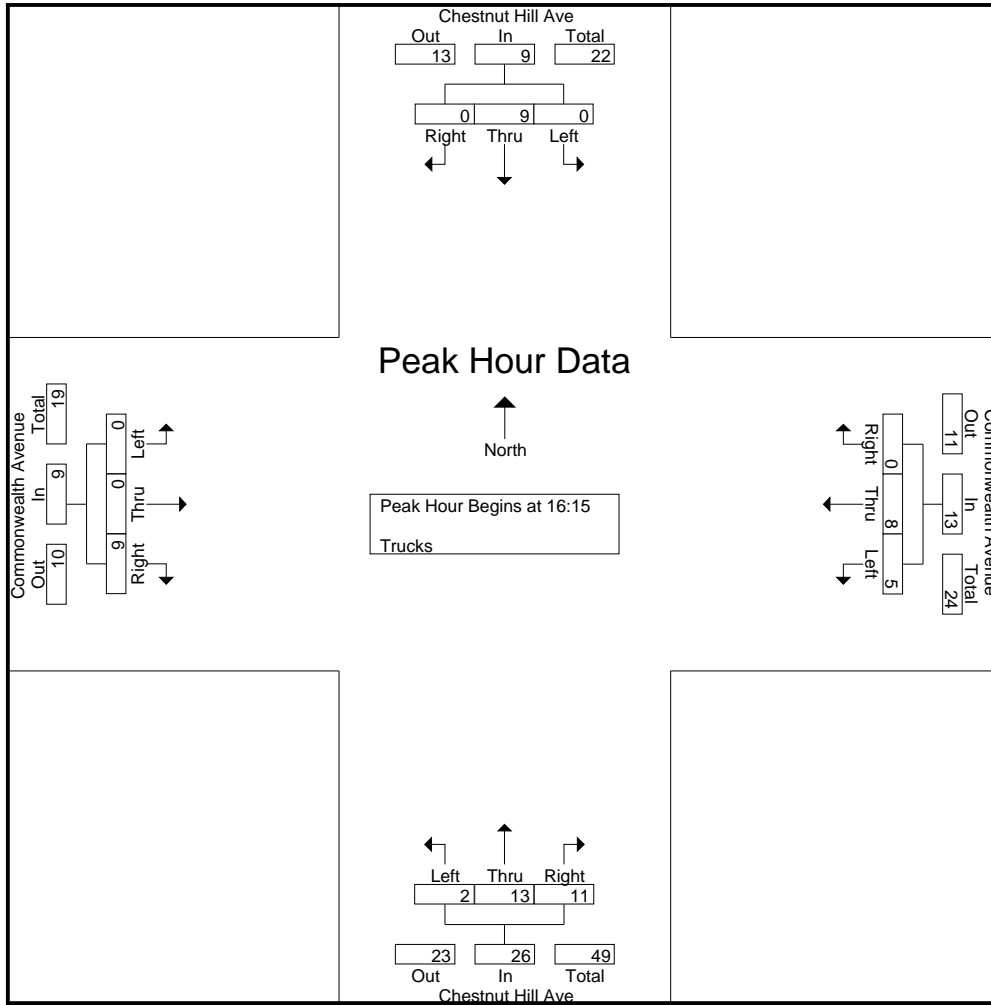
Accurate Counts  
 978-664-2565

File Name : 3900003  
 Site Code : 3900003  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Chestnut Hill Ave From North				Commonwealth Avenue From East					Chestnut Hill Ave From South				Commonwealth Avenue From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	U-Trn	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	0	5	0	0	2	1	0	0	0	1	2	2	0	0	0	2	0	0	15	15
16:15	0	3	0	0	1	1	0	0	0	0	3	1	0	0	0	2	0	0	11	11
16:30	0	1	0	0	0	2	0	0	0	1	4	4	0	0	0	1	0	0	13	13
16:45	0	2	0	0	1	3	0	0	0	1	3	4	0	0	0	2	0	0	16	16
Total	0	11	0	0	4	7	0	0	0	3	12	11	0	0	0	7	0	0	55	55
17:00	0	3	0	0	3	2	0	0	0	0	3	2	0	0	0	4	0	0	17	17
17:15	0	2	0	0	0	2	0	0	0	0	1	1	0	0	0	3	0	0	9	9
17:30	0	3	0	0	0	2	0	0	0	0	1	3	0	0	0	2	0	0	11	11
17:45	0	4	0	0	0	2	2	0	0	0	3	2	0	0	1	2	0	0	16	16
Total	0	12	0	0	3	8	2	0	0	0	8	8	0	0	1	11	0	0	53	53
Grand Total	0	23	0	0	7	15	2	0	0	3	20	19	0	0	1	18	0	0	108	108
Apprch %	0	100	0		29.2	62.5	8.3			7.1	47.6	45.2		0	5.3	94.7				
Total %	0	21.3	0		6.5	13.9	1.9			2.8	18.5	17.6		0	0.9	16.7			0	100

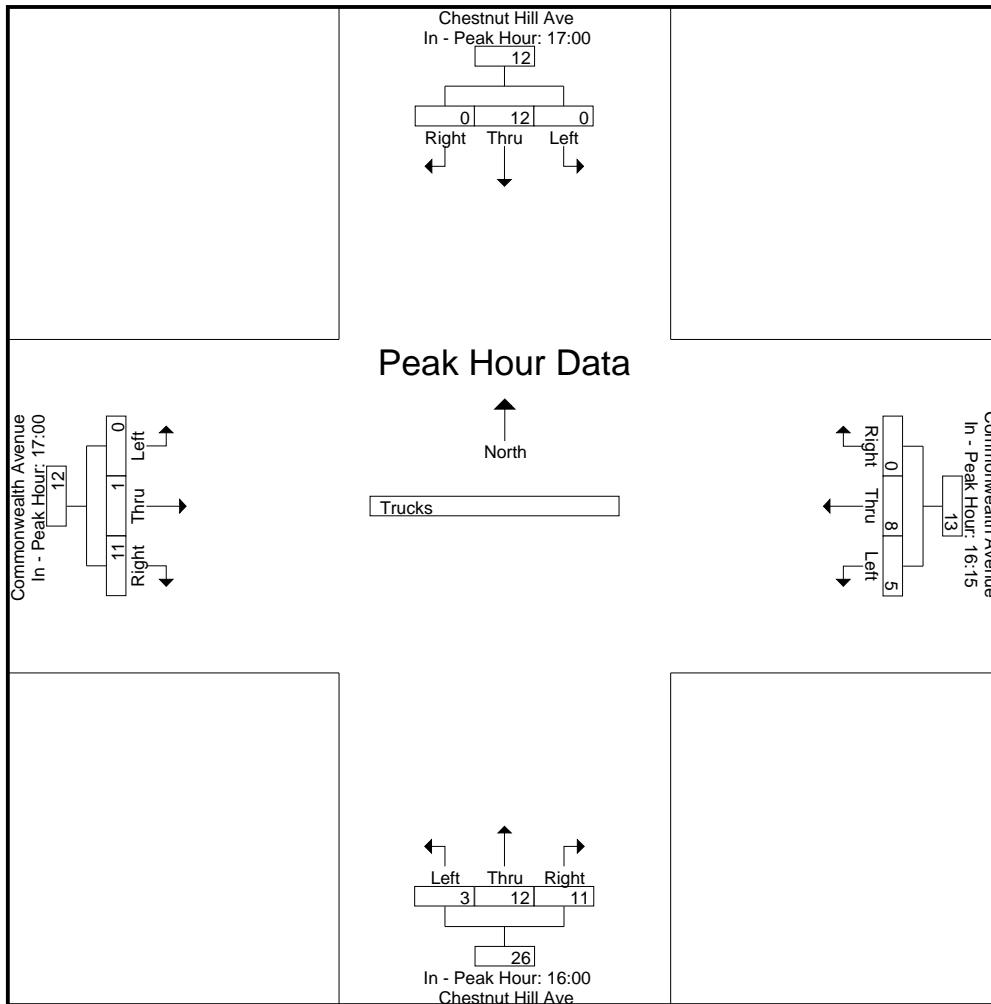
Start Time	Chestnut Hill Ave From North				Commonwealth Avenue From East				Chestnut Hill Ave From South				Commonwealth Avenue From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:15																	
16:15	0	3	0	3	1	1	0	2	0	3	1	4	0	0	2	2	11
16:30	0	1	0	1	0	2	0	2	1	4	4	9	0	0	1	1	13
16:45	0	2	0	2	1	3	0	4	1	3	4	8	0	0	2	2	16
17:00	0	3	0	3	3	2	0	5	0	3	2	5	0	0	4	4	17
Total Volume	0	9	0	9	5	8	0	13	2	13	11	26	0	0	9	9	57
% App. Total	0	100	0		38.5	61.5	0		7.7	50	42.3		0	0	100		
PHF	.000	.750	.000	.750	.417	.667	.000	.650	.500	.813	.688	.722	.000	.000	.563	.563	.838



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00				16:15				16:00				17:00			
+0 mins.	0	3	0	3	1	1	0	2	1	2	2	5	0	0	4	4
+15 mins.	0	2	0	2	0	2	0	2	0	3	1	4	0	0	3	3
+30 mins.	0	3	0	3	1	3	0	4	1	4	4	9	0	0	2	2
+45 mins.	0	4	0	4	3	2	0	5	1	3	4	8	0	1	2	3
Total Volume	0	12	0	12	5	8	0	13	3	12	11	26	0	1	11	12
% App. Total	0	100	0		38.5	61.5	0		11.5	46.2	42.3		0	8.3	91.7	
PHF	.000	.750	.000	.750	.417	.667	.000	.650	.750	.750	.688	.722	.000	.250	.688	.750



N/S Street : Old Colony Road  
 E/W Street: Commonwealth Avenue  
 City/State : Newton, MA  
 Weather : Clear

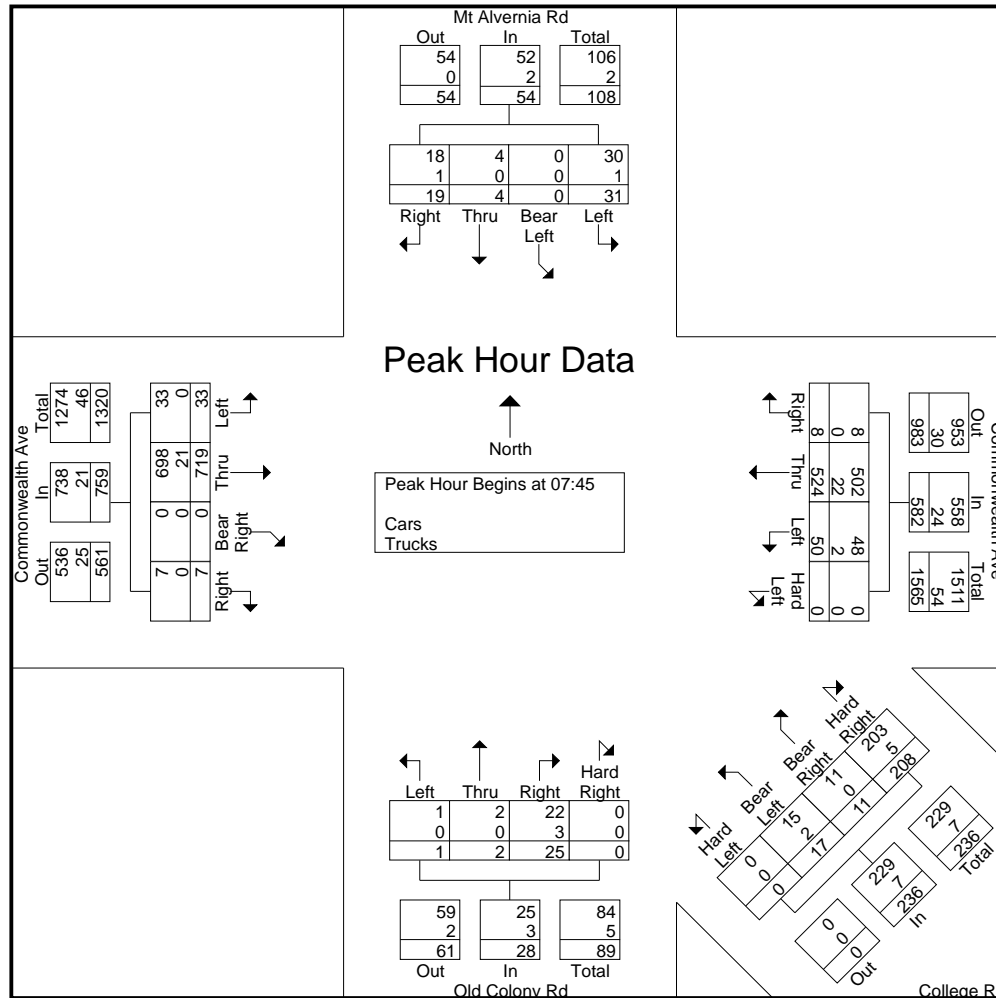
Accurate Counts  
 978-664-2565

File Name : 39000004  
 Site Code : 39000004  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

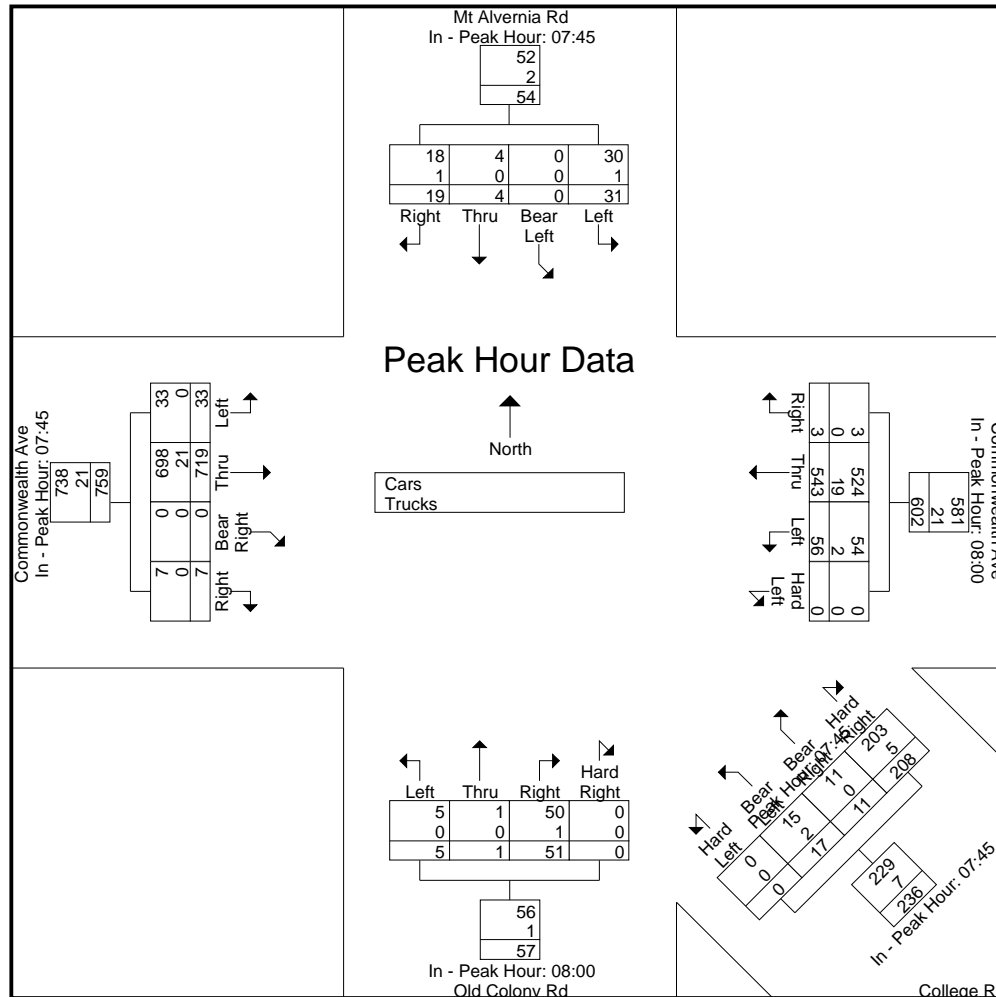
Start Time	Mt Alvernia Rd From North					Commonwealth Ave From East					College Rd From Southeast					Old Colony Rd From South					Commonwealth Ave From West					Exclu. Total	Inclu. Total	Int. Total
	Left	Bear Left	Thru	Right	Peds	Hard Left	Left	Thru	Right	Peds	Hard Left	Bear Left	Bear Right	Hard Right	Peds	Left	Thru	Right	Hard Right	Peds	Left	Thru	Bear Right	Right	Peds			
07:00	0	0	1	4	0	0	8	43	0	0	0	3	0	35	1	0	0	4	0	1	2	60	0	0	0	2	160	162
07:15	3	0	1	3	0	0	14	84	0	0	0	9	0	44	3	0	1	9	0	4	1	84	0	0	2	9	253	262
07:30	9	0	2	4	1	0	11	113	1	0	0	10	5	37	5	0	0	1	0	5	11	132	0	0	1	12	336	348
07:45	8	0	0	8	0	0	11	122	5	0	0	5	4	52	2	0	2	6	0	2	18	218	0	0	0	4	459	463
Total	20	0	4	19	1	0	44	362	6	0	0	27	9	168	11	0	3	20	0	12	32	494	0	0	3	27	1208	1235
08:00	5	0	0	3	0	0	12	126	2	0	0	3	2	48	4	0	0	3	0	4	5	167	0	5	0	8	381	389
08:15	6	0	0	3	0	0	15	132	0	0	0	3	3	53	2	0	0	6	0	3	5	155	0	2	0	5	383	388
08:30	12	0	4	5	0	0	12	144	1	0	0	6	2	55	1	1	0	10	0	1	5	179	0	0	0	2	436	438
08:45	5	0	0	6	1	0	17	141	0	0	0	4	0	56	14	4	1	32	0	14	0	179	0	1	9	38	446	484
Total	28	0	4	17	1	0	56	543	3	0	0	16	7	212	21	5	1	51	0	22	15	680	0	8	9	53	1646	1699
Grand Total	48	0	8	36	2	0	100	905	9	0	0	43	16	380	32	5	4	71	0	34	47	1174	0	8	12	80	2854	2934
Apprch %	52.2	0	8.7	39.1		0	9.9	89.3	0.9		0	9.8	3.6	86.6		6.2	5	88.8	0		3.8	95.5	0	0.7				
Total %	1.7	0	0.3	1.3		0	3.5	31.7	0.3		0	1.5	0.6	13.3		0.2	0.1	2.5	0		1.6	41.1	0	0.3		2.7	97.3	
Cars	47	0	8	33		0	98	868	9		0	38	16	368		5	4	68	0		47	1132	0	8		0	0	
% Cars	97.9	0	100	91.7	100	0	98	95.9	100	0	0	88.4	100	96.8	100	100	100	95.8	0	97.1	100	96.4	0	100	100	0	0	96.4
Trucks	1	0	0	3		0	2	37	0		0	5	0	12		0	0	3	0		0	42	0	0		0	0	106
% Trucks	2.1	0	0	8.3	0	0	2	4.1	0	0	0	11.6	0	3.2	0	0	0	4.2	0	2.9	0	3.6	0	0	0	0	0	3.6

Start Time	Mt Alvernia Rd From North					Commonwealth Ave From East					College Rd From Southeast					Old Colony Rd From South					Commonwealth Ave From West					Int. Total
	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 07:45																										
07:45	8	0	0	8	16	0	11	122	5	138	0	5	4	52	61	0	2	6	0	8	18	218	0	0	236	459
08:00	5	0	0	3	8	0	12	126	2	140	0	3	2	48	53	0	0	3	0	3	5	167	0	5	177	381
08:15	6	0	0	3	9	0	15	132	0	147	0	3	3	53	59	0	0	6	0	6	5	155	0	2	162	383
08:30	12	0	4	5	21	0	12	144	1	157	0	6	2	55	63	1	0	10	0	11	5	179	0	0	184	436
Total Volume	31	0	4	19	54	0	50	524	8	582	0	17	11	208	236	1	2	25	0	28	33	719	0	7	759	1659
% App. Total	57.4	0	7.4	35.2		0	8.6	90	1.4		0	7.2	4.7	88.1		3.6	7.1	89.3	0		4.3	94.7	0	0.9		
PHF	.646	.000	.250	.594	.643	.000	.833	.910	.400	.927	.000	.708	.688	.945	.937	.250	.250	.625	.000	.636	.458	.825	.000	.350	.804	.904
Cars	30	0	4	18	52	0	48	502	8	558	0	15	11	203	229	1	2	22	0	25	33	698	0	7	738	1602
% Cars	96.8	0	100	94.7	96.3	0	96.0	95.8	100	95.9	0	88.2	100	97.6	97.0	100	100	88.0	0	89.3	100	97.1	0	100	97.2	96.6
Trucks	1	0	0	1	2	0	2	22	0	24	0	2	0	5	7	0	0	3	0	3	0	21	0	0	21	57
% Trucks	3.2	0	0	5.3	3.7	0	4.0	4.2	0	4.1	0	11.8	0	2.4	3.0	0	0	12.0	0	10.7	0	2.9	0	0	2.8	3.4



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:45					08:00					07:45					08:00					07:45				
+0 mins.	8	0	0	8	16	0	12	126	2	140	0	5	4	52	61	0	0	3	0	3	18	218	0	0	236
+15 mins.	5	0	0	3	8	0	15	132	0	147	0	3	2	48	53	0	0	6	0	6	5	167	0	5	177
+30 mins.	6	0	0	3	9	0	12	144	1	157	0	3	3	53	59	1	0	10	0	11	5	155	0	2	162
+45 mins.	12	0	4	5	21	0	17	141	0	158	0	6	2	55	63	4	1	32	0	37	5	179	0	0	184
Total Volume	31	0	4	19	54	0	56	543	3	602	0	17	11	208	236	5	1	51	0	57	33	719	0	7	759
% App. Total	57.4	0	7.4	35.2		0	9.3	90.2	0.5		0	7.2	4.7	88.1		8.8	1.8	89.5	0		4.3	94.7	0	0.9	
PHF	.646	.000	.250	.594	.643	.000	.824	.943	.375	.953	.000	.708	.688	.945	.937	.313	.250	.398	.000	.385	.458	.825	.000	.350	.804
Cars	30	0	4	18	52	0	54	524	3	581	0	15	11	203	229	5	1	50	0	56	33	698	0	7	738
% Cars	96.8	0	100	94.7	96.3	0	96.4	96.5	100	96.5	0	88.2	100	97.6	97	100	100	98	0	98.2	100	97.1	0	100	97.2
Trucks	1	0	0	1	2	0	2	19	0	21	0	2	0	5	7	0	0	1	0	1	0	21	0	0	21
% Trucks	3.2	0	0	5.3	3.7	0	3.6	3.5	0	3.5	0	11.8	0	2.4	3	0	0	2	0	1.8	0	2.9	0	0	2.8





N/S Street : Old Colony Road  
 E/W Street: Commonwealth Avenue  
 City/State : Newton, MA  
 Weather : Clear

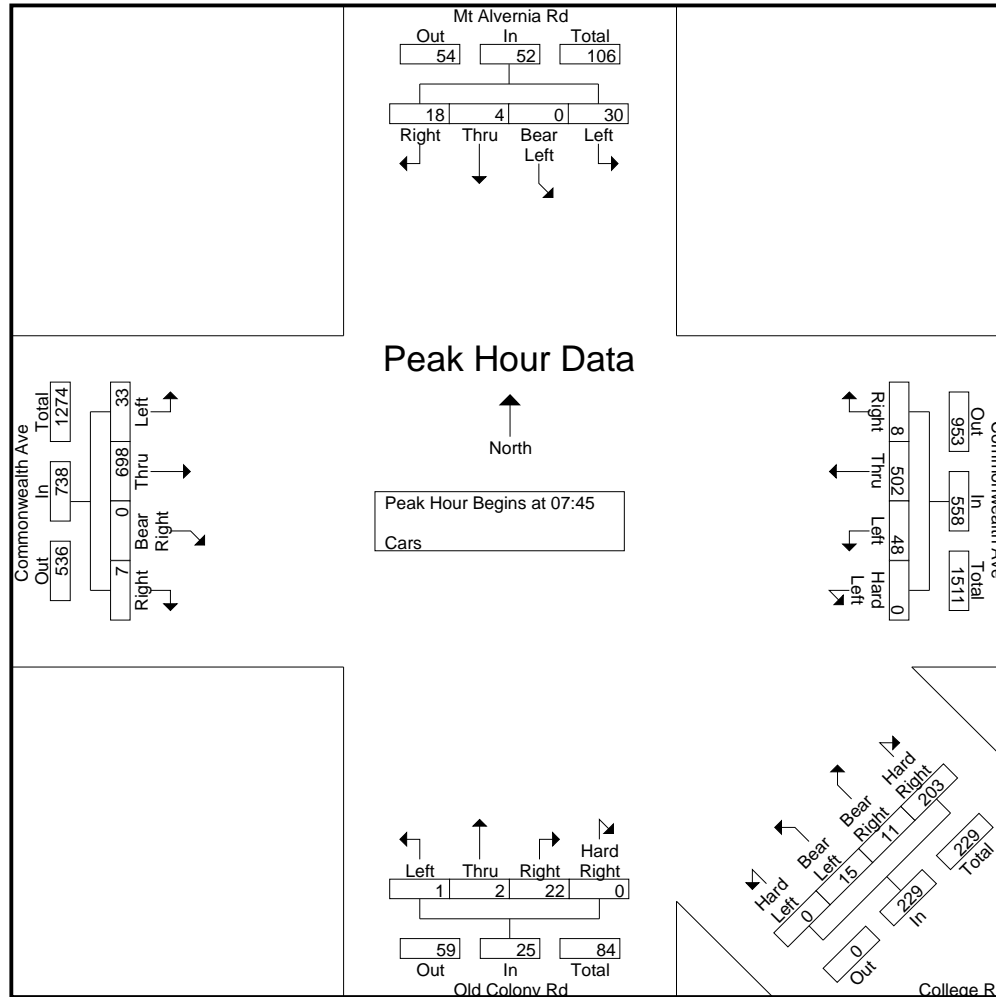
Accurate Counts  
 978-664-2565

File Name : 39000004  
 Site Code : 39000004  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

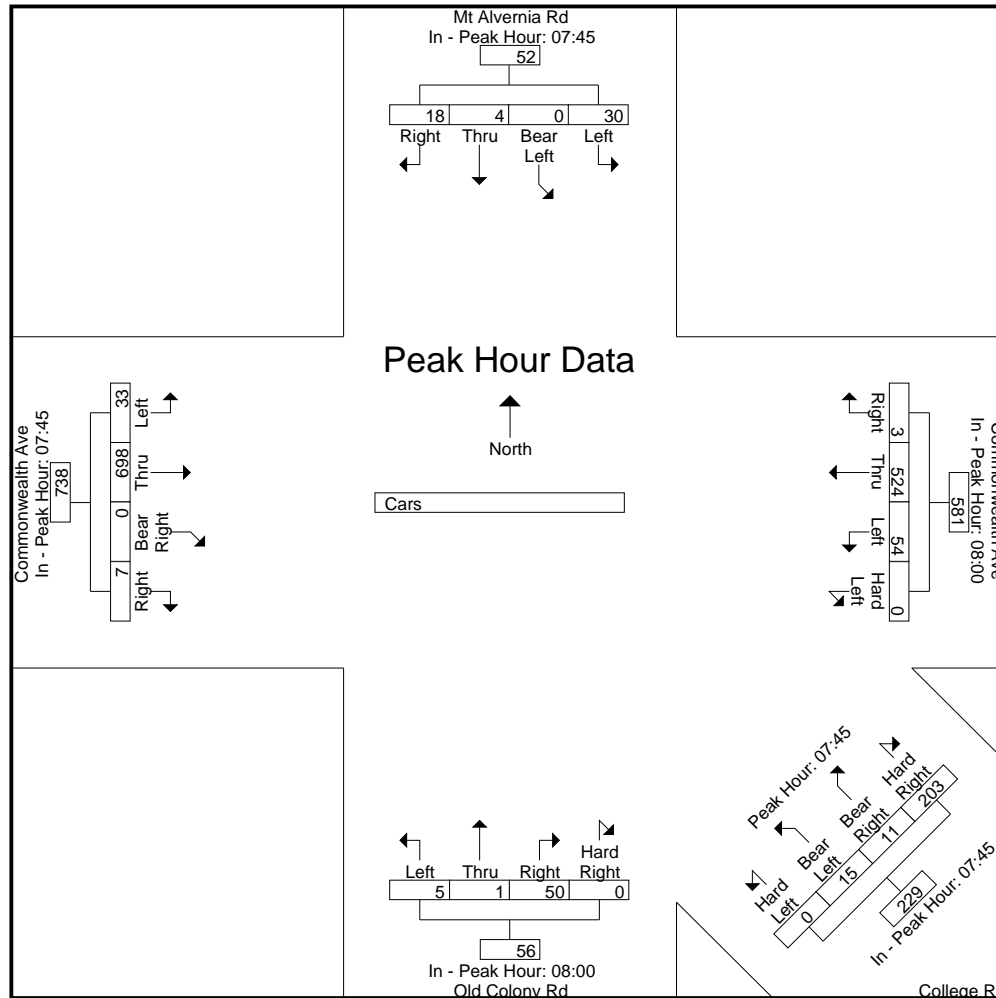
Start Time	Mt Alvernia Rd From North					Commonwealth Ave From East					College Rd From Southeast					Old Colony Rd From South					Commonwealth Ave From West					Exclu. Total	Inclu. Total	Int. Total
	Left	Bear Left	Thru	Right	Peds	Hard Left	Left	Thru	Right	Peds	Hard Left	Bear Left	Bear Right	Hard Right	Peds	Left	Thru	Right	Hard Right	Peds	Left	Thru	Bear Right	Right	Peds			
07:00	0	0	1	4	0	0	8	39	0	0	0	3	0	34	1	0	0	4	0	1	2	56	0	0	0	2	151	153
07:15	3	0	1	3	0	0	14	81	0	0	0	7	0	41	3	0	1	9	0	4	1	79	0	0	2	9	240	249
07:30	9	0	2	3	1	0	11	109	1	0	0	9	5	36	5	0	0	1	0	5	11	126	0	0	1	12	323	335
07:45	8	0	0	8	0	0	11	115	5	0	0	5	4	52	2	0	2	4	0	2	18	213	0	0	0	4	445	449
Total	20	0	4	18	1	0	44	344	6	0	0	24	9	163	11	0	3	18	0	12	32	474	0	0	3	27	1159	1186
08:00	5	0	0	3	0	0	10	123	2	0	0	3	2	47	4	0	0	3	0	4	5	165	0	5	0	8	373	381
08:15	6	0	0	3	0	0	15	129	0	0	0	2	3	53	2	0	0	5	0	3	5	150	0	2	0	5	373	378
08:30	11	0	4	4	0	0	12	135	1	0	0	5	2	51	1	1	0	10	0	0	5	170	0	0	0	1	411	412
08:45	5	0	0	5	1	0	17	137	0	0	0	4	0	54	14	4	1	32	0	14	0	173	0	1	9	38	433	471
Total	27	0	4	15	1	0	54	524	3	0	0	14	7	205	21	5	1	50	0	21	15	658	0	8	9	52	1590	1642
Grand Total	47	0	8	33	2	0	98	868	9	0	0	38	16	368	32	5	4	68	0	33	47	1132	0	8	12	79	2749	2828
Apprch %	53.4	0	9.1	37.5		0	10.1	89	0.9		0	9	3.8	87.2		6.5	5.2	88.3	0		4	95.4	0	0.7				
Total %	1.7	0	0.3	1.2		0	3.6	31.6	0.3		0	1.4	0.6	13.4		0.2	0.1	2.5	0		1.7	41.2	0	0.3		2.8	97.2	

Start Time	Mt Alvernia Rd From North					Commonwealth Ave From East					College Rd From Southeast					Old Colony Rd From South					Commonwealth Ave From West					Int. Total
	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 07:45																										
07:45	8	0	0	8	16	0	11	115	5	131	0	5	4	52	61	0	2	4	0	6	18	213	0	0	231	445
08:00	5	0	0	3	8	0	10	123	2	135	0	3	2	47	52	0	0	3	0	3	5	165	0	5	175	373
08:15	6	0	0	3	9	0	15	129	0	144	0	2	3	53	58	0	0	5	0	5	5	150	0	2	157	373
08:30	11	0	4	4	19	0	12	135	1	148	0	5	2	51	58	1	0	10	0	11	5	170	0	0	175	411
Total Volume	30	0	4	18	52	0	48	502	8	558	0	15	11	203	229	1	2	22	0	25	33	698	0	7	738	1602
% App. Total	57.7	0	7.7	34.6		0	8.6	90	1.4		0	6.6	4.8	88.6		4	8	88	0		4.5	94.6	0	0.9		
PHF	.682	.000	.250	.563	.684	.000	.800	.930	.400	.943	.000	.750	.688	.958	.939	.250	.250	.550	.000	.568	.458	.819	.000	.350	.799	.900



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:45					08:00					07:45					08:00					07:45				
+0 mins.	8	0	0	8	16	0	10	123	2	135	0	5	4	52	61	0	0	3	0	3	18	213	0	0	231
+15 mins.	5	0	0	3	8	0	15	129	0	144	0	3	2	47	52	0	0	5	0	5	5	165	0	5	175
+30 mins.	6	0	0	3	9	0	12	135	1	148	0	2	3	53	58	1	0	10	0	11	5	150	0	2	157
+45 mins.	11	0	4	4	19	0	17	137	0	154	0	5	2	51	58	4	1	32	0	37	5	170	0	0	175
Total Volume	30	0	4	18	52	0	54	524	3	581	0	15	11	203	229	5	1	50	0	56	33	698	0	7	738
% App. Total	57.7	0	7.7	34.6		0	9.3	90.2	0.5		0	6.6	4.8	88.6		8.9	1.8	89.3	0		4.5	94.6	0	0.9	
PHF	.682	.000	.250	.563	.684	.000	.794	.956	.375	.943	.000	.750	.688	.958	.939	.313	.250	.391	.000	.378	.458	.819	.000	.350	.799



N/S Street : Old Colony Road  
 E/W Street: Commonwealth Avenue  
 City/State : Newton, MA  
 Weather : Clear

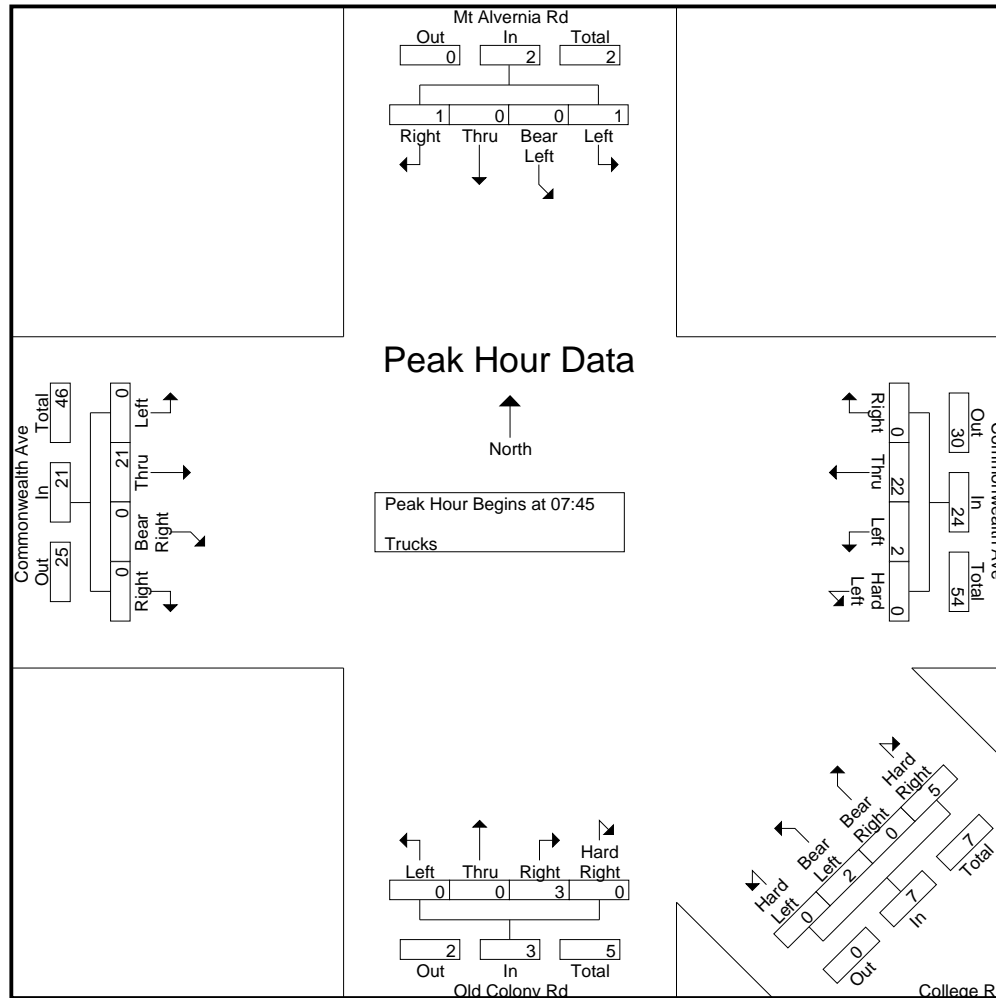
Accurate Counts  
 978-664-2565

File Name : 39000004  
 Site Code : 39000004  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Mt Alvernia Rd From North					Commonwealth Ave From East					College Rd From Southeast					Old Colony Rd From South					Commonwealth Ave From West					Exclu. Total	Inclu. Total	Int. Total
	Left	Bear Left	Thru	Right	Peds	Hard Left	Left	Thru	Right	Peds	Hard Left	Bear Left	Bear Right	Hard Right	Peds	Left	Thru	Right	Hard Right	Peds	Left	Thru	Bear Right	Right	Peds			
07:00	0	0	0	0	0	0	0	4	0	0	0	0	0	1	0	0	0	0	0	0	0	4	0	0	0	0	9	9
07:15	0	0	0	0	0	0	0	3	0	0	0	2	0	3	0	0	0	0	0	0	0	5	0	0	0	0	13	13
07:30	0	0	0	1	0	0	0	4	0	0	0	1	0	1	0	0	0	0	0	0	0	6	0	0	0	0	13	13
07:45	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	2	0	0	0	5	0	0	0	0	14	14
Total	0	0	0	1	0	0	0	18	0	0	0	3	0	5	0	0	0	2	0	0	0	20	0	0	0	0	49	49
08:00	0	0	0	0	0	0	2	3	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	8	8
08:15	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0	0	0	1	0	0	0	5	0	0	0	0	10	10
08:30	1	0	0	1	0	0	0	9	0	0	0	1	0	4	0	0	0	0	0	1	0	9	0	0	0	1	25	26
08:45	0	0	0	1	0	0	0	4	0	0	0	0	0	2	0	0	0	0	0	0	0	6	0	0	0	0	13	13
Total	1	0	0	2	0	0	2	19	0	0	0	2	0	7	0	0	0	1	0	1	0	22	0	0	0	1	56	57
Grand Total	1	0	0	3	0	0	2	37	0	0	0	5	0	12	0	0	0	3	0	1	0	42	0	0	0	1	105	106
Apprch %	25	0	0	75		0	5.1	94.9	0		0	29.4	0	70.6		0	0	100	0		0	100	0	0				
Total %	1	0	0	2.9		0	1.9	35.2	0		0	4.8	0	11.4		0	0	2.9	0		0	40	0	0		0.9	99.1	

Start Time	Mt Alvernia Rd From North					Commonwealth Ave From East					College Rd From Southeast					Old Colony Rd From South					Commonwealth Ave From West					Int. Total
	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 07:45																										
07:45	0	0	0	0	0	0	0	7	0	7	0	0	0	0	0	0	0	2	0	2	0	5	0	0	5	14
08:00	0	0	0	0	0	0	2	3	0	5	0	0	0	1	1	0	0	0	0	0	0	2	0	0	2	8
08:15	0	0	0	0	0	0	0	3	0	3	0	1	0	0	1	0	0	1	0	1	0	5	0	0	5	10
08:30	1	0	0	1	2	0	0	9	0	9	0	1	0	4	5	0	0	0	0	0	0	9	0	0	9	25
Total Volume	1	0	0	1	2	0	2	22	0	24	0	2	0	5	7	0	0	3	0	3	0	21	0	0	21	57
% App. Total	50	0	0	50		0	8.3	91.7	0		0	28.6	0	71.4		0	0	100	0		0	100	0	0		
PHF	.250	.000	.000	.250	.250	.000	.250	.611	.000	.667	.000	.500	.000	.313	.350	.000	.000	.375	.000	.375	.000	.583	.000	.000	.583	.570



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	08:00					07:45					08:00					07:30					08:00				
+0 mins.	0	0	0	0	0	0	0	7	0	7	0	0	0	1	1	0	0	0	0	0	0	2	0	0	2
+15 mins.	0	0	0	0	0	0	2	3	0	5	0	1	0	0	1	0	0	2	0	2	0	5	0	0	5
+30 mins.	1	0	0	1	2	0	0	3	0	3	0	1	0	4	5	0	0	0	0	0	0	9	0	0	9
+45 mins.	0	0	0	1	1	0	0	9	0	9	0	0	0	2	2	0	0	1	0	1	0	6	0	0	6
Total Volume	1	0	0	2	3	0	2	22	0	24	0	2	0	7	9	0	0	3	0	3	0	22	0	0	22
% App. Total	33.3	0	0	66.7		0	8.3	91.7	0		0	22.2	0	77.8		0	0	100	0		0	100	0	0	
PHF	.250	.000	.000	.500	.375	.000	.250	.611	.000	.667	.000	.500	.000	.438	.450	.000	.000	.375	.000	.375	.000	.611	.000	.000	.611



N/S Street : Old Colony Road  
 E/W Street: Commonwealth Avenue  
 City/State : Newton, MA  
 Weather : Clear

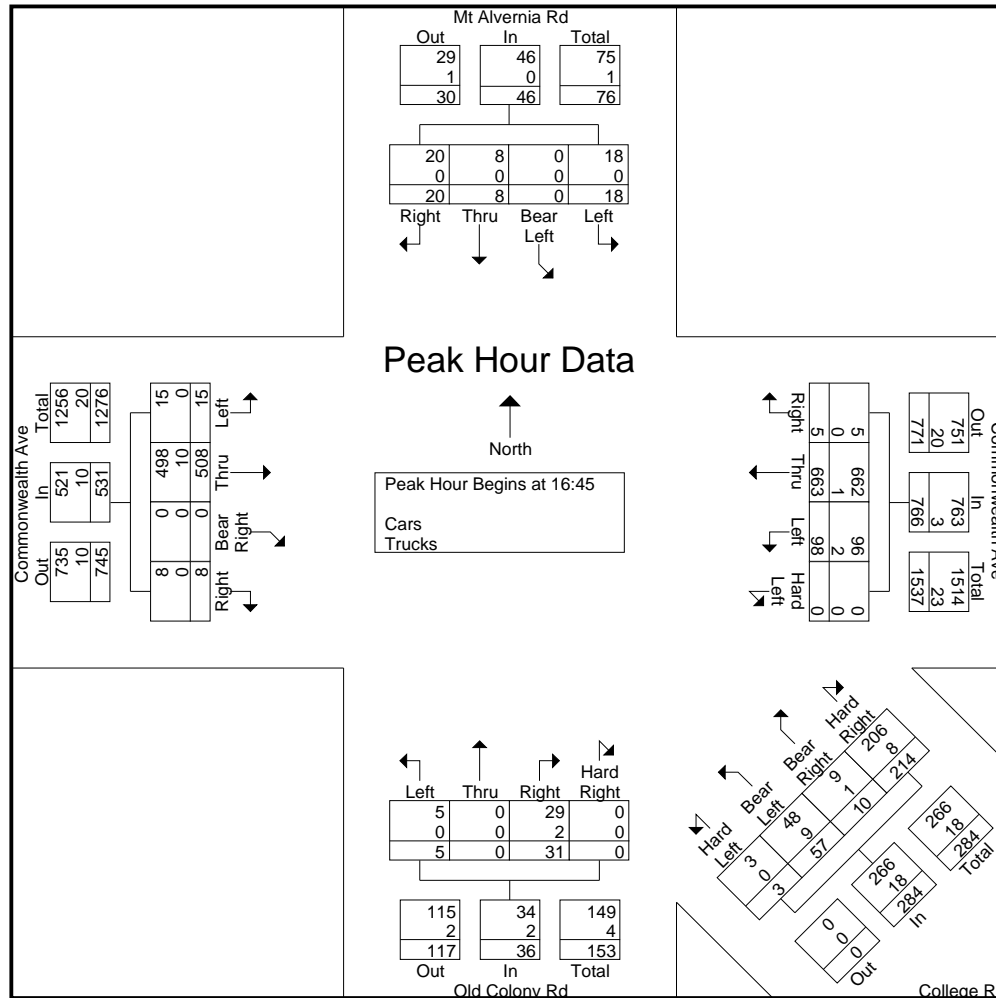
Accurate Counts  
 978-664-2565

File Name : 39000004  
 Site Code : 39000004  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Mt Alvernia Rd From North					Commonwealth Ave From East					College Rd From Southeast					Old Colony Rd From South					Commonwealth Ave From West					Exclu. Total	Inclu. Total	Int. Total
	Left	Bear Left	Thru	Right	Peds	Hard Left	Left	Thru	Right	Peds	Hard Left	Bear Left	Bear Right	Hard Right	Peds	Left	Thru	Right	Hard Right	Peds	Left	Thru	Bear Right	Right	Peds			
16:00	3	0	1	5	0	0	24	119	0	1	0	16	1	39	31	1	0	7	0	29	3	118	0	2	7	68	339	407
16:15	1	0	0	0	0	0	15	129	2	0	0	5	1	37	17	0	0	5	0	15	0	112	0	4	6	38	311	349
16:30	9	0	2	4	0	0	17	120	0	0	1	12	0	45	22	0	0	4	0	22	1	117	0	5	4	48	337	385
16:45	10	0	3	4	1	0	29	126	2	0	1	10	1	50	12	3	0	8	0	10	8	123	0	5	2	25	383	408
Total	23	0	6	13	1	0	85	494	4	1	2	43	3	171	82	4	0	24	0	76	12	470	0	16	19	179	1370	1549
17:00	2	0	2	8	0	0	21	192	0	0	0	18	3	56	14	2	0	7	0	12	3	105	0	1	5	31	420	451
17:15	2	0	0	1	1	0	26	185	2	0	2	13	3	58	14	0	0	1	0	14	2	137	0	2	3	32	434	466
17:30	4	0	3	7	2	0	22	160	1	0	0	16	3	50	12	0	0	15	0	12	2	143	0	0	2	28	426	454
17:45	3	0	1	4	1	0	20	124	1	1	2	8	1	33	10	0	1	1	0	8	0	130	0	0	3	23	329	352
Total	11	0	6	20	4	0	89	661	4	1	4	55	10	197	50	2	1	24	0	46	7	515	0	3	13	114	1609	1723
Grand Total	34	0	12	33	5	0	174	1155	8	2	6	98	13	368	132	6	1	48	0	122	19	985	0	19	32	293	2979	3272
Apprch %	43	0	15.2	41.8		0	13	86.4	0.6		1.2	20.2	2.7	75.9		10.9	1.8	87.3	0		1.9	96.3	0	1.9				
Total %	1.1	0	0.4	1.1		0	5.8	38.8	0.3		0.2	3.3	0.4	12.4		0.2	0	1.6	0		0.6	33.1	0	0.6		9	91	
Cars	34	0	12	33		0	170	1147	8		6	80	12	355		6	1	43	0		19	967	0	19		0	0	3205
% Cars	100	0	100	100	100	0	97.7	99.3	100	100	100	81.6	92.3	96.5	100	100	100	89.6	0	100	100	98.2	0	100	100	0	0	98
Trucks	0	0	0	0		0	4	8	0		0	18	1	13		0	0	5	0		0	18	0	0		0	0	67
% Trucks	0	0	0	0	0	0	2.3	0.7	0	0	0	18.4	7.7	3.5	0	0	0	10.4	0	0	0	1.8	0	0	0	0	0	2

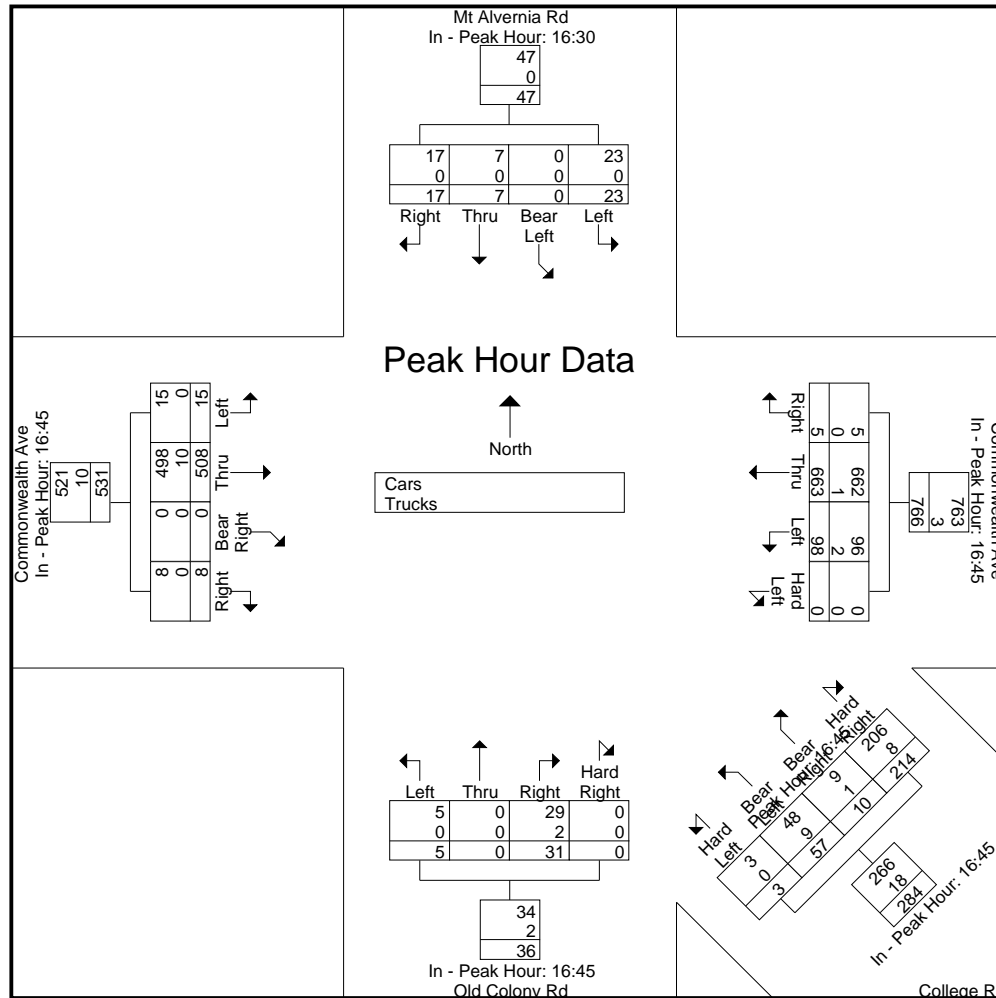
Start Time	Mt Alvernia Rd From North					Commonwealth Ave From East					College Rd From Southeast					Old Colony Rd From South					Commonwealth Ave From West					Int. Total	
	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total		
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																											
Peak Hour for Entire Intersection Begins at 16:45																											
16:45	10	0	3	4	17	0	29	126	2	157	1	10	1	50	62	3	0	8	0	11	8	123	0	5	136	383	
17:00	2	0	2	8	12	0	21	192	0	213	0	18	3	56	77	2	0	7	0	9	3	105	0	1	109	420	
17:15	2	0	0	1	3	0	26	185	2	213	2	13	3	58	76	0	0	1	0	1	2	137	0	2	141	434	
17:30	4	0	3	7	14	0	22	160	1	183	0	16	3	50	69	0	0	15	0	15	2	143	0	0	145	426	
Total Volume	18	0	8	20	46	0	98	663	5	766	3	57	10	214	284	5	0	31	0	36	15	508	0	8	531	1663	
% App. Total	39.1	0	17.4	43.5		0	12.8	86.6	0.7		1.1	20.1	3.5	75.4		13.9	0	86.1	0		2.8	95.7	0	1.5			
PHF	.450	.000	.667	.625	.676	.000	.845	.863	.625	.899	.375	.792	.833	.922	.922	.417	.000	.517	.000	.600	.469	.888	.000	.400	.916	.958	
Cars	18	0	8	20	46	0	96	662	5	763	3	48	9	206	266	5	0	29	0	34	15	498	0	8	521	1630	
% Cars	100	0	100	100	100	0	98.0	99.8	100	99.6	100	84.2	90.0	96.3	93.7	100	0	93.5	0	94.4	100	98.0	0	100	98.1	98.0	
Trucks	0	0	0	0	0	0	2	1	0	3	0	9	1	8	18	0	0	2	0	2	0	10	0	0	10	33	
% Trucks	0	0	0	0	0	0	2.0	0.2	0	0.4	0	15.8	10.0	3.7	6.3	0	0	6.5	0	5.6	0	2.0	0	0	1.9	2.0	



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	16:30					16:45					16:45					16:45									
+0 mins.	9	0	2	4	15	0	29	126	2	157	1	10	1	50	62	3	0	8	0	11	8	123	0	5	136
+15 mins.	10	0	3	4	17	0	21	192	0	213	0	18	3	56	77	2	0	7	0	9	3	105	0	1	109
+30 mins.	2	0	2	8	12	0	26	185	2	213	2	13	3	58	76	0	0	1	0	1	2	137	0	2	141
+45 mins.	2	0	0	1	3	0	22	160	1	183	0	16	3	50	69	0	0	15	0	15	2	143	0	0	145
Total Volume	23	0	7	17	47	0	98	663	5	766	3	57	10	214	284	5	0	31	0	36	15	508	0	8	531
% App. Total	48.9	0	14.9	36.2		0	12.8	86.6	0.7		1.1	20.1	3.5	75.4		13.9	0	86.1	0		2.8	95.7	0	1.5	
PHF	.575	.000	.583	.531	.691	.000	.845	.863	.625	.899	.375	.792	.833	.922	.922	.417	.000	.517	.000	.600	.469	.888	.000	.400	.916
Cars	23	0	7	17	47	0	96	662	5	763	3	48	9	206	266	5	0	29	0	34	15	498	0	8	521
% Cars	100	0	100	100	100	0	98	99.8	100	99.6	100	84.2	90	96.3	93.7	100	0	93.5	0	94.4	100	98	0	100	98.1
Trucks	0	0	0	0	0	0	2	1	0	3	0	9	1	8	18	0	0	2	0	2	0	10	0	0	10
% Trucks	0	0	0	0	0	0	2	0.2	0	0.4	0	15.8	10	3.7	6.3	0	0	6.5	0	5.6	0	2	0	0	1.9





N/S Street : Old Colony Road  
 E/W Street: Commonwealth Avenue  
 City/State : Newton, MA  
 Weather : Clear

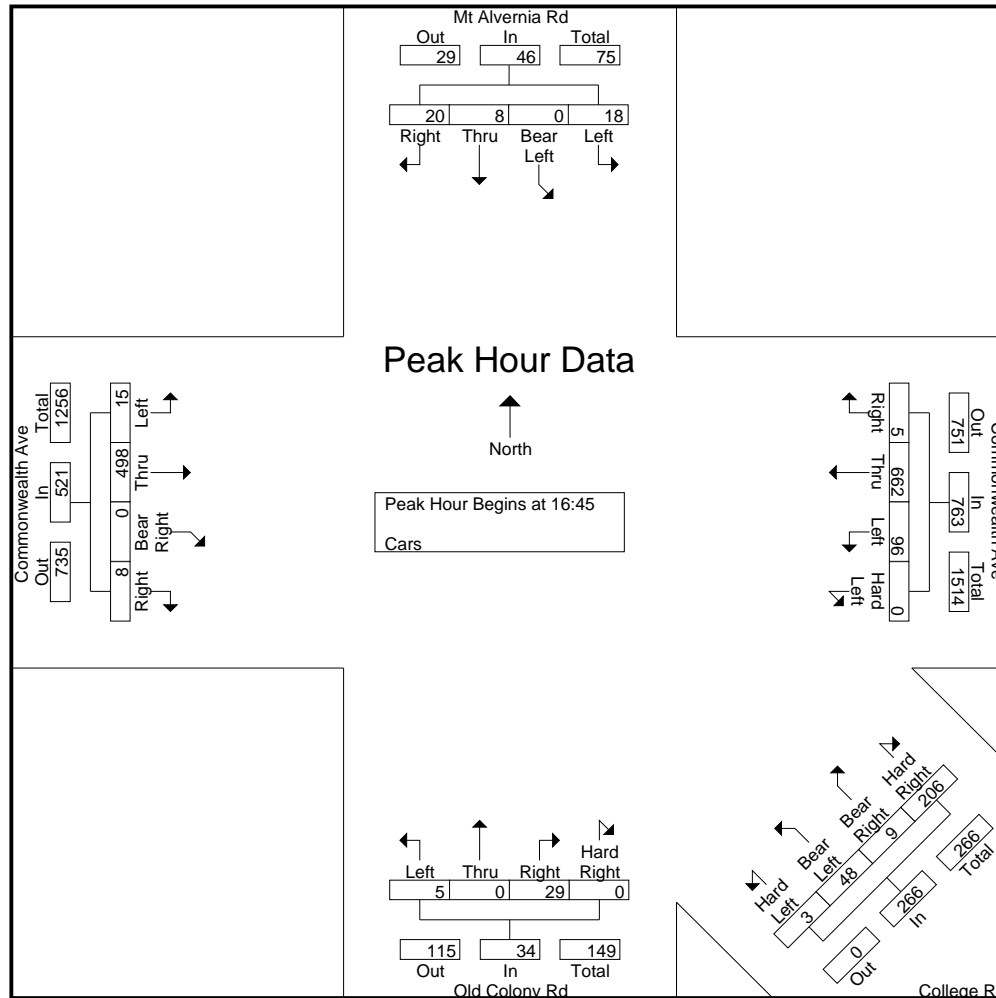
Accurate Counts  
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File Name : 39000004  
 Site Code : 39000004  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

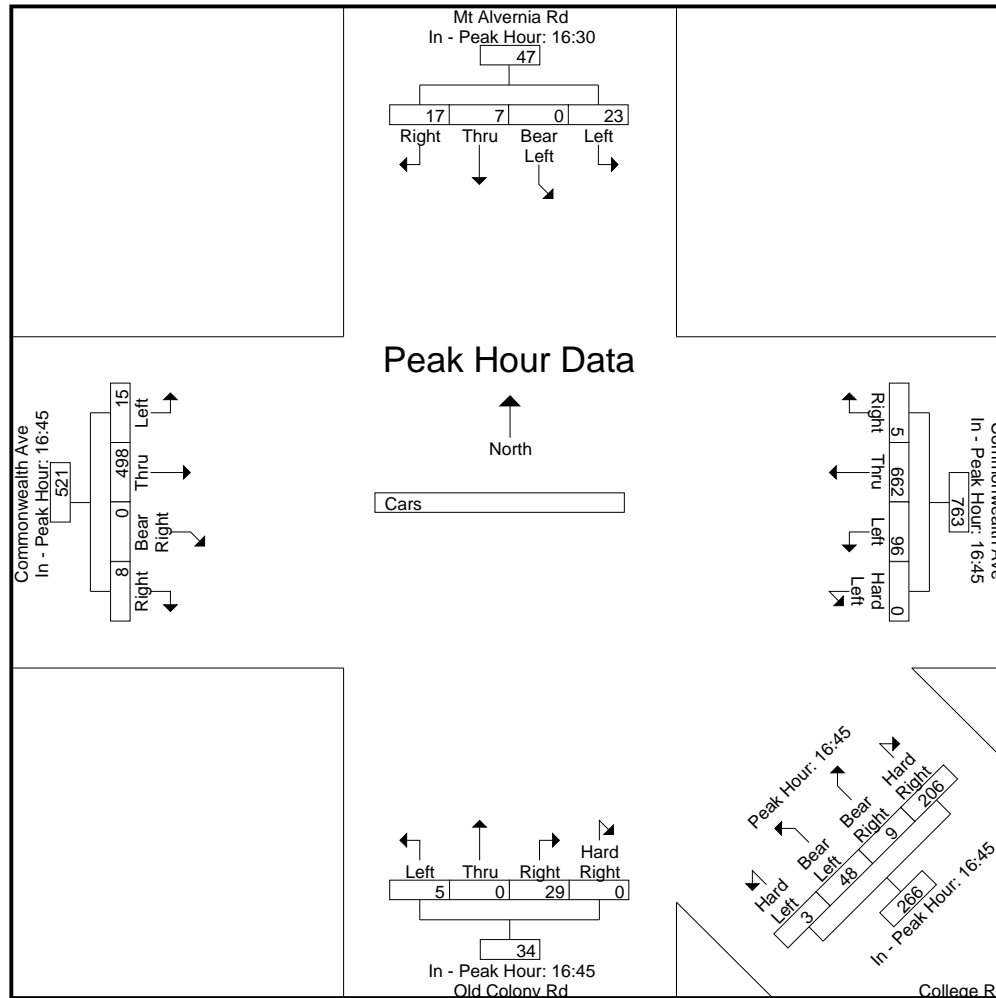
Start Time	Mt Alvernia Rd From North					Commonwealth Ave From East					College Rd From Southeast					Old Colony Rd From South					Commonwealth Ave From West					Exclu. Total	Inclu. Total	Int. Total
	Left	Bear Left	Thru	Right	Peds	Hard Left	Left	Thru	Right	Peds	Hard Left	Bear Left	Bear Right	Hard Right	Peds	Left	Thru	Right	Hard Right	Peds	Left	Thru	Bear Right	Right	Peds			
16:00	3	0	1	5	0	0	22	117	0	1	0	14	1	38	31	1	0	5	0	29	3	116	0	2	7	68	328	396
16:15	1	0	0	0	0	0	15	127	2	0	0	4	1	36	17	0	0	5	0	15	0	110	0	4	6	38	305	343
16:30	9	0	2	4	0	0	17	118	0	0	1	7	0	43	22	0	0	3	0	22	1	114	0	5	4	48	324	372
16:45	10	0	3	4	1	0	28	125	2	0	1	8	1	48	12	3	0	8	0	10	8	121	0	5	2	25	375	400
Total	23	0	6	13	1	0	82	487	4	1	2	33	3	165	82	4	0	21	0	76	12	461	0	16	19	179	1332	1511
17:00	2	0	2	8	0	0	21	192	0	0	0	16	3	55	14	2	0	6	0	12	3	100	0	1	5	31	411	442
17:15	2	0	0	1	1	0	26	185	2	0	2	11	3	55	14	0	0	1	0	14	2	137	0	2	3	32	429	461
17:30	4	0	3	7	2	0	21	160	1	0	0	13	2	48	12	0	0	14	0	12	2	140	0	0	2	28	415	443
17:45	3	0	1	4	1	0	20	123	1	1	2	7	1	32	10	0	1	1	0	8	0	129	0	0	3	23	325	348
Total	11	0	6	20	4	0	88	660	4	1	4	47	9	190	50	2	1	22	0	46	7	506	0	3	13	114	1580	1694
Grand Total	34	0	12	33	5	0	170	1147	8	2	6	80	12	355	132	6	1	43	0	122	19	967	0	19	32	293	2912	3205
Apprch %	43	0	15.2	41.8		0	12.8	86.6	0.6		1.3	17.7	2.6	78.4		12	2	86	0		1.9	96.2	0	1.9				
Total %	1.2	0	0.4	1.1		0	5.8	39.4	0.3		0.2	2.7	0.4	12.2		0.2	0	1.5	0		0.7	33.2	0	0.7		9.1	90.9	

Start Time	Mt Alvernia Rd From North					Commonwealth Ave From East					College Rd From Southeast					Old Colony Rd From South					Commonwealth Ave From West					Int. Total	
	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total		
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																											
Peak Hour for Entire Intersection Begins at 16:45																											
16:45	10	0	3	4	17	0	28	125	2	155	1	8	1	48	58	3	0	8	0	11	8	121	0	5	134	375	
17:00	2	0	2	8	12	0	21	192	0	213	0	16	3	55	74	2	0	6	0	8	3	100	0	1	104	411	
17:15	2	0	0	1	3	0	26	185	2	213	2	11	3	55	71	0	0	1	0	1	2	137	0	2	141	429	
17:30	4	0	3	7	14	0	21	160	1	182	0	13	2	48	63	0	0	14	0	14	2	140	0	0	142	415	
Total Volume	18	0	8	20	46	0	96	662	5	763	3	48	9	206	266	5	0	29	0	34	15	498	0	8	521	1630	
% App. Total	39.1	0	17.4	43.5		0	12.6	86.8	0.7		1.1	18	3.4	77.4		14.7	0	85.3	0		2.9	95.6	0	1.5			
PHF	.450	.000	.667	.625	.676	.000	.857	.862	.625	.896	.375	.750	.750	.936	.899	.417	.000	.518	.000	.607	.469	.889	.000	.400	.917	.950	



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	16:30					16:45					16:45					16:45									
+0 mins.	9	0	2	4	15	0	28	125	2	155	1	8	1	48	58	3	0	8	0	11	8	121	0	5	134
+15 mins.	10	0	3	4	17	0	21	192	0	213	0	16	3	55	74	2	0	6	0	8	3	100	0	1	104
+30 mins.	2	0	2	8	12	0	26	185	2	213	2	11	3	55	71	0	0	1	0	1	2	137	0	2	141
+45 mins.	2	0	0	1	3	0	21	160	1	182	0	13	2	48	63	0	0	14	0	14	2	140	0	0	142
Total Volume	23	0	7	17	47	0	96	662	5	763	3	48	9	206	266	5	0	29	0	34	15	498	0	8	521
% App. Total	48.9	0	14.9	36.2		0	12.6	86.8	0.7		1.1	18	3.4	77.4		14.7	0	85.3	0		2.9	95.6	0	1.5	
PHF	.575	.000	.583	.531	.691	.000	.857	.862	.625	.896	.375	.750	.750	.936	.899	.417	.000	.518	.000	.607	.469	.889	.000	.400	.917



N/S Street : Old Colony Road  
 E/W Street: Commonwealth Avenue  
 City/State : Newton, MA  
 Weather : Clear

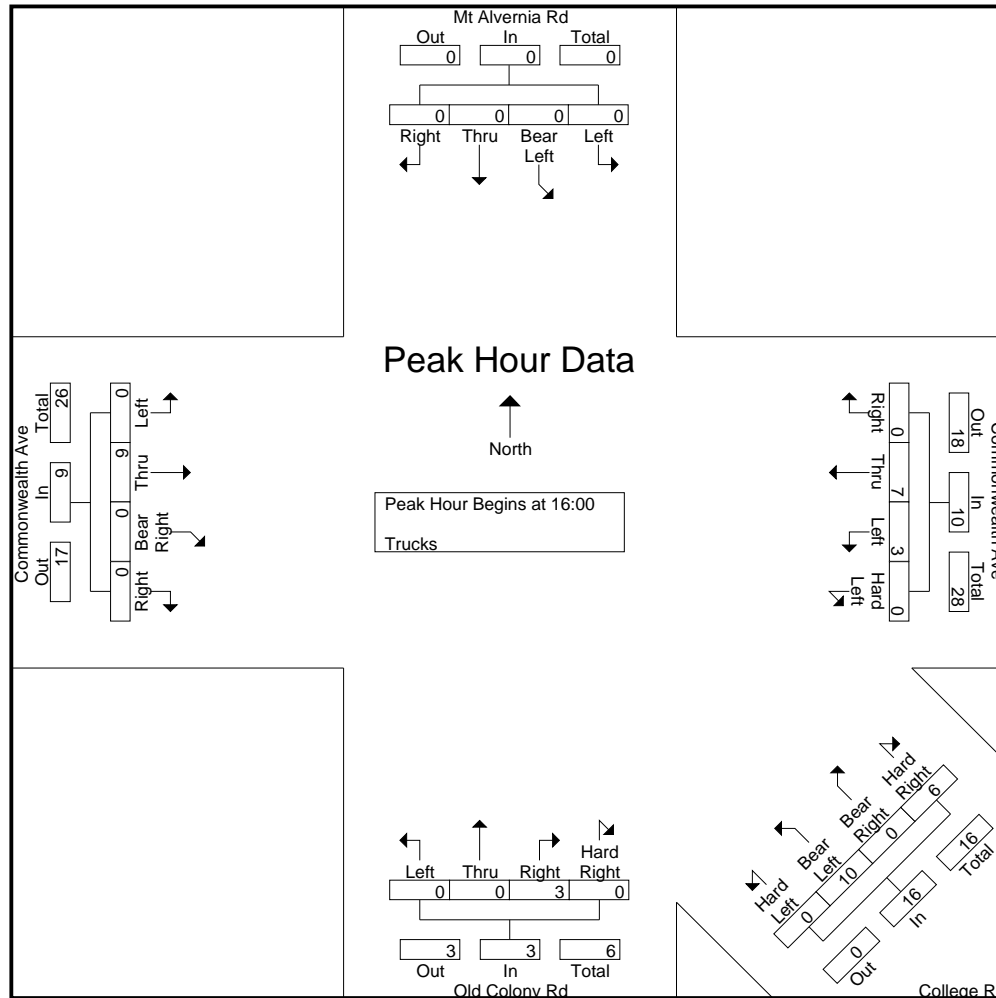
Accurate Counts  
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File Name : 39000004  
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 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Trucks

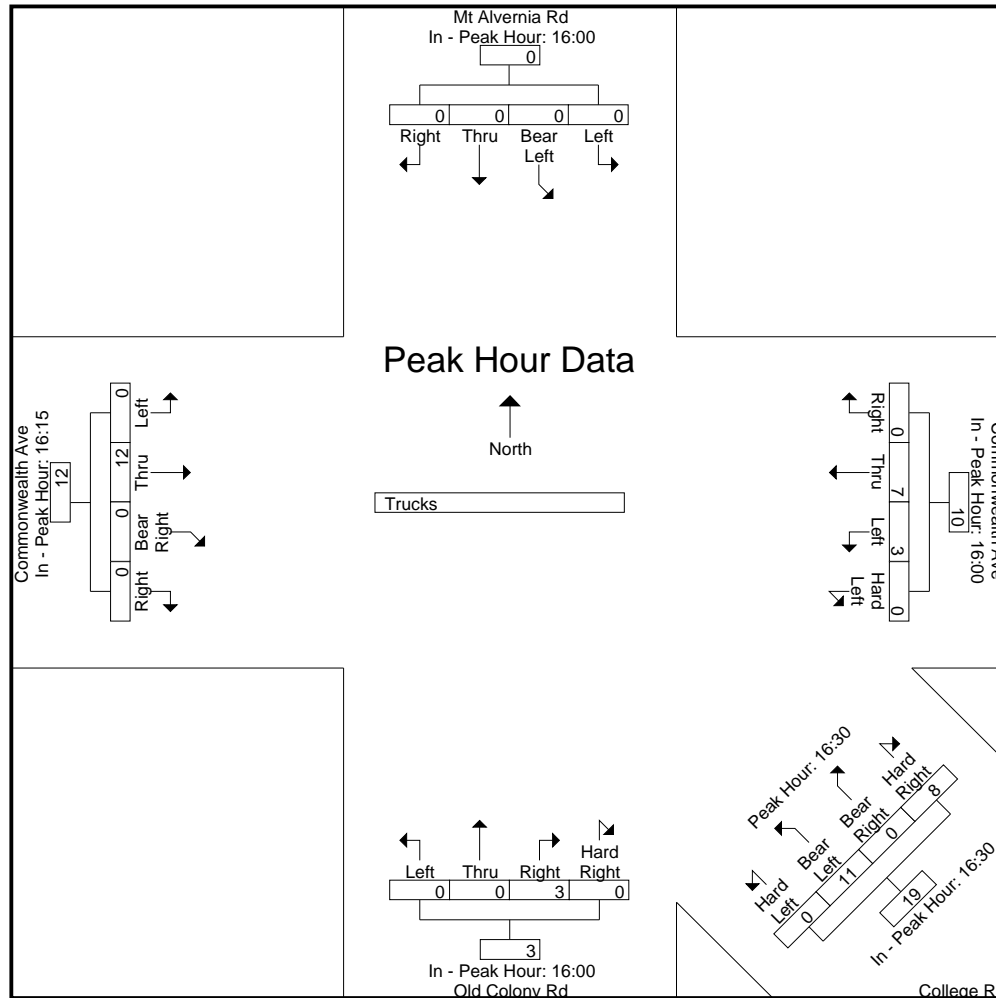
Start Time	Mt Alvernia Rd From North					Commonwealth Ave From East					College Rd From Southeast					Old Colony Rd From South					Commonwealth Ave From West					Exclu. Total	Inclu. Total	Int. Total			
	Left	Bear Left	Thru	Right	Peds	Hard Left	Left	Thru	Right	Peds	Hard Left	Bear Left	Bear Right	Hard Right	Peds	Left	Thru	Right	Hard Right	Peds	Left	Thru	Bear Right	Right	Peds						
16:00	0	0	0	0	0	0	2	2	0	0	0	2	0	1	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	11	11
16:15	0	0	0	0	0	0	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	6	6
16:30	0	0	0	0	0	0	0	2	0	0	0	5	0	2	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0	13	13
16:45	0	0	0	0	0	0	1	1	0	0	0	2	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	8	8
Total	0	0	0	0	0	0	3	7	0	0	0	10	0	6	0	0	0	3	0	0	0	9	0	0	0	0	0	0	0	38	38
17:00	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0	5	0	0	0	0	0	0	0	9	9
17:15	0	0	0	0	0	0	0	0	0	0	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
17:30	0	0	0	0	0	0	1	0	0	0	0	3	1	2	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0	11	11
17:45	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	4
Total	0	0	0	0	0	0	1	1	0	0	0	8	1	7	0	0	0	2	0	0	0	9	0	0	0	0	0	0	0	29	29
Grand Total	0	0	0	0	0	0	4	8	0	0	0	18	1	13	0	0	0	5	0	0	0	18	0	0	0	0	0	0	0	67	67
Apprch %	0	0	0	0	0	0	33.3	66.7	0	0	0	56.2	3.1	40.6	0	0	0	100	0	0	0	100	0	0	0	0	0	0	0	100	100
Total %	0	0	0	0	0	0	6	11.9	0	0	0	26.9	1.5	19.4	0	0	0	7.5	0	0	0	26.9	0	0	0	0	0	0	0	100	100

Start Time	Mt Alvernia Rd From North					Commonwealth Ave From East					College Rd From Southeast					Old Colony Rd From South					Commonwealth Ave From West					Int. Total	
	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total		
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																											
Peak Hour for Entire Intersection Begins at 16:00																											
16:00	0	0	0	0	0	0	2	2	0	4	0	2	0	1	3	0	0	2	0	2	0	2	0	0	2	0	11
16:15	0	0	0	0	0	0	0	2	0	2	0	1	0	1	2	0	0	0	0	0	0	2	0	0	2	0	6
16:30	0	0	0	0	0	0	0	2	0	2	0	5	0	2	7	0	0	1	0	1	0	3	0	0	3	0	13
16:45	0	0	0	0	0	0	1	1	0	2	0	2	0	2	4	0	0	0	0	0	0	2	0	0	2	0	8
Total Volume	0	0	0	0	0	0	3	7	0	10	0	10	0	6	16	0	0	3	0	3	0	9	0	0	9	0	38
% App. Total	0	0	0	0	0	0	30	70	0	0	0	62.5	0	37.5	0	0	0	100	0	0	0	100	0	0	0	0	100
PHF	.000	.000	.000	.000	.000	.000	.375	.875	.000	.625	.000	.500	.000	.750	.571	.000	.000	.375	.000	.375	.000	.750	.000	.000	.750	.731	



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	16:00					16:30					16:00					16:15									
+0 mins.	0	0	0	0	0	0	2	2	0	4	0	5	0	2	7	0	0	2	0	2	0	2	0	0	2
+15 mins.	0	0	0	0	0	0	0	2	0	2	0	2	0	2	4	0	0	0	0	0	0	3	0	0	3
+30 mins.	0	0	0	0	0	0	0	2	0	2	0	2	0	1	3	0	0	1	0	1	0	2	0	0	2
+45 mins.	0	0	0	0	0	0	1	1	0	2	0	2	0	3	5	0	0	0	0	0	0	5	0	0	5
Total Volume	0	0	0	0	0	0	3	7	0	10	0	11	0	8	19	0	0	3	0	3	0	12	0	0	12
% App. Total	0	0	0	0	0	0	30	70	0	0	0	57.9	0	42.1	0	0	0	100	0	0	0	100	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.375	.875	.000	.625	.000	.550	.000	.667	.679	.000	.000	.375	.000	.375	.000	.600	.000	.000	.600



N/S Street : South Street  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

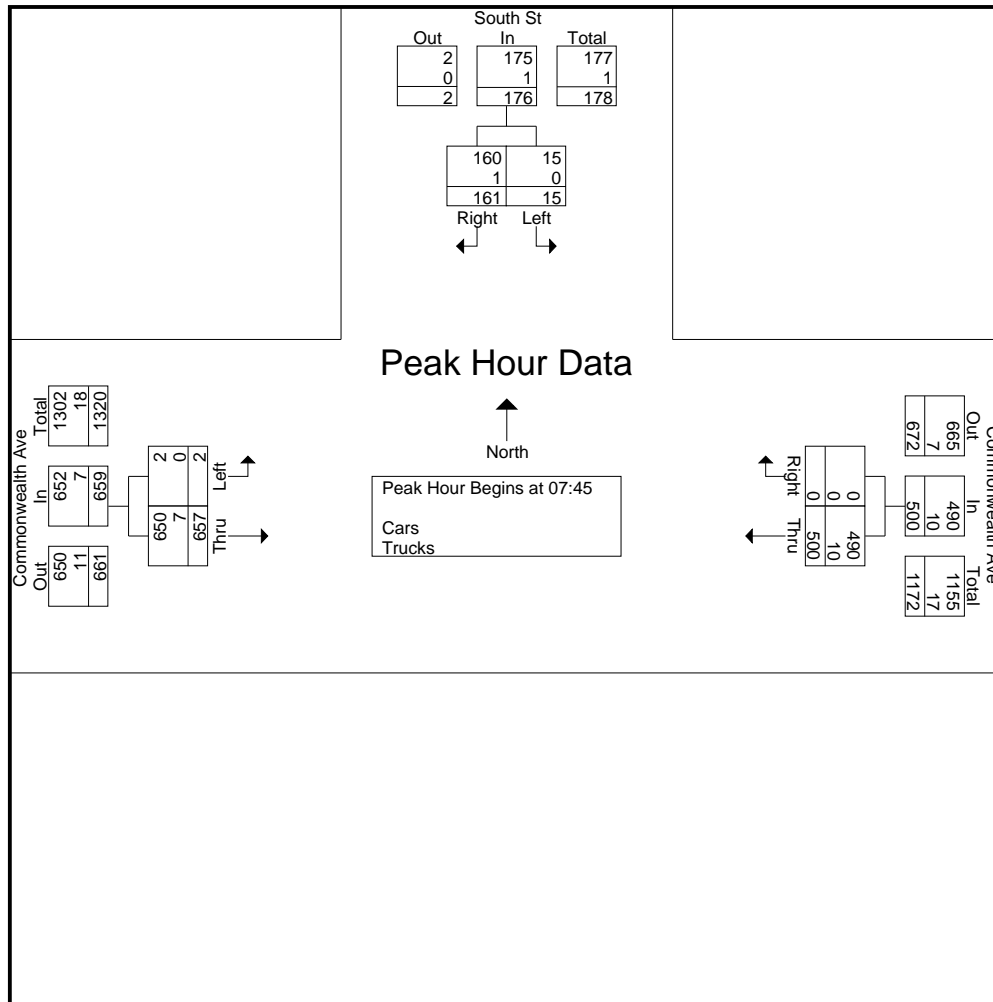
File Name : 39000005  
 Site Code : 39000005  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	South St From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	2	19	1	56	1	2	0	72	1	4	150	154
07:15	2	33	2	91	0	3	0	80	0	5	206	211
07:30	3	32	3	98	0	6	0	115	2	11	248	259
07:45	3	34	2	121	0	4	1	170	2	8	329	337
Total	10	118	8	366	1	15	1	437	5	28	933	961
08:00	5	43	3	131	0	9	0	178	9	21	357	378
08:15	5	36	3	116	0	7	1	165	3	13	323	336
08:30	2	48	3	132	0	3	0	144	1	7	326	333
08:45	2	42	11	106	0	10	0	125	1	22	275	297
Total	14	169	20	485	0	29	1	612	14	63	1281	1344
Grand Total	24	287	28	851	1	44	2	1049	19	91	2214	2305
Apprch %	7.7	92.3		99.9	0.1		0.2	99.8				
Total %	1.1	13		38.4	0		0.1	47.4		3.9	96.1	
Cars	24	284		837	1		2	1036		0	0	2275
% Cars	100	99	100	98.4	100	100	100	98.8	100	0	0	98.7
Trucks	0	3		14	0		0	13		0	0	30
% Trucks	0	1	0	1.6	0	0	0	1.2	0	0	0	1.3

Start Time	South St From North			Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45										
07:45	3	34	37	121	0	121	1	170	171	329
08:00	5	43	48	131	0	131	0	178	178	357
08:15	5	36	41	116	0	116	1	165	166	323
08:30	2	48	50	132	0	132	0	144	144	326
Total Volume	15	161	176	500	0	500	2	657	659	1335
% App. Total	8.5	91.5		100	0		0.3	99.7		
PHF	.750	.839	.880	.947	.000	.947	.500	.923	.926	.935
Cars	15	160	175	490	0	490	2	650	652	1317
% Cars	100	99.4	99.4	98.0	0	98.0	100	98.9	98.9	98.7
Trucks	0	1	1	10	0	10	0	7	7	18
% Trucks	0	0.6	0.6	2.0	0	2.0	0	1.1	1.1	1.3

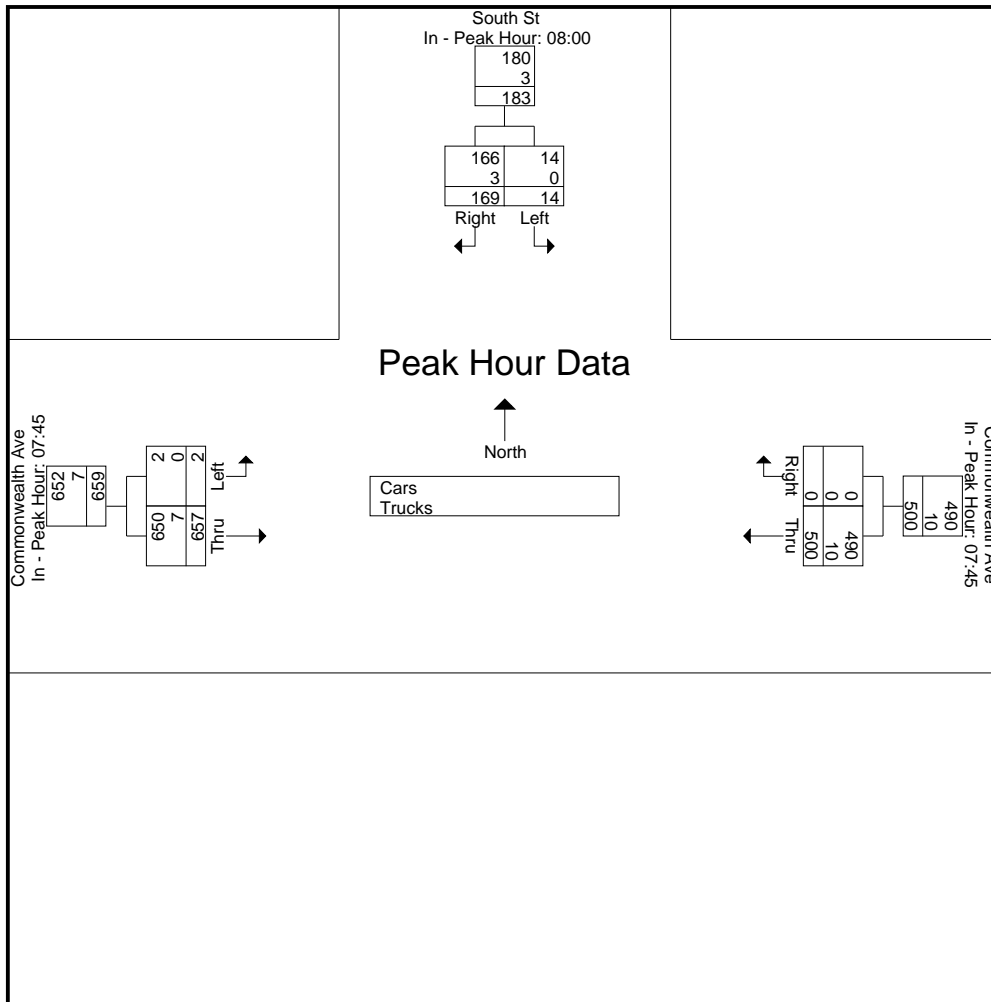




Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00			07:45			07:45		
+0 mins.	5	43	48	121	0	121	1	170	171
+15 mins.	5	36	41	131	0	131	0	178	178
+30 mins.	2	48	50	116	0	116	1	165	166
+45 mins.	2	42	44	132	0	132	0	144	144
Total Volume	14	169	183	500	0	500	2	657	659
% App. Total	7.7	92.3		100	0		0.3	99.7	
PHF	.700	.880	.915	.947	.000	.947	.500	.923	.926
Cars	14	166	180	490	0	490	2	650	652
% Cars	100	98.2	98.4	98	0	98	100	98.9	98.9
Trucks	0	3	3	10	0	10	0	7	7
% Trucks	0	1.8	1.6	2	0	2	0	1.1	1.1



N/S Street : South Street  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

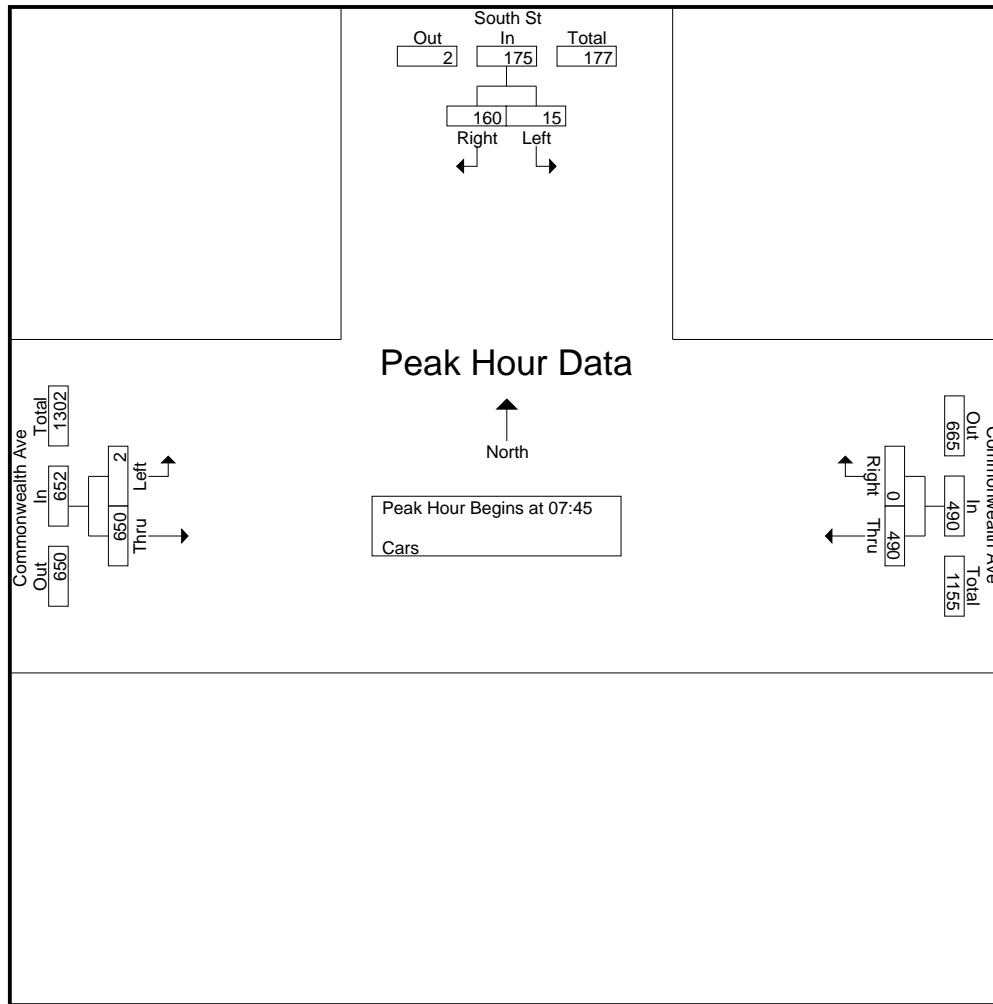
Accurate Counts  
 978-664-2565

File Name : 39000005  
 Site Code : 39000005  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

Start Time	South St From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	2	19	1	56	1	2	0	72	1	4	150	154
07:15	2	33	2	90	0	3	0	80	0	5	205	210
07:30	3	32	3	96	0	6	0	112	2	11	243	254
07:45	3	34	2	120	0	4	1	167	2	8	325	333
Total	10	118	8	362	1	15	1	431	5	28	923	951
08:00	5	42	3	128	0	9	0	177	9	21	352	373
08:15	5	36	3	112	0	7	1	164	3	13	318	331
08:30	2	48	3	130	0	3	0	142	1	7	322	329
08:45	2	40	11	105	0	10	0	122	1	22	269	291
Total	14	166	20	475	0	29	1	605	14	63	1261	1324
Grand Total	24	284	28	837	1	44	2	1036	19	91	2184	2275
Apprch %	7.8	92.2		99.9	0.1		0.2	99.8				
Total %	1.1	13		38.3	0		0.1	47.4		4	96	

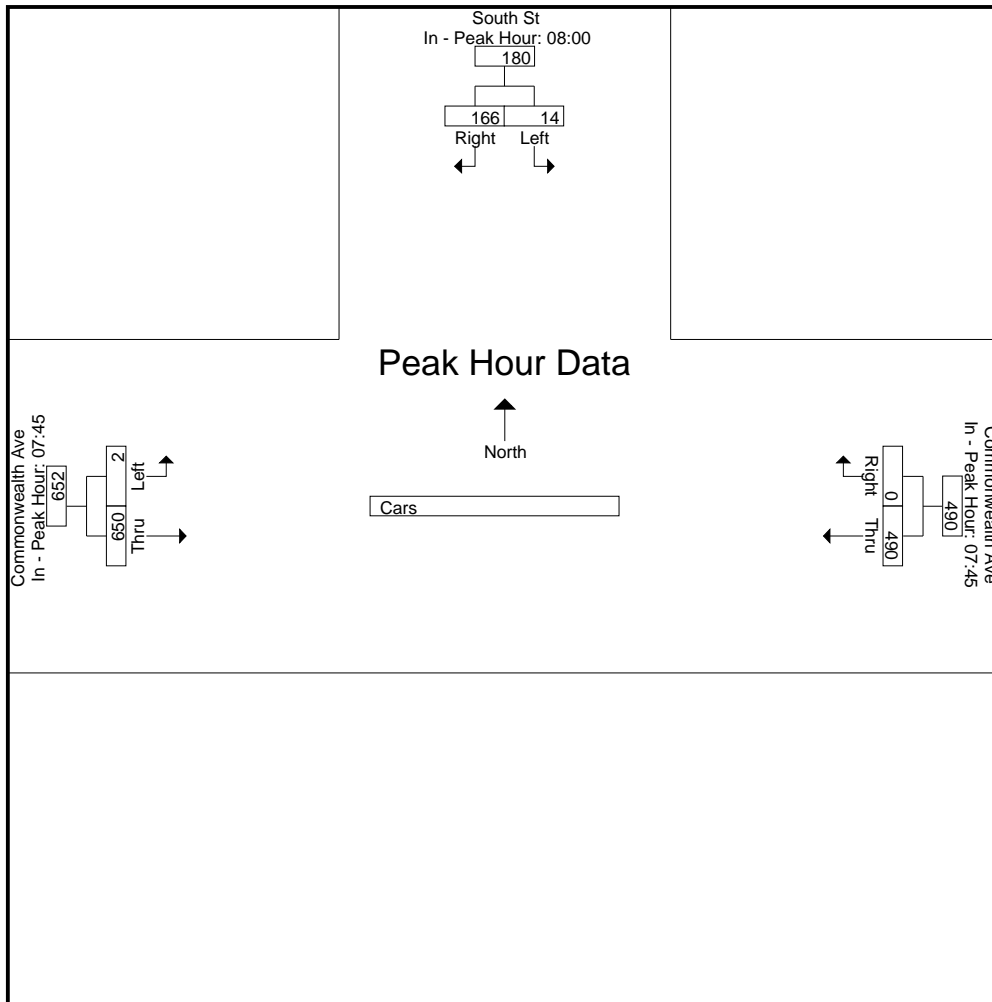
Start Time	South St From North			Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45										
07:45	3	34	37	120	0	120	1	167	168	325
08:00	5	42	47	128	0	128	0	177	177	352
08:15	5	36	41	112	0	112	1	164	165	318
08:30	2	48	50	130	0	130	0	142	142	322
Total Volume	15	160	175	490	0	490	2	650	652	1317
% App. Total	8.6	91.4		100	0		0.3	99.7		
PHF	.750	.833	.875	.942	.000	.942	.500	.918	.921	.935



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00			07:45			07:45		
+0 mins.	5	42	47	120	0	120	1	167	168
+15 mins.	5	36	41	128	0	128	0	177	177
+30 mins.	2	48	50	112	0	112	1	164	165
+45 mins.	2	40	42	130	0	130	0	142	142
Total Volume	14	166	180	490	0	490	2	650	652
% App. Total	7.8	92.2		100	0		0.3	99.7	
PHF	.700	.865	.900	.942	.000	.942	.500	.918	.921



N/S Street : South Street  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

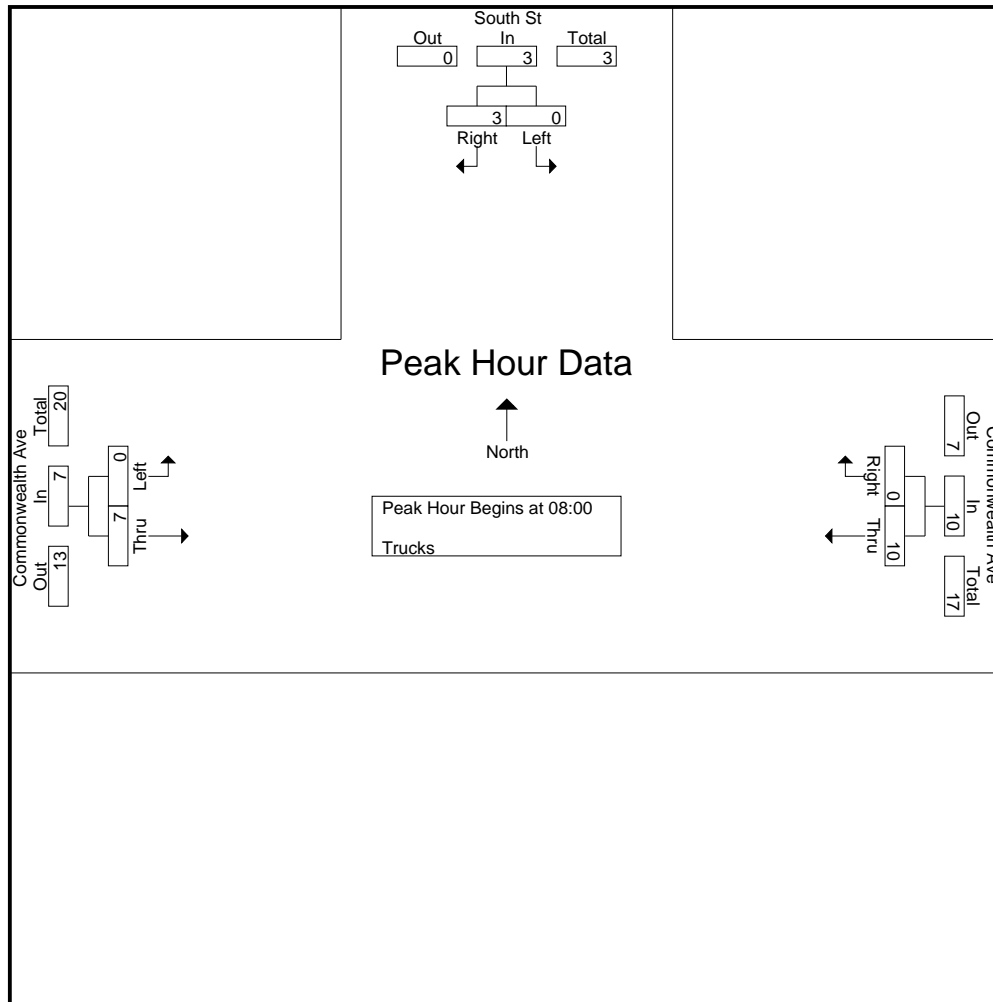
File Name : 39000005  
 Site Code : 39000005  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	South St From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	1	0	0	0	0	0	0	1	1
07:30	0	0	0	2	0	0	0	3	0	0	5	5
07:45	0	0	0	1	0	0	0	3	0	0	4	4
Total	0	0	0	4	0	0	0	6	0	0	10	10
08:00	0	1	0	3	0	0	0	1	0	0	5	5
08:15	0	0	0	4	0	0	0	1	0	0	5	5
08:30	0	0	0	2	0	0	0	2	0	0	4	4
08:45	0	2	0	1	0	0	0	3	0	0	6	6
Total	0	3	0	10	0	0	0	7	0	0	20	20
Grand Total	0	3	0	14	0	0	0	13	0	0	30	30
Apprch %	0	100		100	0		0	100				
Total %	0	10		46.7	0		0	43.3		0	100	

Start Time	South St From North			Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
08:00	0	1	1	3	0	3	0	1	1	5
08:15	0	0	0	4	0	4	0	1	1	5
08:30	0	0	0	2	0	2	0	2	2	4
08:45	0	2	2	1	0	1	0	3	3	6
Total Volume	0	3	3	10	0	10	0	7	7	20
% App. Total	0	100		100	0		0	100		
PHF	.000	.375	.375	.625	.000	.625	.000	.583	.583	.833

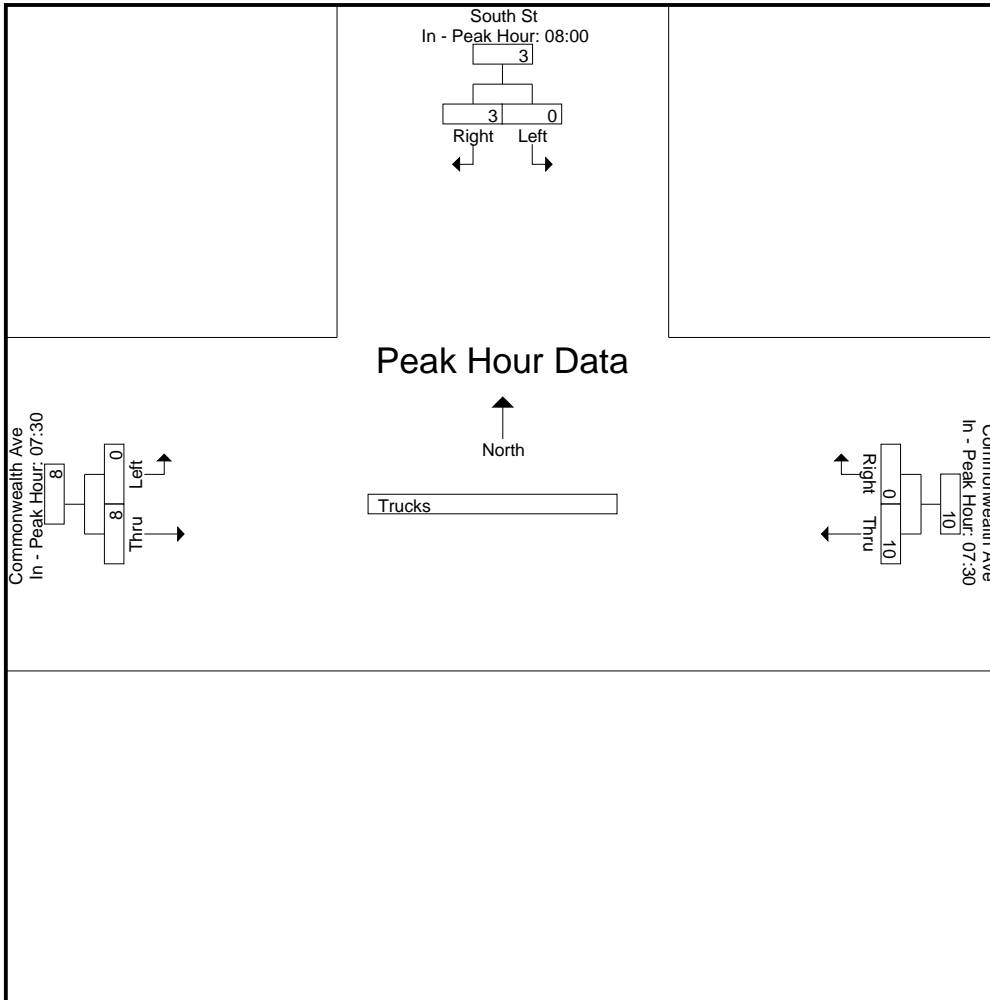
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 08:00



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00			07:30			07:30		
+0 mins.	0	1	1	2	0	2	0	3	3
+15 mins.	0	0	0	1	0	1	0	3	3
+30 mins.	0	0	0	3	0	3	0	1	1
+45 mins.	0	2	2	4	0	4	0	1	1
Total Volume	0	3	3	10	0	10	0	8	8
% App. Total	0	100		100	0		0	100	
PHF	.000	.375	.375	.625	.000	.625	.000	.667	.667





N/S Street : South Street  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

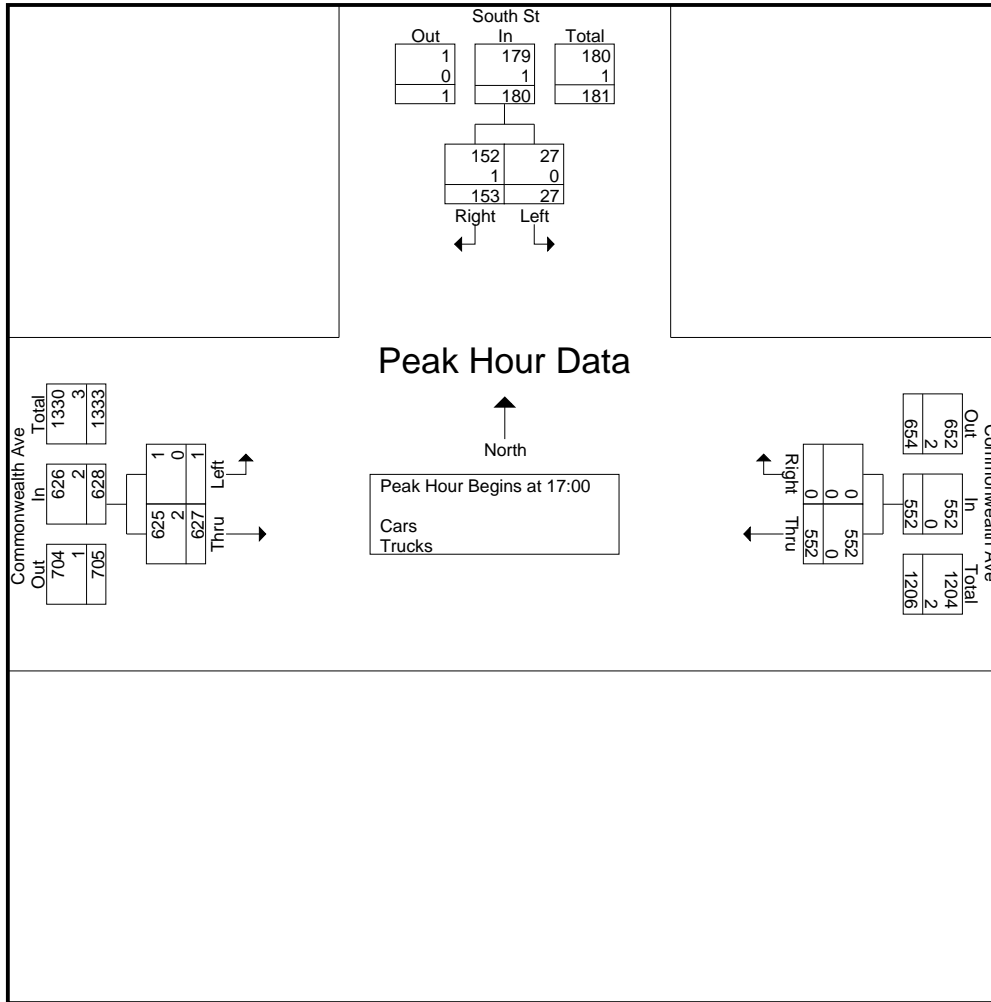
Accurate Counts  
 978-664-2565

File Name : 39000005  
 Site Code : 39000005  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	South St From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	5	30	4	105	0	7	0	103	3	14	243	257
16:15	5	52	1	119	0	12	0	113	12	25	289	314
16:30	5	43	4	90	0	4	0	133	11	19	271	290
16:45	2	41	0	113	0	5	0	145	8	13	301	314
Total	17	166	9	427	0	28	0	494	34	71	1104	1175
17:00	3	43	1	117	0	5	0	144	4	10	307	317
17:15	8	43	3	159	0	7	0	145	4	14	355	369
17:30	7	34	9	123	0	7	0	150	13	29	314	343
17:45	9	33	5	153	0	1	1	188	6	12	384	396
Total	27	153	18	552	0	20	1	627	27	65	1360	1425
Grand Total	44	319	27	979	0	48	1	1121	61	136	2464	2600
Apprch %	12.1	87.9		100	0		0.1	99.9				
Total %	1.8	12.9		39.7	0		0	45.5		5.2	94.8	
Cars	44	318		977	0		1	1119		0	0	2595
% Cars	100	99.7	100	99.8	0	100	100	99.8	100	0	0	99.8
Trucks	0	1		2	0		0	2		0	0	5
% Trucks	0	0.3	0	0.2	0	0	0	0.2	0	0	0	0.2

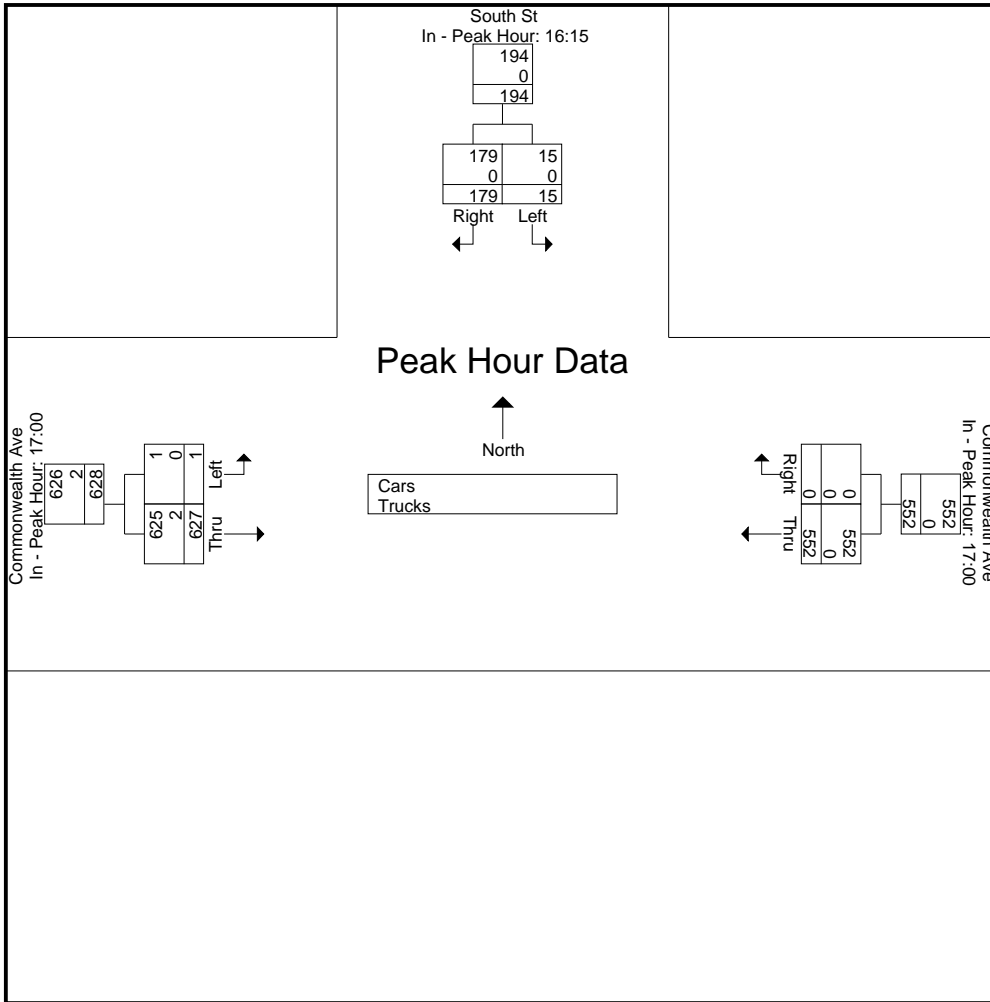
Start Time	South St From North			Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 17:00										
17:00	3	43	46	117	0	117	0	144	144	307
17:15	8	43	51	159	0	159	0	145	145	355
17:30	7	34	41	123	0	123	0	150	150	314
17:45	9	33	42	153	0	153	1	188	189	384
Total Volume	27	153	180	552	0	552	1	627	628	1360
% App. Total	15	85		100	0		0.2	99.8		
PHF	.750	.890	.882	.868	.000	.868	.250	.834	.831	.885
Cars	27	152	179	552	0	552	1	625	626	1357
% Cars	100	99.3	99.4	100	0	100	100	99.7	99.7	99.8
Trucks	0	1	1	0	0	0	0	2	2	3
% Trucks	0	0.7	0.6	0	0	0	0	0.3	0.3	0.2



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:15			17:00			17:00		
+0 mins.	5	52	57	117	0	117	0	144	144
+15 mins.	5	43	48	159	0	159	0	145	145
+30 mins.	2	41	43	123	0	123	0	150	150
+45 mins.	3	43	46	153	0	153	1	188	189
Total Volume	15	179	194	552	0	552	1	627	628
% App. Total	7.7	92.3		100	0		0.2	99.8	
PHF	.750	.861	.851	.868	.000	.868	.250	.834	.831
Cars	15	179	194	552	0	552	1	625	626
% Cars	100	100	100	100	0	100	100	99.7	99.7
Trucks	0	0	0	0	0	0	0	2	2
% Trucks	0	0	0	0	0	0	0	0.3	0.3



N/S Street : South Street  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

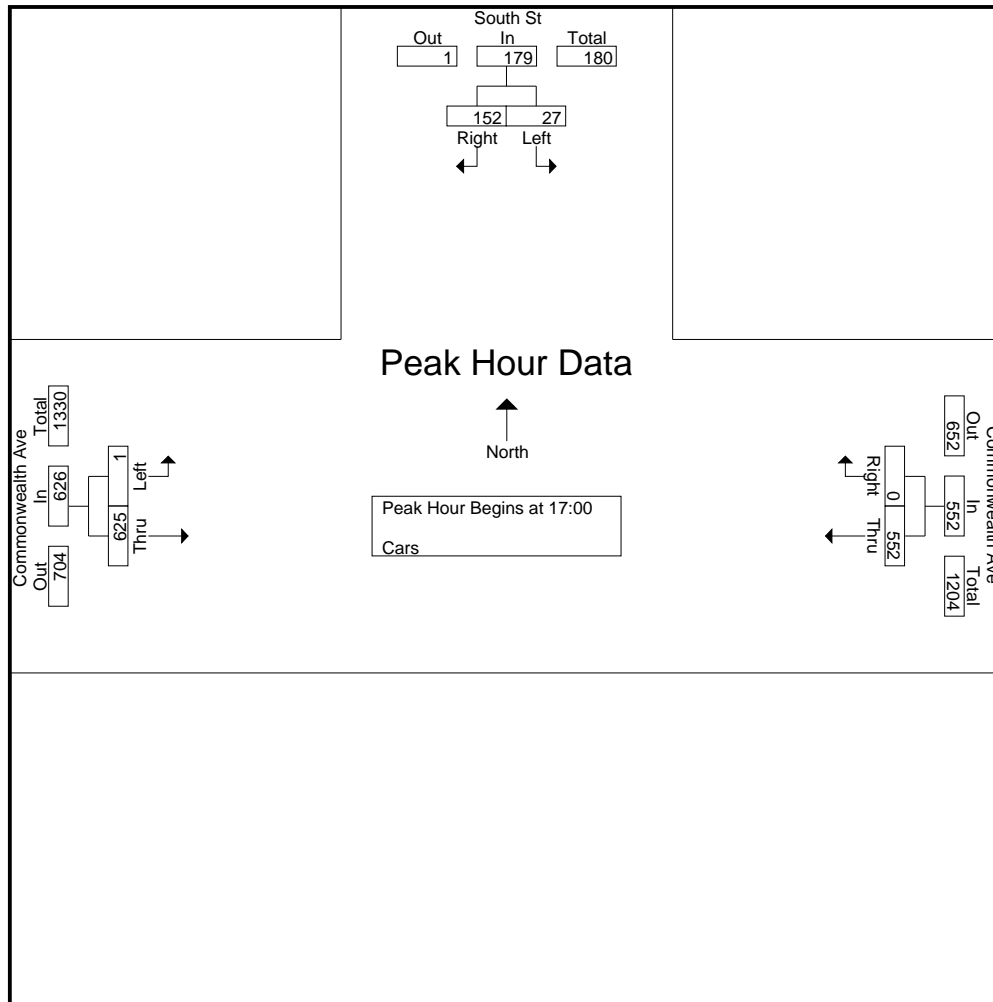
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 Site Code : 39000005  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

Start Time	South St From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	5	30	4	105	0	7	0	103	3	14	243	257
16:15	5	52	1	119	0	12	0	113	12	25	289	314
16:30	5	43	4	89	0	4	0	133	11	19	270	289
16:45	2	41	0	112	0	5	0	145	8	13	300	313
Total	17	166	9	425	0	28	0	494	34	71	1102	1173
17:00	3	43	1	117	0	5	0	143	4	10	306	316
17:15	8	43	3	159	0	7	0	145	4	14	355	369
17:30	7	33	9	123	0	7	0	150	13	29	313	342
17:45	9	33	5	153	0	1	1	187	6	12	383	395
Total	27	152	18	552	0	20	1	625	27	65	1357	1422
Grand Total	44	318	27	977	0	48	1	1119	61	136	2459	2595
Apprch %	12.2	87.8		100	0		0.1	99.9				
Total %	1.8	12.9		39.7	0		0	45.5		5.2	94.8	

Start Time	South St From North			Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
17:00	3	43	46	117	0	117	0	143	143	306
17:15	8	43	51	159	0	159	0	145	145	355
17:30	7	33	40	123	0	123	0	150	150	313
17:45	9	33	42	153	0	153	1	187	188	383
Total Volume	27	152	179	552	0	552	1	625	626	1357
% App. Total	15.1	84.9		100	0		0.2	99.8		
PHF	.750	.884	.877	.868	.000	.868	.250	.836	.832	.886

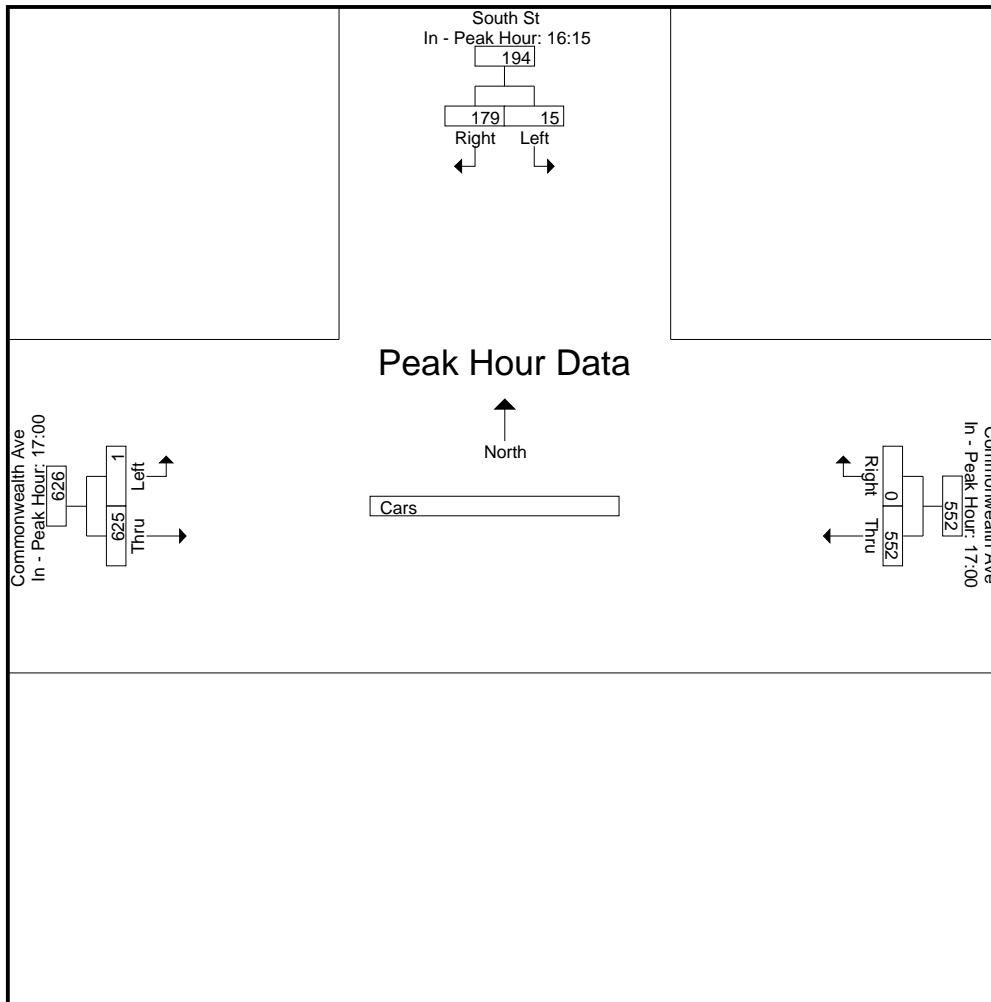
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 17:00



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:15			17:00			17:00		
+0 mins.	5	52	57	117	0	117	0	143	143
+15 mins.	5	43	48	159	0	159	0	145	145
+30 mins.	2	41	43	123	0	123	0	150	150
+45 mins.	3	43	46	153	0	153	1	187	188
Total Volume	15	179	194	552	0	552	1	625	626
% App. Total	7.7	92.3		100	0		0.2	99.8	
PHF	.750	.861	.851	.868	.000	.868	.250	.836	.832



N/S Street : South Street  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

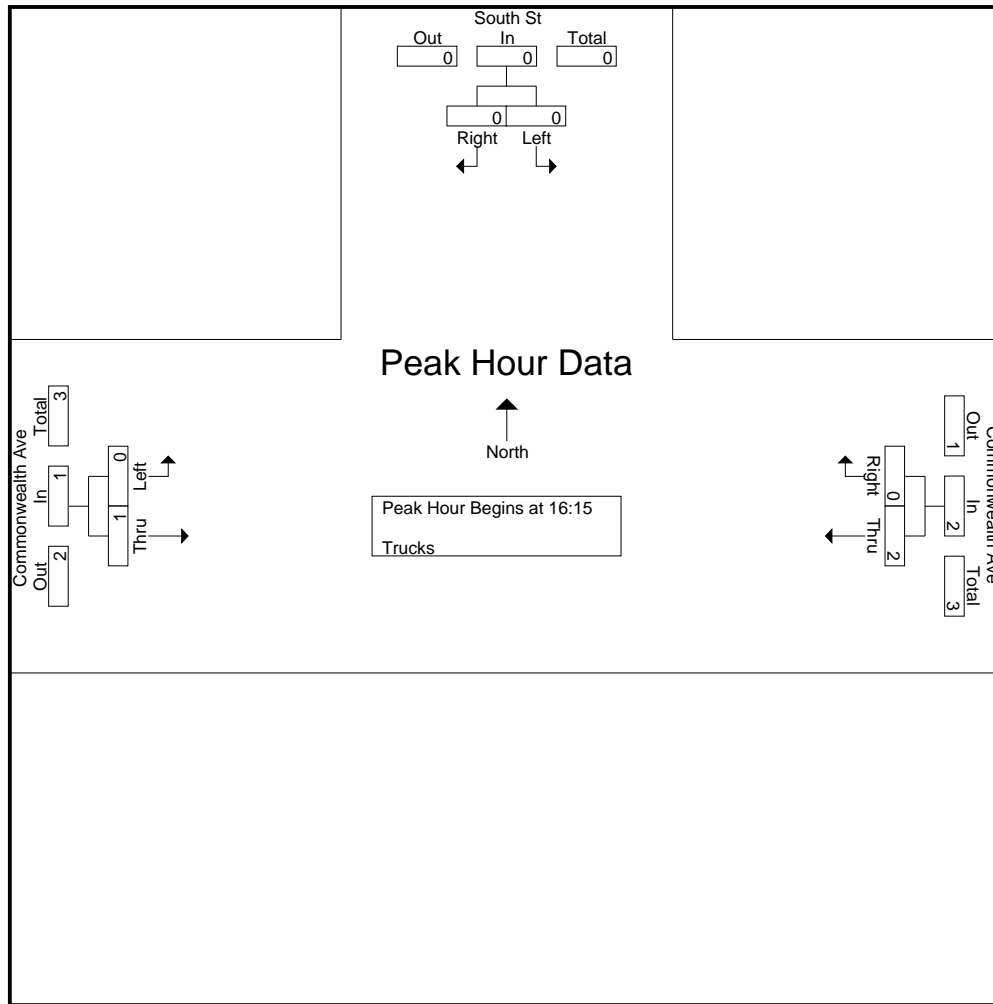
File Name : 39000005  
 Site Code : 39000005  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	South St From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	1	0	0	0	0	0	0	1	1
16:45	0	0	0	1	0	0	0	0	0	0	1	1
Total	0	0	0	2	0	0	0	0	0	0	2	2
17:00	0	0	0	0	0	0	0	1	0	0	1	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	1	0	0	0	0	0	0	0	0	1	1
17:45	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	1	0	0	0	0	0	2	0	0	3	3
Grand Total	0	1	0	2	0	0	0	2	0	0	5	5
Apprch %	0	100		100	0		0	100				
Total %	0	20		40	0		0	40		0	100	

Start Time	South St From North			Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
16:15	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	1	0	1	0	0	0	1
16:45	0	0	0	1	0	1	0	0	0	1
17:00	0	0	0	0	0	0	0	1	1	1
Total Volume	0	0	0	2	0	2	0	1	1	3
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.500	.000	.500	.000	.250	.250	.750

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 16:15

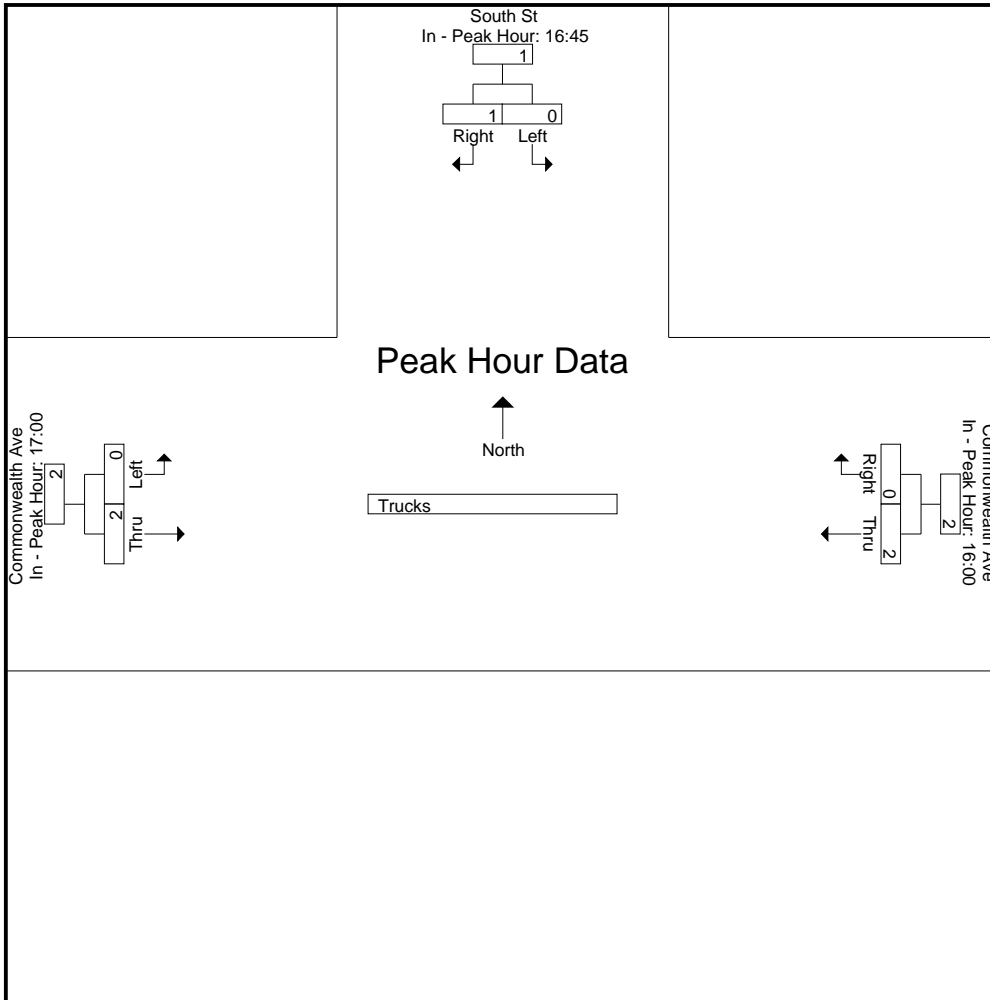


Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:45			16:00			17:00		
+0 mins.	0	0	0	0	0	0	0	1	1
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	1	0	1	0	0	0
+45 mins.	0	1	1	1	0	1	0	1	1
Total Volume	0	1	1	2	0	2	0	2	2
% App. Total	0	100		100	0		0	100	
PHF	.000	.250	.250	.500	.000	.500	.000	.500	.500





N/S Street : St. Thomas Moore Road  
 E/W Street: Chestnut Hill Drive  
 City/State : Brighton, MA  
 Weather : Clear

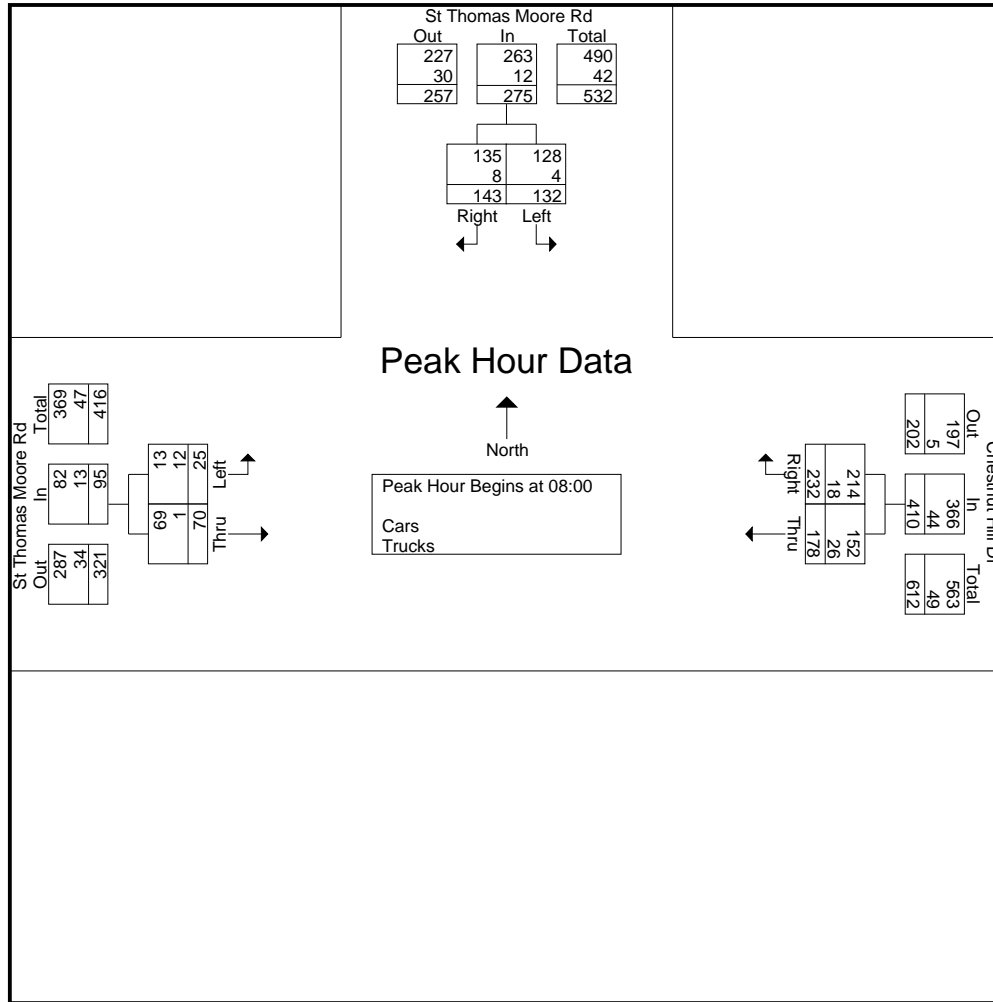
Accurate Counts  
 978-664-2565

File Name : 39000006  
 Site Code : 39000006  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	St Thomas Moore Rd From North			Chestnut Hill Dr From East			St Thomas Moore Rd From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	18	17	1	12	52	1	1	3	2	4	103	107
07:15	21	15	0	24	63	2	5	4	1	3	132	135
07:30	30	17	1	17	53	2	4	13	2	5	134	139
07:45	34	23	1	14	81	0	7	8	6	7	167	174
Total	103	72	3	67	249	5	17	28	11	19	536	555
08:00	26	22	3	17	46	0	8	25	4	7	144	151
08:15	29	35	2	35	62	2	4	16	6	10	181	191
08:30	31	42	4	39	66	15	4	14	1	20	196	216
08:45	46	44	4	87	58	1	9	15	4	9	259	268
Total	132	143	13	178	232	18	25	70	15	46	780	826
Grand Total	235	215	16	245	481	23	42	98	26	65	1316	1381
Apprch %	52.2	47.8		33.7	66.3		30	70				
Total %	17.9	16.3		18.6	36.6		3.2	7.4		4.7	95.3	
Cars	227	196		217	450		23	95		0	0	1273
% Cars	96.6	91.2	100	88.6	93.6	100	54.8	96.9	100	0	0	92.2
Trucks	8	19		28	31		19	3		0	0	108
% Trucks	3.4	8.8	0	11.4	6.4	0	45.2	3.1	0	0	0	7.8

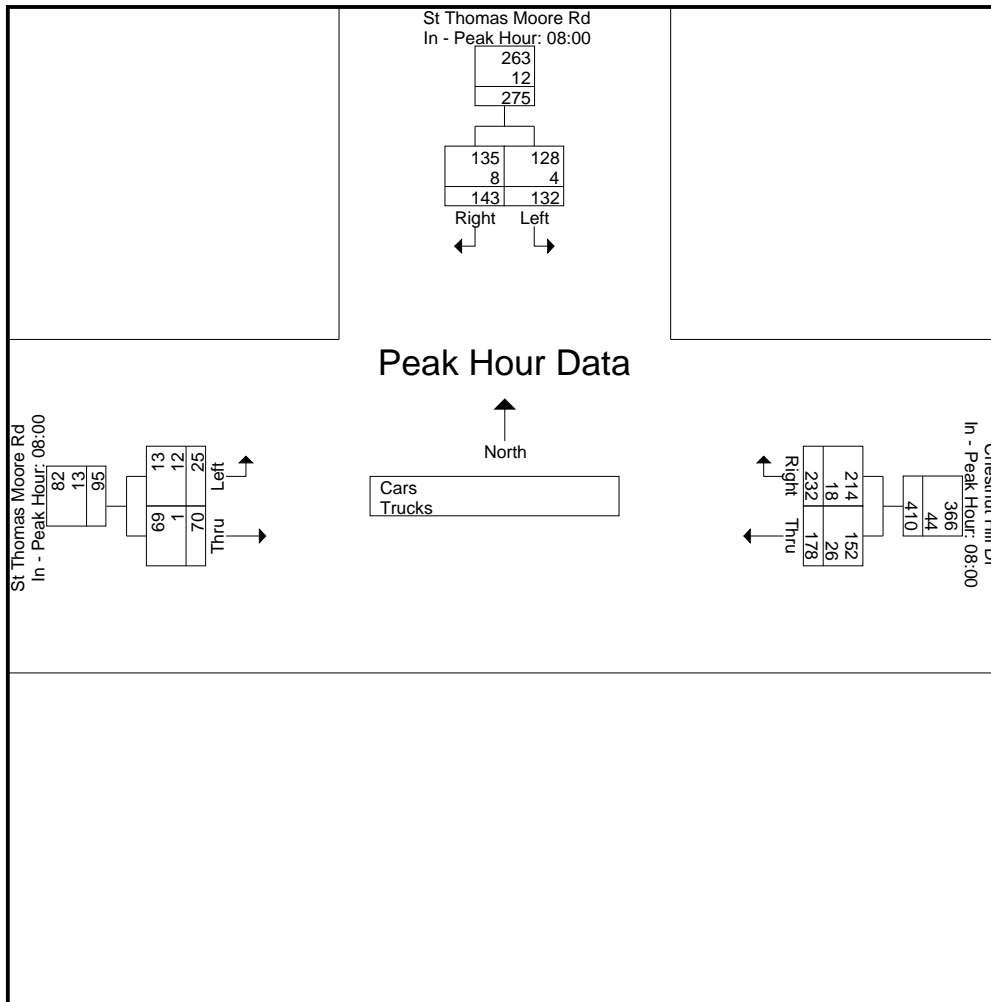
Start Time	St Thomas Moore Rd From North			Chestnut Hill Dr From East			St Thomas Moore Rd From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00										
08:00	26	22	48	17	46	63	8	25	33	144
08:15	29	35	64	35	62	97	4	16	20	181
08:30	31	42	73	39	66	105	4	14	18	196
08:45	46	44	90	87	58	145	9	15	24	259
Total Volume	132	143	275	178	232	410	25	70	95	780
% App. Total	48	52		43.4	56.6		26.3	73.7		
PHF	.717	.813	.764	.511	.879	.707	.694	.700	.720	.753
Cars	128	135	263	152	214	366	13	69	82	711
% Cars	97.0	94.4	95.6	85.4	92.2	89.3	52.0	98.6	86.3	91.2
Trucks	4	8	12	26	18	44	12	1	13	69
% Trucks	3.0	5.6	4.4	14.6	7.8	10.7	48.0	1.4	13.7	8.8



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00			08:00			08:00		
+0 mins.	26	22	48	17	46	63	8	25	33
+15 mins.	29	35	64	35	62	97	4	16	20
+30 mins.	31	42	73	39	66	105	4	14	18
+45 mins.	46	44	90	87	58	145	9	15	24
Total Volume	132	143	275	178	232	410	25	70	95
% App. Total	48	52		43.4	56.6		26.3	73.7	
PHF	.717	.813	.764	.511	.879	.707	.694	.700	.720
Cars	128	135	263	152	214	366	13	69	82
% Cars	97	94.4	95.6	85.4	92.2	89.3	52	98.6	86.3
Trucks	4	8	12	26	18	44	12	1	13
% Trucks	3	5.6	4.4	14.6	7.8	10.7	48	1.4	13.7



N/S Street : St. Thomas Moore Road  
 E/W Street: Chestnut Hill Drive  
 City/State : Brighton, MA  
 Weather : Clear

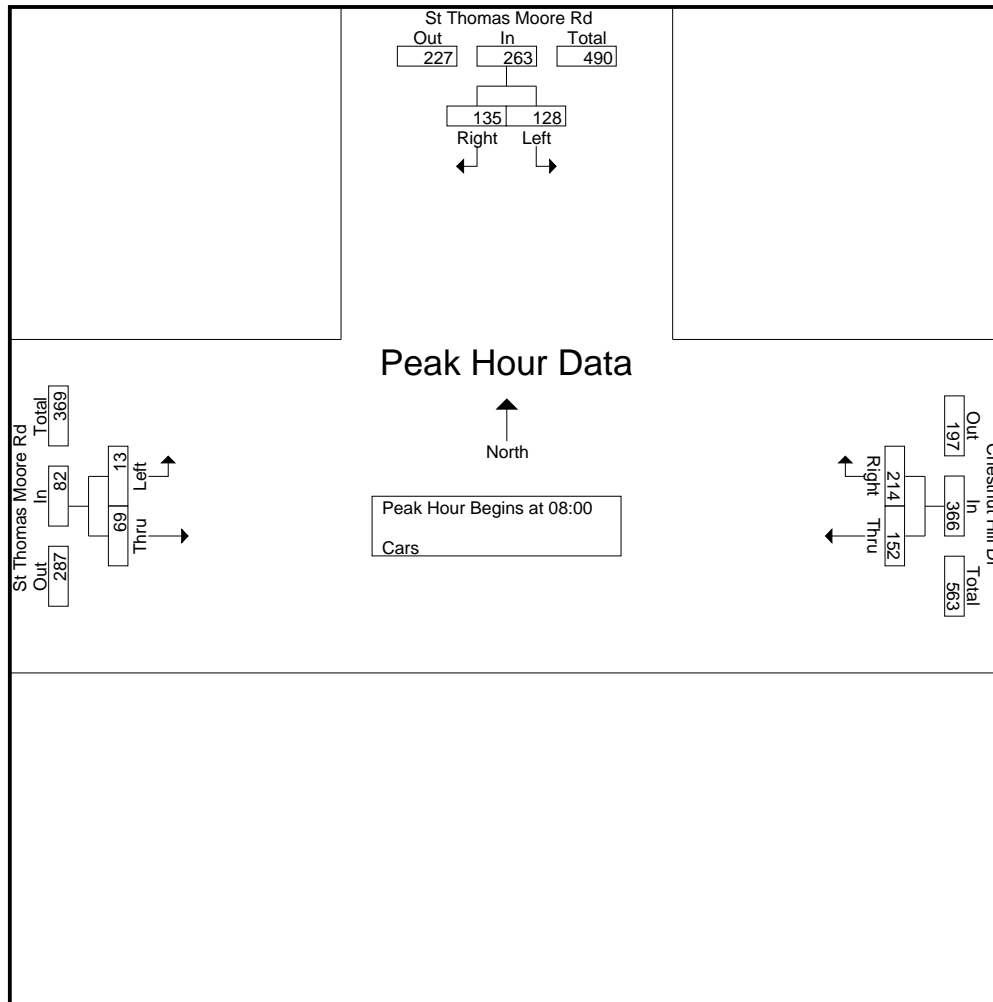
Accurate Counts  
 978-664-2565

File Name : 39000006  
 Site Code : 39000006  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

Start Time	St Thomas Moore Rd From North			Chestnut Hill Dr From East			St Thomas Moore Rd From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	17	14	1	12	47	1	0	3	2	4	93	97
07:15	21	13	0	23	62	2	3	4	1	3	126	129
07:30	29	13	1	16	51	2	1	12	2	5	122	127
07:45	32	21	1	14	76	0	6	7	6	7	156	163
Total	99	61	3	65	236	5	10	26	11	19	497	516
08:00	26	21	3	17	43	0	5	24	4	7	136	143
08:15	27	32	2	33	59	2	1	16	6	10	168	178
08:30	30	39	4	38	59	15	1	14	1	20	181	201
08:45	45	43	4	64	53	1	6	15	4	9	226	235
Total	128	135	13	152	214	18	13	69	15	46	711	757
Grand Total	227	196	16	217	450	23	23	95	26	65	1208	1273
Apprch %	53.7	46.3		32.5	67.5		19.5	80.5				
Total %	18.8	16.2		18	37.3		1.9	7.9		5.1	94.9	

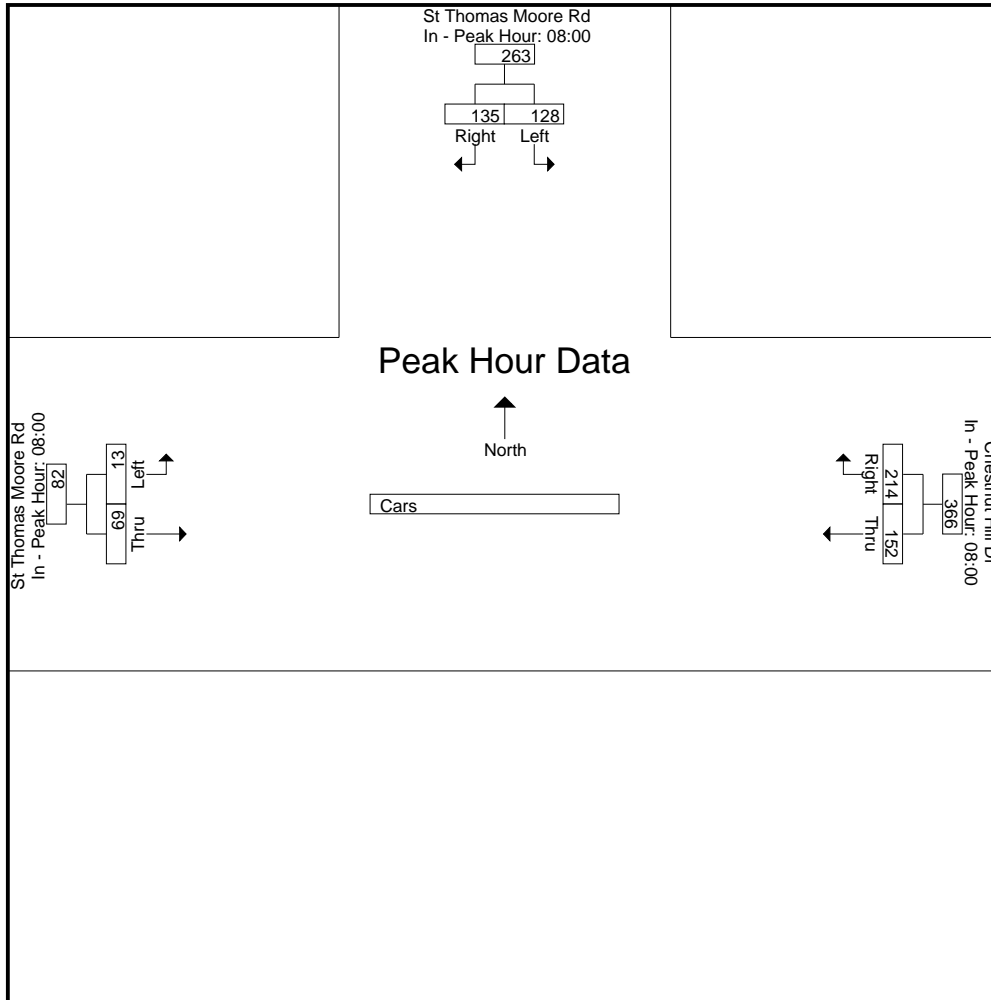
Start Time	St Thomas Moore Rd From North			Chestnut Hill Dr From East			St Thomas Moore Rd From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00										
08:00	26	21	47	17	43	60	5	24	29	136
08:15	27	32	59	33	59	92	1	16	17	168
08:30	30	39	69	38	59	97	1	14	15	181
08:45	45	43	88	64	53	117	6	15	21	226
Total Volume	128	135	263	152	214	366	13	69	82	711
% App. Total	48.7	51.3		41.5	58.5		15.9	84.1		
PHF	.711	.785	.747	.594	.907	.782	.542	.719	.707	.787



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00			08:00			08:00		
+0 mins.	26	21	47	17	43	60	5	24	29
+15 mins.	27	32	59	33	59	92	1	16	17
+30 mins.	30	39	69	38	59	97	1	14	15
+45 mins.	45	43	88	64	53	117	6	15	21
Total Volume	128	135	263	152	214	366	13	69	82
% App. Total	48.7	51.3		41.5	58.5		15.9	84.1	
PHF	.711	.785	.747	.594	.907	.782	.542	.719	.707



N/S Street : St. Thomas Moore Road  
 E/W Street: Chestnut Hill Drive  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

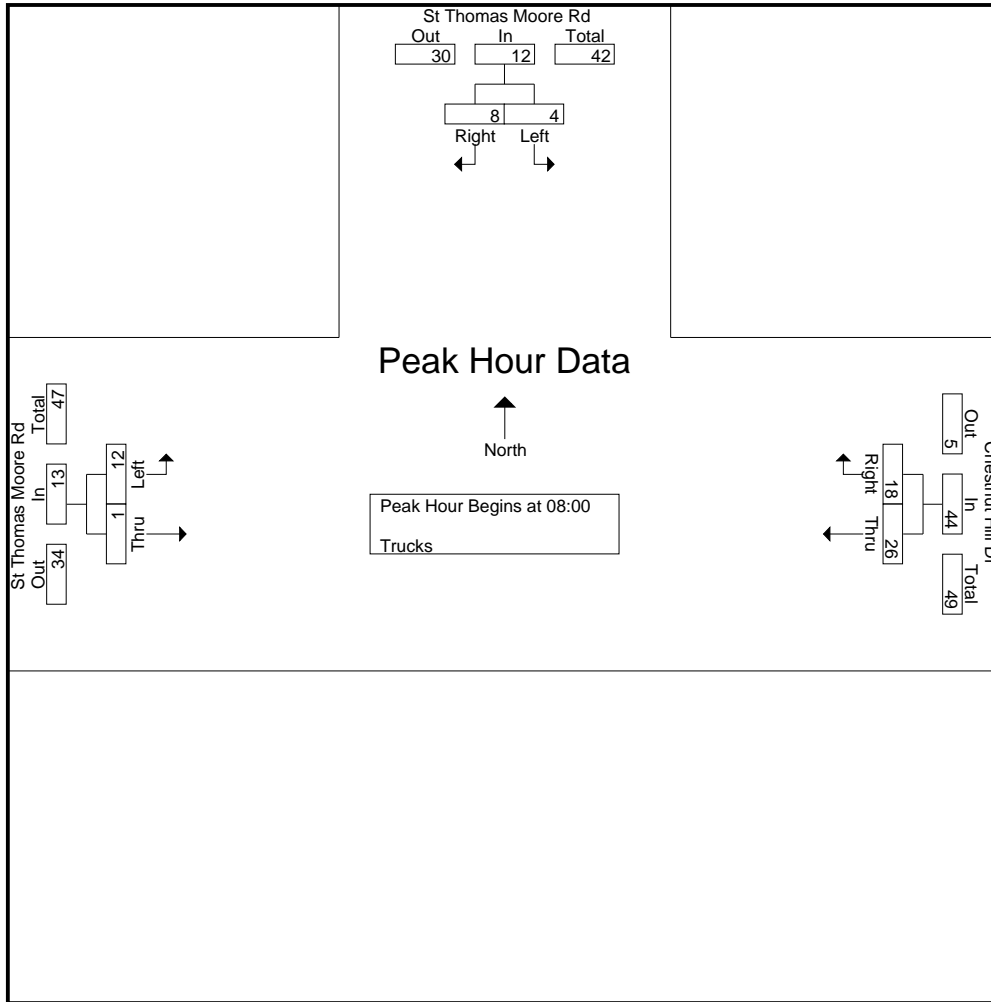
File Name : 39000006  
 Site Code : 39000006  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	St Thomas Moore Rd From North			Chestnut Hill Dr From East			St Thomas Moore Rd From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	1	3	0	0	5	0	1	0	0	0	10	10
07:15	0	2	0	1	1	0	2	0	0	0	6	6
07:30	1	4	0	1	2	0	3	1	0	0	12	12
07:45	2	2	0	0	5	0	1	1	0	0	11	11
Total	4	11	0	2	13	0	7	2	0	0	39	39
08:00	0	1	0	0	3	0	3	1	0	0	8	8
08:15	2	3	0	2	3	0	3	0	0	0	13	13
08:30	1	3	0	1	7	0	3	0	0	0	15	15
08:45	1	1	0	23	5	0	3	0	0	0	33	33
Total	4	8	0	26	18	0	12	1	0	0	69	69
Grand Total	8	19	0	28	31	0	19	3	0	0	108	108
Apprch %	29.6	70.4		47.5	52.5		86.4	13.6				
Total %	7.4	17.6		25.9	28.7		17.6	2.8		0	100	

Start Time	St Thomas Moore Rd From North			Chestnut Hill Dr From East			St Thomas Moore Rd From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00										
08:00	0	1	1	0	3	3	3	1	4	8
08:15	2	3	5	2	3	5	3	0	3	13
08:30	1	3	4	1	7	8	3	0	3	15
08:45	1	1	2	23	5	28	3	0	3	33
Total Volume	4	8	12	26	18	44	12	1	13	69
% App. Total	33.3	66.7		59.1	40.9		92.3	7.7		
PHF	.500	.667	.600	.283	.643	.393	1.000	.250	.813	.523

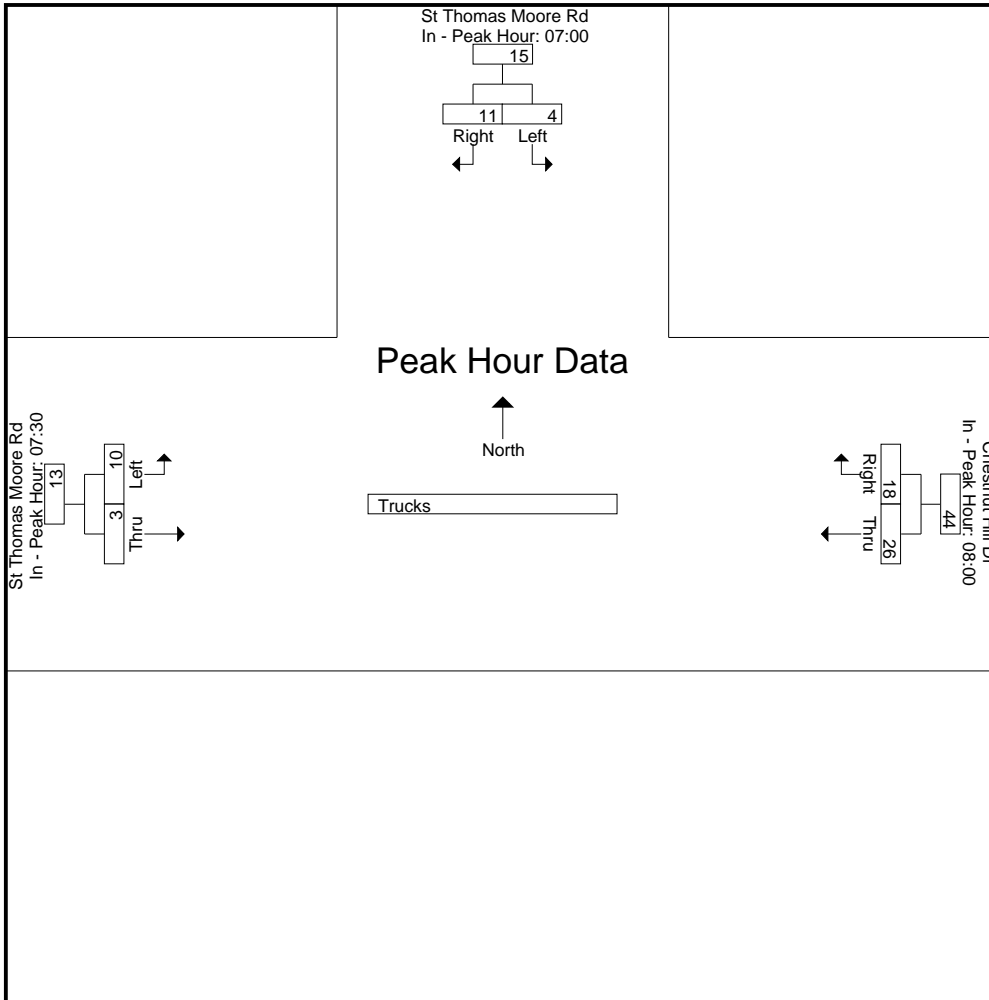




Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00			08:00			07:30		
+0 mins.	1	3	4	0	3	3	3	1	4
+15 mins.	0	2	2	2	3	5	1	1	2
+30 mins.	1	4	5	1	7	8	3	1	4
+45 mins.	2	2	4	23	5	28	3	0	3
Total Volume	4	11	15	26	18	44	10	3	13
% App. Total	26.7	73.3		59.1	40.9		76.9	23.1	
PHF	.500	.688	.750	.283	.643	.393	.833	.750	.813



N/S Street : St. Thomas Moore Road  
 E/W Street: Chestnut Hill Drive  
 City/State : Brighton, MA  
 Weather : Clear

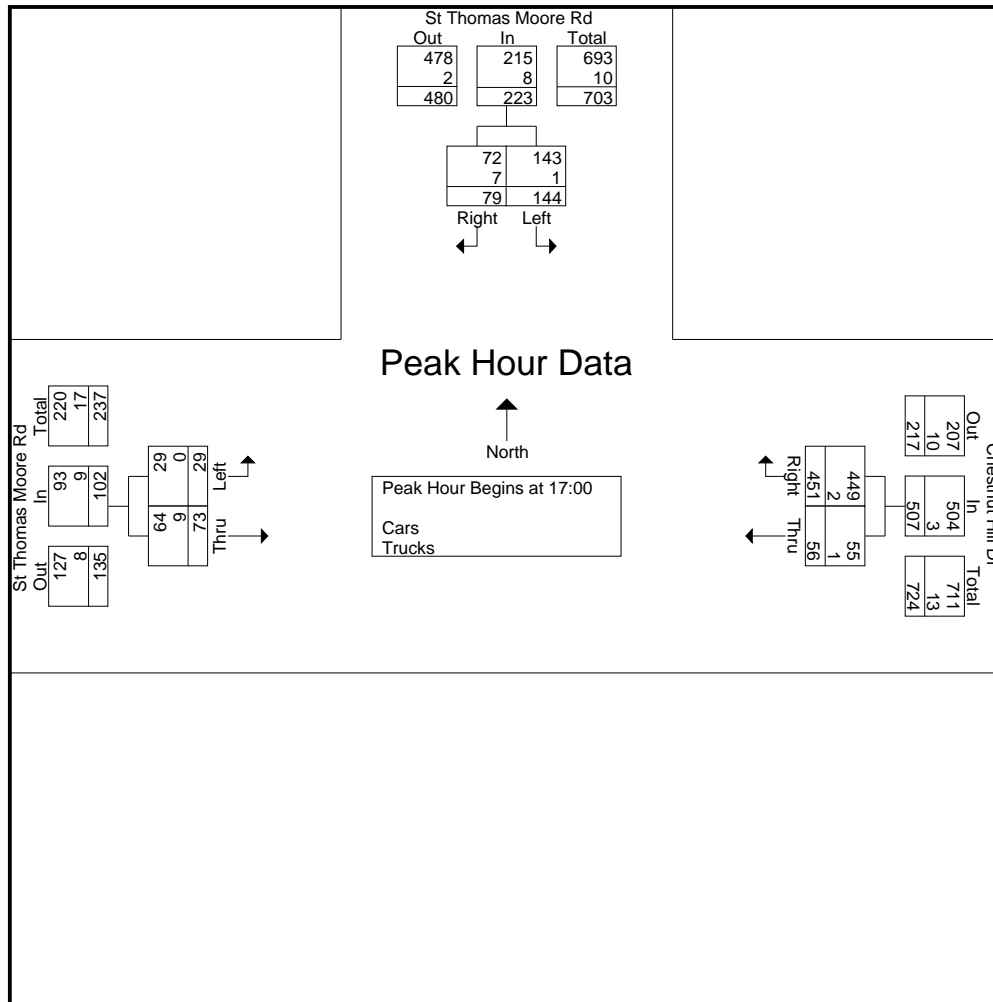
Accurate Counts  
 978-664-2565

File Name : 39000006  
 Site Code : 39000006  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	St Thomas Moore Rd From North			Chestnut Hill Dr From East			St Thomas Moore Rd From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	39	17	5	27	125	14	4	19	10	29	231	260
16:15	30	28	5	21	101	27	4	20	11	43	204	247
16:30	32	15	6	15	83	19	8	17	18	43	170	213
16:45	27	16	6	14	89	23	8	11	11	40	165	205
Total	128	76	22	77	398	83	24	67	50	155	770	925
17:00	23	11	5	11	128	9	10	21	22	36	204	240
17:15	36	25	3	11	108	17	8	19	7	27	207	234
17:30	39	20	4	13	112	12	6	18	3	19	208	227
17:45	46	23	1	21	103	14	5	15	4	19	213	232
Total	144	79	13	56	451	52	29	73	36	101	832	933
Grand Total	272	155	35	133	849	135	53	140	86	256	1602	1858
Apprch %	63.7	36.3		13.5	86.5		27.5	72.5				
Total %	17	9.7		8.3	53		3.3	8.7		13.8	86.2	
Cars	269	140		129	846		53	122		0	0	1815
% Cars	98.9	90.3	100	97	99.6	100	100	87.1	100	0	0	97.7
Trucks	3	15		4	3		0	18		0	0	43
% Trucks	1.1	9.7	0	3	0.4	0	0	12.9	0	0	0	2.3

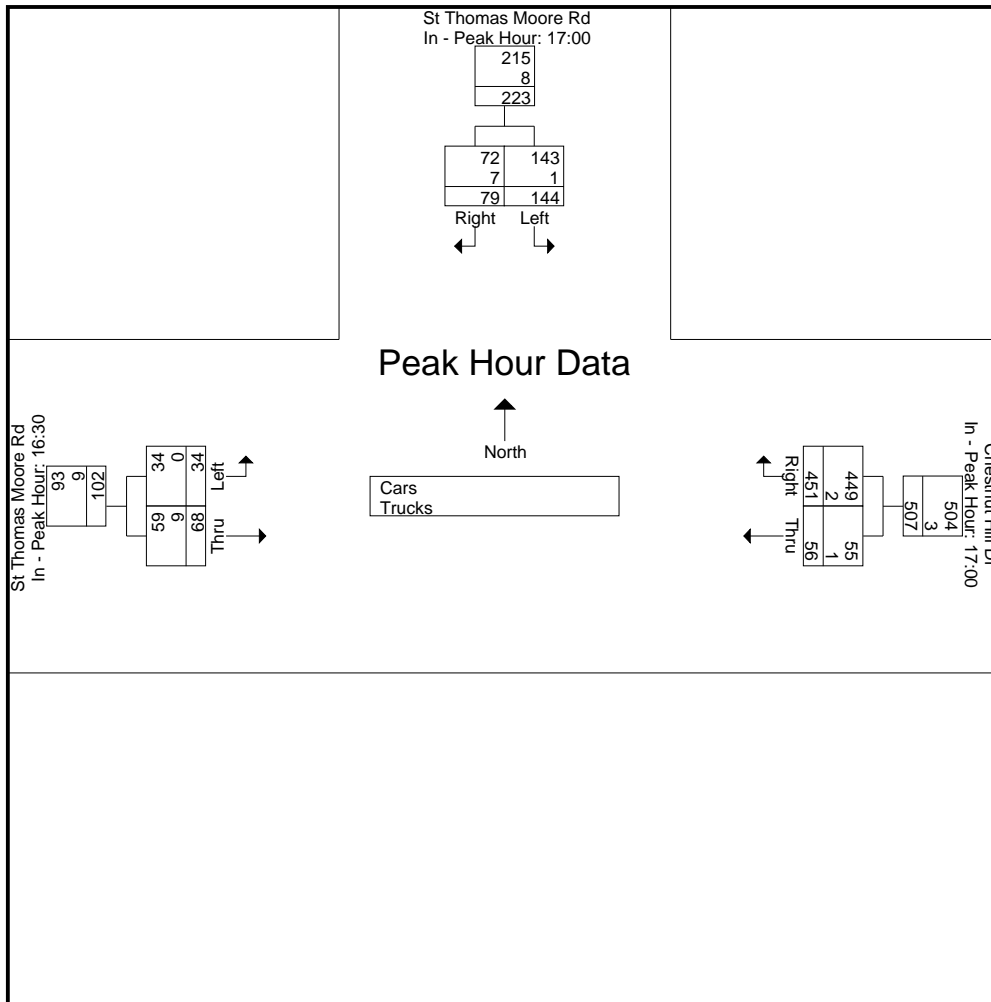
Start Time	St Thomas Moore Rd From North			Chestnut Hill Dr From East			St Thomas Moore Rd From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 17:00										
17:00	23	11	34	11	128	139	10	21	31	204
17:15	36	25	61	11	108	119	8	19	27	207
17:30	39	20	59	13	112	125	6	18	24	208
17:45	46	23	69	21	103	124	5	15	20	213
Total Volume	144	79	223	56	451	507	29	73	102	832
% App. Total	64.6	35.4		11	89		28.4	71.6		
PHF	.783	.790	.808	.667	.881	.912	.725	.869	.823	.977
Cars	143	72	215	55	449	504	29	64	93	812
% Cars	99.3	91.1	96.4	98.2	99.6	99.4	100	87.7	91.2	97.6
Trucks	1	7	8	1	2	3	0	9	9	20
% Trucks	0.7	8.9	3.6	1.8	0.4	0.6	0	12.3	8.8	2.4



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00			17:00			16:30		
+0 mins.	23	11	34	11	128	139	8	17	25
+15 mins.	36	25	61	11	108	119	8	11	19
+30 mins.	39	20	59	13	112	125	10	21	31
+45 mins.	46	23	69	21	103	124	8	19	27
Total Volume	144	79	223	56	451	507	34	68	102
% App. Total	64.6	35.4		11	89		33.3	66.7	
PHF	.783	.790	.808	.667	.881	.912	.850	.810	.823
Cars	143	72	215	55	449	504	34	59	93
% Cars	99.3	91.1	96.4	98.2	99.6	99.4	100	86.8	91.2
Trucks	1	7	8	1	2	3	0	9	9
% Trucks	0.7	8.9	3.6	1.8	0.4	0.6	0	13.2	8.8



N/S Street : St. Thomas Moore Road  
 E/W Street: Chestnut Hill Drive  
 City/State : Brighton, MA  
 Weather : Clear

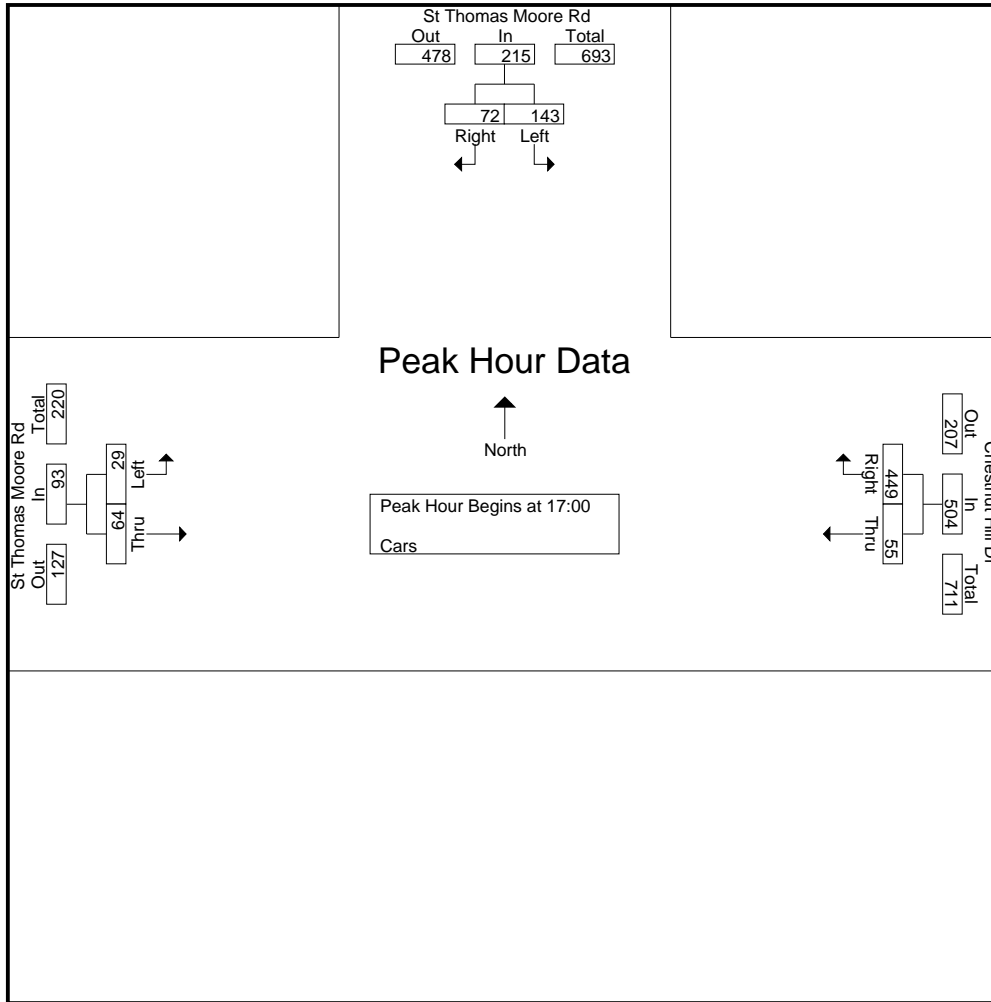
Accurate Counts  
 978-664-2565

File Name : 39000006  
 Site Code : 39000006  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

Start Time	St Thomas Moore Rd From North			Chestnut Hill Dr From East			St Thomas Moore Rd From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	39	15	5	26	125	14	4	16	10	29	225	254
16:15	30	26	5	21	101	27	4	18	11	43	200	243
16:30	30	13	6	14	82	19	8	15	18	43	162	205
16:45	27	14	6	13	89	23	8	9	11	40	160	200
Total	126	68	22	74	397	83	24	58	50	155	747	902
17:00	23	9	5	11	128	9	10	17	22	36	198	234
17:15	35	23	3	11	108	17	8	18	7	27	203	230
17:30	39	18	4	12	111	12	6	16	3	19	202	221
17:45	46	22	1	21	102	14	5	13	4	19	209	228
Total	143	72	13	55	449	52	29	64	36	101	812	913
Grand Total	269	140	35	129	846	135	53	122	86	256	1559	1815
Apprch %	65.8	34.2		13.2	86.8		30.3	69.7				
Total %	17.3	9		8.3	54.3		3.4	7.8		14.1	85.9	

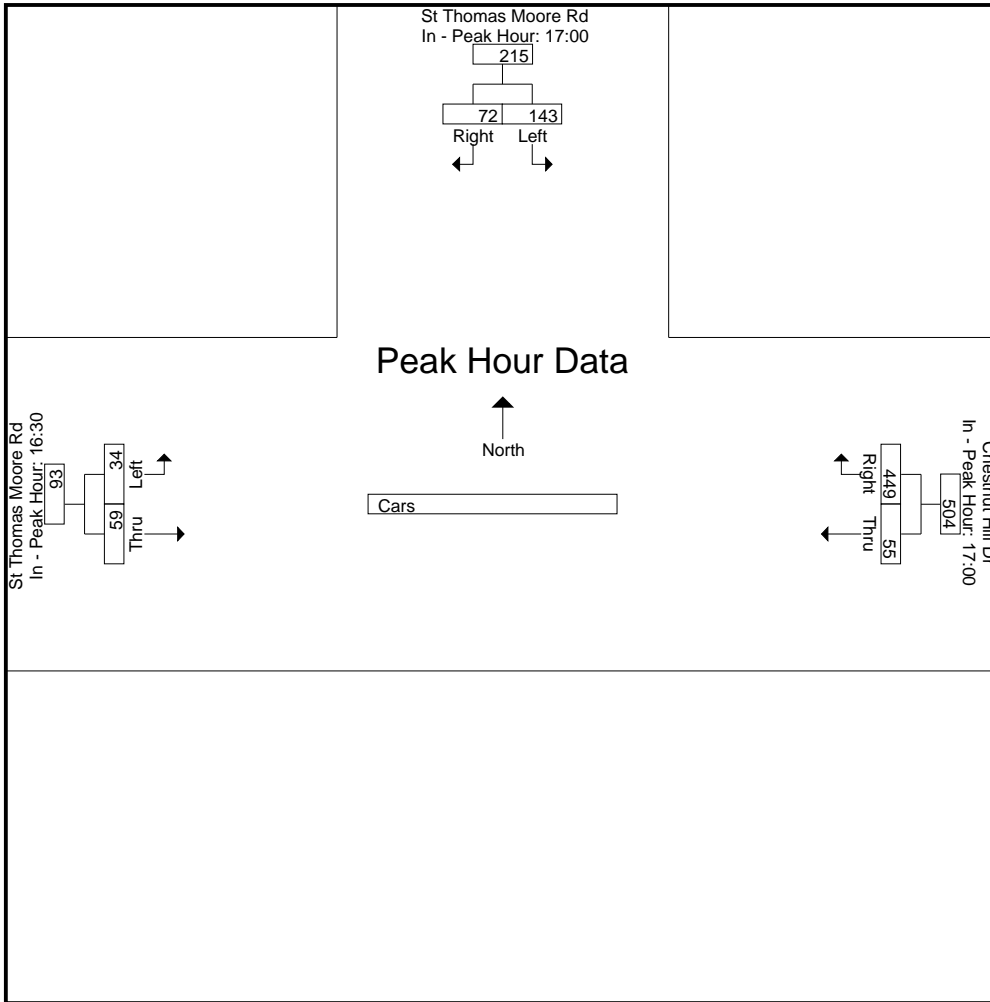
Start Time	St Thomas Moore Rd From North			Chestnut Hill Dr From East			St Thomas Moore Rd From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 17:00										
17:00	23	9	32	11	128	139	10	17	27	198
17:15	35	23	58	11	108	119	8	18	26	203
17:30	39	18	57	12	111	123	6	16	22	202
17:45	46	22	68	21	102	123	5	13	18	209
Total Volume	143	72	215	55	449	504	29	64	93	812
% App. Total	66.5	33.5		10.9	89.1		31.2	68.8		
PHF	.777	.783	.790	.655	.877	.906	.725	.889	.861	.971



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00			17:00			16:30		
+0 mins.	23	9	32	11	128	139	8	15	23
+15 mins.	35	23	58	11	108	119	8	9	17
+30 mins.	39	18	57	12	111	123	10	17	27
+45 mins.	46	22	68	21	102	123	8	18	26
Total Volume	143	72	215	55	449	504	34	59	93
% App. Total	66.5	33.5		10.9	89.1		36.6	63.4	
PHF	.777	.783	.790	.655	.877	.906	.850	.819	.861





N/S Street : St. Thomas Moore Road  
 E/W Street: Chestnut Hill Drive  
 City/State : Brighton, MA  
 Weather : Clear

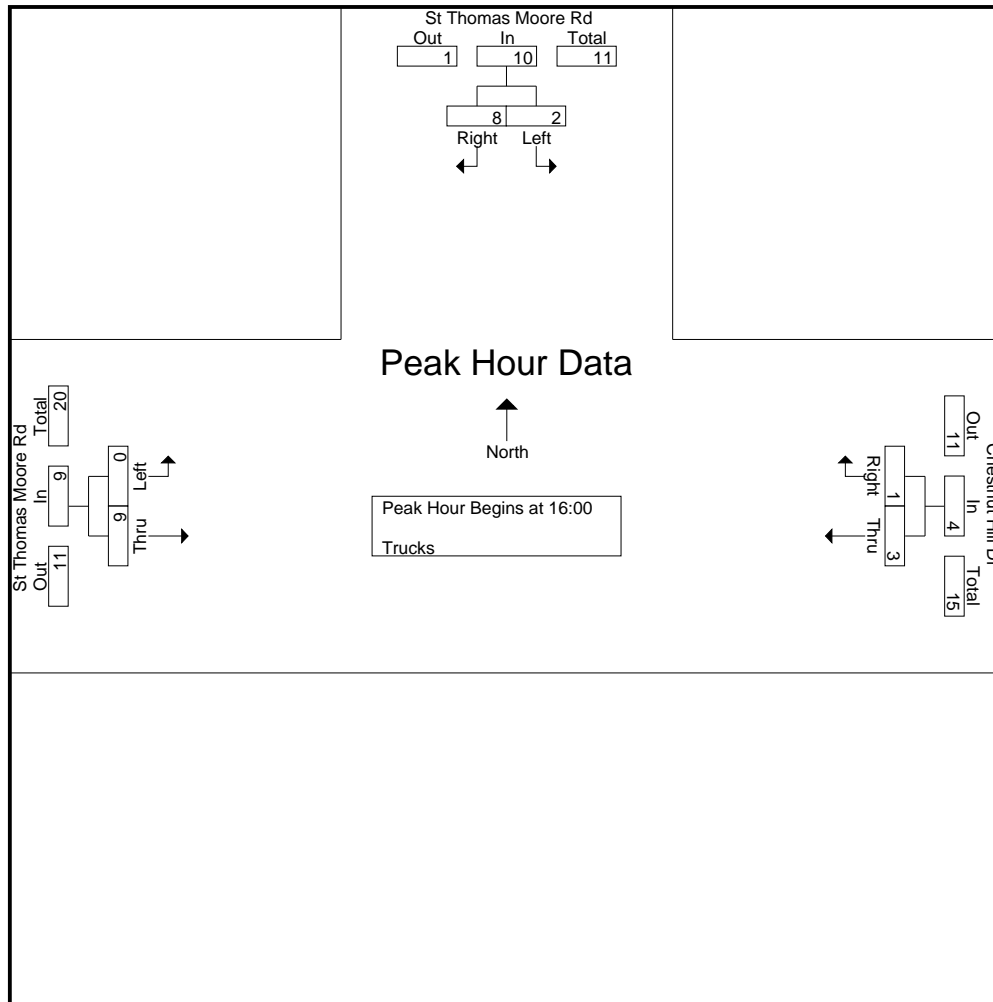
Accurate Counts  
 978-664-2565

File Name : 39000006  
 Site Code : 39000006  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Trucks

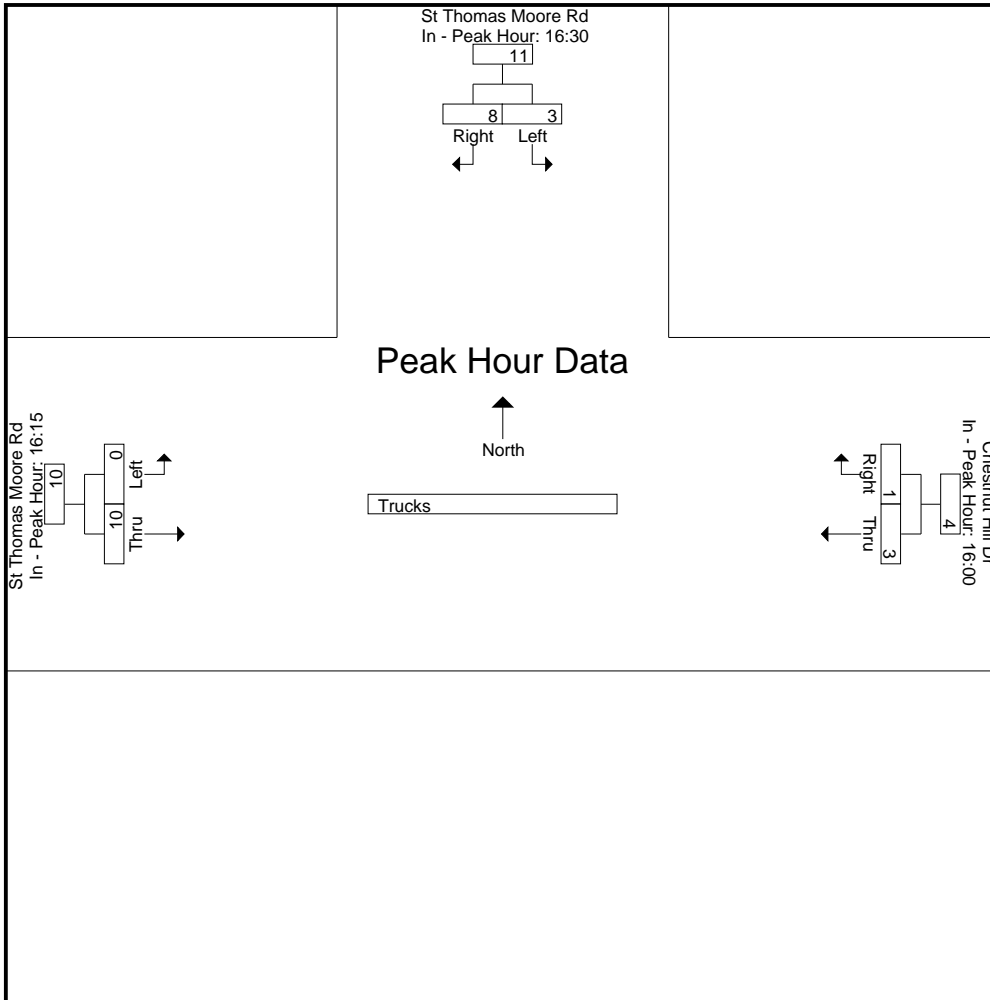
Start Time	St Thomas Moore Rd From North			Chestnut Hill Dr From East			St Thomas Moore Rd From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	0	2	0	1	0	0	0	3	0	0	6	6
16:15	0	2	0	0	0	0	0	2	0	0	4	4
16:30	2	2	0	1	1	0	0	2	0	0	8	8
16:45	0	2	0	1	0	0	0	2	0	0	5	5
Total	2	8	0	3	1	0	0	9	0	0	23	23
17:00	0	2	0	0	0	0	0	4	0	0	6	6
17:15	1	2	0	0	0	0	0	1	0	0	4	4
17:30	0	2	0	1	1	0	0	2	0	0	6	6
17:45	0	1	0	0	1	0	0	2	0	0	4	4
Total	1	7	0	1	2	0	0	9	0	0	20	20
Grand Total	3	15	0	4	3	0	0	18	0	0	43	43
Apprch %	16.7	83.3		57.1	42.9		0	100				
Total %	7	34.9		9.3	7		0	41.9		0	100	

Start Time	St Thomas Moore Rd From North			Chestnut Hill Dr From East			St Thomas Moore Rd From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 16:00										
16:00	0	2	2	1	0	1	0	3	3	6
16:15	0	2	2	0	0	0	0	2	2	4
16:30	2	2	4	1	1	2	0	2	2	8
16:45	0	2	2	1	0	1	0	2	2	5
Total Volume	2	8	10	3	1	4	0	9	9	23
% App. Total	20	80		75	25		0	100		
PHF	.250	1.000	.625	.750	.250	.500	.000	.750	.750	.719



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	16:30			16:00			16:15		
+0 mins.	2	2	4	1	0	1	0	2	2
+15 mins.	0	2	2	0	0	0	0	2	2
+30 mins.	0	2	2	1	1	2	0	2	2
+45 mins.	1	2	3	1	0	1	0	4	4
Total Volume	3	8	11	3	1	4	0	10	10
% App. Total	27.3	72.7		75	25		0	100	
PHF	.375	1.000	.688	.750	.250	.500	.000	.625	.625



N/S Street : Hammond Street  
 E/W Street: Beacon Street  
 City/State : Newton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000007  
 Site Code : 39000007  
 Start Date : 3/11/2008  
 Page No : 1

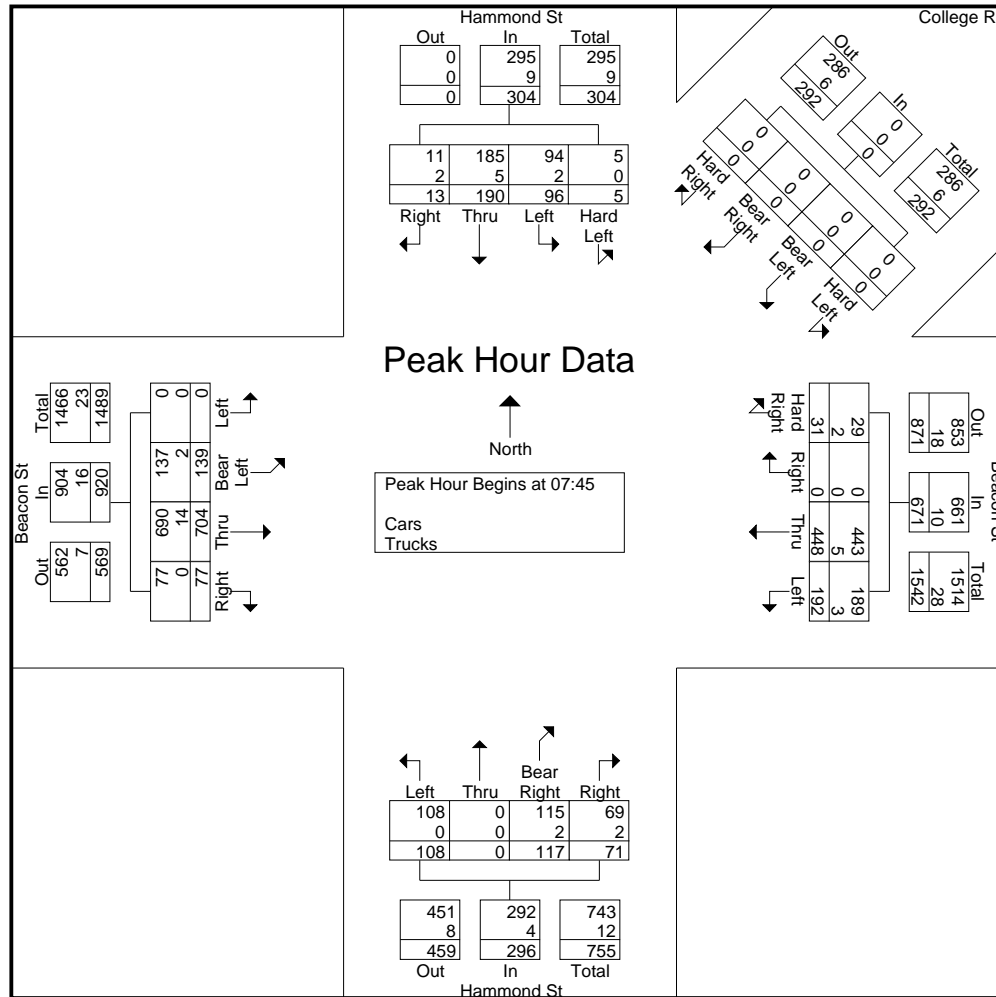
Groups Printed- Cars - Trucks

Start Time	Hammond St From North					College Rd From Northeast					Beacon St From East					Hammond St From South					Beacon St From West					Exclu. Total	Inclu. Total	Int. Total
	Hard Left	Left	Thru	Right	Peds	Hard Left	Bear Left	Bear Right	Hard Right	Peds	Left	Thru	Right	Hard Right	Peds	Left	Thru	Bear Right	Right	Peds	Left	Bear Left	Thru	Right	Peds			
07:00	0	11	23	2	11	0	0	0	0	7	21	56	0	1	4	5	0	17	10	0	0	32	83	4	0	22	265	287
07:15	0	13	41	3	12	0	0	0	0	14	28	92	0	2	4	16	0	27	7	0	0	28	108	17	0	30	382	412
07:30	0	21	53	5	9	0	0	0	0	12	60	97	0	4	6	26	0	23	6	0	0	23	133	20	0	27	471	498
07:45	2	26	61	1	5	0	0	0	0	6	59	94	0	3	1	28	0	35	18	4	0	38	171	23	0	16	559	575
Total	2	71	178	11	37	0	0	0	0	39	168	339	0	10	15	75	0	102	41	4	0	121	495	64	0	95	1677	1772
08:00	1	22	46	6	9	0	0	0	0	21	40	105	0	6	5	34	0	28	19	2	0	37	183	23	0	37	550	587
08:15	1	18	39	2	22	0	0	0	0	65	49	143	0	7	10	30	0	25	9	1	0	27	176	18	0	98	544	642
08:30	1	30	44	4	93	0	0	0	0	250	44	106	0	15	5	16	0	29	25	1	0	37	174	13	1	350	538	888
08:45	1	20	37	4	171	0	0	0	0	500	41	99	0	12	18	18	0	31	20	0	0	37	138	9	0	689	467	1156
Total	4	90	166	16	295	0	0	0	0	836	174	453	0	40	38	98	0	113	73	4	0	138	671	63	1	1174	2099	3273
Grand Total	6	161	344	27	332	0	0	0	0	875	342	792	0	50	53	173	0	215	114	8	0	259	1166	127	1	1269	3776	5045
Apprch %	1.1	29.9	63.9	5		0	0	0	0		28.9	66.9	0	4.2		34.5	0	42.8	22.7		0	16.7	75.1	8.2				
Total %	0.2	4.3	9.1	0.7		0	0	0	0		9.1	21	0	1.3		4.6	0	5.7	3		0	6.9	30.9	3.4		25.2	74.8	
Cars	6	156	333	25		0	0	0	0		337	777	0	47		172	0	207	111		0	255	1144	126		0	0	4965
% Cars	100	96.9	96.8	92.6	100	0	0	0	0	100	98.5	98.1	0	94	100	99.4	0	96.3	97.4	100	0	98.5	98.1	99.2	100	0	0	98.4
Trucks	0	5	11	2		0	0	0	0		5	15	0	3		1	0	8	3		0	4	22	1		0	0	80
% Trucks	0	3.1	3.2	7.4	0	0	0	0	0	0	1.5	1.9	0	6	0	0.6	0	3.7	2.6	0	0	1.5	1.9	0.8	0	0	0	1.6

Start Time	Hammond St From North					College Rd From Northeast					Beacon St From East					Hammond St From South					Beacon St From West					Int. Total		
	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total			
07:45	2	26	61	1	90	0	0	0	0	0	59	94	0	3	156	28	0	35	18	81	0	38	171	23	232	559		
08:00	1	22	46	6	75	0	0	0	0	0	40	105	0	6	151	34	0	28	19	81	0	37	183	23	243	550		
08:15	1	18	39	2	60	0	0	0	0	0	49	143	0	7	199	30	0	25	9	64	0	27	176	18	221	544		
08:30	1	30	44	4	79	0	0	0	0	0	44	106	0	15	165	16	0	29	25	70	0	37	174	13	224	538		
Total Volume	5	96	190	13	304	0	0	0	0	0	192	448	0	31	671	108	0	117	71	296	0	139	704	77	920	2191		
% App. Total	1.6	31.6	62.5	4.3		0	0	0	0	0	28.6	66.8	0	4.6		36.5	0	39.5	24		0	15.1	76.5	8.4				
PHF	.625	.800	.779	.542	.844	.000	.000	.000	.000	.000	.814	.783	.000	.517	.843	.794	.000	.836	.710	.914	.000	.914	.962	.837	.947	.980		
Cars	5	94	185	11	295	0	0	0	0	0	189	443	0	29	661	108	0	115	69	292	0	137	690	77	904	2152		
% Cars	100	97.9	97.4	84.6	97.0	0	0	0	0	0	98.4	98.9	0	93.5	98.5	100	0	98.3	97.2	98.6	0	98.6	98.0	100	98.3	98.2		
Trucks	0	2	5	2	9	0	0	0	0	0	3	5	0	2	10	0	0	2	2	4	0	2	14	0	16	39		
% Trucks	0	2.1	2.6	15.4	3.0	0	0	0	0	0	1.6	1.1	0	6.5	1.5	0	0	1.7	2.8	1.4	0	1.4	2.0	0	1.7	1.8		

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:30					07:00					07:45					07:45					07:45				
+0 mins.	0	21	53	5	79	0	0	0	0	0	59	94	0	3	156	28	0	35	18	81	0	38	171	23	232
+15 mins.	2	26	61	1	90	0	0	0	0	0	40	105	0	6	151	34	0	28	19	81	0	37	183	23	243
+30 mins.	1	22	46	6	75	0	0	0	0	0	49	143	0	7	199	30	0	25	9	64	0	27	176	18	221
+45 mins.	1	18	39	2	60	0	0	0	0	0	44	106	0	15	165	16	0	29	25	70	0	37	174	13	224
Total Volume	4	87	199	14	304	0	0	0	0	0	192	448	0	31	671	108	0	117	71	296	0	139	704	77	920
% App. Total	1.3	28.6	65.5	4.6		0	0	0	0		28.6	66.8	0	4.6		36.5	0	39.5	24		0	15.1	76.5	8.4	
PHF	.500	.837	.816	.583	.844	.000	.000	.000	.000	.000	.814	.783	.000	.517	.843	.794	.000	.836	.710	.914	.000	.914	.962	.837	.947
Cars	4	84	192	13	293	0	0	0	0	0	189	443	0	29	661	108	0	115	69	292	0	137	690	77	904
% Cars	100	96.6	96.5	92.9	96.4	0	0	0	0	0	98.4	98.9	0	93.5	98.5	100	0	98.3	97.2	98.6	0	98.6	98	100	98.3
Trucks	0	3	7	1	11	0	0	0	0	0	3	5	0	2	10	0	0	2	2	4	0	2	14	0	16
% Trucks	0	3.4	3.5	7.1	3.6	0	0	0	0	0	1.6	1.1	0	6.5	1.5	0	0	1.7	2.8	1.4	0	1.4	2	0	1.7



N/S Street : Hammond Street  
 E/W Street: Beacon Street  
 City/State : Newton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000007  
 Site Code : 39000007  
 Start Date : 3/11/2008  
 Page No : 1

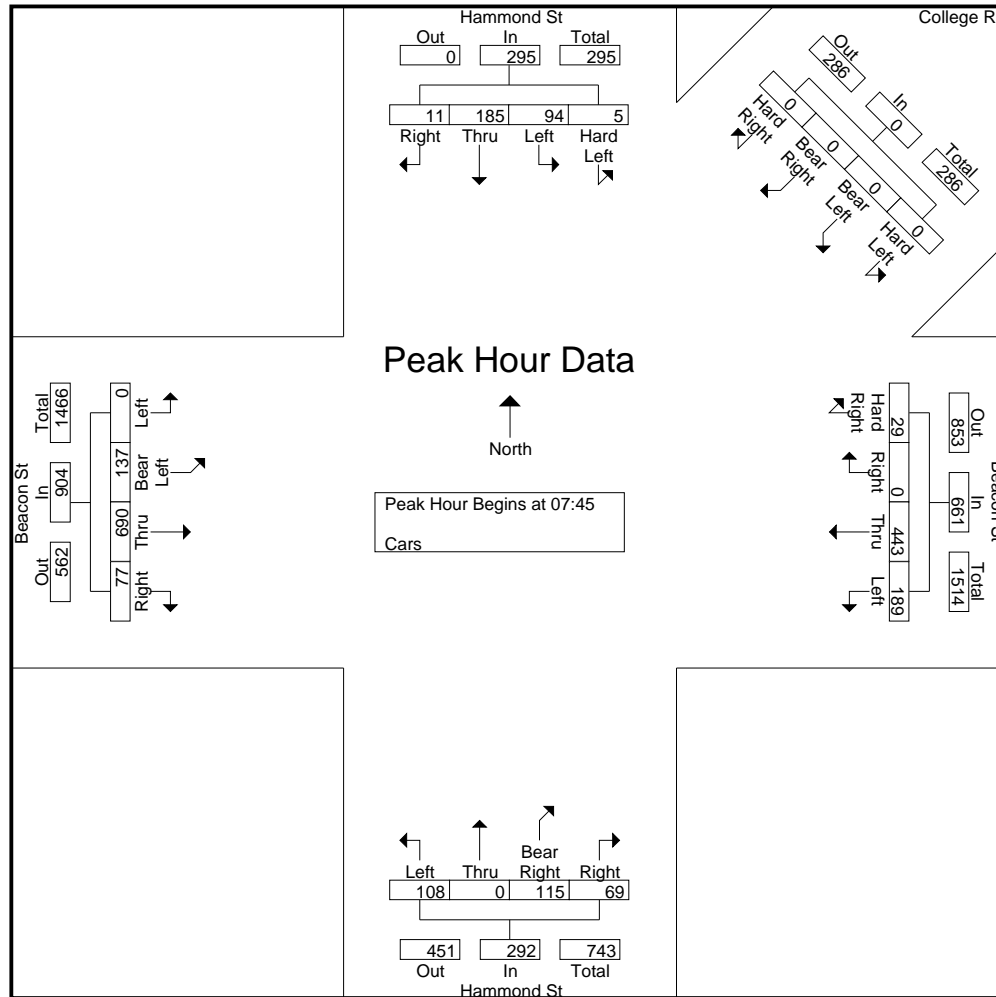
Groups Printed- Cars

Start Time	Hammond St From North					College Rd From Northeast					Beacon St From East					Hammond St From South					Beacon St From West					Exclu. Total	Inclu. Total	Int. Total
	Hard Left	Left	Thru	Right	Peds	Hard Left	Bear Left	Bear Right	Hard Right	Peds	Left	Thru	Right	Hard Right	Peds	Left	Thru	Bear Right	Right	Peds	Left	Bear Left	Thru	Right	Peds			
07:00	0	10	23	2	11	0	0	0	0	7	20	53	0	1	4	4	0	16	10	0	0	31	81	4	0	22	255	277
07:15	0	12	39	3	12	0	0	0	0	14	28	92	0	1	4	16	0	25	6	0	0	28	105	16	0	30	371	401
07:30	0	20	50	5	9	0	0	0	0	12	60	95	0	4	6	26	0	22	6	0	0	23	130	20	0	27	461	488
07:45	2	26	60	1	5	0	0	0	0	6	56	93	0	3	1	28	0	35	18	4	0	38	166	23	0	16	549	565
Total	2	68	172	11	37	0	0	0	0	39	164	333	0	9	15	74	0	98	40	4	0	120	482	63	0	95	1636	1731
08:00	1	20	45	5	9	0	0	0	0	21	40	104	0	6	5	34	0	28	18	2	0	37	181	23	0	37	542	579
08:15	1	18	37	2	22	0	0	0	0	65	49	140	0	6	10	30	0	24	9	1	0	26	173	18	0	98	533	631
08:30	1	30	43	3	93	0	0	0	0	250	44	106	0	14	5	16	0	28	24	1	0	36	170	13	1	350	528	878
08:45	1	20	36	4	171	0	0	0	0	500	40	94	0	12	18	18	0	29	20	0	0	36	138	9	0	689	457	1146
Total	4	88	161	14	295	0	0	0	0	836	173	444	0	38	38	98	0	109	71	4	0	135	662	63	1	1174	2060	3234
Grand Total	6	156	333	25	332	0	0	0	0	875	337	777	0	47	53	172	0	207	111	8	0	255	1144	126	1	1269	3696	4965
Apprch %	1.2	30	64	4.8		0	0	0	0		29	66.9	0	4		35.1	0	42.2	22.7		0	16.7	75	8.3				
Total %	0.2	4.2	9	0.7		0	0	0	0		9.1	21	0	1.3		4.7	0	5.6	3		0	6.9	31	3.4		25.6	74.4	

Start Time	Hammond St From North					College Rd From Northeast					Beacon St From East					Hammond St From South					Beacon St From West					Int. Total
	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	
07:45	2	26	60	1	89	0	0	0	0	0	56	93	0	3	152	28	0	35	18	81	0	38	166	23	227	549
08:00	1	20	45	5	71	0	0	0	0	0	40	104	0	6	150	34	0	28	18	80	0	37	181	23	241	542
08:15	1	18	37	2	58	0	0	0	0	0	49	140	0	6	195	30	0	24	9	63	0	26	173	18	217	533
08:30	1	30	43	3	77	0	0	0	0	0	44	106	0	14	164	16	0	28	24	68	0	36	170	13	219	528
Total Volume	5	94	185	11	295	0	0	0	0	0	189	443	0	29	661	108	0	115	69	292	0	137	690	77	904	2152
% App. Total	1.7	31.9	62.7	3.7		0	0	0	0		28.6	67	0	4.4		37	0	39.4	23.6		0	15.2	76.3	8.5		
PHF	.625	.783	.771	.550	.829	.000	.000	.000	.000	.000	.844	.791	.000	.518	.847	.794	.000	.821	.719	.901	.000	.901	.953	.837	.938	.980

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

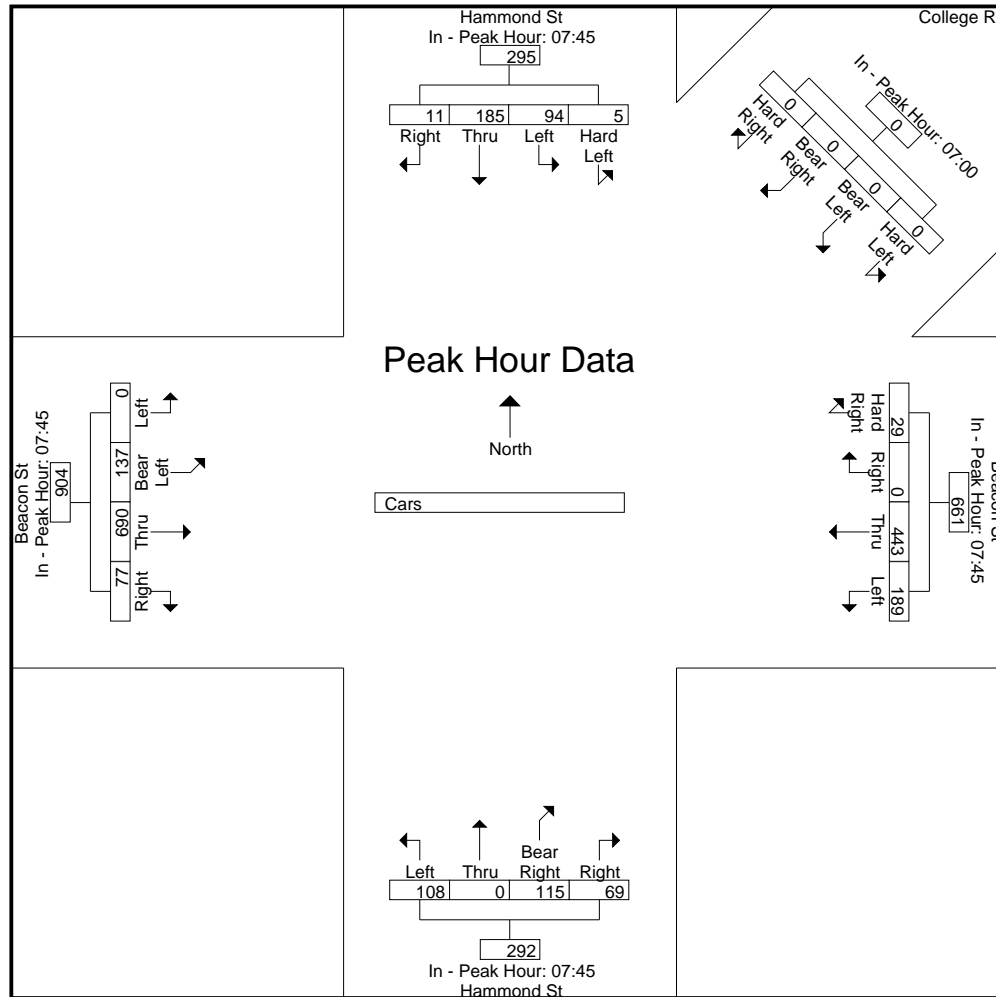
Peak Hour for Entire Intersection Begins at 07:45



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:45					07:00					07:45					07:45					07:45				
+0 mins.	2	26	60	1	89	0	0	0	0	0	56	93	0	3	152	28	0	35	18	81	0	38	166	23	227
+15 mins.	1	20	45	5	71	0	0	0	0	0	40	104	0	6	150	34	0	28	18	80	0	37	181	23	241
+30 mins.	1	18	37	2	58	0	0	0	0	0	49	140	0	6	195	30	0	24	9	63	0	26	173	18	217
+45 mins.	1	30	43	3	77	0	0	0	0	0	44	106	0	14	164	16	0	28	24	68	0	36	170	13	219
Total Volume	5	94	185	11	295	0	0	0	0	0	189	443	0	29	661	108	0	115	69	292	0	137	690	77	904
% App. Total	1.7	31.9	62.7	3.7		0	0	0	0	0	28.6	67	0	4.4		37	0	39.4	23.6		0	15.2	76.3	8.5	
PHF	.625	.783	.771	.550	.829	.000	.000	.000	.000	.000	.844	.791	.000	.518	.847	.794	.000	.821	.719	.901	.000	.901	.953	.837	.938





N/S Street : Hammond Street  
 E/W Street: Beacon Street  
 City/State : Newton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000007  
 Site Code : 39000007  
 Start Date : 3/11/2008  
 Page No : 1

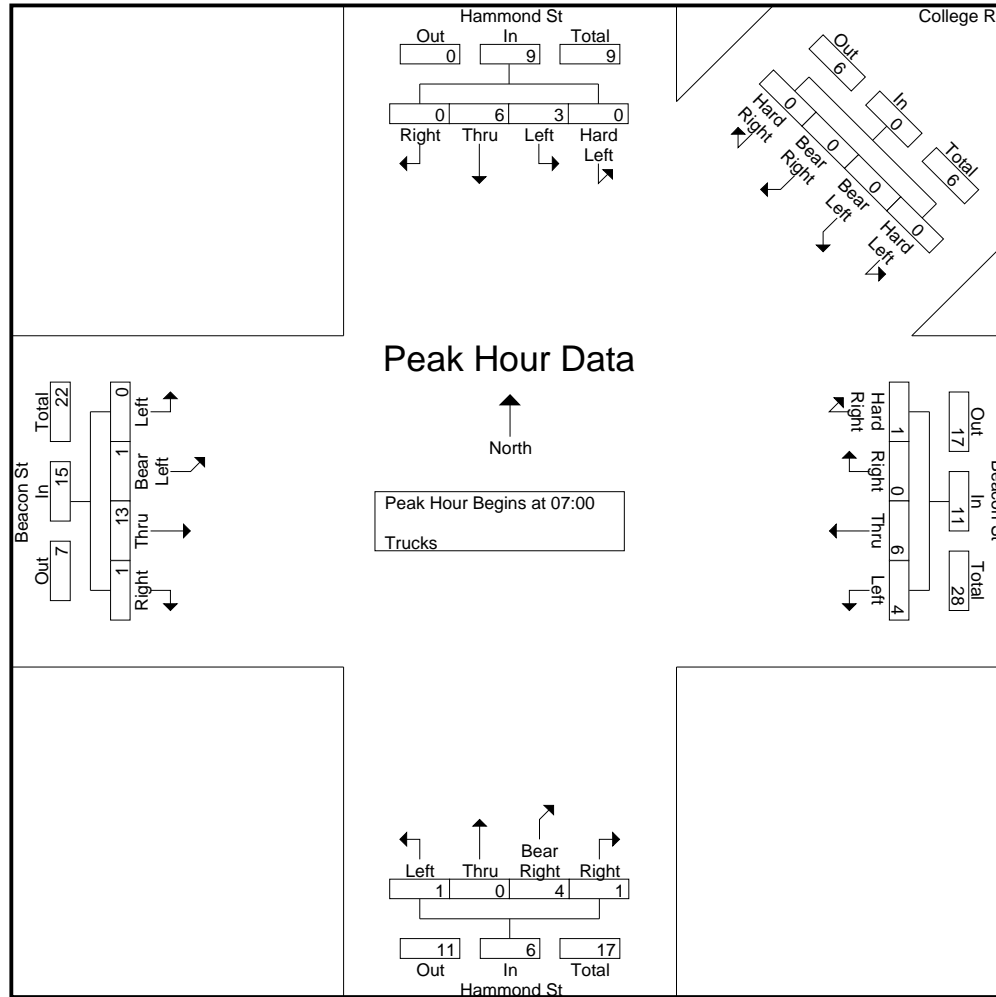
Groups Printed- Trucks

Start Time	Hammond St From North					College Rd From Northeast					Beacon St From East					Hammond St From South					Beacon St From West					Exclu. Total	Inclu. Total	Int. Total
	Hard Left	Left	Thru	Right	Peds	Hard Left	Bear Left	Bear Right	Hard Right	Peds	Left	Thru	Right	Hard Right	Peds	Left	Thru	Bear Right	Right	Peds	Left	Bear Left	Thru	Right	Peds			
07:00	0	1	0	0	0	0	0	0	0	0	1	3	0	0	0	1	0	1	0	0	0	1	2	0	0	0	10	10
07:15	0	1	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	1	0	0	0	3	1	0	0	11	11
07:30	0	1	3	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	3	0	0	0	10	10
07:45	0	0	1	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	5	0	0	0	10	10
Total	0	3	6	0	0	0	0	0	0	0	4	6	0	1	0	1	0	4	1	0	0	1	13	1	0	0	41	41
08:00	0	2	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2	0	0	0	8	8
08:15	0	0	2	0	0	0	0	0	0	0	0	3	0	1	0	0	0	1	0	0	0	1	3	0	0	0	11	11
08:30	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	1	4	0	0	0	10	10
08:45	0	0	1	0	0	0	0	0	0	0	1	5	0	0	0	0	0	2	0	0	0	1	0	0	0	0	10	10
Total	0	2	5	2	0	0	0	0	0	0	1	9	0	2	0	0	0	4	2	0	0	3	9	0	0	0	39	39
Grand Total	0	5	11	2	0	0	0	0	0	0	5	15	0	3	0	1	0	8	3	0	0	4	22	1	0	0	80	80
Apprch %	0	27.8	61.1	11.1		0	0	0	0		21.7	65.2	0	13		8.3	0	66.7	25		0	14.8	81.5	3.7				
Total %	0	6.2	13.8	2.5		0	0	0	0		6.2	18.8	0	3.8		1.2	0	10	3.8		0	5	27.5	1.2		0	100	

Start Time	Hammond St From North					College Rd From Northeast					Beacon St From East					Hammond St From South					Beacon St From West					Int. Total
	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	
07:00	0	1	0	0	1	0	0	0	0	0	1	3	0	0	4	1	0	1	0	2	0	1	2	0	3	10
07:15	0	1	2	0	3	0	0	0	0	0	0	0	0	1	1	0	0	2	1	3	0	0	3	1	4	11
07:30	0	1	3	0	4	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	0	3	0	3	10
07:45	0	0	1	0	1	0	0	0	0	0	3	1	0	0	4	0	0	0	0	0	0	0	5	0	5	10
Total Volume	0	3	6	0	9	0	0	0	0	0	4	6	0	1	11	1	0	4	1	6	0	1	13	1	15	41
% App. Total	0	33.3	66.7	0		0	0	0	0		36.4	54.5	0	9.1		16.7	0	66.7	16.7		0	6.7	86.7	6.7		
PHF	.000	.750	.500	.000	.563	.000	.000	.000	.000	.000	.333	.500	.000	.250	.688	.250	.000	.500	.250	.500	.000	.250	.650	.250	.750	.932

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

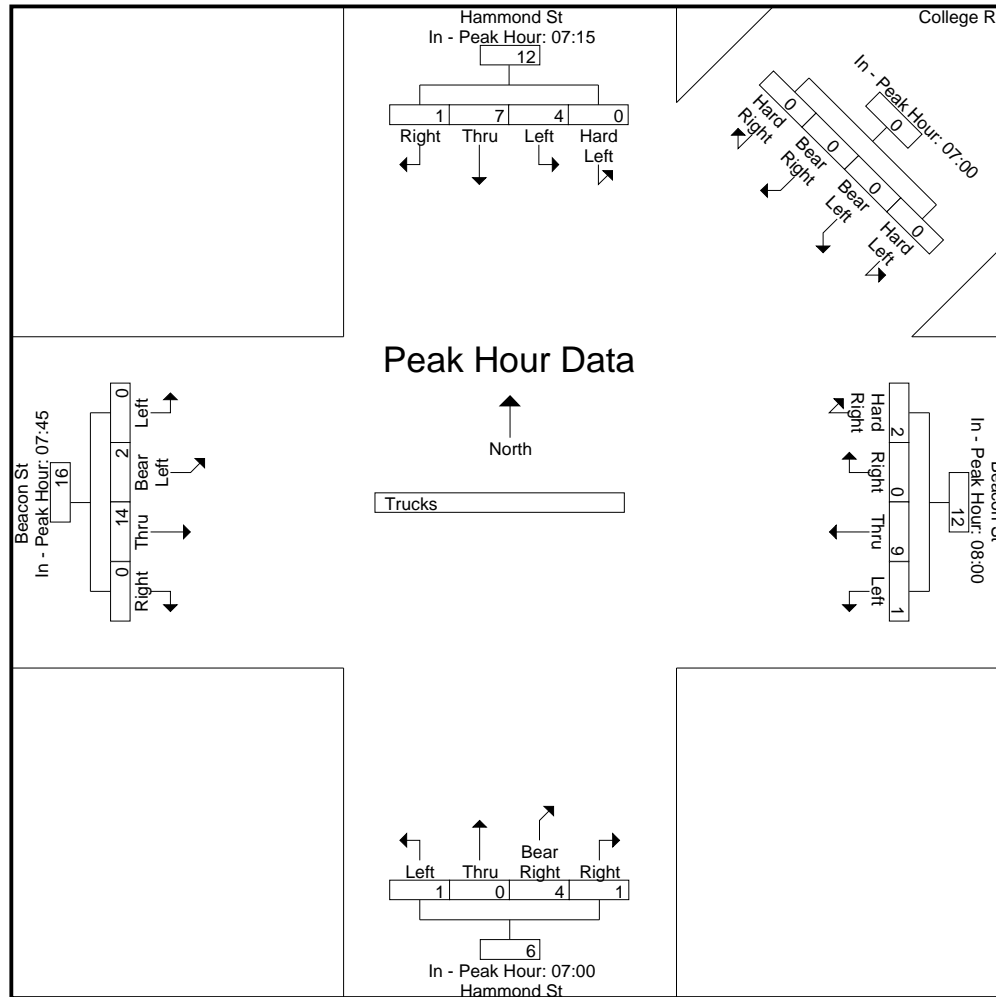
Peak Hour for Entire Intersection Begins at 07:00



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15					07:00					08:00					07:00					07:45				
+0 mins.	0	1	2	0	3	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	0	0	5	0	5
+15 mins.	0	1	3	0	4	0	0	0	0	0	0	3	0	1	4	0	0	2	1	3	0	0	2	0	2
+30 mins.	0	0	1	0	1	0	0	0	0	0	0	0	0	1	1	0	0	1	0	1	0	1	3	0	4
+45 mins.	0	2	1	1	4	0	0	0	0	0	1	5	0	0	6	0	0	0	0	0	0	1	4	0	5
Total Volume	0	4	7	1	12	0	0	0	0	0	1	9	0	2	12	1	0	4	1	6	0	2	14	0	16
% App. Total	0	33.3	58.3	8.3		0	0	0	0		8.3	75	0	16.7		16.7	0	66.7	16.7		0	12.5	87.5	0	
PHF	.000	.500	.583	.250	.750	.000	.000	.000	.000	.000	.250	.450	.000	.500	.500	.250	.000	.500	.250	.500	.000	.500	.700	.000	.800



N/S Street : Hammond Street  
 E/W Street: Beacon Street  
 City/State : Newton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

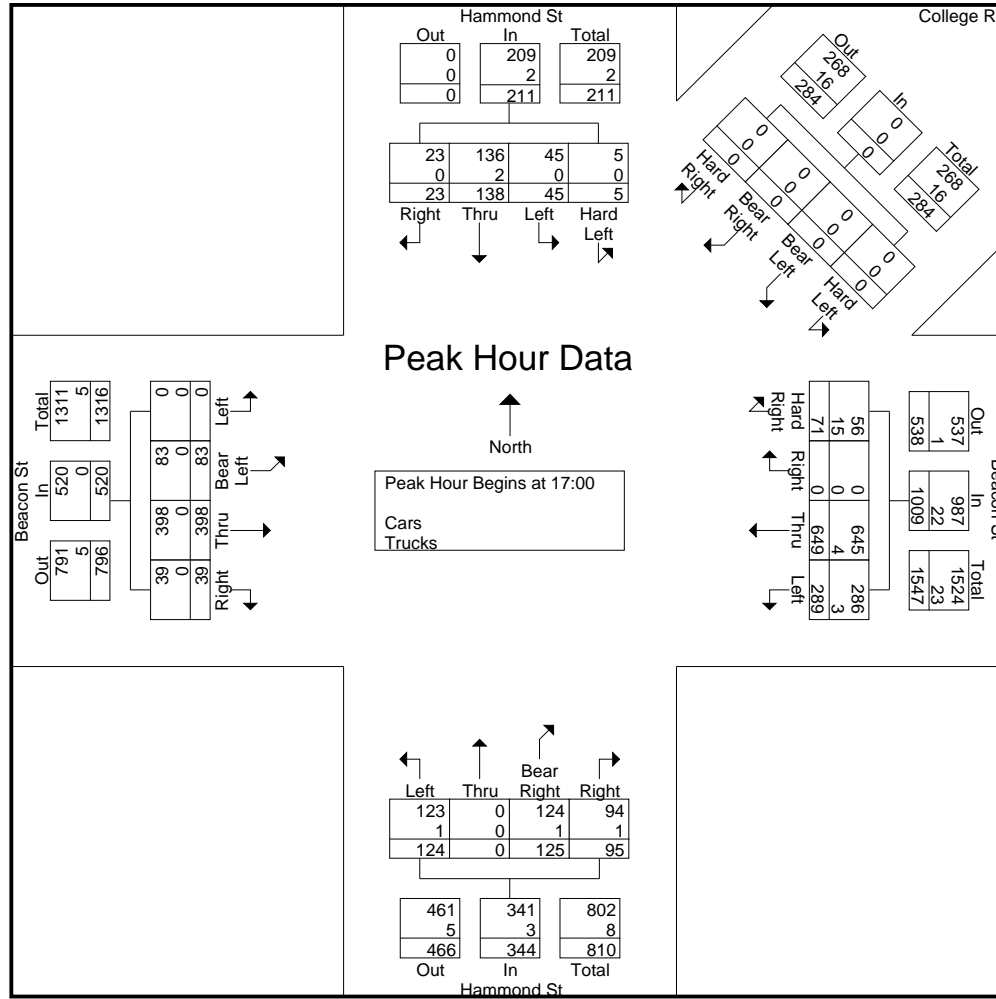
File Name : 39000007  
 Site Code : 39000007  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Hammond St From North					College Rd From Northeast					Beacon St From East					Hammond St From South					Beacon St From West					Exclu. Total	Inclu. Total	Int. Total
	Hard Left	Left	Thru	Right	Peds	Hard Left	Bear Left	Bear Right	Hard Right	Peds	Left	Thru	Right	Hard Right	Peds	Left	Thru	Bear Right	Right	Peds	Left	Bear Left	Thru	Right	Peds			
16:00	1	13	34	8	83	0	0	0	0	251	54	140	0	20	29	28	0	21	18	1	0	14	67	6	0	364	424	788
16:15	0	6	28	7	221	0	0	0	0	415	86	142	0	23	26	22	0	31	17	2	0	20	79	7	2	666	468	1134
16:30	1	8	28	5	62	0	0	0	0	168	69	153	0	13	17	30	0	31	23	1	0	15	69	12	1	249	457	706
16:45	0	14	27	4	89	0	0	0	0	182	60	159	0	21	11	27	0	36	18	4	0	23	74	9	1	287	472	759
Total	2	41	117	24	455	0	0	0	0	{\fs1 5 101 6}	269	594	0	77	83	107	0	119	76	8	0	72	289	34	4	1566	1821	3387
17:00	1	12	31	5	85	0	0	0	0	175	66	148	0	22	16	39	0	31	22	0	0	17	77	11	1	277	482	759
17:15	1	11	40	5	62	0	0	0	0	106	90	174	0	19	9	30	0	32	22	2	0	32	121	12	0	179	589	768
17:30	0	7	32	5	124	0	0	0	0	333	54	152	0	16	7	27	0	36	28	2	0	14	108	7	2	468	486	954
17:45	3	15	35	8	148	0	0	0	0	297	79	175	0	14	11	28	0	26	23	5	0	20	92	9	1	462	527	989
Total	5	45	138	23	419	0	0	0	0	911	289	649	0	71	43	124	0	125	95	9	0	83	398	39	4	1386	2084	3470
Grand Total	7	86	255	47	874	0	0	0	0	{\fs1 5 192 7}	558	1243	0	148	126	231	0	244	171	17	0	155	687	73	8	2952	3905	6857
Apprch %	1.8	21.8	64.6	11.9		0	0	0	0		28.6	63.8	0	7.6		35.8	0	37.8	26.5		0	16.9	75.1	8				
Total %	0.2	2.2	6.5	1.2		0	0	0	0		14.3	31.8	0	3.8		5.9	0	6.2	4.4		0	4	17.6	1.9		43.1	56.9	
Cars	7	85	252	46	100	0	0	0	0	100	553	1233	0	113	96	225	0	241	170	100	0	154	685	73	100	0	0	6784
% Cars	100	98.8	98.8	97.9	100	0	0	0	0	100	99.1	99.2	0	76.4	96	97.4	0	98.8	99.4	100	0	99.4	99.7	100	100	0	0	98.9
Trucks	0	1	3	1	0	0	0	0	0	0	5	10	0	35	0	6	0	3	1	0	0	1	2	0	0	0	0	73
% Trucks	0	1.2	1.2	2.1	0	0	0	0	0	0	0.9	0.8	0	23.6	4	2.6	0	1.2	0.6	0	0	0.6	0.3	0	0	0	0	1.1

Start Time	Hammond St From North					College Rd From Northeast					Beacon St From East					Hammond St From South					Beacon St From West					Int. Total	
	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total		
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																											
Peak Hour for Entire Intersection Begins at 17:00																											
17:00	1	12	31	5	49	0	0	0	0	0	66	148	0	22	236	39	0	31	22	92	0	17	77	11	105	482	
17:15	1	11	40	5	57	0	0	0	0	0	90	174	0	19	283	30	0	32	22	84	0	32	121	12	165	589	
17:30	0	7	32	5	44	0	0	0	0	0	54	152	0	16	222	27	0	36	28	91	0	14	108	7	129	486	
17:45	3	15	35	8	61	0	0	0	0	0	79	175	0	14	268	28	0	26	23	77	0	20	92	9	121	527	
Total Volume	5	45	138	23	211	0	0	0	0	0	289	649	0	71	1009	124	0	125	95	344	0	83	398	39	520	2084	

% App. Total	2.4	21.3	65.4	10.9		0	0	0	0	0	28.6	64.3	0	7		36	0	36.3	27.6		0	16	76.5	7.5		
PHF	.417	.750	.863	.719	.865	.000	.000	.000	.000	.000	.803	.927	.000	.807	.891	.795	.000	.868	.848	.935	.000	.648	.822	.813	.788	.885
Cars	5	45	136	23	209	0	0	0	0	0	286	645	0	56	987	123	0	124	94	341	0	83	398	39	520	2057
% Cars	100	100	98.6	100	99.1	0	0	0	0	0	99.0	99.4	0	78.9	97.8	99.2	0	99.2	98.9	99.1	0	100	100	100	100	98.7
Trucks	0	0	2	0	2	0	0	0	0	0	3	4	0	15	22	1	0	1	1	3	0	0	0	0	0	27
% Trucks	0	0	1.4	0	0.9	0	0	0	0	0	1.0	0.6	0	21.1	2.2	0.8	0	0.8	1.1	0.9	0	0	0	0	0	1.3



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	17:00					16:00					17:00					16:45					17:00				
+0 mins.	1	12	31	5	49	0	0	0	0	0	66	148	0	22	236	27	0	36	18	81	0	17	77	11	105
+15 mins.	1	11	40	5	57	0	0	0	0	0	90	174	0	19	283	39	0	31	22	92	0	32	121	12	165
+30 mins.	0	7	32	5	44	0	0	0	0	0	54	152	0	16	222	30	0	32	22	84	0	14	108	7	129
+45 mins.	3	15	35	8	61	0	0	0	0	0	79	175	0	14	268	27	0	36	28	91	0	20	92	9	121
Total Volume	5	45	138	23	211	0	0	0	0	0	289	649	0	71	1009	123	0	135	90	348	0	83	398	39	520
% App. Total	2.4	21.3	65.4	10.9		0	0	0	0	0	28.6	64.3	0	7		35.3	0	38.8	25.9		0	16	76.5	7.5	
PHF	.417	.750	.863	.719	.865	.000	.000	.000	.000	.000	.803	.927	.000	.807	.891	.788	.000	.938	.804	.946	.000	.648	.822	.813	.788
Cars	5	45	136	23	209	0	0	0	0	0	286	645	0	56	987	122	0	134	90	346	0	83	398	39	520
% Cars	100	100	98.6	100	99.1	0	0	0	0	0	99	99.4	0	78.9	97.8	99.2	0	99.3	100	99.4	0	100	100	100	100
Trucks	0	0	2	0	2	0	0	0	0	0	3	4	0	15	22	1	0	1	0	2	0	0	0	0	0
% Trucks	0	0	1.4	0	0.9	0	0	0	0	0	1	0.6	0	21.1	2.2	0.8	0	0.7	0	0.6	0	0	0	0	0



N/S Street : Hammond Street  
 E/W Street: Beacon Street  
 City/State : Newton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

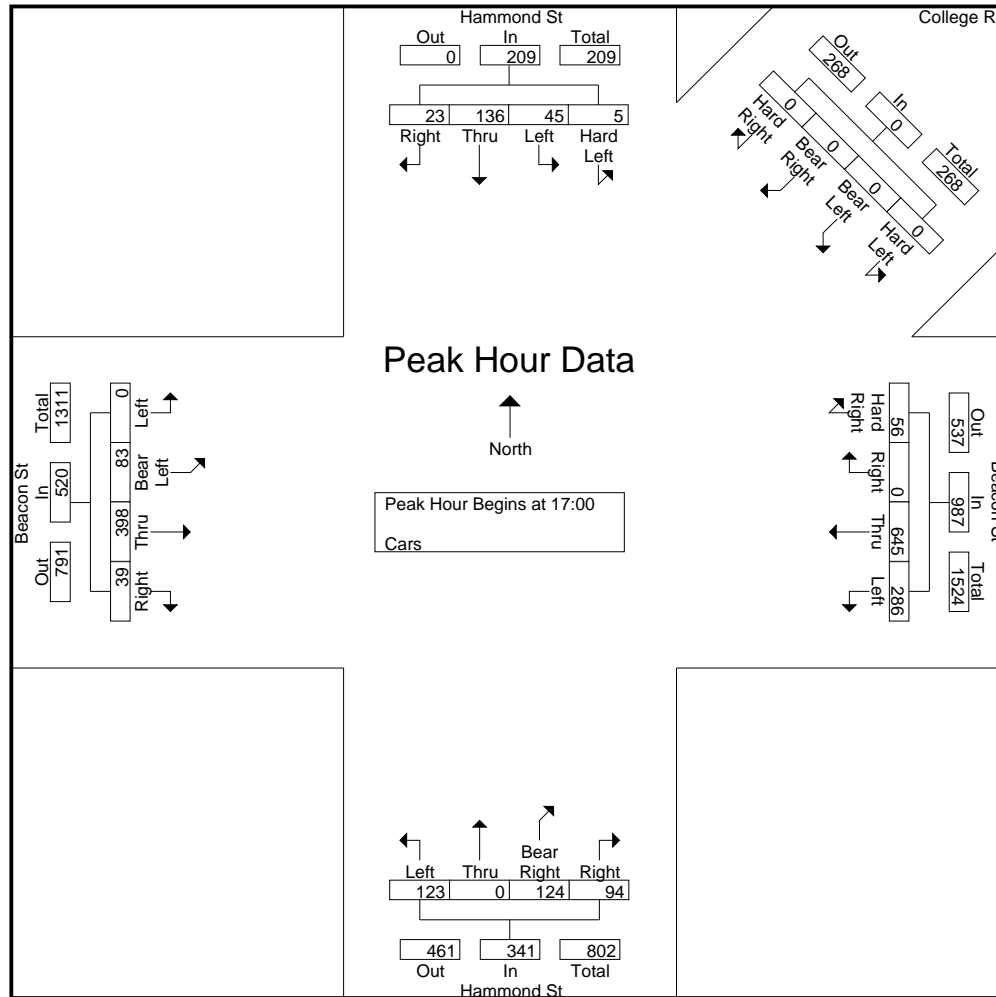
File Name : 39000007  
 Site Code : 39000007  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Hammond St From North					College Rd From Northeast					Beacon St From East					Hammond St From South					Beacon St From West					Exclu. Total	Inclu. Total	Int. Total		
	Hard Left	Left	Thru	Right	Peds	Hard Left	Bear Left	Bear Right	Hard Right	Peds	Left	Thru	Right	Hard Right	Peds	Left	Thru	Bear Right	Right	Peds	Left	Bear Left	Thru	Right	Peds					
16:00	1	13	33	7	83	0	0	0	0	251	53	140	0	16	24	27	0	21	18	1	0	14	66	6	0	359	415	774		
16:15	0	6	28	7	221	0	0	0	0	415	85	138	0	18	26	21	0	30	17	2	0	19	78	7	2	666	454	1120		
16:30	1	8	28	5	62	0	0	0	0	168	69	152	0	8	17	27	0	30	23	1	0	15	69	12	1	249	447	696		
16:45	0	13	27	4	89	0	0	0	0	182	60	158	0	15	11	27	0	36	18	4	0	23	74	9	1	287	464	751		
Total	2	40	116	23	455	0	0	0	0	{\fs15 101 6}	267	588	0	57	78	102	0	117	76	8	0	71	287	34	4	1561	1780	3341		
17:00	1	12	31	5	85	0	0	0	0	175	66	148	0	18	16	39	0	31	22	0	0	17	77	11	1	277	478	755		
17:15	1	11	39	5	62	0	0	0	0	106	89	172	0	16	9	29	0	32	22	2	0	32	121	12	0	179	581	760		
17:30	0	7	31	5	124	0	0	0	0	333	54	152	0	12	7	27	0	35	28	2	0	14	108	7	2	468	480	948		
17:45	3	15	35	8	148	0	0	0	0	297	77	173	0	10	11	28	0	26	22	5	0	20	92	9	1	462	518	980		
Total	5	45	136	23	419	0	0	0	0	911	286	645	0	56	43	123	0	124	94	9	0	83	398	39	4	1386	2057	3443		
Grand Total	7	85	252	46	874	0	0	0	0	{\fs15 192 7}	553	1233	0	113	121	225	0	241	170	17	0	154	685	73	8	2947	3837	6784		
Apprch %	1.8	21.8	64.6	11.8		0	0	0	0		29.1	64.9	0	6		35.4	0	37.9	26.7		0	16.9	75.1	8						
Total %	0.2	2.2	6.6	1.2		0	0	0	0		14.4	32.1	0	2.9		5.9	0	6.3	4.4		0	4	17.9	1.9		43.4	56.6			

Start Time	Hammond St From North					College Rd From Northeast					Beacon St From East					Hammond St From South					Beacon St From West					Int. Total				
	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total					
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																														
Peak Hour for Entire Intersection Begins at 17:00																														
17:00	1	12	31	5	49	0	0	0	0	0	66	148	0	18	232	39	0	31	22	92	0	17	77	11	105	478				
17:15	1	11	39	5	56	0	0	0	0	0	89	172	0	16	277	29	0	32	22	83	0	32	121	12	165	581				
17:30	0	7	31	5	43	0	0	0	0	0	54	152	0	12	218	27	0	35	28	90	0	14	108	7	129	480				
17:45	3	15	35	8	61	0	0	0	0	0	77	173	0	10	260	28	0	26	22	76	0	20	92	9	121	518				
Total Volume	5	45	136	23	209	0	0	0	0	0	286	645	0	56	987	123	0	124	94	341	0	83	398	39	520	2057				
% App. Total	2.4	21.5	65.1	11		0	0	0	0		29	65.3	0	5.7		36.1	0	36.4	27.6		0	16	76.5	7.5						
PHF	.417	.750	.872	.719	.857	.000	.000	.000	.000	.000	.803	.932	.000	.778	.891	.788	.000	.886	.839	.927	.000	.648	.822	.813	.788	.885				

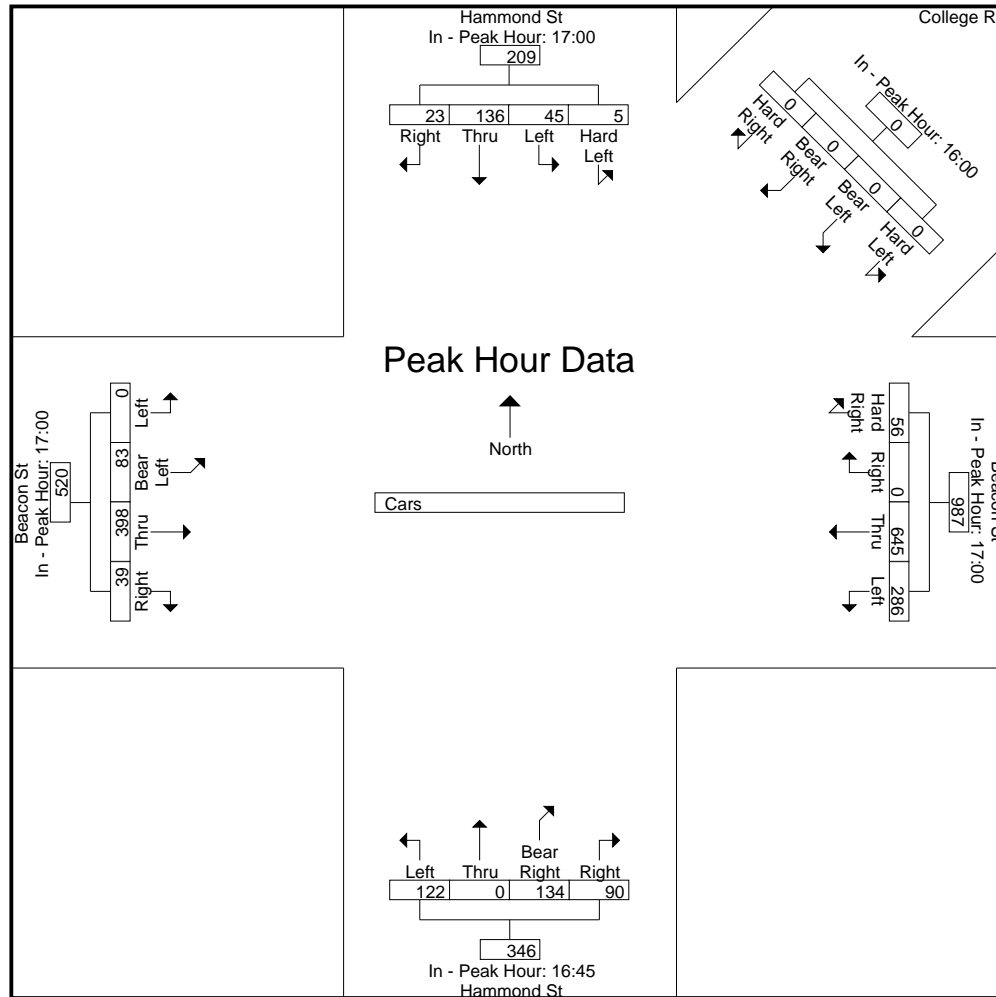




Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00					16:00					17:00					16:45					17:00				
+0 mins.	1	12	31	5	49	0	0	0	0	0	66	148	0	18	232	27	0	36	18	81	0	17	77	11	105
+15 mins.	1	11	39	5	56	0	0	0	0	0	89	172	0	16	277	39	0	31	22	92	0	32	121	12	165
+30 mins.	0	7	31	5	43	0	0	0	0	0	54	152	0	12	218	29	0	32	22	83	0	14	108	7	129
+45 mins.	3	15	35	8	61	0	0	0	0	0	77	173	0	10	260	27	0	35	28	90	0	20	92	9	121
Total Volume	5	45	136	23	209	0	0	0	0	0	286	645	0	56	987	122	0	134	90	346	0	83	398	39	520
% App. Total	2.4	21.5	65.1	11		0	0	0	0		29	65.3	0	5.7		35.3	0	38.7	26		0	16	76.5	7.5	
PHF	.417	.750	.872	.719	.857	.000	.000	.000	.000	.000	.803	.932	.000	.778	.891	.782	.000	.931	.804	.940	.000	.648	.822	.813	.788



N/S Street : Hammond Street  
 E/W Street: Beacon Street  
 City/State : Newton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000007  
 Site Code : 39000007  
 Start Date : 3/11/2008  
 Page No : 1

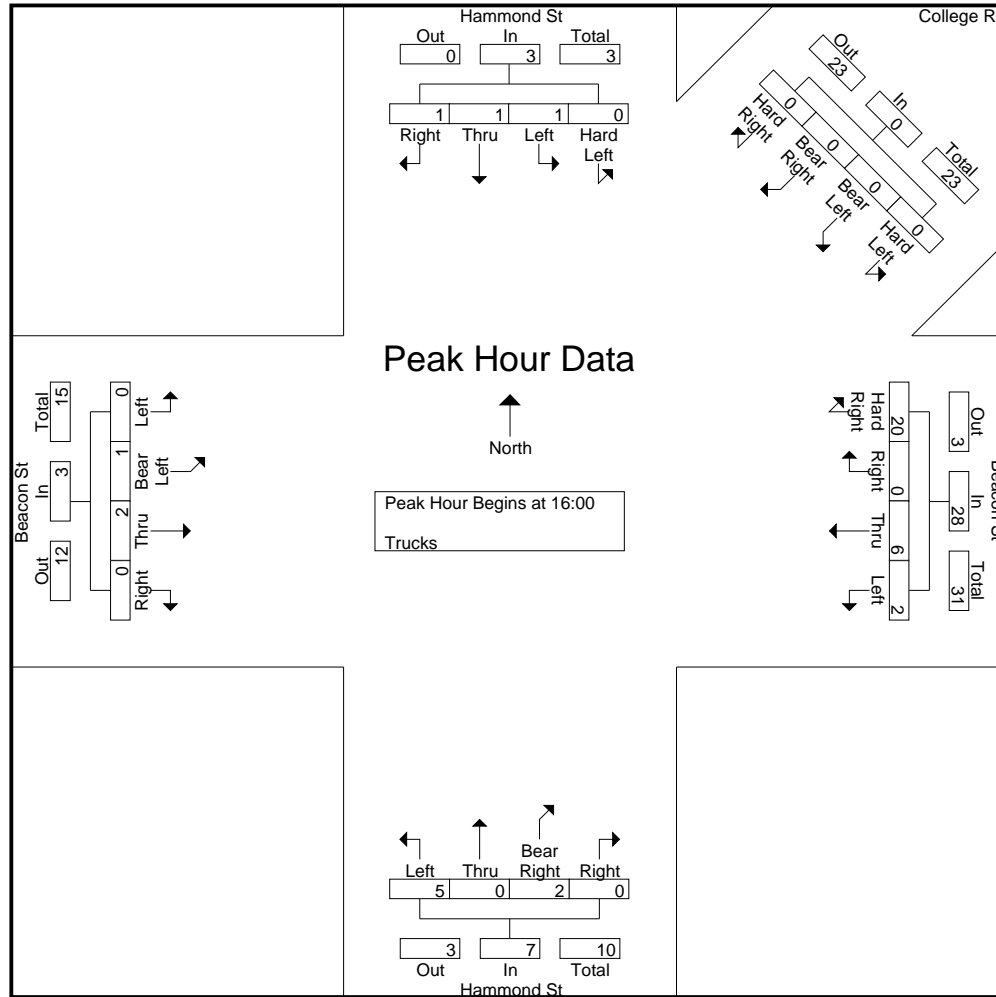
Groups Printed- Trucks

Start Time	Hammond St From North					College Rd From Northeast					Beacon St From East					Hammond St From South					Beacon St From West					Exclu. Total	Inclu. Total	Int. Total
	Hard Left	Left	Thru	Right	Peds	Hard Left	Bear Left	Bear Right	Hard Right	Peds	Left	Thru	Right	Hard Right	Peds	Left	Thru	Bear Right	Right	Peds	Left	Bear Left	Thru	Right	Peds			
16:00	0	0	1	1	0	0	0	0	0	0	1	0	0	4	5	1	0	0	0	0	0	0	1	0	0	5	9	14
16:15	0	0	0	0	0	0	0	0	0	0	1	4	0	5	0	1	0	1	0	0	0	1	1	0	0	0	14	14
16:30	0	0	0	0	0	0	0	0	0	0	0	1	0	5	0	3	0	1	0	0	0	0	0	0	0	0	10	10
16:45	0	1	0	0	0	0	0	0	0	0	0	1	0	6	0	0	0	0	0	0	0	0	0	0	0	0	8	8
Total	0	1	1	1	0	0	0	0	0	0	2	6	0	20	5	5	0	2	0	0	0	1	2	0	0	5	41	46
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4	4
17:15	0	0	1	0	0	0	0	0	0	0	1	2	0	3	0	1	0	0	0	0	0	0	0	0	0	0	8	8
17:30	0	0	1	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	6	6
17:45	0	0	0	0	0	0	0	0	0	0	2	2	0	4	0	0	0	0	1	0	0	0	0	0	0	0	9	9
Total	0	0	2	0	0	0	0	0	0	0	3	4	0	15	0	1	0	1	1	0	0	0	0	0	0	0	27	27
Grand Total	0	1	3	1	0	0	0	0	0	0	5	10	0	35	5	6	0	3	1	0	0	1	2	0	0	5	68	73
Apprch %	0	20	60	20		0	0	0	0		10	20	0	70		60	0	30	10		0	33.3	66.7	0				
Total %	0	1.5	4.4	1.5		0	0	0	0		7.4	14.7	0	51.5		8.8	0	4.4	1.5		0	1.5	2.9	0		6.8	93.2	

Start Time	Hammond St From North					College Rd From Northeast					Beacon St From East					Hammond St From South					Beacon St From West					Int. Total
	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	
16:00	0	0	1	1	2	0	0	0	0	0	1	0	0	4	5	1	0	0	0	1	0	0	1	0	1	9
16:15	0	0	0	0	0	0	0	0	0	0	1	4	0	5	10	1	0	1	0	2	0	1	1	0	2	14
16:30	0	0	0	0	0	0	0	0	0	0	0	1	0	5	6	3	0	1	0	4	0	0	0	0	0	10
16:45	0	1	0	0	1	0	0	0	0	0	0	1	0	6	7	0	0	0	0	0	0	0	0	0	0	8
Total Volume	0	1	1	1	3	0	0	0	0	0	2	6	0	20	28	5	0	2	0	7	0	1	2	0	3	41
% App. Total	0	33.3	33.3	33.3		0	0	0	0		7.1	21.4	0	71.4		71.4	0	28.6	0		0	33.3	66.7	0		
PHF	.000	.250	.250	.250	.375	.000	.000	.000	.000	.000	.500	.375	.000	.833	.700	.417	.000	.500	.000	.438	.000	.250	.500	.000	.375	.732

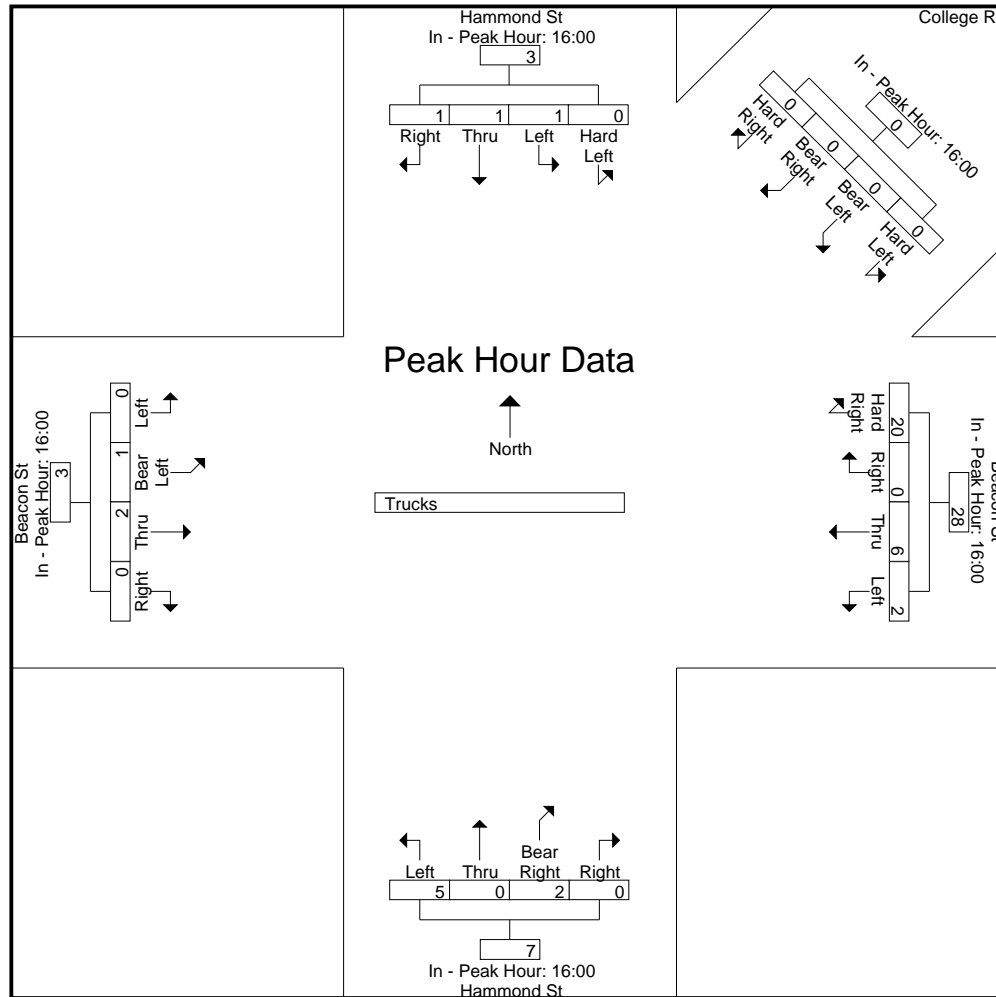
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 16:00



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	16:00					16:00					16:00					16:00									
+0 mins.	0	0	1	1	2	0	0	0	0	0	1	0	0	4	5	1	0	0	0	1	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	1	4	0	5	10	1	0	1	0	2	0	1	1	0	2
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	1	0	5	6	3	0	1	0	4	0	0	0	0	0
+45 mins.	0	1	0	0	1	0	0	0	0	0	0	1	0	6	7	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	1	3	0	0	0	0	0	2	6	0	20	28	5	0	2	0	7	0	1	2	0	3
% App. Total	0	33.3	33.3	33.3		0	0	0	0		7.1	21.4	0	71.4		71.4	0	28.6	0		0	33.3	66.7	0	
PHF	.000	.250	.250	.250	.375	.000	.000	.000	.000	.000	.500	.375	.000	.833	.700	.417	.000	.500	.000	.438	.000	.250	.500	.000	.375



N/S Street : Chestnut Hill Avenue  
 E/W Street: Beacon Street  
 City/State : Boston, MA  
 Weather : Clear

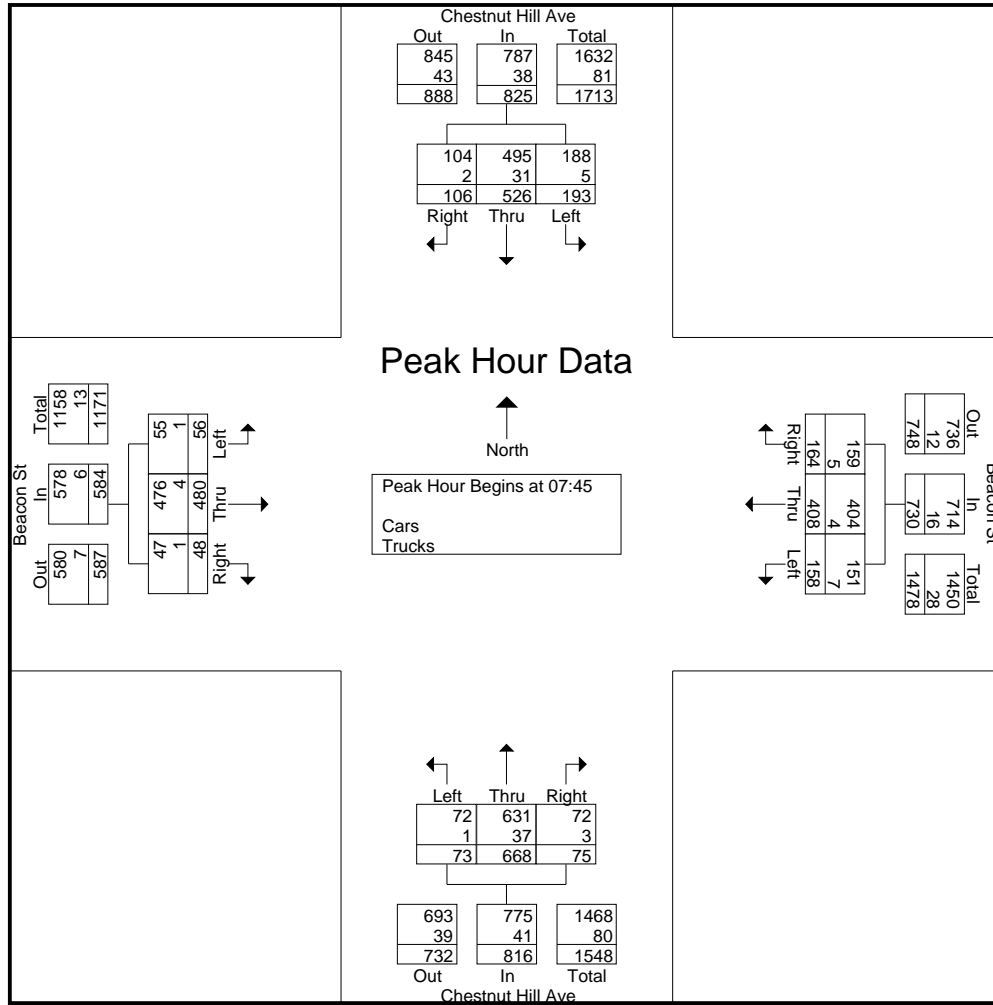
Accurate Counts  
 978-664-2565

File Name : 39000008  
 Site Code : 39000008  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Chestnut Hill Ave From North				Beacon St From East				Chestnut Hill Ave From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	30	82	17	9	33	49	27	39	3	126	22	8	10	60	10	2	58	469	527
07:15	34	137	26	12	41	72	26	64	9	153	12	2	14	81	15	2	80	620	700
07:30	61	165	18	7	39	83	21	100	9	159	9	4	16	89	18	3	114	687	801
07:45	42	141	28	19	42	96	35	83	12	170	25	4	12	134	13	6	112	750	862
Total	167	525	89	47	155	300	109	286	33	608	68	18	52	364	56	13	364	2526	2890
08:00	69	164	24	17	42	86	41	105	15	143	11	6	16	106	18	10	138	735	873
08:15	42	120	27	10	39	125	38	94	30	181	27	3	12	118	11	5	112	770	882
08:30	40	101	27	9	35	101	50	89	16	174	12	2	16	122	6	3	103	700	803
08:45	52	130	18	4	32	99	35	68	27	145	14	3	20	102	18	5	80	692	772
Total	203	515	96	40	148	411	164	356	88	643	64	14	64	448	53	23	433	2897	3330
Grand Total	370	1040	185	87	303	711	273	642	121	1251	132	32	116	812	109	36	797	5423	6220
Apprch %	23.2	65.2	11.6		23.5	55.2	21.2		8	83.2	8.8		11.2	78.3	10.5				
Total %	6.8	19.2	3.4		5.6	13.1	5		2.2	23.1	2.4		2.1	15	2		12.8	87.2	
Cars	361	976	183		293	702	266		120	1192	126		113	803	108		0	0	6040
% Cars	97.6	93.8	98.9	100	96.7	98.7	97.4	100	99.2	95.3	95.5	100	97.4	98.9	99.1	100	0	0	97.1
Trucks	9	64	2		10	9	7		1	59	6		3	9	1		0	0	180
% Trucks	2.4	6.2	1.1	0	3.3	1.3	2.6	0	0.8	4.7	4.5	0	2.6	1.1	0.9	0	0	0	2.9

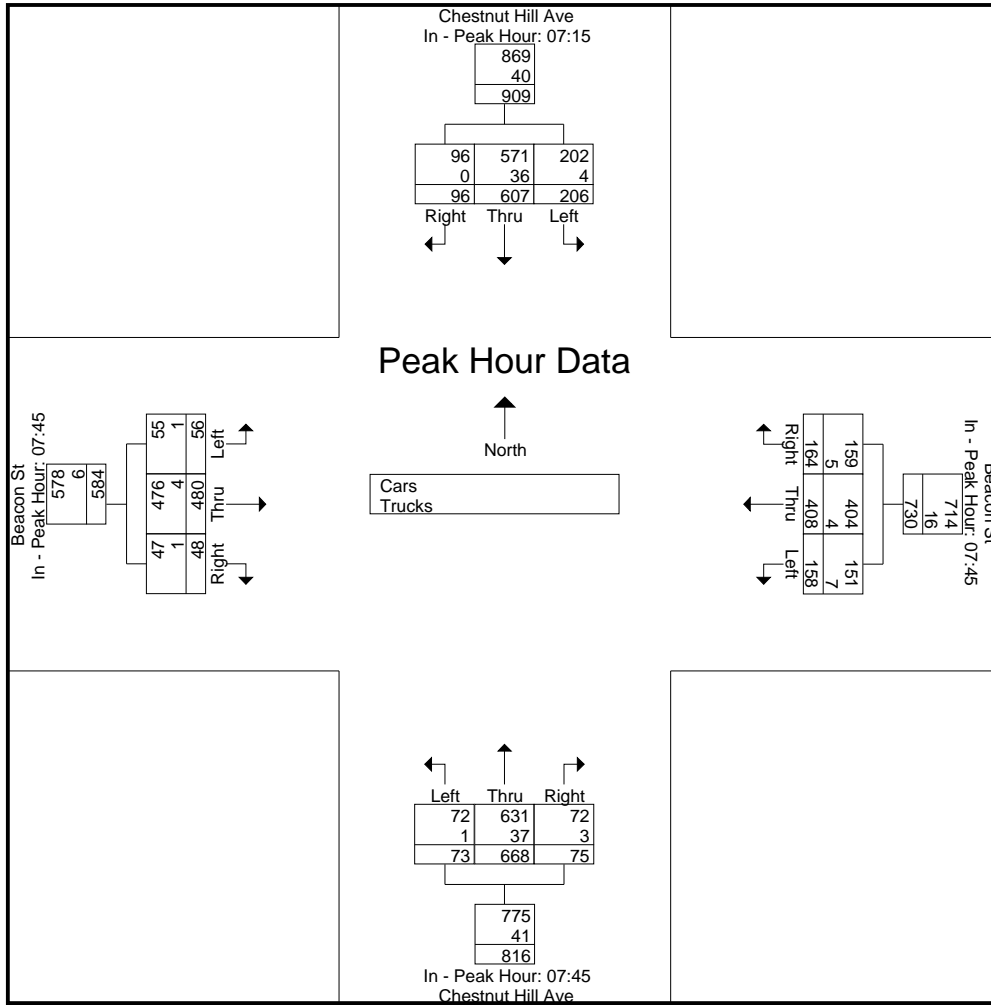
Start Time	Chestnut Hill Ave From North				Beacon St From East				Chestnut Hill Ave From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	42	141	28	211	42	96	35	173	12	170	25	207	12	134	13	159	750
08:00	69	164	24	257	42	86	41	169	15	143	11	169	16	106	18	140	735
08:15	42	120	27	189	39	125	38	202	30	181	27	238	12	118	11	141	770
08:30	40	101	27	168	35	101	50	186	16	174	12	202	16	122	6	144	700
Total Volume	193	526	106	825	158	408	164	730	73	668	75	816	56	480	48	584	2955
% App. Total	23.4	63.8	12.8		21.6	55.9	22.5		8.9	81.9	9.2		9.6	82.2	8.2		
PHF	.699	.802	.946	.803	.940	.816	.820	.903	.608	.923	.694	.857	.875	.896	.667	.918	.959
Cars	188	495	104	787	151	404	159	714	72	631	72	775	55	476	47	578	2854
% Cars	97.4	94.1	98.1	95.4	95.6	99.0	97.0	97.8	98.6	94.5	96.0	95.0	98.2	99.2	97.9	99.0	96.6
Trucks	5	31	2	38	7	4	5	16	1	37	3	41	1	4	1	6	101
% Trucks	2.6	5.9	1.9	4.6	4.4	1.0	3.0	2.2	1.4	5.5	4.0	5.0	1.8	0.8	2.1	1.0	3.4



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15				07:45				07:45				07:45			
+0 mins.	34	137	26	197	42	96	35	173	12	170	25	207	12	134	13	159
+15 mins.	61	165	18	244	42	86	41	169	15	143	11	169	16	106	18	140
+30 mins.	42	141	28	211	39	125	38	202	30	181	27	238	12	118	11	141
+45 mins.	69	164	24	257	35	101	50	186	16	174	12	202	16	122	6	144
Total Volume	206	607	96	909	158	408	164	730	73	668	75	816	56	480	48	584
% App. Total	22.7	66.8	10.6		21.6	55.9	22.5		8.9	81.9	9.2		9.6	82.2	8.2	
PHF	.746	.920	.857	.884	.940	.816	.820	.903	.608	.923	.694	.857	.875	.896	.667	.918
Cars	202	571	96	869	151	404	159	714	72	631	72	775	55	476	47	578
% Cars	98.1	94.1	100	95.6	95.6	99	97	97.8	98.6	94.5	96	95	98.2	99.2	97.9	99
Trucks	4	36	0	40	7	4	5	16	1	37	3	41	1	4	1	6
% Trucks	1.9	5.9	0	4.4	4.4	1	3	2.2	1.4	5.5	4	5	1.8	0.8	2.1	1





N/S Street : Chestnut Hill Avenue  
 E/W Street: Beacon Street  
 City/State : Boston, MA  
 Weather : Clear

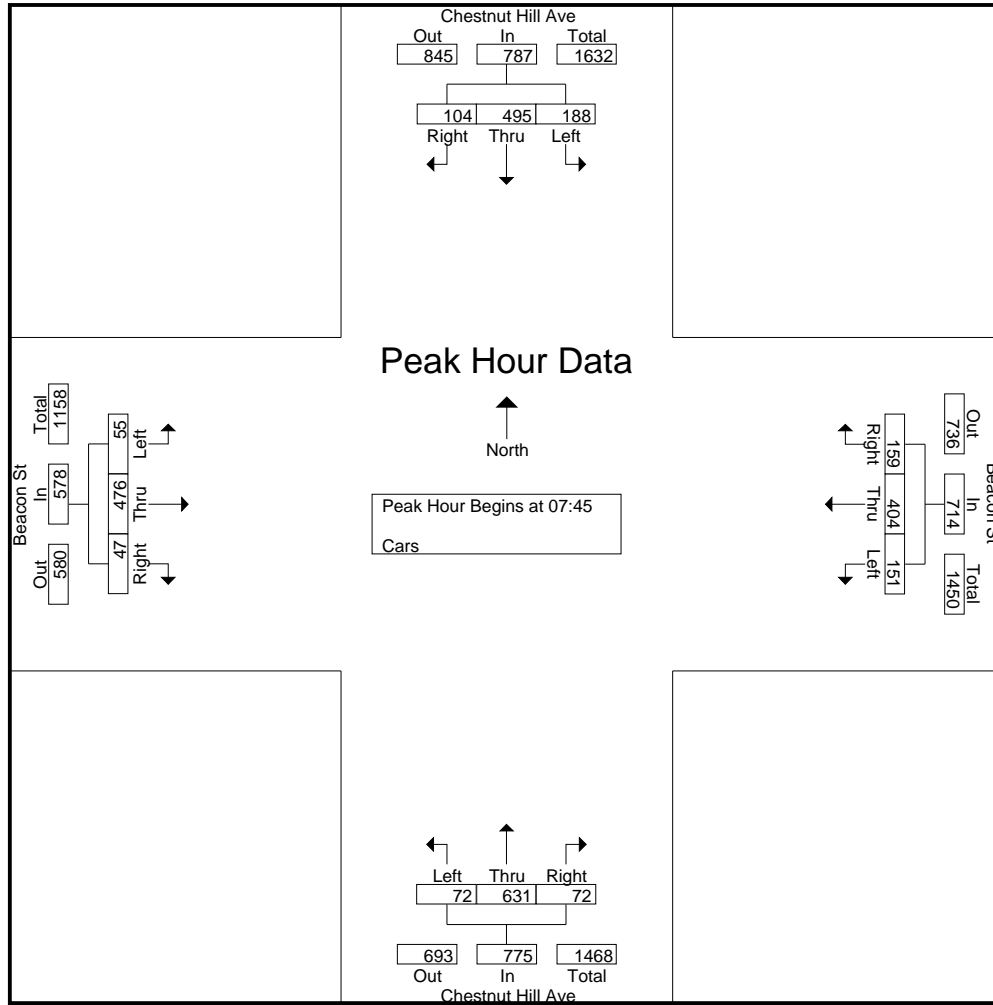
Accurate Counts  
 978-664-2565

File Name : 39000008  
 Site Code : 39000008  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Chestnut Hill Ave From North				Beacon St From East				Chestnut Hill Ave From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	29	77	17	9	32	48	27	39	3	119	22	8	10	59	10	2	58	453	511
07:15	33	130	26	12	40	71	24	64	9	147	10	2	14	80	15	2	80	599	679
07:30	59	152	18	7	38	82	21	100	9	154	8	4	14	88	18	3	114	661	775
07:45	42	134	28	19	39	95	34	83	12	163	24	4	11	132	13	6	112	727	839
Total	163	493	89	47	149	296	106	286	33	583	64	18	49	359	56	13	364	2440	2804
08:00	68	155	24	17	41	86	39	105	15	134	10	6	16	106	18	10	138	712	850
08:15	40	113	25	10	39	123	37	94	29	169	26	3	12	117	10	5	112	740	852
08:30	38	93	27	9	32	100	49	89	16	165	12	2	16	121	6	3	103	675	778
08:45	52	122	18	4	32	97	35	68	27	141	14	3	20	100	18	5	80	676	756
Total	198	483	94	40	144	406	160	356	87	609	62	14	64	444	52	23	433	2803	3236
Grand Total	361	976	183	87	293	702	266	642	120	1192	126	32	113	803	108	36	797	5243	6040
Apprch %	23.8	64.2	12		23.2	55.7	21.1		8.3	82.9	8.8		11	78.4	10.5				
Total %	6.9	18.6	3.5		5.6	13.4	5.1		2.3	22.7	2.4		2.2	15.3	2.1		13.2	86.8	

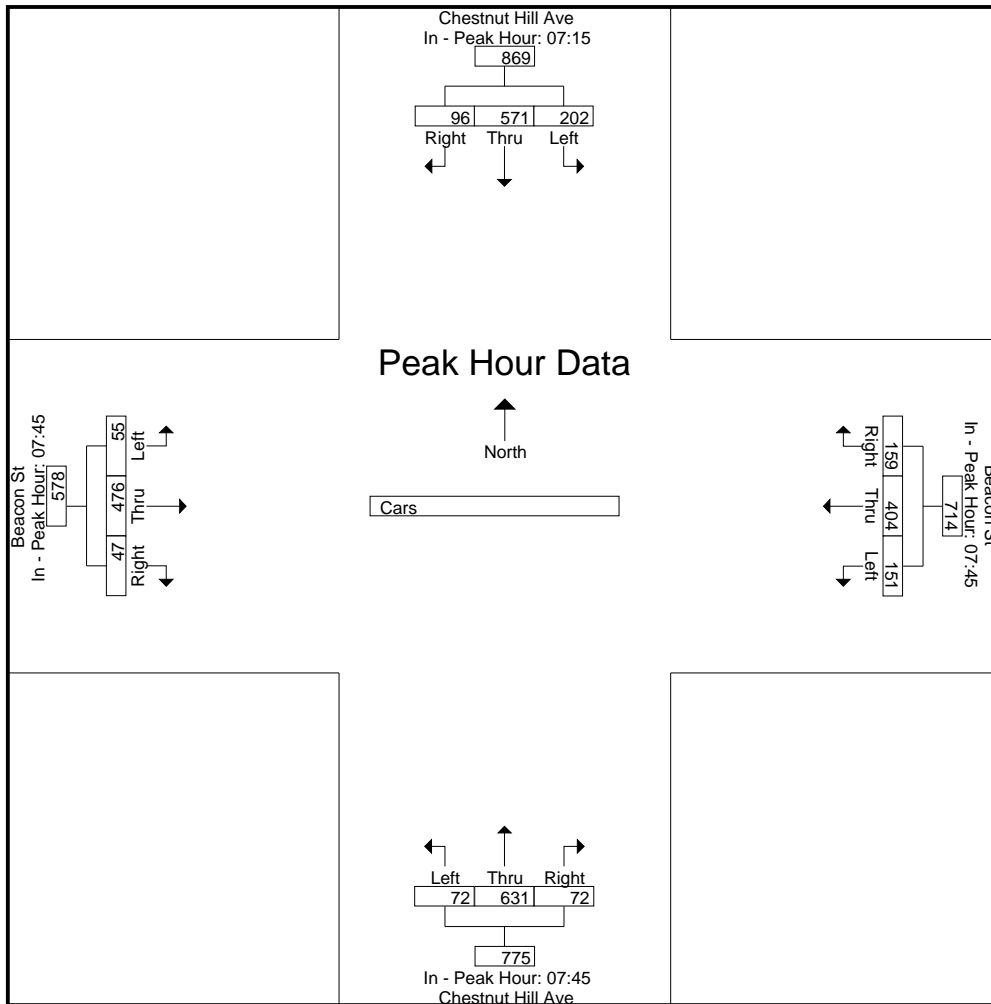
Start Time	Chestnut Hill Ave From North				Beacon St From East				Chestnut Hill Ave From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	42	134	28	204	39	95	34	168	12	163	24	199	11	132	13	156	727
08:00	68	155	24	247	41	86	39	166	15	134	10	159	16	106	18	140	712
08:15	40	113	25	178	39	123	37	199	29	169	26	224	12	117	10	139	740
08:30	38	93	27	158	32	100	49	181	16	165	12	193	16	121	6	143	675
Total Volume	188	495	104	787	151	404	159	714	72	631	72	775	55	476	47	578	2854
% App. Total	23.9	62.9	13.2		21.1	56.6	22.3		9.3	81.4	9.3		9.5	82.4	8.1		
PHF	.691	.798	.929	.797	.921	.821	.811	.897	.621	.933	.692	.865	.859	.902	.653	.926	.964



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15				07:45				07:45				07:45			
+0 mins.	33	130	26	189	39	95	34	168	12	163	24	199	11	132	13	156
+15 mins.	59	152	18	229	41	86	39	166	15	134	10	159	16	106	18	140
+30 mins.	42	134	28	204	39	123	37	199	29	169	26	224	12	117	10	139
+45 mins.	68	155	24	247	32	100	49	181	16	165	12	193	16	121	6	143
Total Volume	202	571	96	869	151	404	159	714	72	631	72	775	55	476	47	578
% App. Total	23.2	65.7	11		21.1	56.6	22.3		9.3	81.4	9.3		9.5	82.4	8.1	
PHF	.743	.921	.857	.880	.921	.821	.811	.897	.621	.933	.692	.865	.859	.902	.653	.926



N/S Street : Chestnut Hill Avenue  
 E/W Street: Beacon Street  
 City/State : Boston, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

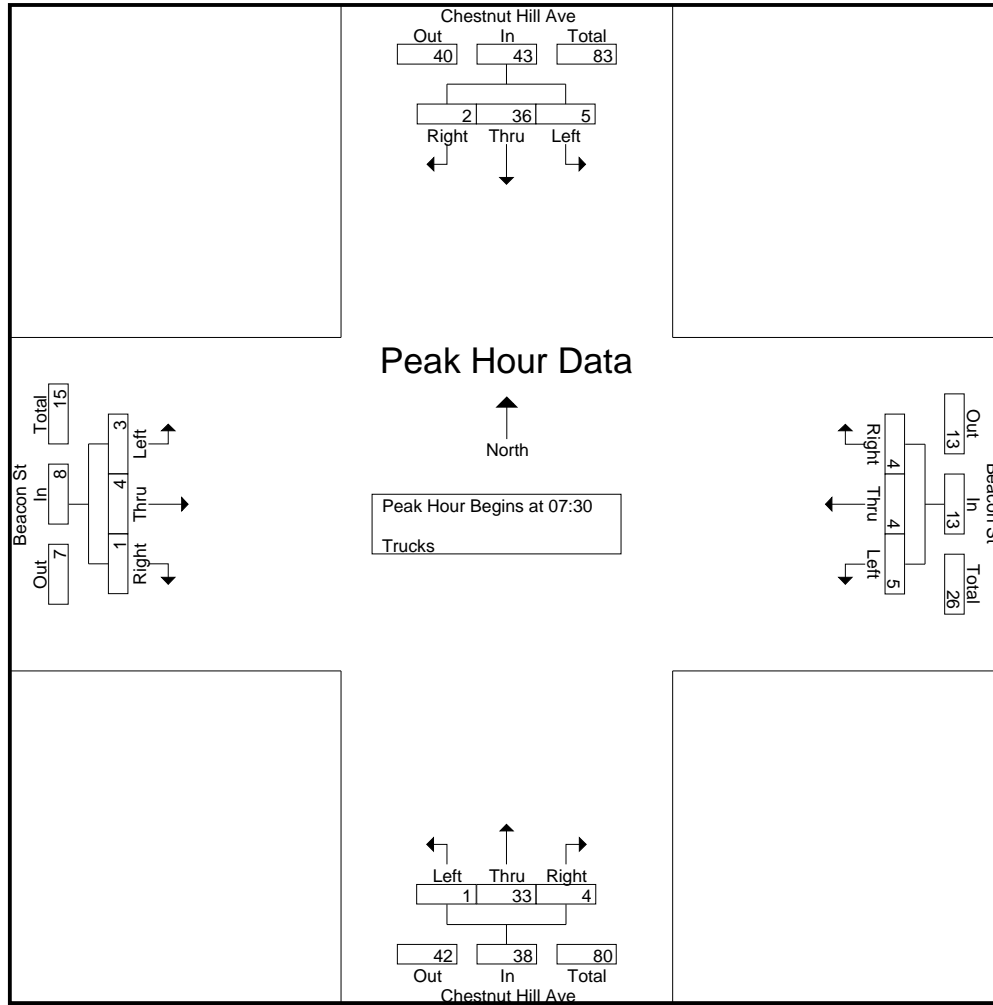
File Name : 39000008  
 Site Code : 39000008  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Chestnut Hill Ave From North				Beacon St From East				Chestnut Hill Ave From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	1	5	0	0	1	1	0	0	0	7	0	0	0	1	0	0	0	16	16
07:15	1	7	0	0	1	1	2	0	0	6	2	0	0	1	0	0	0	21	21
07:30	2	13	0	0	1	1	0	0	0	5	1	0	2	1	0	0	0	26	26
07:45	0	7	0	0	3	1	1	0	0	7	1	0	1	2	0	0	0	23	23
Total	4	32	0	0	6	4	3	0	0	25	4	0	3	5	0	0	0	86	86
08:00	1	9	0	0	1	0	2	0	0	9	1	0	0	0	0	0	0	23	23
08:15	2	7	2	0	0	2	1	0	1	12	1	0	0	1	1	0	0	30	30
08:30	2	8	0	0	3	1	1	0	0	9	0	0	0	1	0	0	0	25	25
08:45	0	8	0	0	0	2	0	0	0	4	0	0	0	2	0	0	0	16	16
Total	5	32	2	0	4	5	4	0	1	34	2	0	0	4	1	0	0	94	94
Grand Total	9	64	2	0	10	9	7	0	1	59	6	0	3	9	1	0	0	180	180
Apprch %	12	85.3	2.7		38.5	34.6	26.9		1.5	89.4	9.1		23.1	69.2	7.7				
Total %	5	35.6	1.1		5.6	5	3.9		0.6	32.8	3.3		1.7	5	0.6		0	100	

Start Time	Chestnut Hill Ave From North				Beacon St From East				Chestnut Hill Ave From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30	2	13	0	15	1	1	0	2	0	5	1	6	2	1	0	3	26
07:45	0	7	0	7	3	1	1	5	0	7	1	8	1	2	0	3	23
08:00	1	9	0	10	1	0	2	3	0	9	1	10	0	0	0	0	23
08:15	2	7	2	11	0	2	1	3	1	12	1	14	0	1	1	2	30
Total Volume	5	36	2	43	5	4	4	13	1	33	4	38	3	4	1	8	102
% App. Total	11.6	83.7	4.7		38.5	30.8	30.8		2.6	86.8	10.5		37.5	50	12.5		
PHF	.625	.692	.250	.717	.417	.500	.500	.650	.250	.688	1.000	.679	.375	.500	.250	.667	.850

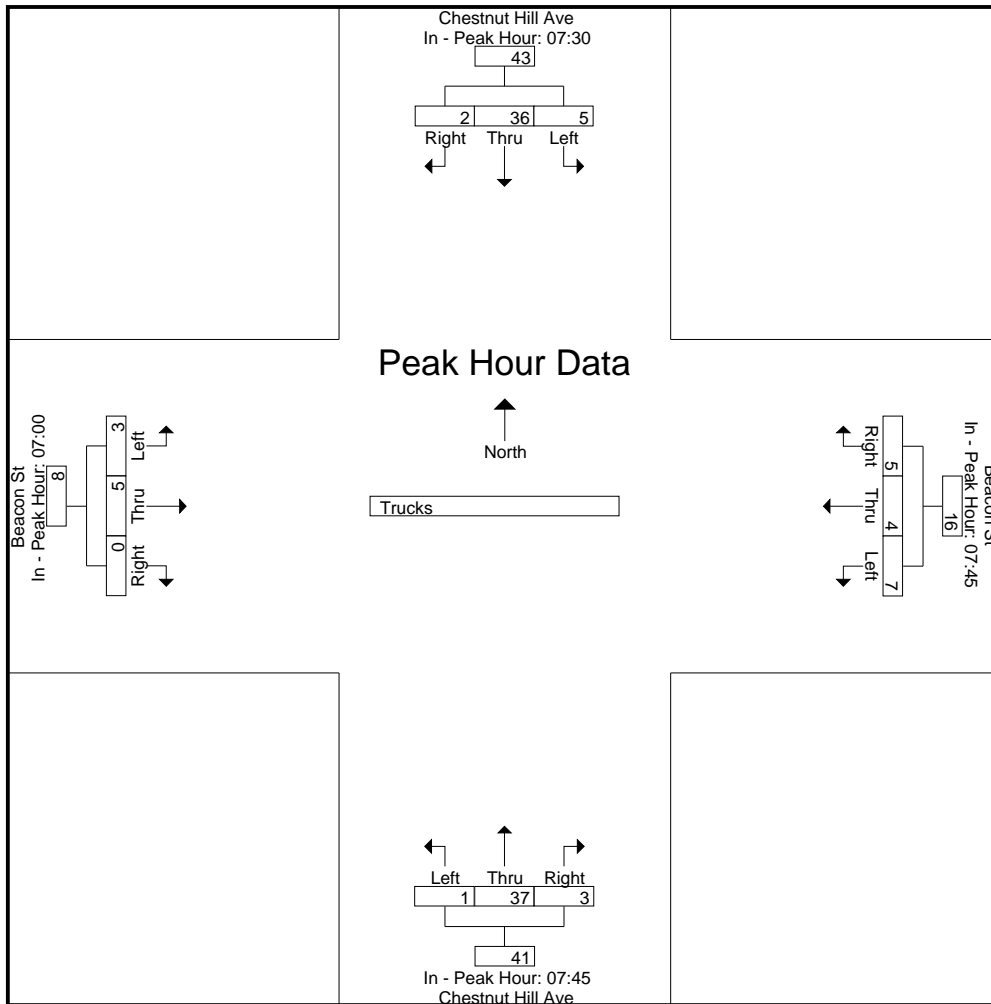
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:30



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30				07:45				07:45				07:00			
+0 mins.	2	13	0	15	3	1	1	5	0	7	1	8	0	1	0	1
+15 mins.	0	7	0	7	1	0	2	3	0	9	1	10	0	1	0	1
+30 mins.	1	9	0	10	0	2	1	3	1	12	1	14	2	1	0	3
+45 mins.	2	7	2	11	3	1	1	5	0	9	0	9	1	2	0	3
Total Volume	5	36	2	43	7	4	5	16	1	37	3	41	3	5	0	8
% App. Total	11.6	83.7	4.7		43.8	25	31.2		2.4	90.2	7.3		37.5	62.5	0	
PHF	.625	.692	.250	.717	.583	.500	.625	.800	.250	.771	.750	.732	.375	.625	.000	.667



N/S Street : Chestnut Hill Avenue  
 E/W Street: Beacon Street  
 City/State : Boston, MA  
 Weather : Clear

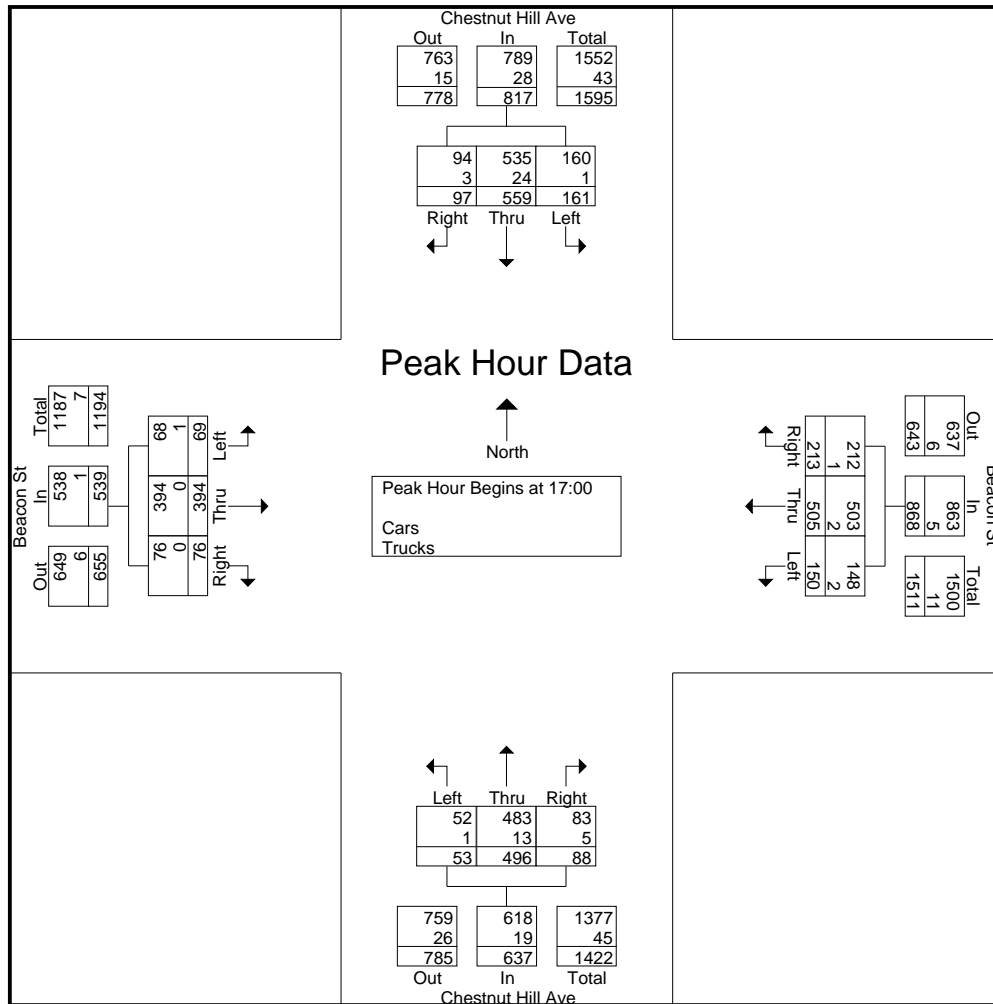
Accurate Counts  
 978-664-2565

File Name : 39000008  
 Site Code : 39000008  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Chestnut Hill Ave From North				Beacon St From East				Chestnut Hill Ave From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	47	136	24	12	18	94	44	37	14	114	27	1	11	63	14	5	55	606	661
16:15	43	122	22	7	35	138	45	69	13	96	27	1	19	56	15	2	79	631	710
16:30	39	124	22	14	41	112	44	43	16	124	36	1	18	85	18	2	60	679	739
16:45	36	142	36	14	37	97	47	45	14	128	16	2	10	69	20	4	65	652	717
Total	165	524	104	47	131	441	180	194	57	462	106	5	58	273	67	13	259	2568	2827
17:00	29	147	27	19	48	117	58	66	15	96	26	0	16	74	22	2	87	675	762
17:15	40	152	25	22	27	126	42	63	16	126	20	8	20	122	14	5	98	730	828
17:30	40	148	28	24	36	124	55	34	8	136	17	0	18	93	19	2	60	722	782
17:45	52	112	17	15	39	138	58	104	14	138	25	2	15	105	21	3	124	734	858
Total	161	559	97	80	150	505	213	267	53	496	88	10	69	394	76	12	369	2861	3230
Grand Total	326	1083	201	127	281	946	393	461	110	958	194	15	127	667	143	25	628	5429	6057
Apprch %	20.2	67.3	12.5		17.3	58.4	24.3		8.7	75.9	15.4		13.6	71.2	15.3				
Total %	6	19.9	3.7		5.2	17.4	7.2		2	17.6	3.6		2.3	12.3	2.6		10.4	89.6	
Cars	324	1032	198		277	941	390		109	928	187		125	665	142		0	0	5945
% Cars	99.4	95.3	98.5	100	98.6	99.5	99.2	99.8	99.1	96.9	96.4	100	98.4	99.7	99.3	100	0	0	98.2
Trucks	2	51	3		4	5	3		1	30	7		2	2	1		0	0	112
% Trucks	0.6	4.7	1.5	0	1.4	0.5	0.8	0.2	0.9	3.1	3.6	0	1.6	0.3	0.7	0	0	0	1.8

Start Time	Chestnut Hill Ave From North				Beacon St From East				Chestnut Hill Ave From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	29	147	27	203	48	117	58	223	15	96	26	137	16	74	22	112	675
17:15	40	152	25	217	27	126	42	195	16	126	20	162	20	122	14	156	730
17:30	40	148	28	216	36	124	55	215	8	136	17	161	18	93	19	130	722
17:45	52	112	17	181	39	138	58	235	14	138	25	177	15	105	21	141	734
Total Volume	161	559	97	817	150	505	213	868	53	496	88	637	69	394	76	539	2861
% App. Total	19.7	68.4	11.9		17.3	58.2	24.5		8.3	77.9	13.8		12.8	73.1	14.1		
PHF	.774	.919	.866	.941	.781	.915	.918	.923	.828	.899	.846	.900	.863	.807	.864	.864	.974
Cars	160	535	94	789	148	503	212	863	52	483	83	618	68	394	76	538	2808
% Cars	99.4	95.7	96.9	96.6	98.7	99.6	99.5	99.4	98.1	97.4	94.3	97.0	98.6	100	100	99.8	98.1
Trucks	1	24	3	28	2	2	1	5	1	13	5	19	1	0	0	1	53
% Trucks	0.6	4.3	3.1	3.4	1.3	0.4	0.5	0.6	1.9	2.6	5.7	3.0	1.4	0	0	0.2	1.9

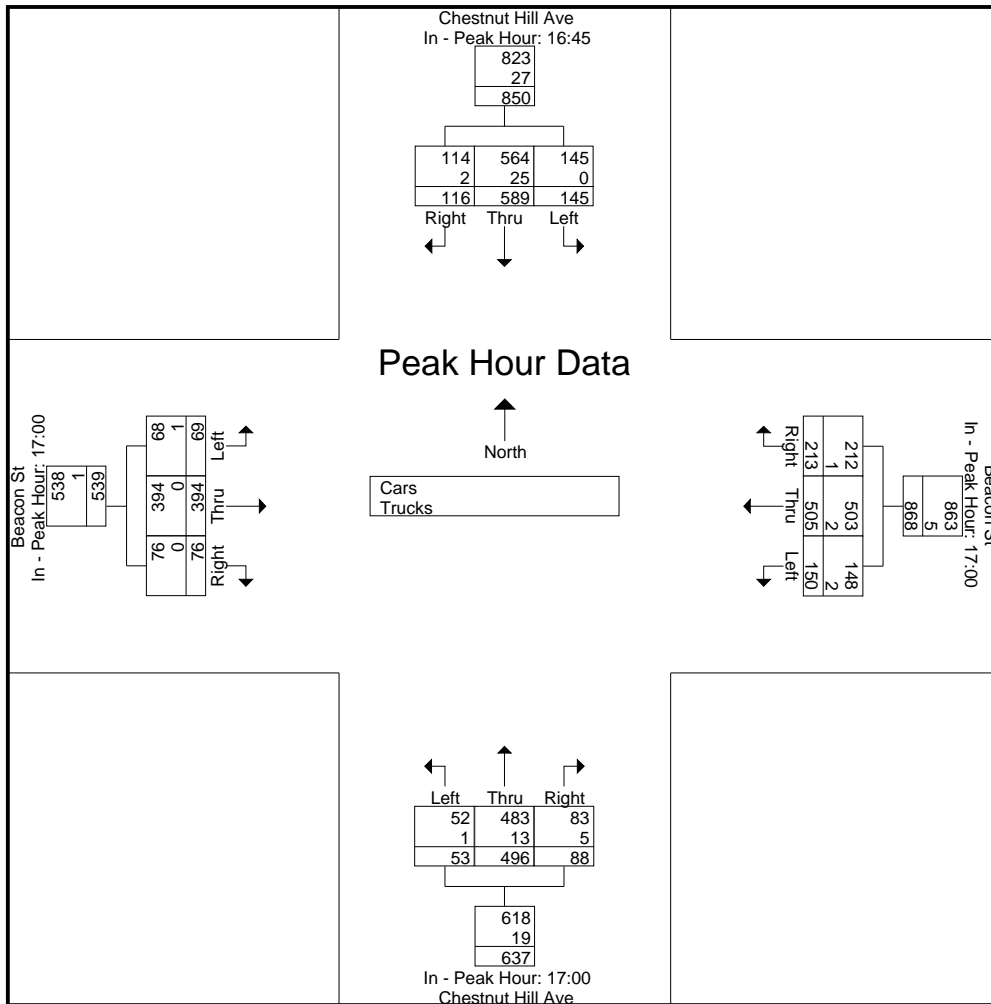


Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:45				17:00				17:00				17:00			
+0 mins.	36	142	36	214	48	117	58	223	15	96	26	137	16	74	22	112
+15 mins.	29	147	27	203	27	126	42	195	16	126	20	162	20	122	14	156
+30 mins.	40	152	25	217	36	124	55	215	8	136	17	161	18	93	19	130
+45 mins.	40	148	28	216	39	138	58	235	14	138	25	177	15	105	21	141
Total Volume	145	589	116	850	150	505	213	868	53	496	88	637	69	394	76	539
% App. Total	17.1	69.3	13.6		17.3	58.2	24.5		8.3	77.9	13.8		12.8	73.1	14.1	
PHF	.906	.969	.806	.979	.781	.915	.918	.923	.828	.899	.846	.900	.863	.807	.864	.864
Cars	145	564	114	823	148	503	212	863	52	483	83	618	68	394	76	538
% Cars	100	95.8	98.3	96.8	98.7	99.6	99.5	99.4	98.1	97.4	94.3	97	98.6	100	100	99.8
Trucks	0	25	2	27	2	2	1	5	1	13	5	19	1	0	0	1
% Trucks	0	4.2	1.7	3.2	1.3	0.4	0.5	0.6	1.9	2.6	5.7	3	1.4	0	0	0.2





N/S Street : Chestnut Hill Avenue  
 E/W Street: Beacon Street  
 City/State : Boston, MA  
 Weather : Clear

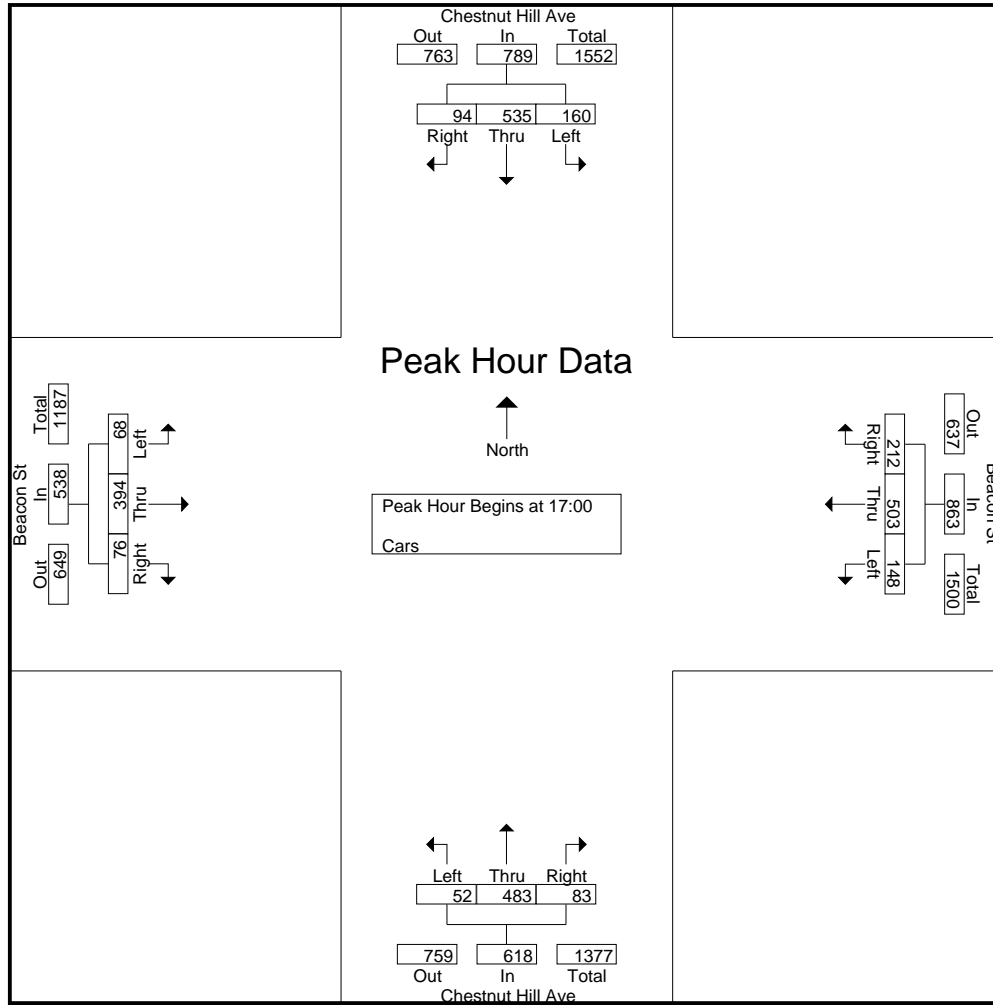
Accurate Counts  
 978-664-2565

File Name : 39000008  
 Site Code : 39000008  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Chestnut Hill Ave From North				Beacon St From East				Chestnut Hill Ave From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	47	127	24	12	18	94	44	37	14	110	26	1	11	61	14	5	55	590	645
16:15	42	114	22	7	35	137	44	69	13	93	27	1	19	56	14	2	79	616	695
16:30	39	121	22	14	41	111	44	43	16	119	36	1	17	85	18	2	60	669	729
16:45	36	135	36	14	35	96	46	45	14	123	15	2	10	69	20	4	65	635	700
Total	164	497	104	47	129	438	178	194	57	445	104	5	57	271	66	13	259	2510	2769
17:00	29	138	26	19	47	117	58	66	15	92	23	0	16	74	22	2	87	657	744
17:15	40	147	24	22	26	126	42	63	16	123	19	8	19	122	14	5	98	718	816
17:30	40	144	28	24	36	124	55	33	8	134	17	0	18	93	19	2	59	716	775
17:45	51	106	16	15	39	136	57	104	13	134	24	2	15	105	21	3	124	717	841
Total	160	535	94	80	148	503	212	266	52	483	83	10	68	394	76	12	368	2808	3176
Grand Total	324	1032	198	127	277	941	390	460	109	928	187	15	125	665	142	25	627	5318	5945
Apprch %	20.8	66.4	12.7		17.2	58.5	24.3		8.9	75.8	15.3		13.4	71.4	15.2				
Total %	6.1	19.4	3.7		5.2	17.7	7.3		2	17.5	3.5		2.4	12.5	2.7		10.5	89.5	

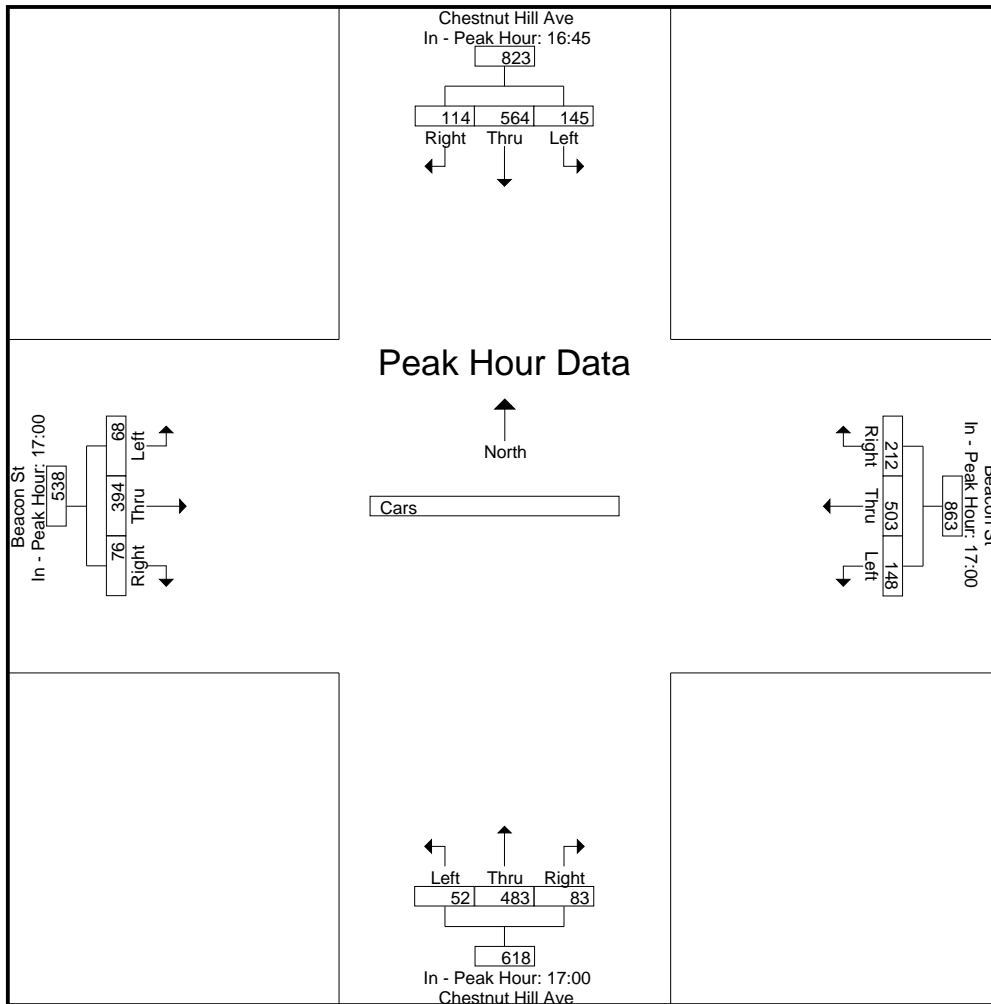
Start Time	Chestnut Hill Ave From North				Beacon St From East				Chestnut Hill Ave From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	29	138	26	193	47	117	58	222	15	92	23	130	16	74	22	112	657
17:15	40	147	24	211	26	126	42	194	16	123	19	158	19	122	14	155	718
17:30	40	144	28	212	36	124	55	215	8	134	17	159	18	93	19	130	716
17:45	51	106	16	173	39	136	57	232	13	134	24	171	15	105	21	141	717
Total Volume	160	535	94	789	148	503	212	863	52	483	83	618	68	394	76	538	2808
% App. Total	20.3	67.8	11.9		17.1	58.3	24.6		8.4	78.2	13.4		12.6	73.2	14.1		
PHF	.784	.910	.839	.930	.787	.925	.914	.930	.813	.901	.865	.904	.895	.807	.864	.868	.978



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:45				17:00				17:00				17:00			
+0 mins.	36	135	36	207	47	117	58	222	15	92	23	130	16	74	22	112
+15 mins.	29	138	26	193	26	126	42	194	16	123	19	158	19	122	14	155
+30 mins.	40	147	24	211	36	124	55	215	8	134	17	159	18	93	19	130
+45 mins.	40	144	28	212	39	136	57	232	13	134	24	171	15	105	21	141
Total Volume	145	564	114	823	148	503	212	863	52	483	83	618	68	394	76	538
% App. Total	17.6	68.5	13.9		17.1	58.3	24.6		8.4	78.2	13.4		12.6	73.2	14.1	
PHF	.906	.959	.792	.971	.787	.925	.914	.930	.813	.901	.865	.904	.895	.807	.864	.868



N/S Street : Chestnut Hill Avenue  
 E/W Street: Beacon Street  
 City/State : Boston, MA  
 Weather : Clear

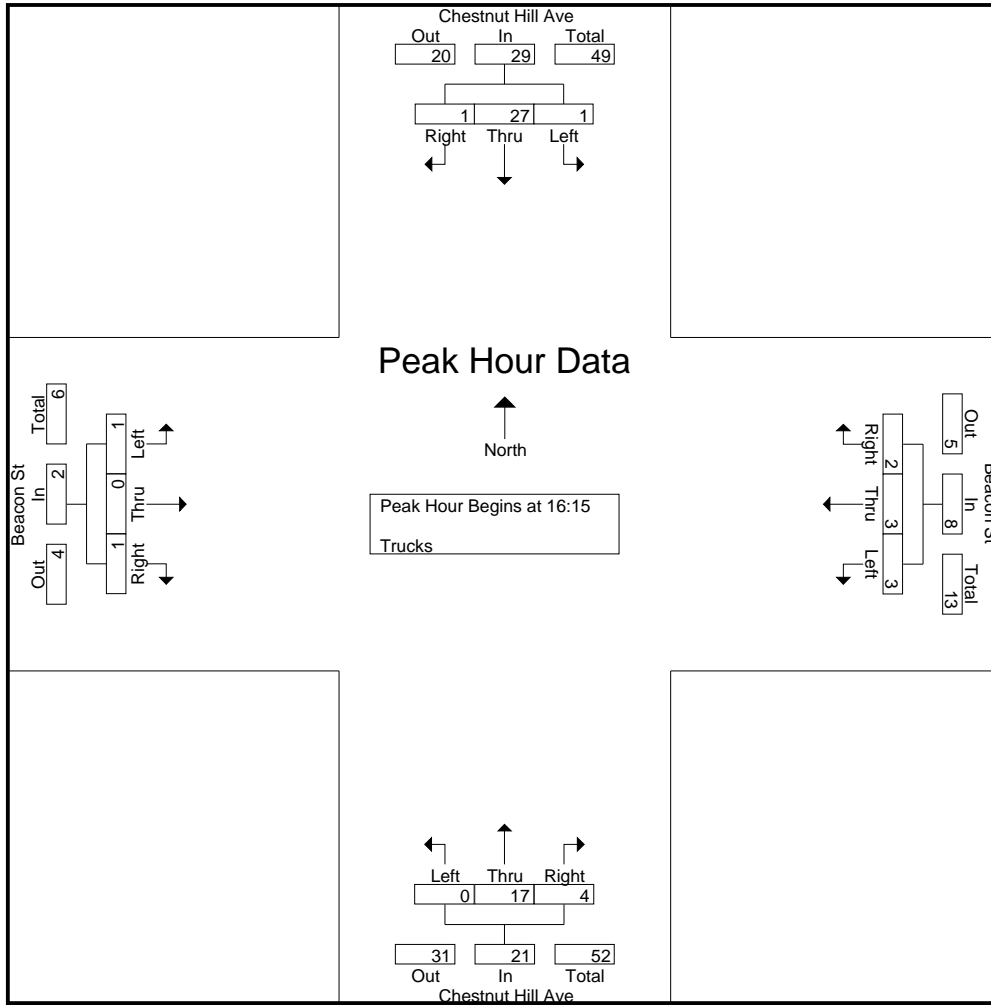
Accurate Counts  
 978-664-2565

File Name : 39000008  
 Site Code : 39000008  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Chestnut Hill Ave From North				Beacon St From East				Chestnut Hill Ave From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	0	9	0	0	0	0	0	0	0	4	1	0	0	2	0	0	0	16	16
16:15	1	8	0	0	0	1	1	0	0	3	0	0	0	0	1	0	0	15	15
16:30	0	3	0	0	0	1	0	0	0	5	0	0	1	0	0	0	0	10	10
16:45	0	7	0	0	2	1	1	0	0	5	1	0	0	0	0	0	0	17	17
Total	1	27	0	0	2	3	2	0	0	17	2	0	1	2	1	0	0	58	58
17:00	0	9	1	0	1	0	0	0	0	4	3	0	0	0	0	0	0	18	18
17:15	0	5	1	0	1	0	0	0	0	3	1	0	1	0	0	0	0	12	12
17:30	0	4	0	0	0	0	0	1	0	2	0	0	0	0	0	0	1	6	7
17:45	1	6	1	0	0	2	1	0	1	4	1	0	0	0	0	0	0	17	17
Total	1	24	3	0	2	2	1	1	1	13	5	0	1	0	0	0	1	53	54
Grand Total	2	51	3	0	4	5	3	1	1	30	7	0	2	2	1	0	1	111	112
Apprch %	3.6	91.1	5.4		33.3	41.7	25		2.6	78.9	18.4		40	40	20				
Total %	1.8	45.9	2.7		3.6	4.5	2.7		0.9	27	6.3		1.8	1.8	0.9		0.9	99.1	

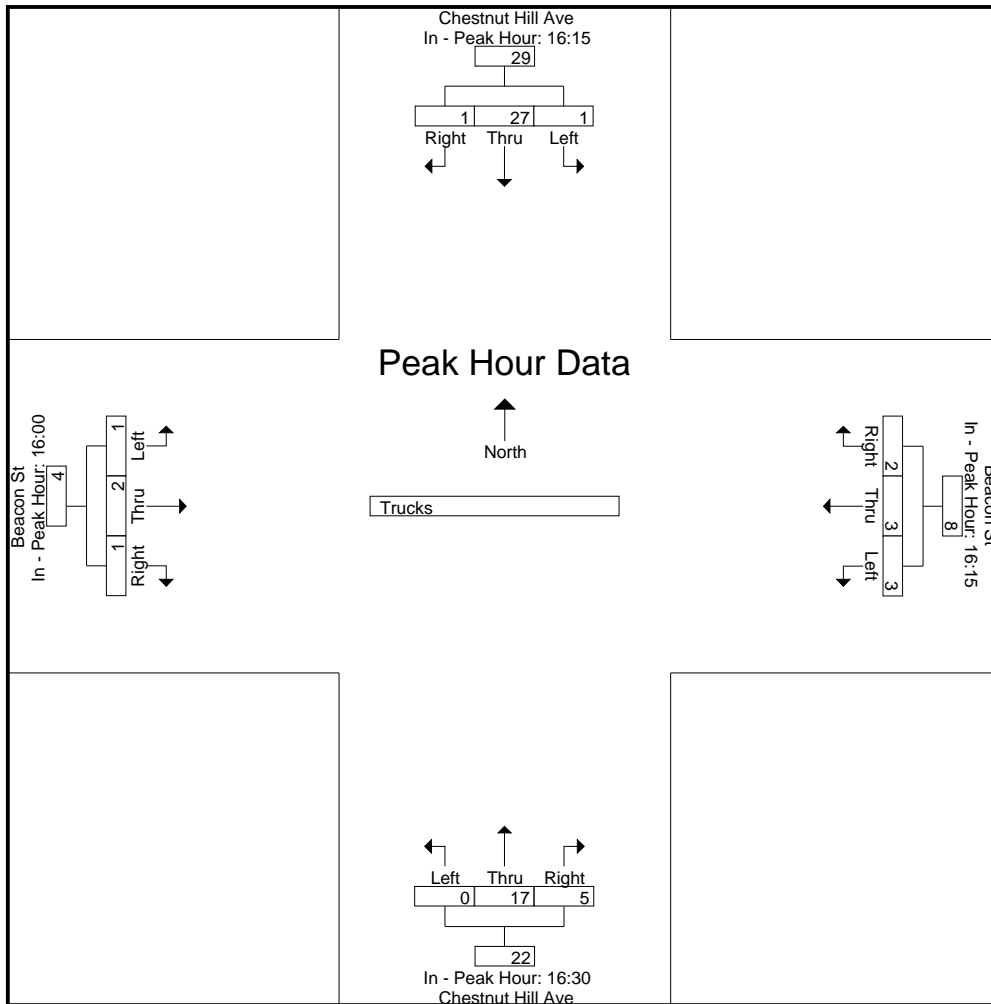
Start Time	Chestnut Hill Ave From North				Beacon St From East				Chestnut Hill Ave From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:15																	
16:15	1	8	0	9	0	1	1	2	0	3	0	3	0	0	1	1	15
16:30	0	3	0	3	0	1	0	1	0	5	0	5	1	0	0	1	10
16:45	0	7	0	7	2	1	1	4	0	5	1	6	0	0	0	0	17
17:00	0	9	1	10	1	0	0	1	0	4	3	7	0	0	0	0	18
Total Volume	1	27	1	29	3	3	2	8	0	17	4	21	1	0	1	2	60
% App. Total	3.4	93.1	3.4		37.5	37.5	25		0	81	19		50	0	50		
PHF	.250	.750	.250	.725	.375	.750	.500	.500	.000	.850	.333	.750	.250	.000	.250	.500	.833



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:15				16:15				16:30				16:00			
+0 mins.	1	8	0	9	0	1	1	2	0	5	0	5	0	2	0	2
+15 mins.	0	3	0	3	0	1	0	1	0	5	1	6	0	0	1	1
+30 mins.	0	7	0	7	2	1	1	4	0	4	3	7	1	0	0	1
+45 mins.	0	9	1	10	1	0	0	1	0	3	1	4	0	0	0	0
Total Volume	1	27	1	29	3	3	2	8	0	17	5	22	1	2	1	4
% App. Total	3.4	93.1	3.4		37.5	37.5	25		0	77.3	22.7		25	50	25	
PHF	.250	.750	.250	.725	.375	.750	.500	.500	.000	.850	.417	.786	.250	.250	.250	.500



N/S Street : Reservoir Avenue  
 E/W Street: Beacon Street  
 City/State : Newton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

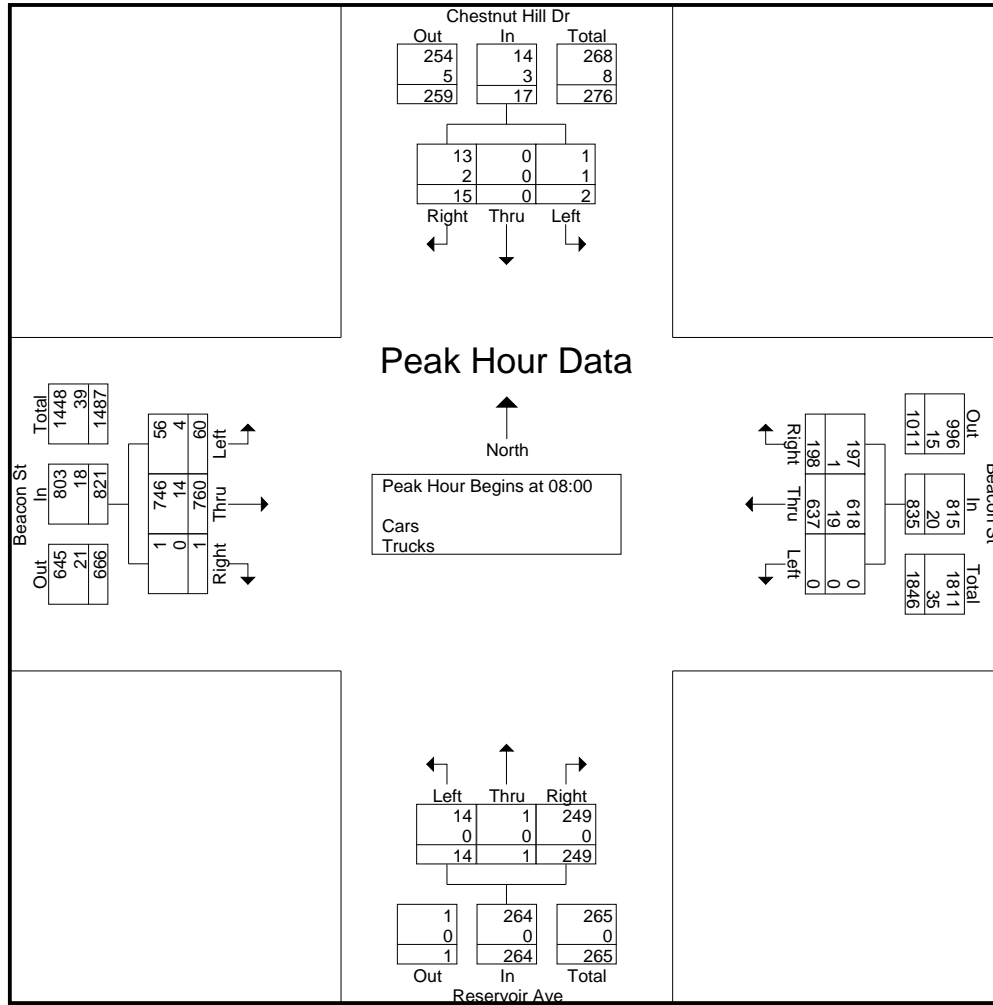
File Name : 39000009  
 Site Code : 39000009  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Chestnut Hill Dr From North				Beacon St From East				Reservoir Ave From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	0	0	3	2	0	80	17	0	2	0	37	0	1	93	0	0	2	233	235
07:15	2	0	1	1	0	118	12	0	0	0	48	1	1	142	0	0	2	324	326
07:30	2	0	7	3	0	155	22	0	1	0	57	0	5	142	1	0	3	392	395
07:45	0	0	5	2	0	156	36	1	1	0	79	3	8	211	0	1	7	496	503
Total	4	0	16	8	0	509	87	1	4	0	221	4	15	588	1	1	14	1445	1459
08:00	1	0	3	6	0	141	40	2	3	0	55	1	17	184	0	0	9	444	453
08:15	1	0	5	7	0	191	38	1	5	1	56	0	11	191	0	0	8	499	507
08:30	0	0	3	2	0	163	50	0	4	0	62	0	15	197	1	1	3	495	498
08:45	0	0	4	1	0	142	70	1	2	0	76	1	17	188	0	1	4	499	503
Total	2	0	15	16	0	637	198	4	14	1	249	2	60	760	1	2	24	1937	1961
Grand Total	6	0	31	24	0	1146	285	5	18	1	470	6	75	1348	2	3	38	3382	3420
Apprch %	16.2	0	83.8		0	80.1	19.9		3.7	0.2	96.1		5.3	94.6	0.1				
Total %	0.2	0	0.9		0	33.9	8.4		0.5	0	13.9		2.2	39.9	0.1		1.1	98.9	
Cars	4	0	22		0	1116	283		18	1	468		67	1321	2		0	0	3340
% Cars	66.7	0	71	100	0	97.4	99.3	100	100	100	99.6	100	89.3	98	100	100	0	0	97.7
Trucks	2	0	9		0	30	2		0	0	2		8	27	0		0	0	80
% Trucks	33.3	0	29	0	0	2.6	0.7	0	0	0	0.4	0	10.7	2	0	0	0	0	2.3

Start Time	Chestnut Hill Dr From North				Beacon St From East				Reservoir Ave From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00																	
08:00	1	0	3	4	0	141	40	181	3	0	55	58	17	184	0	201	444
08:15	1	0	5	6	0	191	38	229	5	1	56	62	11	191	0	202	499
08:30	0	0	3	3	0	163	50	213	4	0	62	66	15	197	1	213	495
08:45	0	0	4	4	0	142	70	212	2	0	76	78	17	188	0	205	499
Total Volume	2	0	15	17	0	637	198	835	14	1	249	264	60	760	1	821	1937
% App. Total	11.8	0	88.2		0	76.3	23.7		5.3	0.4	94.3		7.3	92.6	0.1		
PHF	.500	.000	.750	.708	.000	.834	.707	.912	.700	.250	.819	.846	.882	.964	.250	.964	.970
Cars	1	0	13	14	0	618	197	815	14	1	249	264	56	746	1	803	1896
% Cars	50.0	0	86.7	82.4	0	97.0	99.5	97.6	100	100	100	100	93.3	98.2	100	97.8	97.9
Trucks	1	0	2	3	0	19	1	20	0	0	0	0	4	14	0	18	41
% Trucks	50.0	0	13.3	17.6	0	3.0	0.5	2.4	0	0	0	0	6.7	1.8	0	2.2	2.1

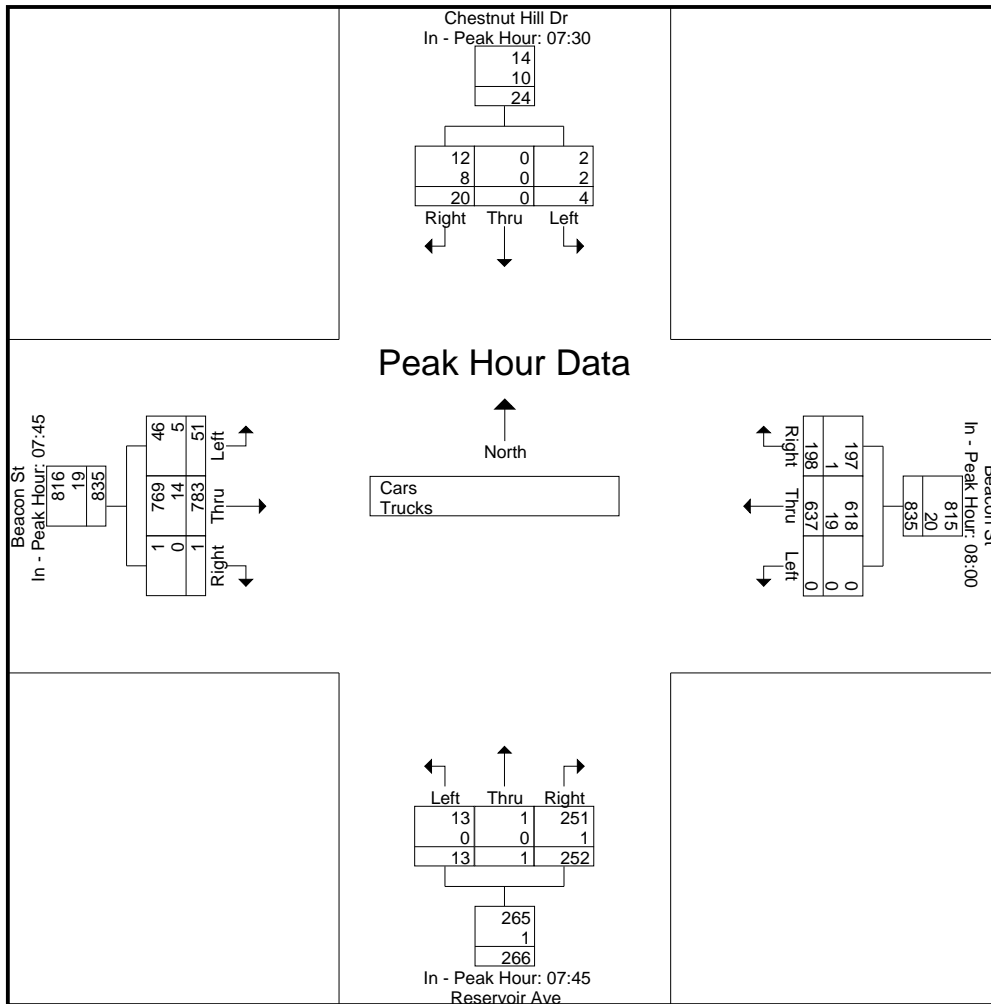




Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30				08:00				07:45				07:45			
+0 mins.	2	0	7	9	0	141	40	181	1	0	79	80	8	211	0	219
+15 mins.	0	0	5	5	0	191	38	229	3	0	55	58	17	184	0	201
+30 mins.	1	0	3	4	0	163	50	213	5	1	56	62	11	191	0	202
+45 mins.	1	0	5	6	0	142	70	212	4	0	62	66	15	197	1	213
Total Volume	4	0	20	24	0	637	198	835	13	1	252	266	51	783	1	835
% App. Total	16.7	0	83.3		0	76.3	23.7		4.9	0.4	94.7		6.1	93.8	0.1	
PHF	.500	.000	.714	.667	.000	.834	.707	.912	.650	.250	.797	.831	.750	.928	.250	.953
Cars	2	0	12	14	0	618	197	815	13	1	251	265	46	769	1	816
% Cars	50	0	60	58.3	0	97	99.5	97.6	100	100	99.6	99.6	90.2	98.2	100	97.7
Trucks	2	0	8	10	0	19	1	20	0	0	1	1	5	14	0	19
% Trucks	50	0	40	41.7	0	3	0.5	2.4	0	0	0.4	0.4	9.8	1.8	0	2.3



N/S Street : Reservoir Avenue  
 E/W Street: Beacon Street  
 City/State : Newton, MA  
 Weather : Clear

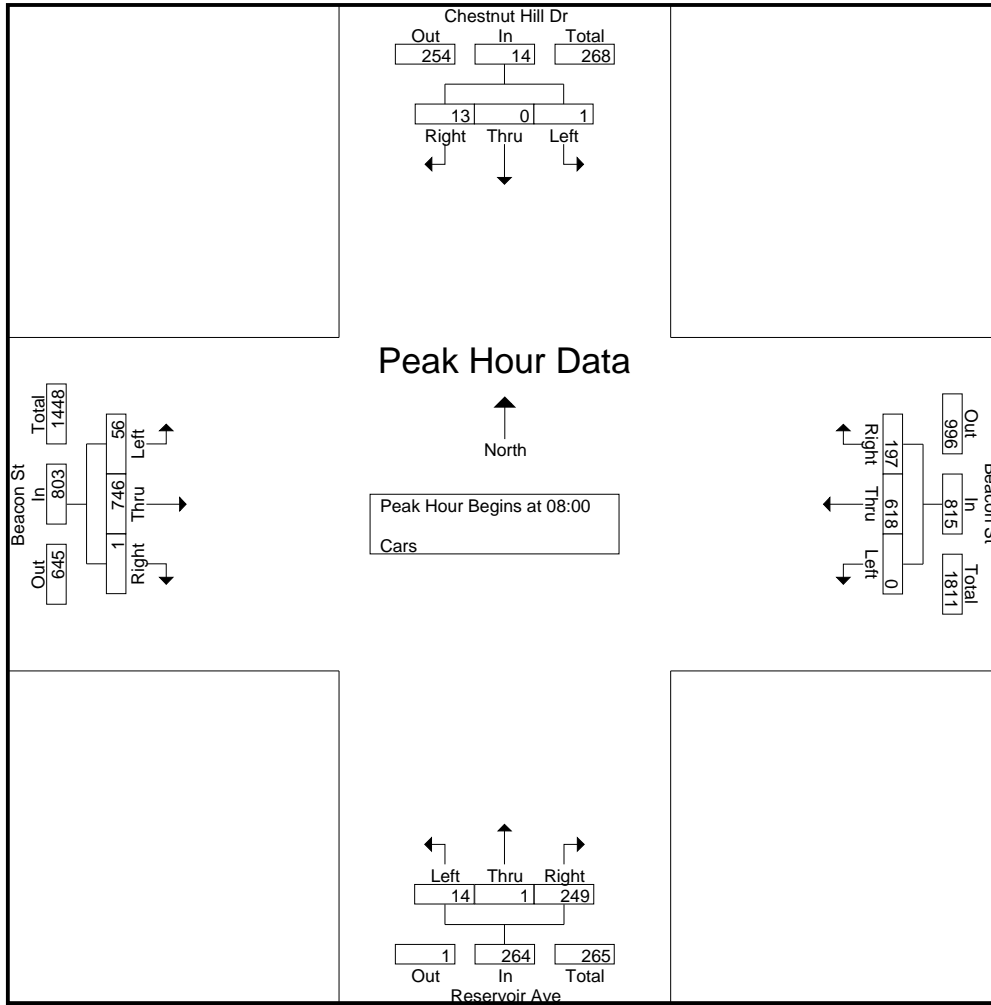
Accurate Counts  
 978-664-2565

File Name : 39000009  
 Site Code : 39000009  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Chestnut Hill Dr From North				Beacon St From East				Reservoir Ave From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	0	0	2	2	0	79	16	0	2	0	37	0	1	91	0	0	2	228	230
07:15	2	0	1	1	0	116	12	0	0	0	48	1	1	138	0	0	2	318	320
07:30	1	0	3	3	0	153	22	0	1	0	56	0	2	137	1	0	3	376	379
07:45	0	0	3	2	0	150	36	1	1	0	78	3	7	209	0	1	7	484	491
Total	3	0	9	8	0	498	86	1	4	0	219	4	11	575	1	1	14	1406	1420
08:00	0	0	2	6	0	139	40	2	3	0	55	1	16	180	0	0	9	435	444
08:15	1	0	4	7	0	186	38	1	5	1	56	0	9	187	0	0	8	487	495
08:30	0	0	3	2	0	157	50	0	4	0	62	0	14	193	1	1	3	484	487
08:45	0	0	4	1	0	136	69	1	2	0	76	1	17	186	0	1	4	490	494
Total	1	0	13	16	0	618	197	4	14	1	249	2	56	746	1	2	24	1896	1920
Grand Total	4	0	22	24	0	1116	283	5	18	1	468	6	67	1321	2	3	38	3302	3340
Apprch %	15.4	0	84.6		0	79.8	20.2		3.7	0.2	96.1		4.8	95	0.1				
Total %	0.1	0	0.7		0	33.8	8.6		0.5	0	14.2		2	40	0.1		1.1	98.9	

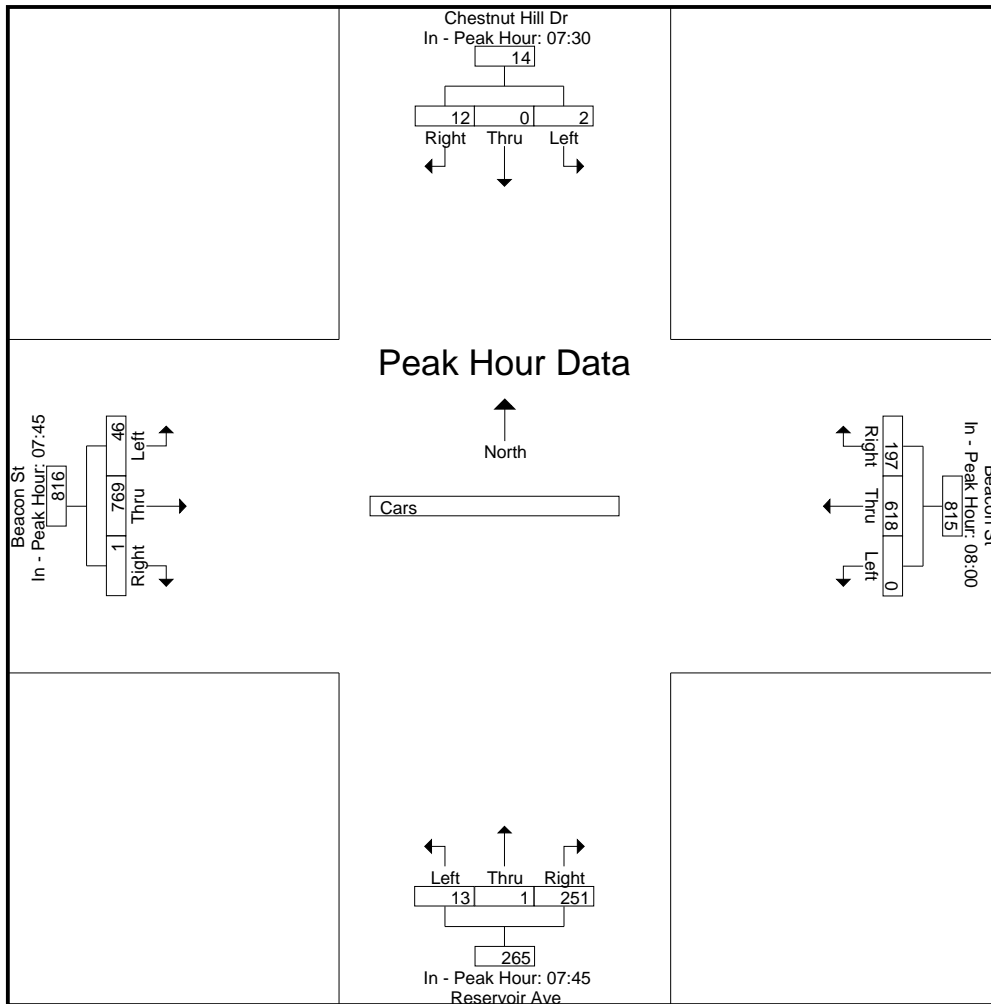
Start Time	Chestnut Hill Dr From North				Beacon St From East				Reservoir Ave From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00																	
08:00	0	0	2	2	0	139	40	179	3	0	55	58	16	180	0	196	435
08:15	1	0	4	5	0	186	38	224	5	1	56	62	9	187	0	196	487
08:30	0	0	3	3	0	157	50	207	4	0	62	66	14	193	1	208	484
08:45	0	0	4	4	0	136	69	205	2	0	76	78	17	186	0	203	490
Total Volume	1	0	13	14	0	618	197	815	14	1	249	264	56	746	1	803	1896
% App. Total	7.1	0	92.9		0	75.8	24.2		5.3	0.4	94.3		7	92.9	0.1		
PHF	.250	.000	.813	.700	.000	.831	.714	.910	.700	.250	.819	.846	.824	.966	.250	.965	.967



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30				08:00				07:45				07:45			
+0 mins.	1	0	3	4	0	139	40	179	1	0	78	79	7	209	0	216
+15 mins.	0	0	3	3	0	186	38	224	3	0	55	58	16	180	0	196
+30 mins.	0	0	2	2	0	157	50	207	5	1	56	62	9	187	0	196
+45 mins.	1	0	4	5	0	136	69	205	4	0	62	66	14	193	1	208
Total Volume	2	0	12	14	0	618	197	815	13	1	251	265	46	769	1	816
% App. Total	14.3	0	85.7		0	75.8	24.2		4.9	0.4	94.7		5.6	94.2	0.1	
PHF	.500	.000	.750	.700	.000	.831	.714	.910	.650	.250	.804	.839	.719	.920	.250	.944



N/S Street : Reservoir Avenue  
 E/W Street: Beacon Street  
 City/State : Newton, MA  
 Weather : Clear

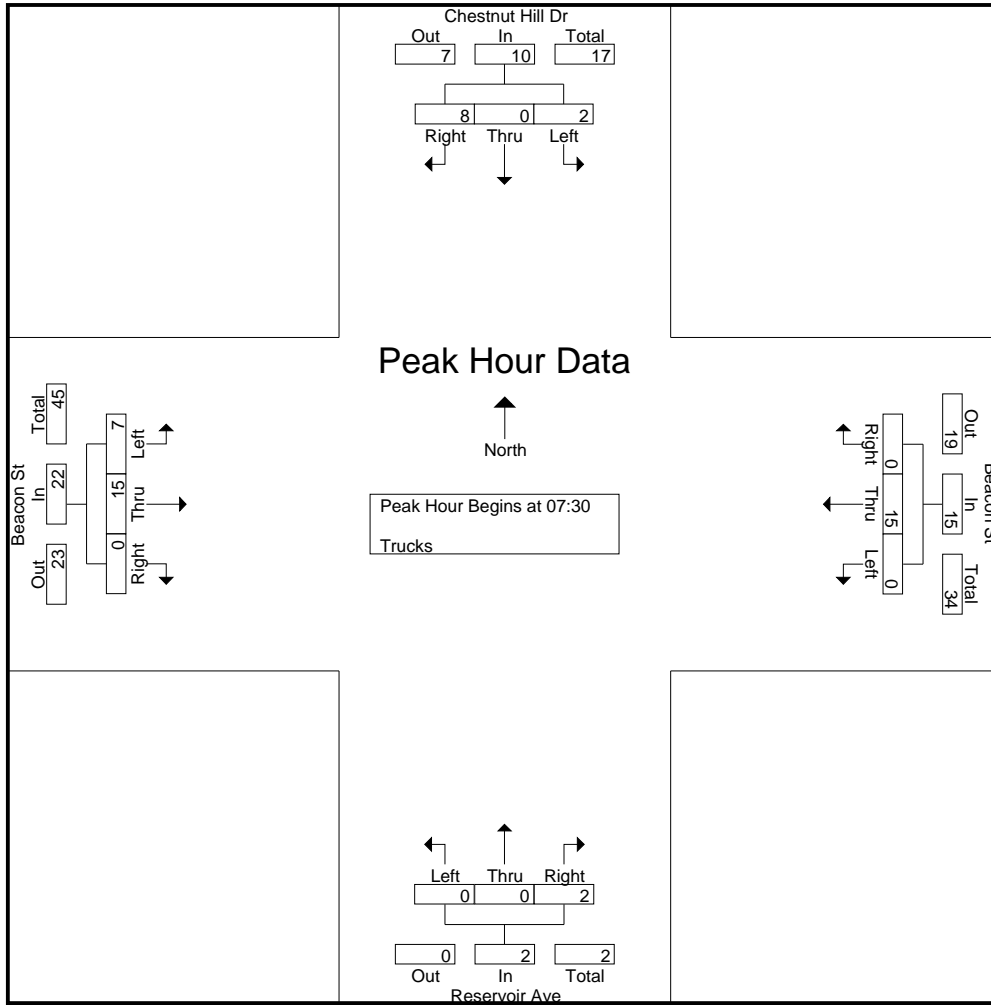
Accurate Counts  
 978-664-2565

File Name : 39000009  
 Site Code : 39000009  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Chestnut Hill Dr From North				Beacon St From East				Reservoir Ave From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds				
07:00	0	0	1	0	0	1	1	0	0	0	0	0	0	2	0	0	0	0	5	5
07:15	0	0	0	0	0	2	0	0	0	0	0	0	0	4	0	0	0	0	6	6
07:30	1	0	4	0	0	2	0	0	0	0	1	0	3	5	0	0	0	0	16	16
07:45	0	0	2	0	0	6	0	0	0	0	1	0	1	2	0	0	0	0	12	12
Total	1	0	7	0	0	11	1	0	0	0	2	0	4	13	0	0	0	0	39	39
08:00	1	0	1	0	0	2	0	0	0	0	0	0	1	4	0	0	0	0	9	9
08:15	0	0	1	0	0	5	0	0	0	0	0	0	2	4	0	0	0	0	12	12
08:30	0	0	0	0	0	6	0	0	0	0	0	0	1	4	0	0	0	0	11	11
08:45	0	0	0	0	0	6	1	0	0	0	0	0	0	2	0	0	0	0	9	9
Total	1	0	2	0	0	19	1	0	0	0	0	0	4	14	0	0	0	0	41	41
Grand Total	2	0	9	0	0	30	2	0	0	0	2	0	8	27	0	0	0	0	80	80
Apprch %	18.2	0	81.8		0	93.8	6.2		0	0	100		22.9	77.1	0					
Total %	2.5	0	11.2		0	37.5	2.5		0	0	2.5		10	33.8	0			0	100	

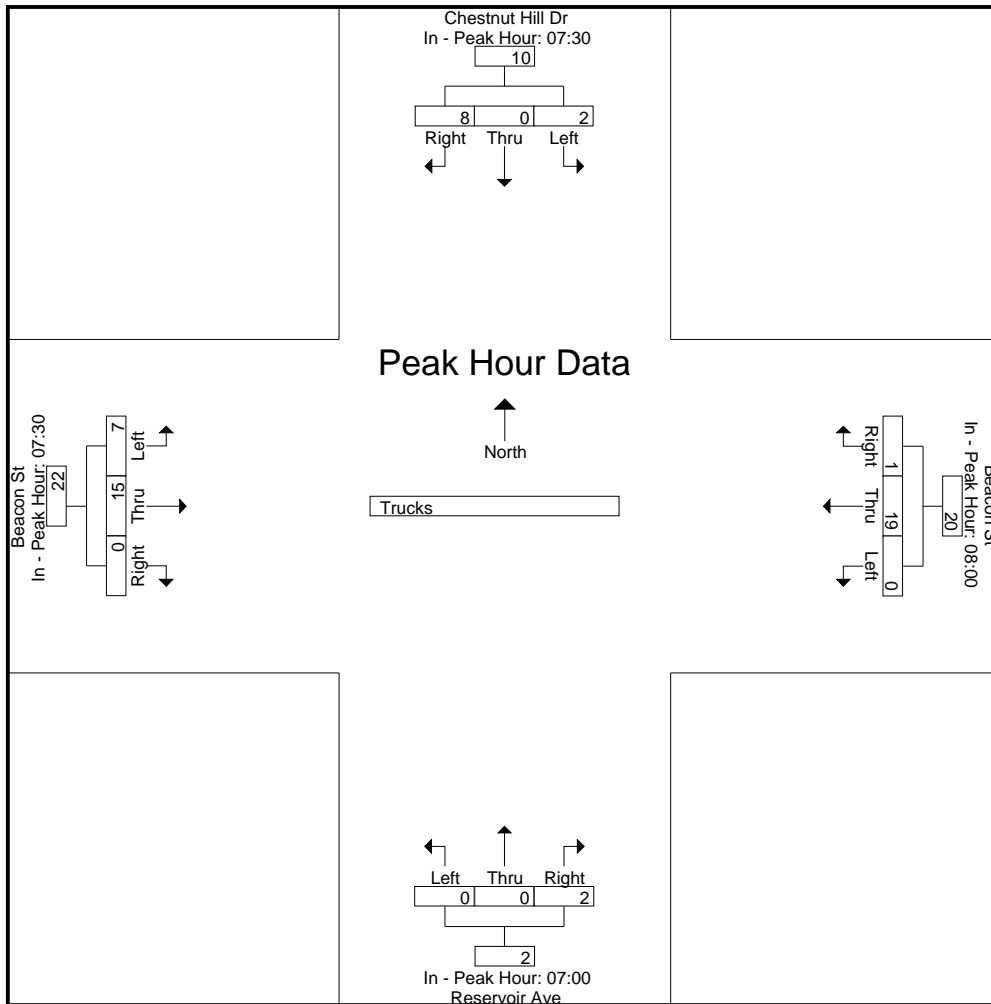
Start Time	Chestnut Hill Dr From North				Beacon St From East				Reservoir Ave From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	1	0	4	5	0	2	0	2	0	0	1	1	3	5	0	8	16
07:45	0	0	2	2	0	6	0	6	0	0	1	1	1	2	0	3	12
08:00	1	0	1	2	0	2	0	2	0	0	0	0	1	4	0	5	9
08:15	0	0	1	1	0	5	0	5	0	0	0	0	2	4	0	6	12
Total Volume	2	0	8	10	0	15	0	15	0	0	2	2	7	15	0	22	49
% App. Total	20	0	80		0	100	0		0	0	100		31.8	68.2	0		
PHF	.500	.000	.500	.500	.000	.625	.000	.625	.000	.000	.500	.500	.583	.750	.000	.688	.766



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30				08:00				07:00				07:30			
+0 mins.	1	0	4	5	0	2	0	2	0	0	0	0	3	5	0	8
+15 mins.	0	0	2	2	0	5	0	5	0	0	0	0	1	2	0	3
+30 mins.	1	0	1	2	0	6	0	6	0	0	1	1	1	4	0	5
+45 mins.	0	0	1	1	0	6	1	7	0	0	1	1	2	4	0	6
Total Volume	2	0	8	10	0	19	1	20	0	0	2	2	7	15	0	22
% App. Total	20	0	80		0	95	5		0	0	100		31.8	68.2	0	
PHF	.500	.000	.500	.500	.000	.792	.250	.714	.000	.000	.500	.500	.583	.750	.000	.688





N/S Street : Reservoir Avenue  
 E/W Street: Beacon Street  
 City/State : Newton, MA  
 Weather : Clear

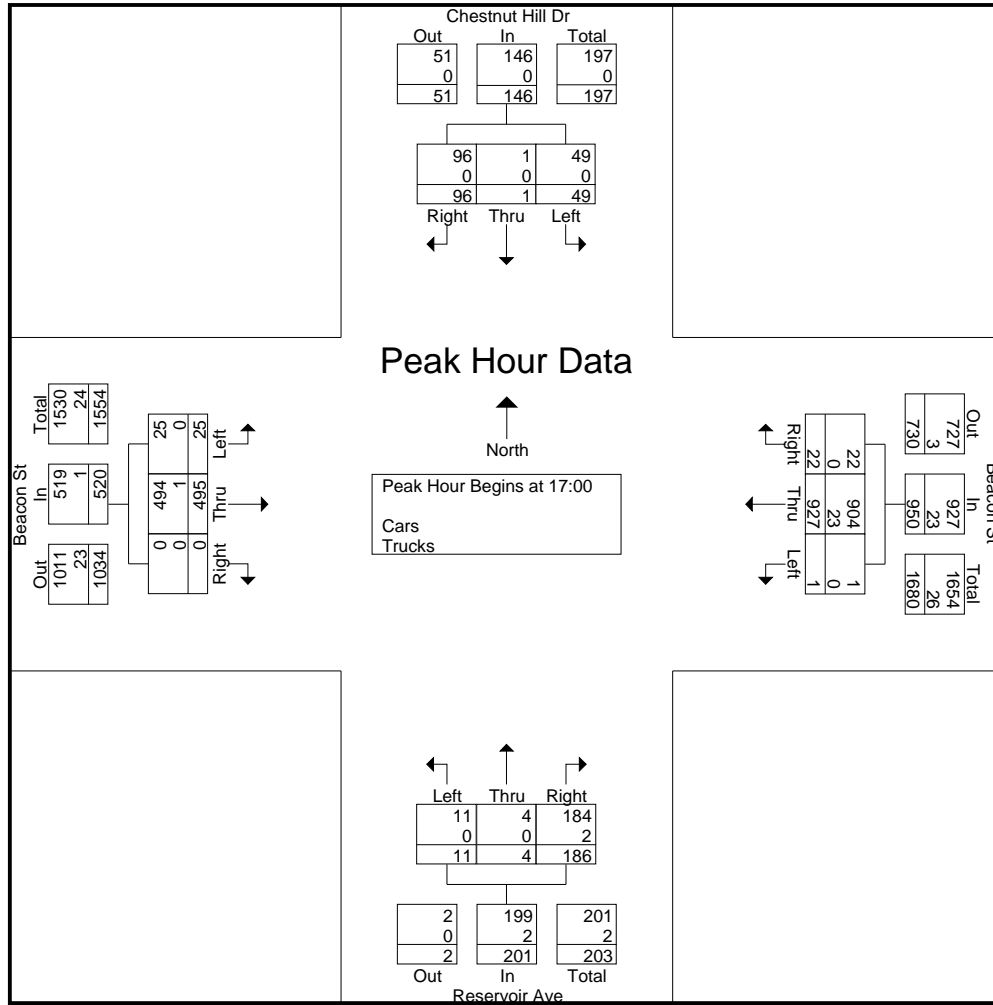
Accurate Counts  
 978-664-2565

File Name : 39000009  
 Site Code : 39000009  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Chestnut Hill Dr From North				Beacon St From East				Reservoir Ave From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	10	0	24	8	0	178	23	0	5	1	36	0	14	97	0	0	8	388	396
16:15	12	0	29	6	0	197	19	0	2	2	45	1	14	83	0	3	10	403	413
16:30	5	0	30	6	0	224	4	2	3	2	46	1	11	94	0	1	10	419	429
16:45	9	0	20	10	0	206	6	0	4	1	47	1	8	99	0	0	11	400	411
Total	36	0	103	30	0	805	52	2	14	6	174	3	47	373	0	4	39	1610	1649
17:00	19	1	25	14	0	218	4	4	0	2	42	1	2	109	0	1	20	422	442
17:15	15	0	28	8	0	250	7	1	7	1	43	0	8	136	0	2	11	495	506
17:30	7	0	24	5	0	221	4	0	0	1	52	0	7	141	0	1	6	457	463
17:45	8	0	19	15	1	238	7	0	4	0	49	1	8	109	0	4	20	443	463
Total	49	1	96	42	1	927	22	5	11	4	186	2	25	495	0	8	57	1817	1874
Grand Total	85	1	199	72	1	1732	74	7	25	10	360	5	72	868	0	12	96	3427	3523
Apprch %	29.8	0.4	69.8		0.1	95.8	4.1		6.3	2.5	91.1		7.7	92.3	0				
Total %	2.5	0	5.8		0	50.5	2.2		0.7	0.3	10.5		2.1	25.3	0		2.7	97.3	
Cars	84	1	197		1	1687	73		24	10	357		70	863	0		0	0	3463
% Cars	98.8	100	99	100	100	97.4	98.6	100	96	100	99.2	100	97.2	99.4	0	100	0	0	98.3
Trucks	1	0	2		0	45	1		1	0	3		2	5	0		0	0	60
% Trucks	1.2	0	1	0	0	2.6	1.4	0	4	0	0.8	0	2.8	0.6	0	0	0	0	1.7

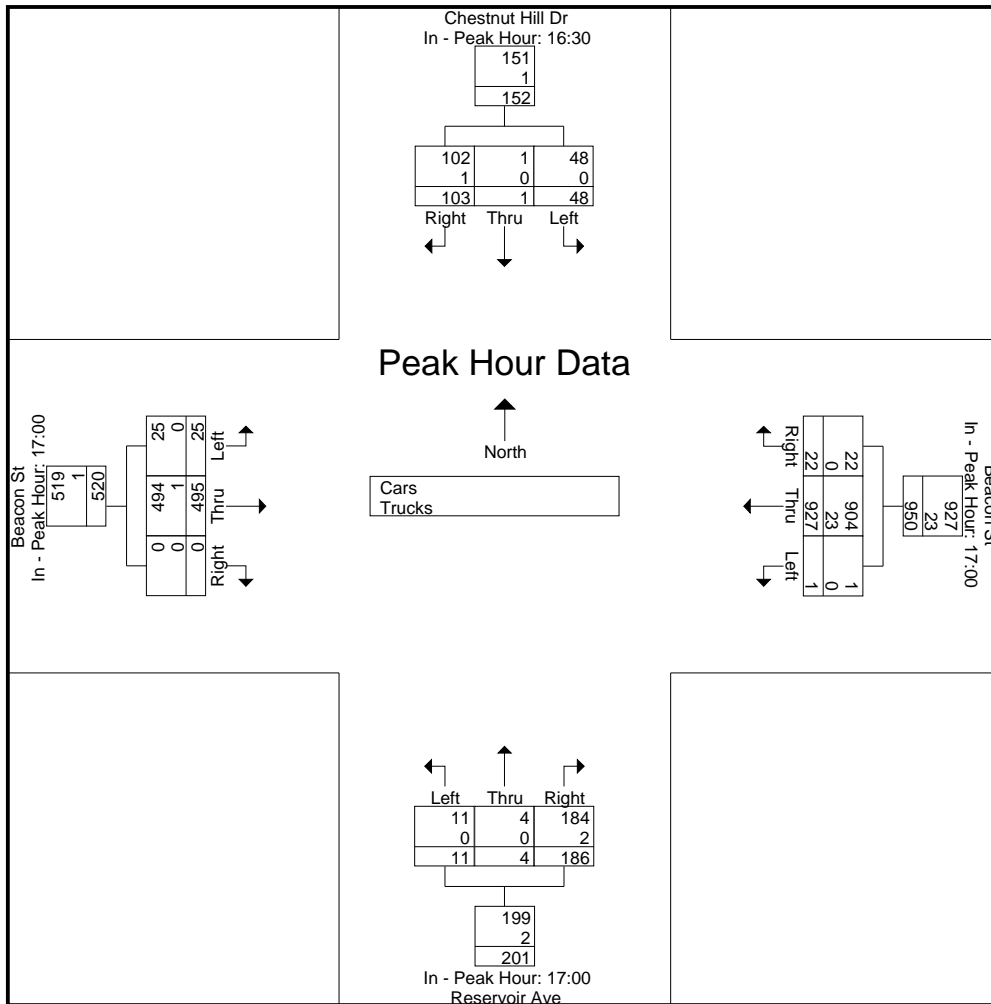
Start Time	Chestnut Hill Dr From North				Beacon St From East				Reservoir Ave From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	19	1	25	45	0	218	4	222	0	2	42	44	2	109	0	111	422
17:15	15	0	28	43	0	250	7	257	7	1	43	51	8	136	0	144	495
17:30	7	0	24	31	0	221	4	225	0	1	52	53	7	141	0	148	457
17:45	8	0	19	27	1	238	7	246	4	0	49	53	8	109	0	117	443
Total Volume	49	1	96	146	1	927	22	950	11	4	186	201	25	495	0	520	1817
% App. Total	33.6	0.7	65.8		0.1	97.6	2.3		5.5	2	92.5		4.8	95.2	0		
PHF	.645	.250	.857	.811	.250	.927	.786	.924	.393	.500	.894	.948	.781	.878	.000	.878	.918
Cars	49	1	96	146	1	904	22	927	11	4	184	199	25	494	0	519	1791
% Cars	100	100	100	100	100	97.5	100	97.6	100	100	98.9	99.0	100	99.8	0	99.8	98.6
Trucks	0	0	0	0	0	23	0	23	0	0	2	2	0	1	0	1	26
% Trucks	0	0	0	0	0	2.5	0	2.4	0	0	1.1	1.0	0	0.2	0	0.2	1.4



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:30				17:00				17:00				17:00			
+0 mins.	5	0	30	35	0	218	4	222	0	2	42	44	2	109	0	111
+15 mins.	9	0	20	29	0	250	7	257	7	1	43	51	8	136	0	144
+30 mins.	19	1	25	45	0	221	4	225	0	1	52	53	7	141	0	148
+45 mins.	15	0	28	43	1	238	7	246	4	0	49	53	8	109	0	117
Total Volume	48	1	103	152	1	927	22	950	11	4	186	201	25	495	0	520
% App. Total	31.6	0.7	67.8		0.1	97.6	2.3		5.5	2	92.5		4.8	95.2	0	
PHF	.632	.250	.858	.844	.250	.927	.786	.924	.393	.500	.894	.948	.781	.878	.000	.878
Cars	48	1	102	151	1	904	22	927	11	4	184	199	25	494	0	519
% Cars	100	100	99	99.3	100	97.5	100	97.6	100	100	98.9	99	100	99.8	0	99.8
Trucks	0	0	1	1	0	23	0	23	0	0	2	2	0	1	0	1
% Trucks	0	0	1	0.7	0	2.5	0	2.4	0	0	1.1	1	0	0.2	0	0.2



N/S Street : Reservoir Avenue  
 E/W Street: Beacon Street  
 City/State : Newton, MA  
 Weather : Clear

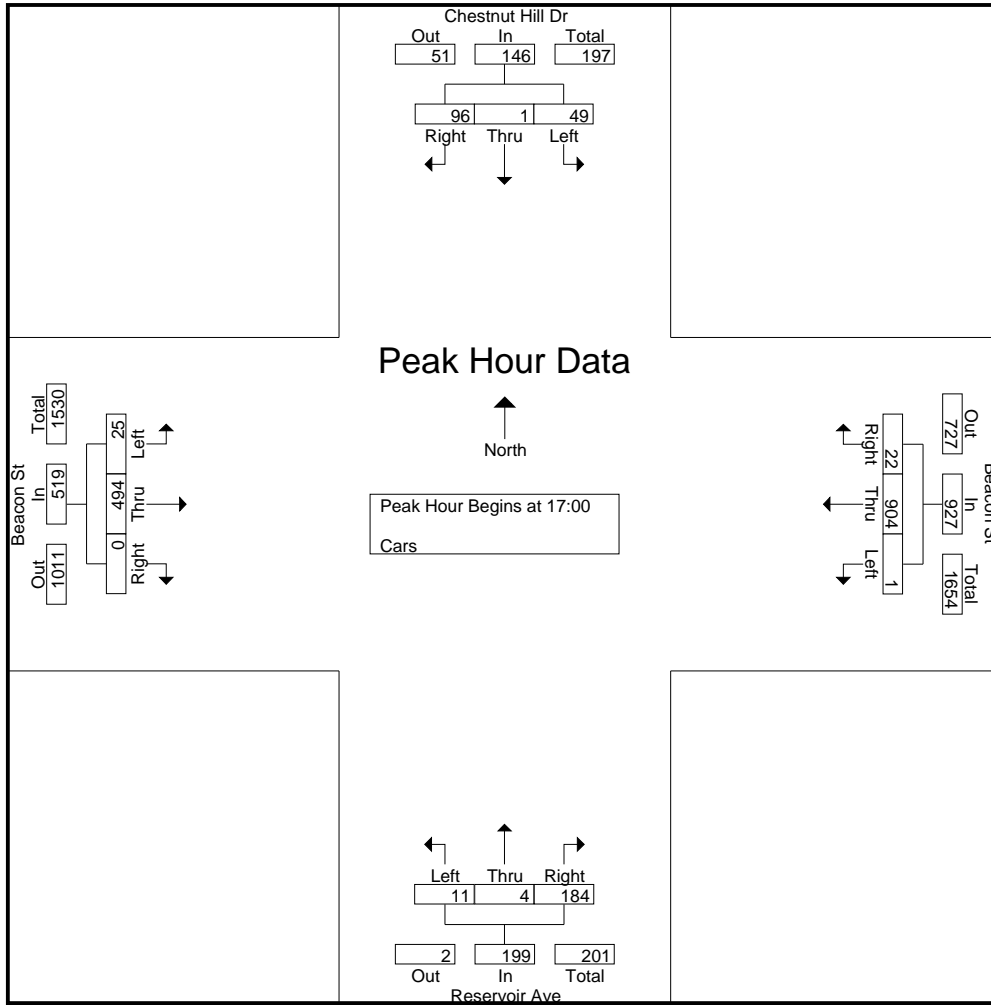
Accurate Counts  
 978-664-2565

File Name : 39000009  
 Site Code : 39000009  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Chestnut Hill Dr From North				Beacon St From East				Reservoir Ave From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	10	0	24	8	0	173	22	0	4	1	36	0	14	95	0	0	8	379	387
16:15	11	0	28	6	0	192	19	0	2	2	44	1	14	83	0	3	10	395	405
16:30	5	0	29	6	0	217	4	2	3	2	46	1	10	92	0	1	10	408	418
16:45	9	0	20	10	0	201	6	0	4	1	47	1	7	99	0	0	11	394	405
Total	35	0	101	30	0	783	51	2	13	6	173	3	45	369	0	4	39	1576	1615
17:00	19	1	25	14	0	213	4	4	0	2	41	1	2	109	0	1	20	416	436
17:15	15	0	28	8	0	246	7	1	7	1	43	0	8	136	0	2	11	491	502
17:30	7	0	24	5	0	214	4	0	0	1	51	0	7	141	0	1	6	449	455
17:45	8	0	19	15	1	231	7	0	4	0	49	1	8	108	0	4	20	435	455
Total	49	1	96	42	1	904	22	5	11	4	184	2	25	494	0	8	57	1791	1848
Grand Total	84	1	197	72	1	1687	73	7	24	10	357	5	70	863	0	12	96	3367	3463
Apprch %	29.8	0.4	69.9		0.1	95.8	4.1		6.1	2.6	91.3		7.5	92.5	0				
Total %	2.5	0	5.9		0	50.1	2.2		0.7	0.3	10.6		2.1	25.6	0		2.8	97.2	

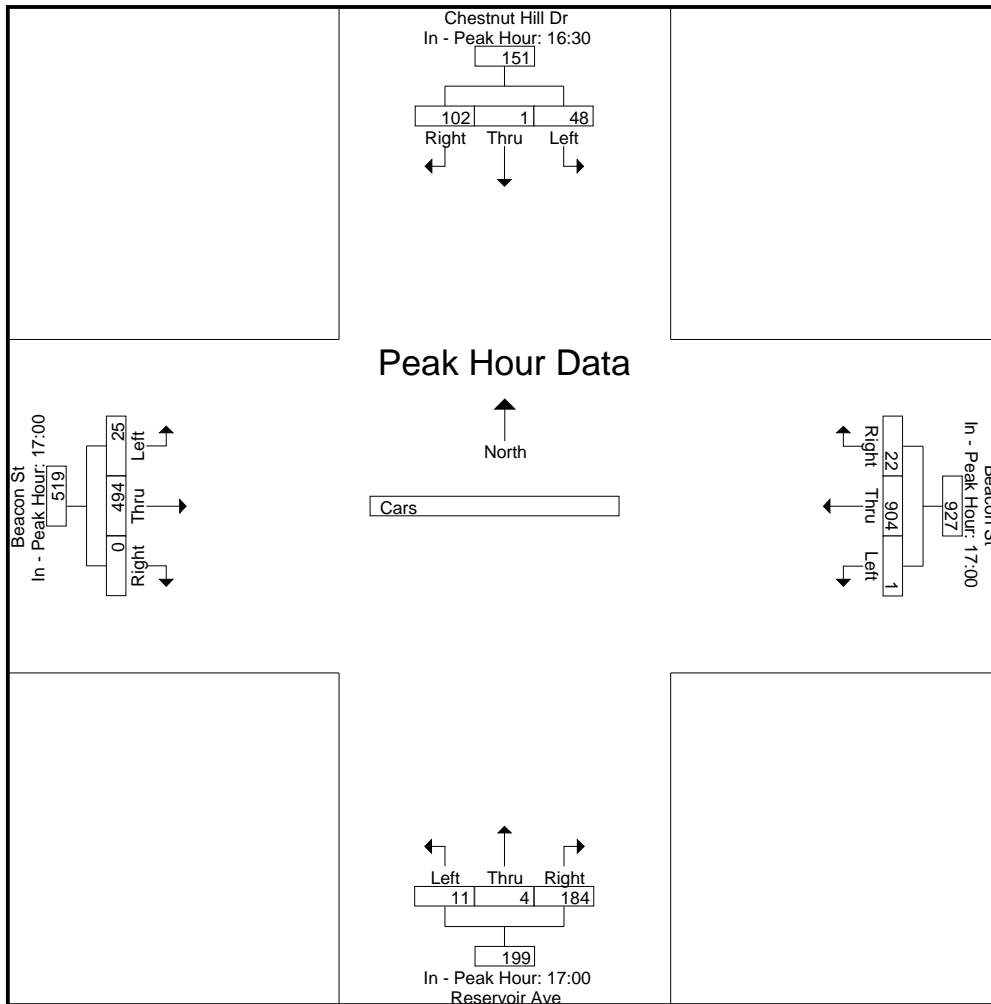
Start Time	Chestnut Hill Dr From North				Beacon St From East				Reservoir Ave From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	19	1	25	45	0	213	4	217	0	2	41	43	2	109	0	111	416
17:15	15	0	28	43	0	246	7	253	7	1	43	51	8	136	0	144	491
17:30	7	0	24	31	0	214	4	218	0	1	51	52	7	141	0	148	449
17:45	8	0	19	27	1	231	7	239	4	0	49	53	8	108	0	116	435
Total Volume	49	1	96	146	1	904	22	927	11	4	184	199	25	494	0	519	1791
% App. Total	33.6	0.7	65.8		0.1	97.5	2.4		5.5	2	92.5		4.8	95.2	0		
PHF	.645	.250	.857	.811	.250	.919	.786	.916	.393	.500	.902	.939	.781	.876	.000	.877	.912



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:30				17:00				17:00							
+0 mins.	5	0	29	34	0	213	4	217	0	2	41	43	2	109	0	111
+15 mins.	9	0	20	29	0	246	7	253	7	1	43	51	8	136	0	144
+30 mins.	19	1	25	45	0	214	4	218	0	1	51	52	7	141	0	148
+45 mins.	15	0	28	43	1	231	7	239	4	0	49	53	8	108	0	116
Total Volume	48	1	102	151	1	904	22	927	11	4	184	199	25	494	0	519
% App. Total	31.8	0.7	67.5		0.1	97.5	2.4		5.5	2	92.5		4.8	95.2	0	
PHF	.632	.250	.879	.839	.250	.919	.786	.916	.393	.500	.902	.939	.781	.876	.000	.877



N/S Street : Reservoir Avenue  
 E/W Street: Beacon Street  
 City/State : Newton, MA  
 Weather : Clear

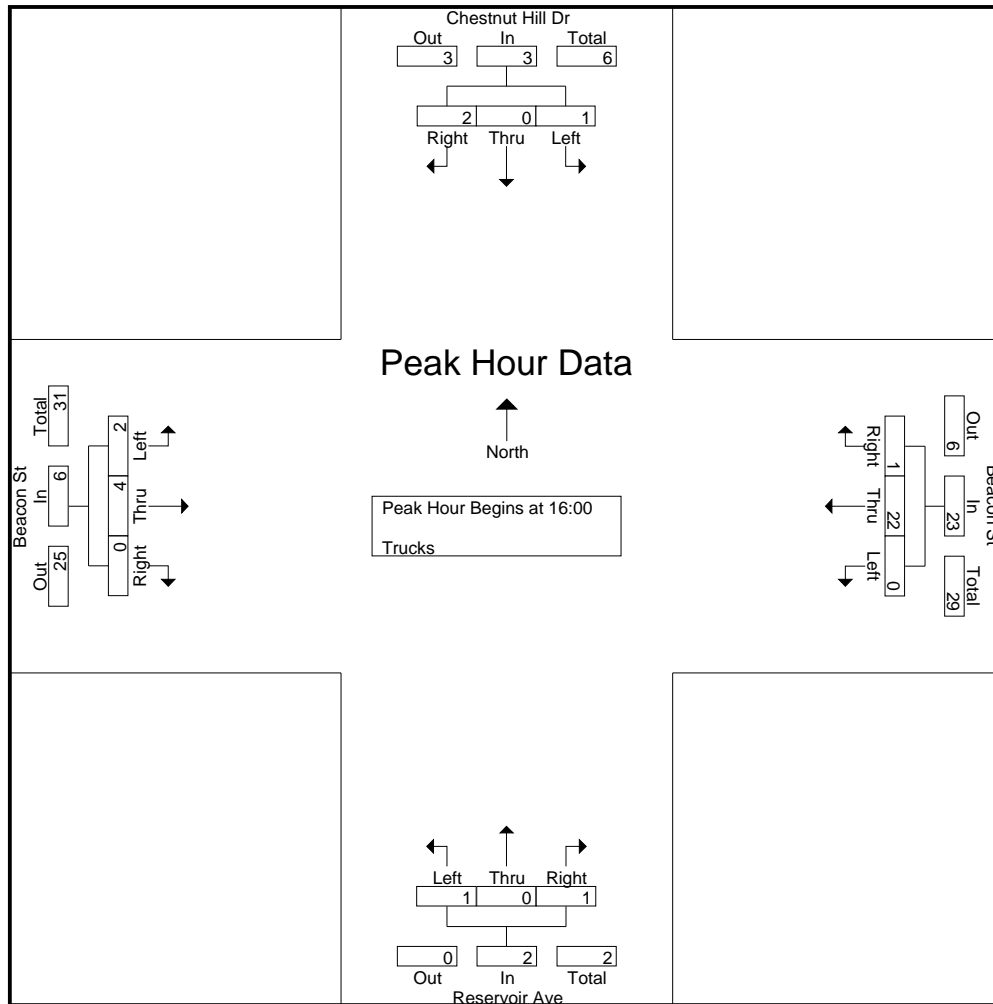
Accurate Counts  
 978-664-2565

File Name : 39000009  
 Site Code : 39000009  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Chestnut Hill Dr From North				Beacon St From East				Reservoir Ave From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds				
16:00	0	0	0	0	0	5	1	0	1	0	0	0	0	2	0	0	0	0	9	9
16:15	1	0	1	0	0	5	0	0	0	0	1	0	0	0	0	0	0	0	8	8
16:30	0	0	1	0	0	7	0	0	0	0	0	0	1	2	0	0	0	0	11	11
16:45	0	0	0	0	0	5	0	0	0	0	0	0	1	0	0	0	0	0	6	6
Total	1	0	2	0	0	22	1	0	1	0	1	0	2	4	0	0	0	0	34	34
17:00	0	0	0	0	0	5	0	0	0	0	1	0	0	0	0	0	0	0	6	6
17:15	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4	4
17:30	0	0	0	0	0	7	0	0	0	0	1	0	0	0	0	0	0	0	8	8
17:45	0	0	0	0	0	7	0	0	0	0	0	0	0	1	0	0	0	0	8	8
Total	0	0	0	0	0	23	0	0	0	0	2	0	0	1	0	0	0	0	26	26
Grand Total	1	0	2	0	0	45	1	0	1	0	3	0	2	5	0	0	0	0	60	60
Apprch %	33.3	0	66.7		0	97.8	2.2		25	0	75		28.6	71.4	0					
Total %	1.7	0	3.3		0	75	1.7		1.7	0	5		3.3	8.3	0			0	100	

Start Time	Chestnut Hill Dr From North				Beacon St From East				Reservoir Ave From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:00																	
16:00	0	0	0	0	0	5	1	6	1	0	0	1	0	2	0	2	9
16:15	1	0	1	2	0	5	0	5	0	0	1	1	0	0	0	0	8
16:30	0	0	1	1	0	7	0	7	0	0	0	0	1	2	0	3	11
16:45	0	0	0	0	0	5	0	5	0	0	0	0	1	0	0	1	6
Total Volume	1	0	2	3	0	22	1	23	1	0	1	2	2	4	0	6	34
% App. Total	33.3	0	66.7		0	95.7	4.3		50	0	50		33.3	66.7	0		
PHF	.250	.000	.500	.375	.000	.786	.250	.821	.250	.000	.250	.500	.500	.500	.000	.500	.773

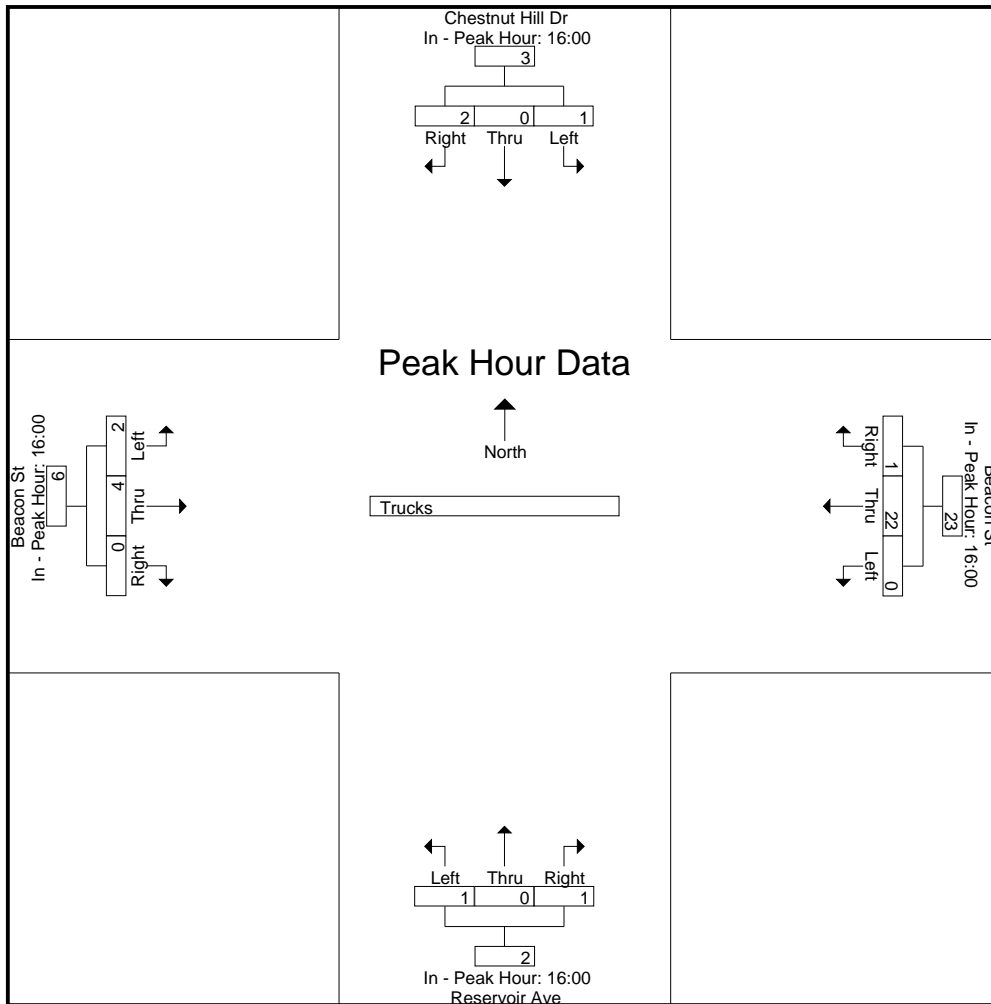


Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00				16:00				16:00				16:00			
+0 mins.	0	0	0	0	0	5	1	6	1	0	0	1	0	2	0	2
+15 mins.	1	0	1	2	0	5	0	5	0	0	1	1	0	0	0	0
+30 mins.	0	0	1	1	0	7	0	7	0	0	0	0	1	2	0	3
+45 mins.	0	0	0	0	0	5	0	5	0	0	0	0	1	0	0	1
Total Volume	1	0	2	3	0	22	1	23	1	0	1	2	2	4	0	6
% App. Total	33.3	0	66.7		0	95.7	4.3		50	0	50		33.3	66.7	0	
PHF	.250	.000	.500	.375	.000	.786	.250	.821	.250	.000	.250	.500	.500	.500	.000	.500





N/S Street : St Thomas Moore Road  
 E/W Street: Beacon Street  
 City/State : Brighton, MA  
 Weather : Clear

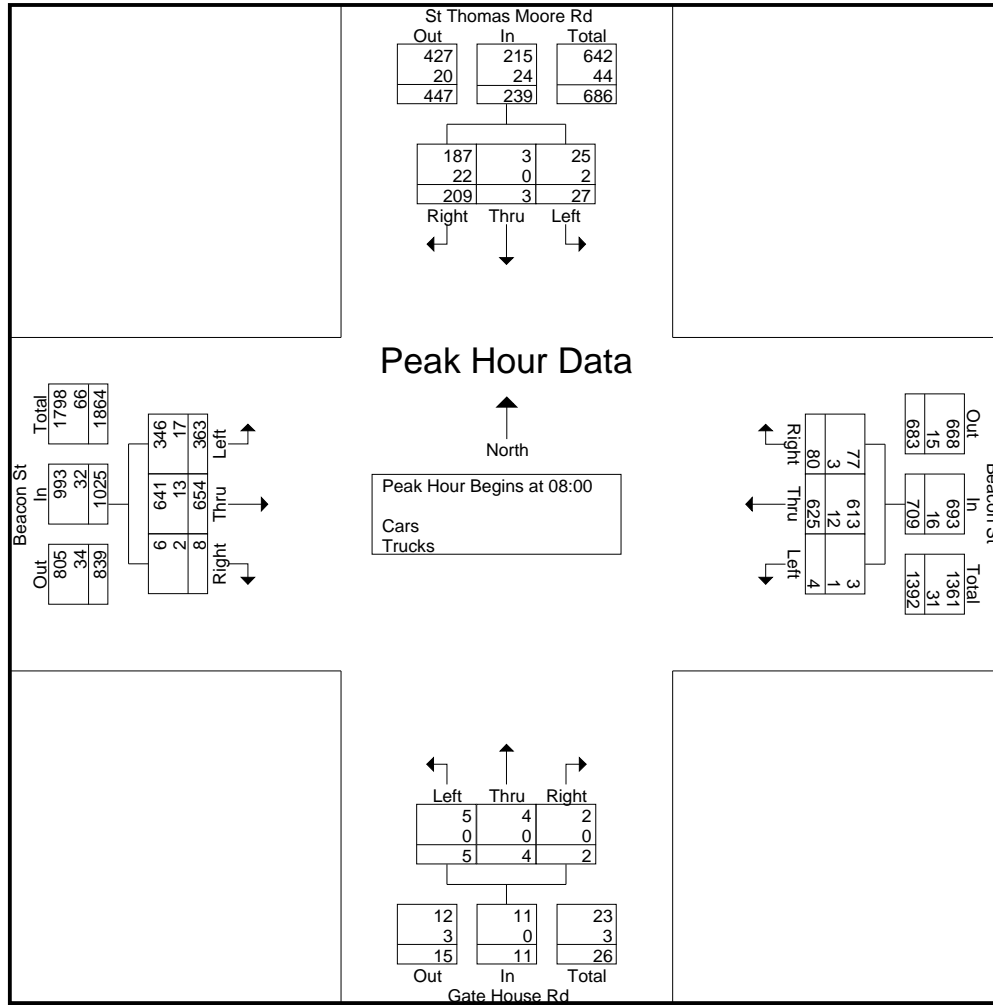
Accurate Counts  
 978-664-2565

File Name : 39000015  
 Site Code : 39000015  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	St Thomas Moore Rd From North				Beacon St From East				Gate House Rd From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	2	1	32	2	1	66	8	0	0	0	0	3	49	81	1	1	6	241	247
07:15	6	0	36	0	0	89	9	0	2	3	1	0	72	120	1	0	0	339	339
07:30	5	2	56	2	0	113	14	1	1	1	0	0	66	141	1	0	3	400	403
07:45	4	0	52	3	0	131	20	0	1	1	2	2	100	189	3	0	5	503	508
Total	17	3	176	7	1	399	51	1	4	5	3	5	287	531	6	1	14	1483	1497
08:00	8	0	49	2	0	136	7	0	0	0	0	3	89	154	3	0	5	446	451
08:15	5	0	53	2	2	175	27	0	3	3	1	0	90	158	0	0	2	517	519
08:30	6	2	58	1	1	153	18	2	1	1	1	0	92	167	2	0	3	502	505
08:45	8	1	49	0	1	161	28	0	1	0	0	0	92	175	3	2	2	519	521
Total	27	3	209	5	4	625	80	2	5	4	2	3	363	654	8	2	12	1984	1996
Grand Total	44	6	385	12	5	1024	131	3	9	9	5	8	650	1185	14	3	26	3467	3493
Apprch %	10.1	1.4	88.5		0.4	88.3	11.3		39.1	39.1	21.7		35.2	64.1	0.8				
Total %	1.3	0.2	11.1		0.1	29.5	3.8		0.3	0.3	0.1		18.7	34.2	0.4		0.7	99.3	
Cars	42	6	343		3	1003	126		9	9	5		619	1160	9		0	0	3360
% Cars	95.5	100	89.1	100	60	97.9	96.2	100	100	100	100	100	95.2	97.9	64.3	100	0	0	96.2
Trucks	2	0	42		2	21	5		0	0	0		31	25	5		0	0	133
% Trucks	4.5	0	10.9	0	40	2.1	3.8	0	0	0	0	0	4.8	2.1	35.7	0	0	0	3.8

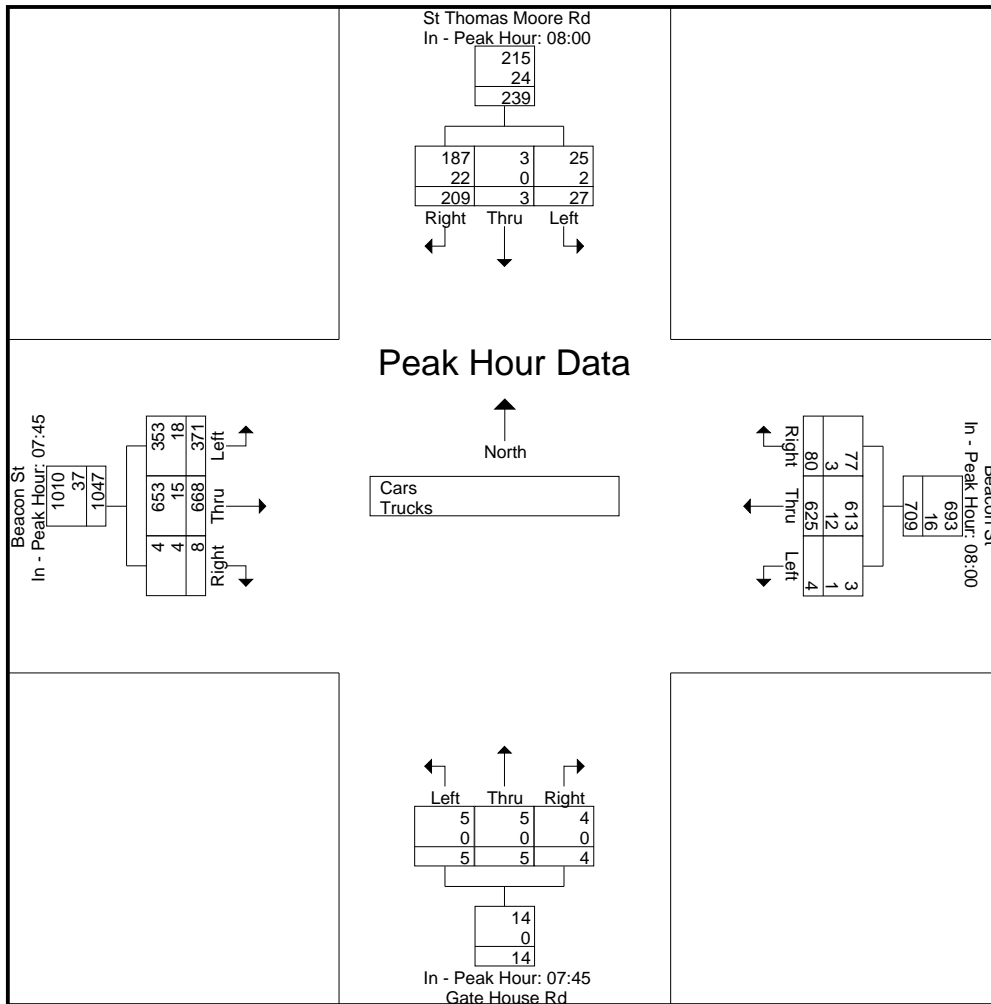
Start Time	St Thomas Moore Rd From North				Beacon St From East				Gate House Rd From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00																	
08:00	8	0	49	57	0	136	7	143	0	0	0	0	89	154	3	246	446
08:15	5	0	53	58	2	175	27	204	3	3	1	7	90	158	0	248	517
08:30	6	2	58	66	1	153	18	172	1	1	1	3	92	167	2	261	502
08:45	8	1	49	58	1	161	28	190	1	0	0	1	92	175	3	270	519
Total Volume	27	3	209	239	4	625	80	709	5	4	2	11	363	654	8	1025	1984
% App. Total	11.3	1.3	87.4		0.6	88.2	11.3		45.5	36.4	18.2		35.4	63.8	0.8		
PHF	.844	.375	.901	.905	.500	.893	.714	.869	.417	.333	.500	.393	.986	.934	.667	.949	.956
Cars	25	3	187	215	3	613	77	693	5	4	2	11	346	641	6	993	1912
% Cars	92.6	100	89.5	90.0	75.0	98.1	96.3	97.7	100	100	100	100	95.3	98.0	75.0	96.9	96.4
Trucks	2	0	22	24	1	12	3	16	0	0	0	0	17	13	2	32	72
% Trucks	7.4	0	10.5	10.0	25.0	1.9	3.8	2.3	0	0	0	0	4.7	2.0	25.0	3.1	3.6



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00				08:00				07:45				07:45			
+0 mins.	8	0	49	57	0	136	7	143	1	1	2	4	100	189	3	292
+15 mins.	5	0	53	58	2	175	27	204	0	0	0	0	89	154	3	246
+30 mins.	6	2	58	66	1	153	18	172	3	3	1	7	90	158	0	248
+45 mins.	8	1	49	58	1	161	28	190	1	1	1	3	92	167	2	261
Total Volume	27	3	209	239	4	625	80	709	5	5	4	14	371	668	8	1047
% App. Total	11.3	1.3	87.4		0.6	88.2	11.3		35.7	35.7	28.6		35.4	63.8	0.8	
PHF	.844	.375	.901	.905	.500	.893	.714	.869	.417	.417	.500	.500	.928	.884	.667	.896
Cars	25	3	187	215	3	613	77	693	5	5	4	14	353	653	4	1010
% Cars	92.6	100	89.5	90	75	98.1	96.2	97.7	100	100	100	100	95.1	97.8	50	96.5
Trucks	2	0	22	24	1	12	3	16	0	0	0	0	18	15	4	37
% Trucks	7.4	0	10.5	10	25	1.9	3.8	2.3	0	0	0	0	4.9	2.2	50	3.5



N/S Street : St Thomas Moore Road  
 E/W Street: Beacon Street  
 City/State : Brighton, MA  
 Weather : Clear

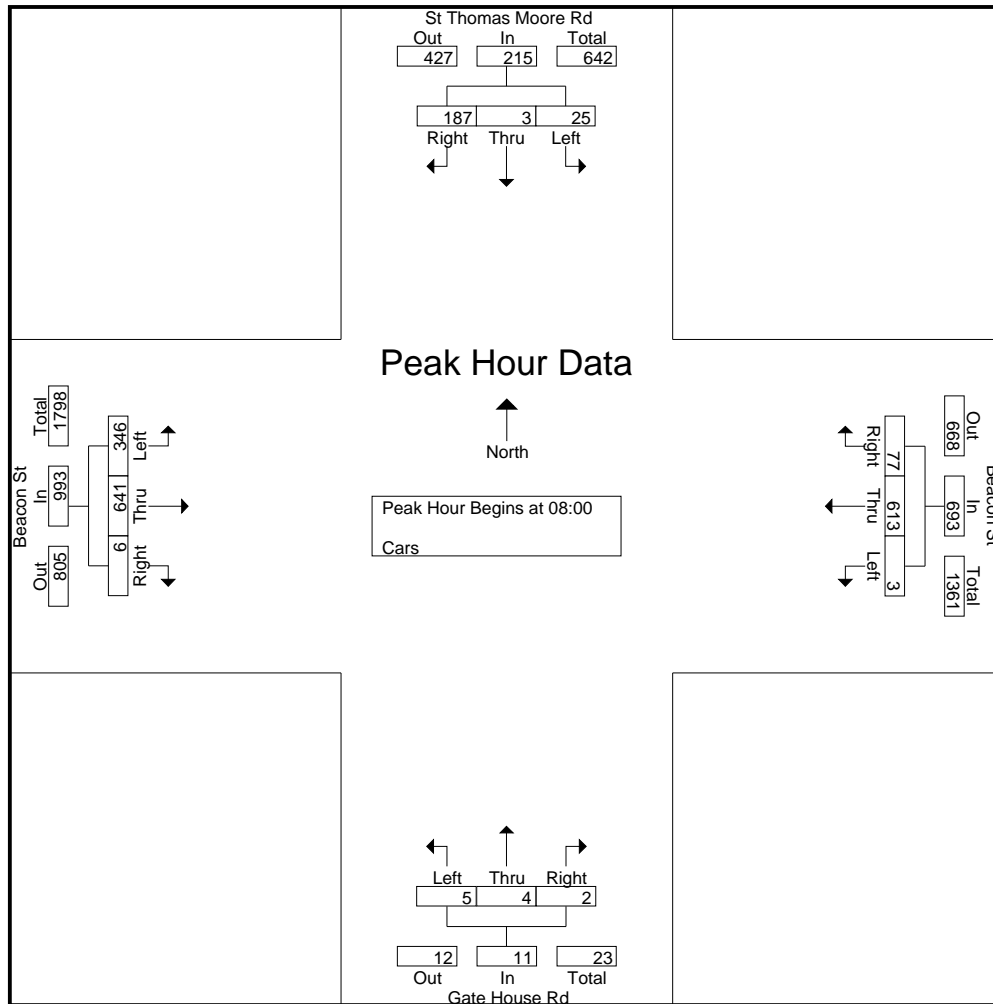
Accurate Counts  
 978-664-2565

File Name : 39000015  
 Site Code : 39000015  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

Start Time	St Thomas Moore Rd From North				Beacon St From East				Gate House Rd From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	2	1	30	2	0	65	8	0	0	0	0	3	46	78	0	1	6	230	236
07:15	6	0	32	0	0	85	9	0	2	3	1	0	68	117	1	0	0	324	324
07:30	5	2	49	2	0	110	13	1	1	1	0	0	64	139	1	0	3	385	388
07:45	4	0	45	3	0	130	19	0	1	1	2	2	95	185	1	0	5	483	488
Total	17	3	156	7	0	390	49	1	4	5	3	5	273	519	3	1	14	1422	1436
08:00	7	0	44	2	0	136	7	0	0	0	0	3	82	150	1	0	5	427	432
08:15	4	0	49	2	1	169	24	0	3	3	1	0	89	154	0	0	2	497	499
08:30	6	2	51	1	1	152	18	2	1	1	1	0	87	164	2	0	3	486	489
08:45	8	1	43	0	1	156	28	0	1	0	0	0	88	173	3	2	2	502	504
Total	25	3	187	5	3	613	77	2	5	4	2	3	346	641	6	2	12	1912	1924
Grand Total	42	6	343	12	3	1003	126	3	9	9	5	8	619	1160	9	3	26	3334	3360
Apprch %	10.7	1.5	87.7		0.3	88.6	11.1		39.1	39.1	21.7		34.6	64.9	0.5				
Total %	1.3	0.2	10.3		0.1	30.1	3.8		0.3	0.3	0.1		18.6	34.8	0.3		0.8	99.2	

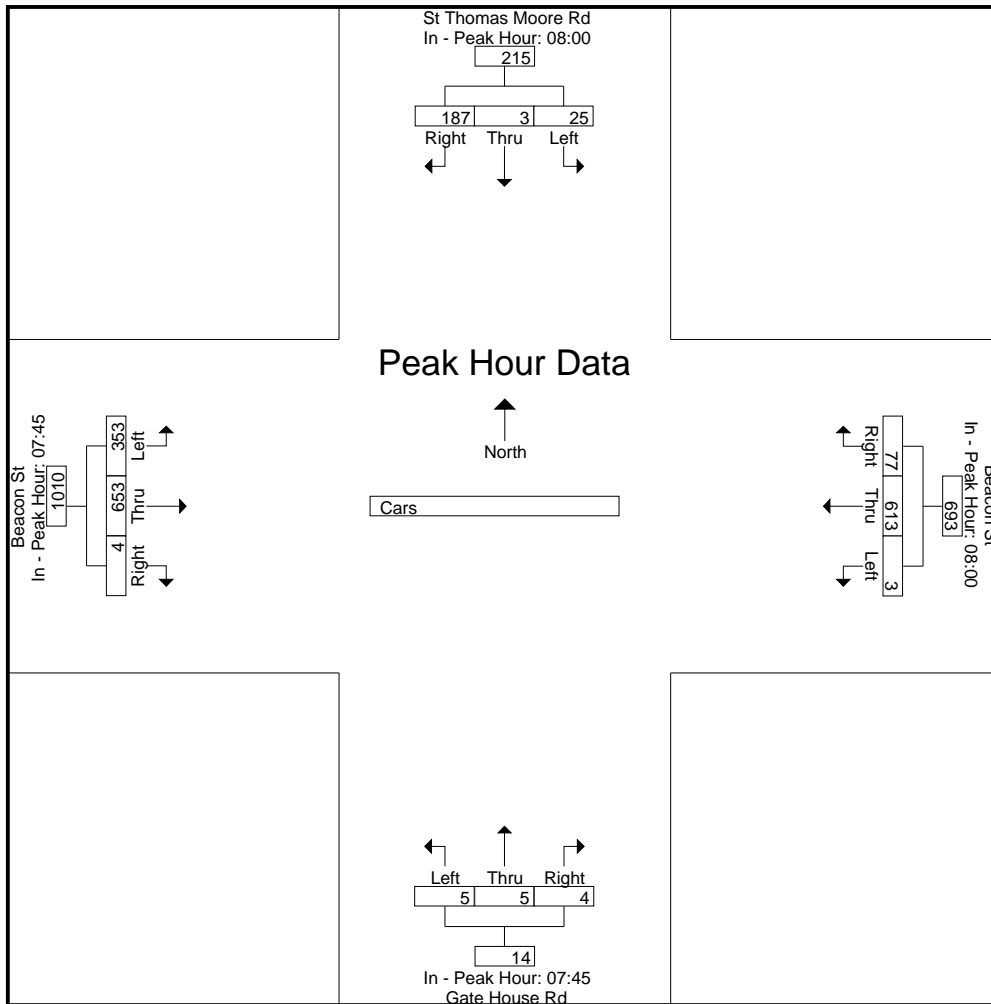
Start Time	St Thomas Moore Rd From North				Beacon St From East				Gate House Rd From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00																	
08:00	7	0	44	51	0	136	7	143	0	0	0	0	82	150	1	233	427
08:15	4	0	49	53	1	169	24	194	3	3	1	7	89	154	0	243	497
08:30	6	2	51	59	1	152	18	171	1	1	1	3	87	164	2	253	486
08:45	8	1	43	52	1	156	28	185	1	0	0	1	88	173	3	264	502
Total Volume	25	3	187	215	3	613	77	693	5	4	2	11	346	641	6	993	1912
% App. Total	11.6	1.4	87		0.4	88.5	11.1		45.5	36.4	18.2		34.8	64.6	0.6		
PHF	.781	.375	.917	.911	.750	.907	.688	.893	.417	.333	.500	.393	.972	.926	.500	.940	.952



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00				08:00				07:45				07:45			
+0 mins.	7	0	44	51	0	136	7	143	1	1	2	4	95	185	1	281
+15 mins.	4	0	49	53	1	169	24	194	0	0	0	0	82	150	1	233
+30 mins.	6	2	51	59	1	152	18	171	3	3	1	7	89	154	0	243
+45 mins.	8	1	43	52	1	156	28	185	1	1	1	3	87	164	2	253
Total Volume	25	3	187	215	3	613	77	693	5	5	4	14	353	653	4	1010
% App. Total	11.6	1.4	87		0.4	88.5	11.1		35.7	35.7	28.6		35	64.7	0.4	
PHF	.781	.375	.917	.911	.750	.907	.688	.893	.417	.417	.500	.500	.929	.882	.500	.899



N/S Street : St Thomas Moore Road  
 E/W Street: Beacon Street  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

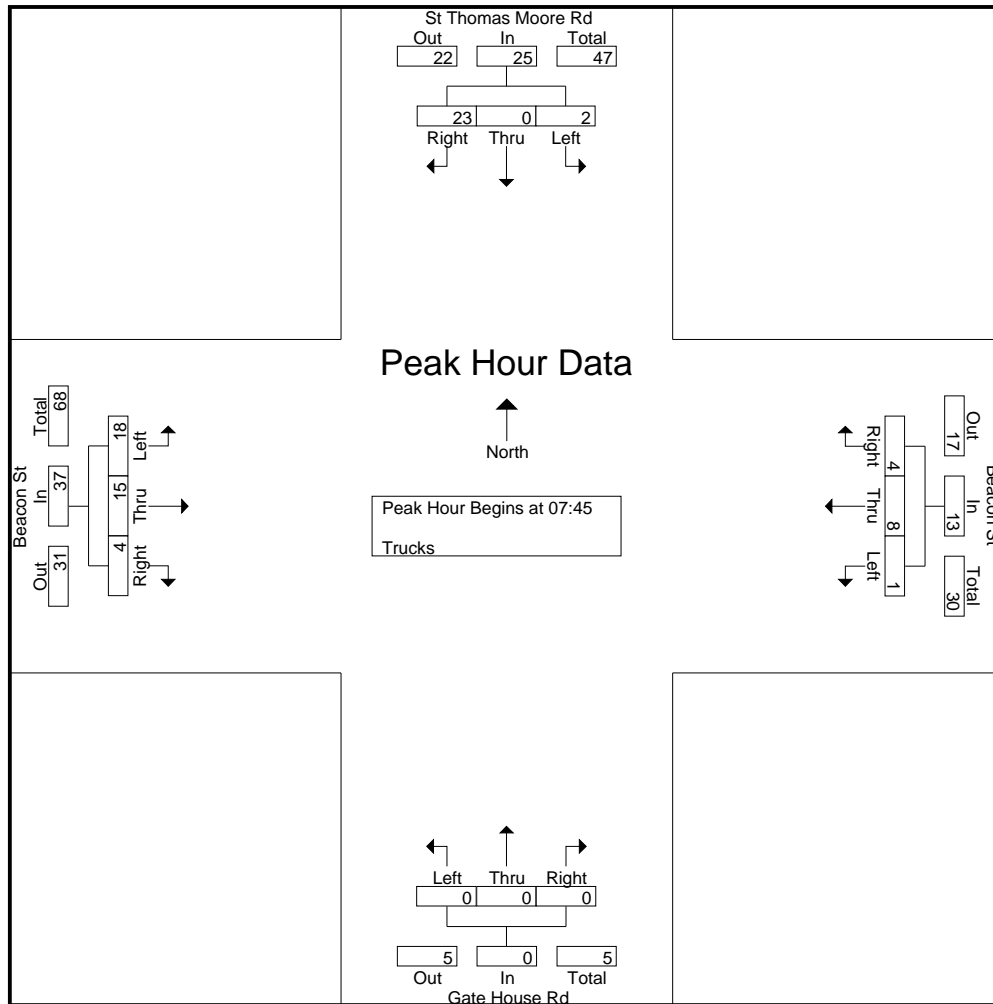
File Name : 39000015  
 Site Code : 39000015  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	St Thomas Moore Rd From North				Beacon St From East				Gate House Rd From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	0	0	2	0	1	1	0	0	0	0	0	0	3	3	1	0	0	11	11
07:15	0	0	4	0	0	4	0	0	0	0	0	0	4	3	0	0	0	15	15
07:30	0	0	7	0	0	3	1	0	0	0	0	0	2	2	0	0	0	15	15
07:45	0	0	7	0	0	1	1	0	0	0	0	0	5	4	2	0	0	20	20
Total	0	0	20	0	1	9	2	0	0	0	0	0	14	12	3	0	0	61	61
08:00	1	0	5	0	0	0	0	0	0	0	0	0	7	4	2	0	0	19	19
08:15	1	0	4	0	1	6	3	0	0	0	0	0	1	4	0	0	0	20	20
08:30	0	0	7	0	0	1	0	0	0	0	0	0	5	3	0	0	0	16	16
08:45	0	0	6	0	0	5	0	0	0	0	0	0	4	2	0	0	0	17	17
Total	2	0	22	0	1	12	3	0	0	0	0	0	17	13	2	0	0	72	72
Grand Total	2	0	42	0	2	21	5	0	0	0	0	0	31	25	5	0	0	133	133
Apprch %	4.5	0	95.5		7.1	75	17.9		0	0	0		50.8	41	8.2				
Total %	1.5	0	31.6		1.5	15.8	3.8		0	0	0		23.3	18.8	3.8		0	100	

Start Time	St Thomas Moore Rd From North				Beacon St From East				Gate House Rd From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	0	0	7	7	0	1	1	2	0	0	0	0	5	4	2	11	20
08:00	1	0	5	6	0	0	0	0	0	0	0	0	7	4	2	13	19
08:15	1	0	4	5	1	6	3	10	0	0	0	0	1	4	0	5	20
08:30	0	0	7	7	0	1	0	1	0	0	0	0	5	3	0	8	16
Total Volume	2	0	23	25	1	8	4	13	0	0	0	0	18	15	4	37	75
% App. Total	8	0	92		7.7	61.5	30.8		0	0	0		48.6	40.5	10.8		
PHF	.500	.000	.821	.893	.250	.333	.333	.325	.000	.000	.000	.000	.643	.938	.500	.712	.938

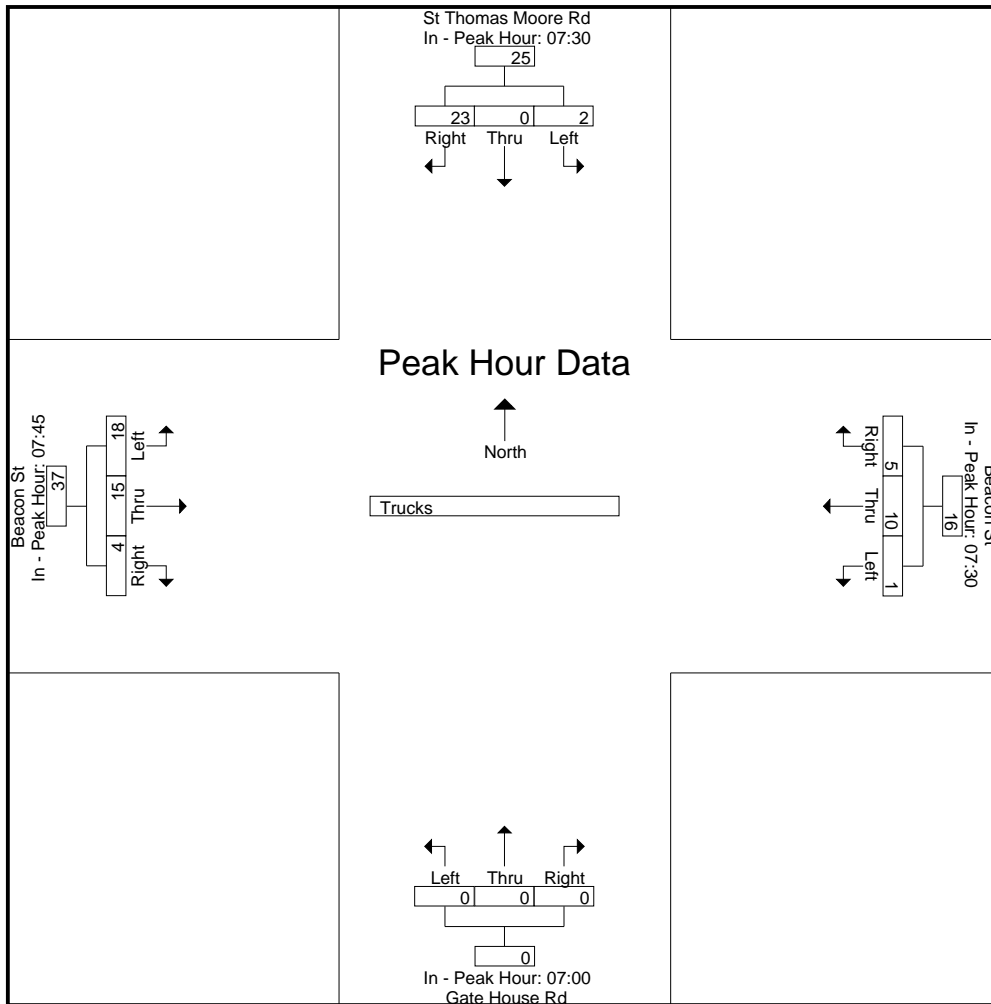




Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30				07:00				07:45							
+0 mins.	0	0	7	7	0	3	1	4	0	0	0	0	5	4	2	11
+15 mins.	0	0	7	7	0	1	1	2	0	0	0	0	7	4	2	13
+30 mins.	1	0	5	6	0	0	0	0	0	0	0	0	1	4	0	5
+45 mins.	1	0	4	5	1	6	3	10	0	0	0	0	5	3	0	8
Total Volume	2	0	23	25	1	10	5	16	0	0	0	0	18	15	4	37
% App. Total	8	0	92		6.2	62.5	31.2		0	0	0		48.6	40.5	10.8	
PHF	.500	.000	.821	.893	.250	.417	.417	.400	.000	.000	.000	.000	.643	.938	.500	.712



N/S Street : St Thomas Moore Road  
 E/W Street: Beacon Street  
 City/State : Brighton, MA  
 Weather : Clear

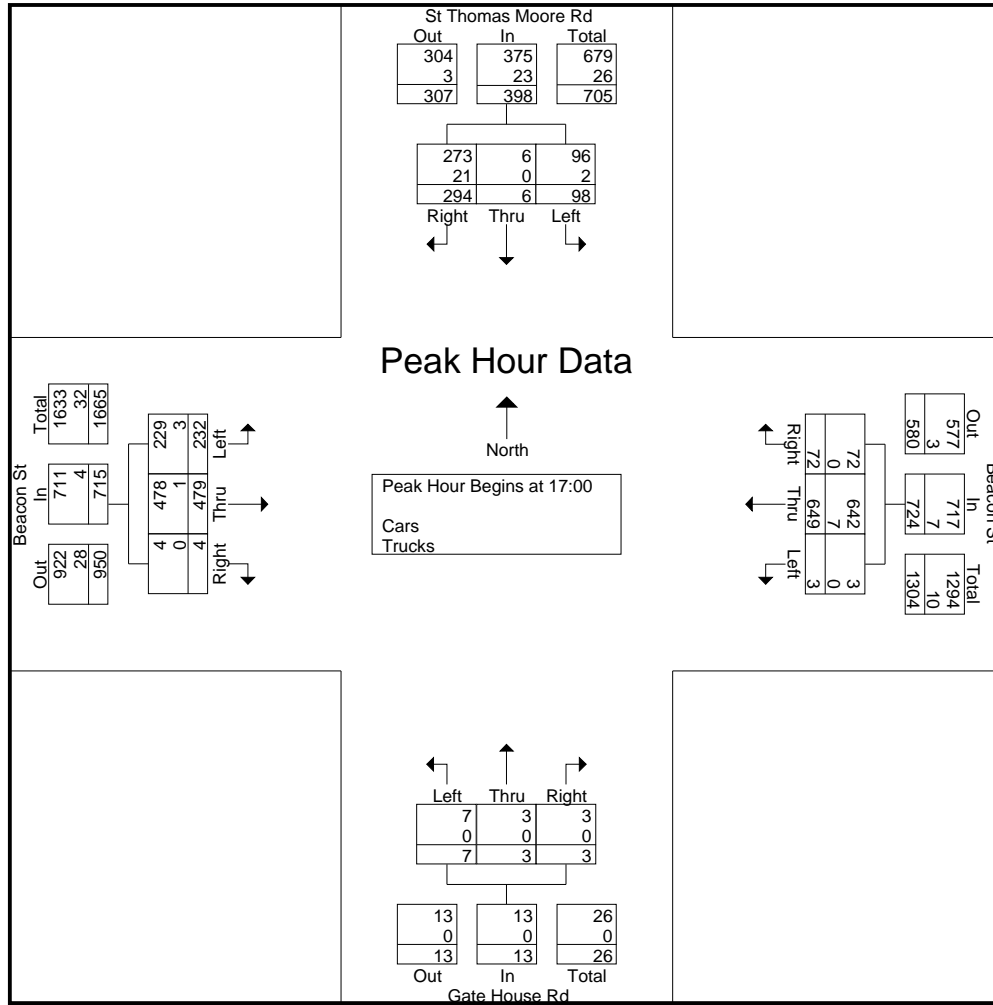
Accurate Counts  
 978-664-2565

File Name : 39000015  
 Site Code : 39000015  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	St Thomas Moore Rd From North				Beacon St From East				Gate House Rd From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	19	0	79	4	0	116	22	1	0	1	0	0	66	79	2	0	5	384	389
16:15	17	4	80	8	3	133	20	0	0	2	3	4	52	81	2	0	12	397	409
16:30	23	1	72	3	0	155	16	1	3	0	2	2	44	95	0	0	6	411	417
16:45	10	3	63	8	3	147	13	3	1	0	1	0	59	90	1	0	11	391	402
Total	69	8	294	23	6	551	71	5	4	3	6	6	221	345	5	0	34	1583	1617
17:00	29	0	79	7	2	143	12	0	1	1	0	1	54	104	1	0	8	426	434
17:15	22	1	78	7	0	181	14	1	1	2	3	0	63	141	1	0	8	507	515
17:30	21	2	61	3	1	159	22	0	3	0	0	0	53	128	1	0	3	451	454
17:45	26	3	76	8	0	166	24	0	2	0	0	1	62	106	1	4	13	466	479
Total	98	6	294	25	3	649	72	1	7	3	3	2	232	479	4	4	32	1850	1882
Grand Total	167	14	588	48	9	1200	143	6	11	6	9	8	453	824	9	4	66	3433	3499
Apprch %	21.7	1.8	76.5		0.7	88.8	10.6		42.3	23.1	34.6		35.2	64.1	0.7				
Total %	4.9	0.4	17.1		0.3	35	4.2		0.3	0.2	0.3		13.2	24	0.3		1.9	98.1	
Cars	165	14	542		9	1184	143		11	6	9		446	819	8		0	0	3422
% Cars	98.8	100	92.2	100	100	98.7	100	100	100	100	100	100	98.5	99.4	88.9	100	0	0	97.8
Trucks	2	0	46		0	16	0		0	0	0		7	5	1		0	0	77
% Trucks	1.2	0	7.8	0	0	1.3	0	0	0	0	0	0	1.5	0.6	11.1	0	0	0	2.2

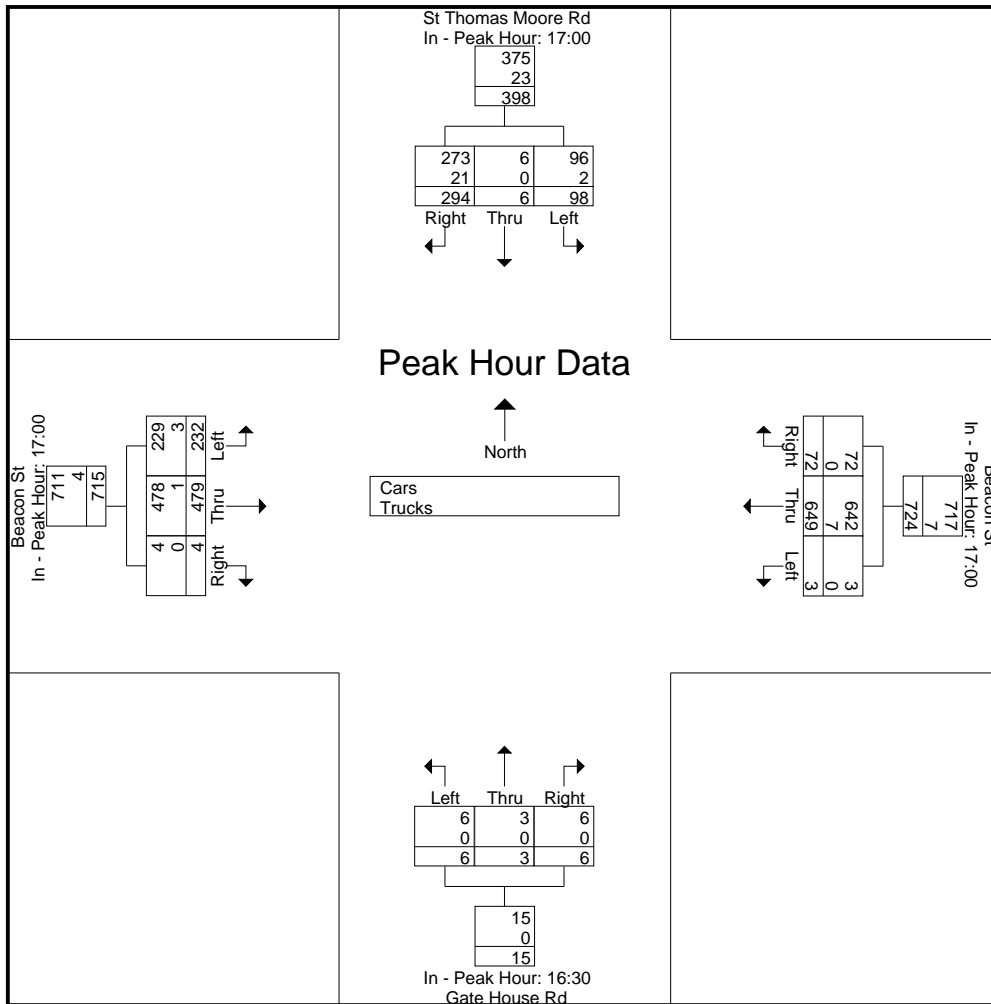
Start Time	St Thomas Moore Rd From North				Beacon St From East				Gate House Rd From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	29	0	79	108	2	143	12	157	1	1	0	2	54	104	1	159	426
17:15	22	1	78	101	0	181	14	195	1	2	3	6	63	141	1	205	507
17:30	21	2	61	84	1	159	22	182	3	0	0	3	53	128	1	182	451
17:45	26	3	76	105	0	166	24	190	2	0	0	2	62	106	1	169	466
Total Volume	98	6	294	398	3	649	72	724	7	3	3	13	232	479	4	715	1850
% App. Total	24.6	1.5	73.9		0.4	89.6	9.9		53.8	23.1	23.1		32.4	67	0.6		
PHF	.845	.500	.930	.921	.375	.896	.750	.928	.583	.375	.250	.542	.921	.849	1.000	.872	.912
Cars	96	6	273	375	3	642	72	717	7	3	3	13	229	478	4	711	1816
% Cars	98.0	100	92.9	94.2	100	98.9	100	99.0	100	100	100	100	98.7	99.8	100	99.4	98.2
Trucks	2	0	21	23	0	7	0	7	0	0	0	0	3	1	0	4	34
% Trucks	2.0	0	7.1	5.8	0	1.1	0	1.0	0	0	0	0	1.3	0.2	0	0.6	1.8



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00				17:00				16:30				17:00			
+0 mins.	29	0	79	108	2	143	12	157	3	0	2	5	54	104	1	159
+15 mins.	22	1	78	101	0	181	14	195	1	0	1	2	63	141	1	205
+30 mins.	21	2	61	84	1	159	22	182	1	1	0	2	53	128	1	182
+45 mins.	26	3	76	105	0	166	24	190	1	2	3	6	62	106	1	169
Total Volume	98	6	294	398	3	649	72	724	6	3	6	15	232	479	4	715
% App. Total	24.6	1.5	73.9		0.4	89.6	9.9		40	20	40		32.4	67	0.6	
PHF	.845	.500	.930	.921	.375	.896	.750	.928	.500	.375	.500	.625	.921	.849	1.000	.872
Cars	96	6	273	375	3	642	72	717	6	3	6	15	229	478	4	711
% Cars	98	100	92.9	94.2	100	98.9	100	99	100	100	100	100	98.7	99.8	100	99.4
Trucks	2	0	21	23	0	7	0	7	0	0	0	0	3	1	0	4
% Trucks	2	0	7.1	5.8	0	1.1	0	1	0	0	0	0	1.3	0.2	0	0.6



N/S Street : St Thomas Moore Road  
 E/W Street: Beacon Street  
 City/State : Brighton, MA  
 Weather : Clear

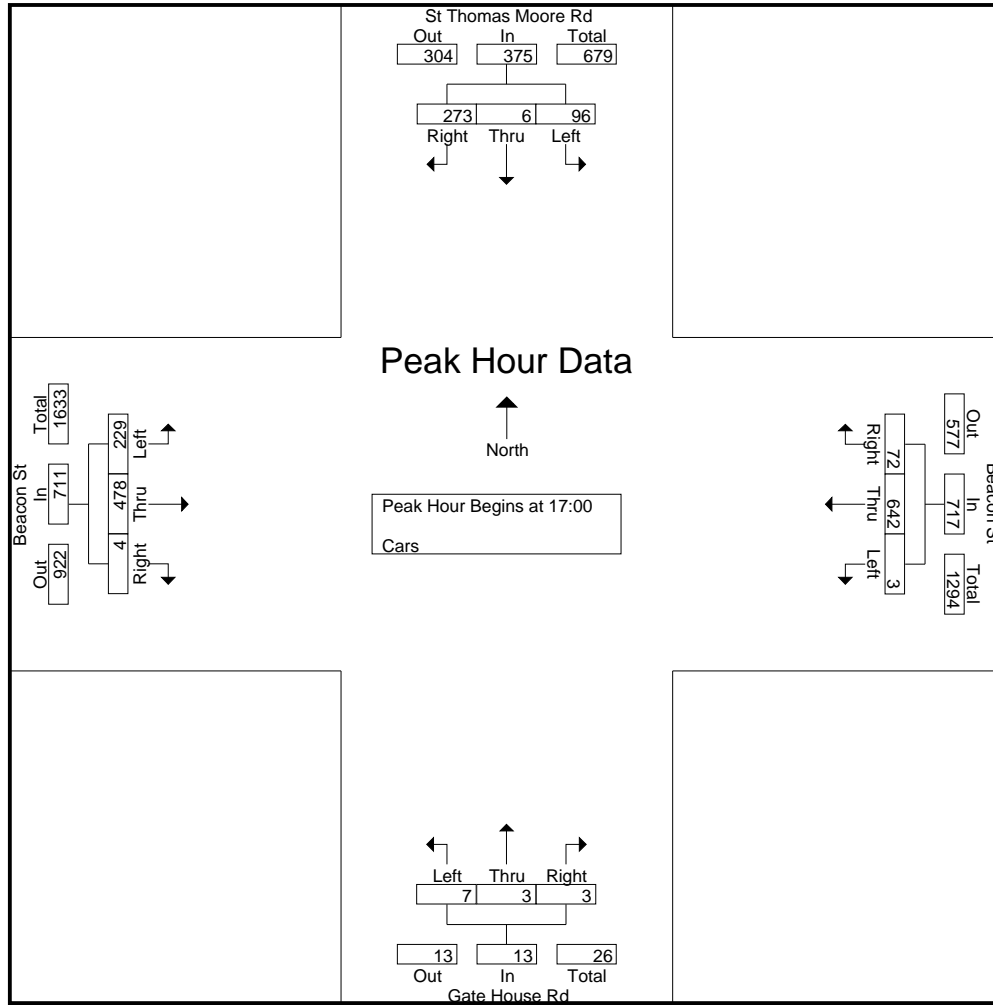
Accurate Counts  
 978-664-2565

File Name : 39000015  
 Site Code : 39000015  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Cars

Start Time	St Thomas Moore Rd From North				Beacon St From East				Gate House Rd From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	19	0	71	4	0	114	22	1	0	1	0	0	64	77	2	0	5	370	375
16:15	17	4	76	8	3	131	20	0	0	2	3	4	51	79	1	0	12	387	399
16:30	23	1	65	3	0	151	16	1	3	0	2	2	43	95	0	0	6	399	405
16:45	10	3	57	8	3	146	13	3	1	0	1	0	59	90	1	0	11	384	395
Total	69	8	269	23	6	542	71	5	4	3	6	6	217	341	4	0	34	1540	1574
17:00	27	0	74	7	2	141	12	0	1	1	0	1	53	103	1	0	8	415	423
17:15	22	1	73	7	0	180	14	1	1	2	3	0	63	141	1	0	8	501	509
17:30	21	2	55	3	1	159	22	0	3	0	0	0	52	128	1	0	3	444	447
17:45	26	3	71	8	0	162	24	0	2	0	0	1	61	106	1	4	13	456	469
Total	96	6	273	25	3	642	72	1	7	3	3	2	229	478	4	4	32	1816	1848
Grand Total	165	14	542	48	9	1184	143	6	11	6	9	8	446	819	8	4	66	3356	3422
Apprch %	22.9	1.9	75.2		0.7	88.6	10.7		42.3	23.1	34.6		35	64.3	0.6				
Total %	4.9	0.4	16.2		0.3	35.3	4.3		0.3	0.2	0.3		13.3	24.4	0.2		1.9	98.1	

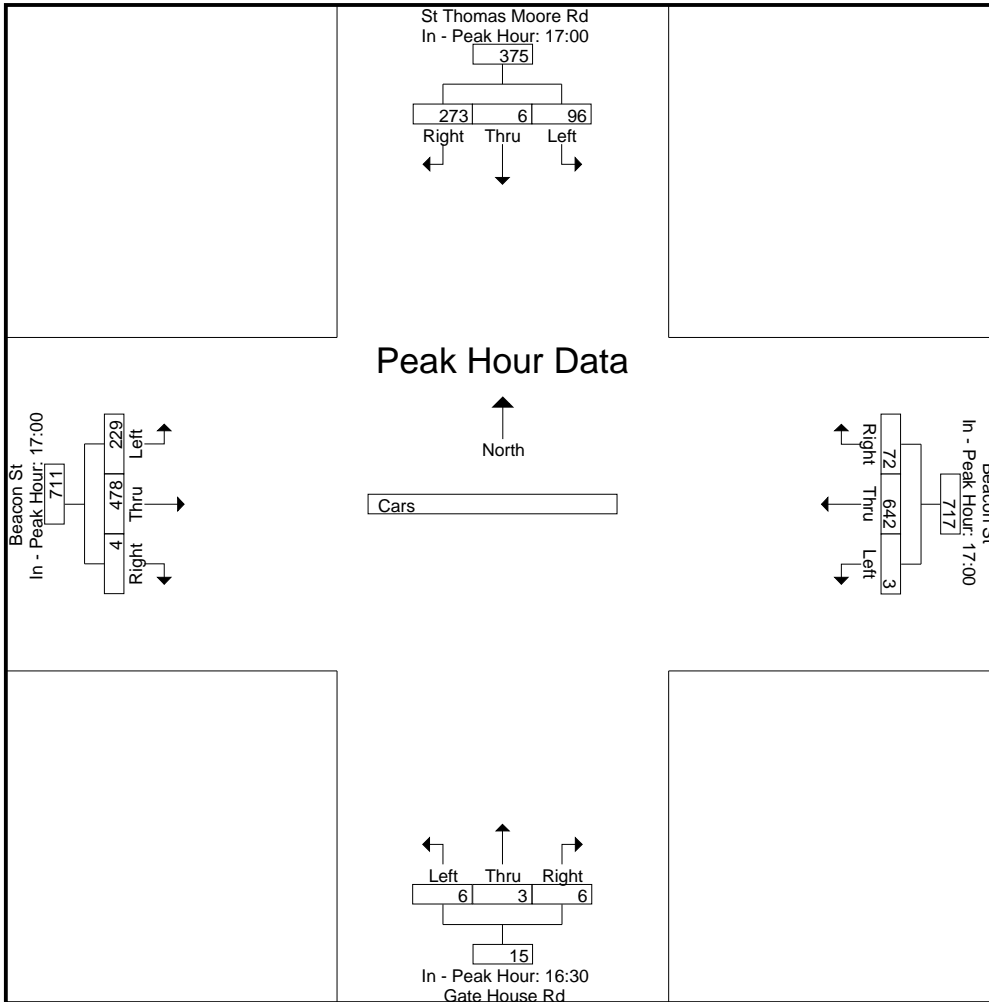
Start Time	St Thomas Moore Rd From North				Beacon St From East				Gate House Rd From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	27	0	74	101	2	141	12	155	1	1	0	2	53	103	1	157	415
17:15	22	1	73	96	0	180	14	194	1	2	3	6	63	141	1	205	501
17:30	21	2	55	78	1	159	22	182	3	0	0	3	52	128	1	181	444
17:45	26	3	71	100	0	162	24	186	2	0	0	2	61	106	1	168	456
Total Volume	96	6	273	375	3	642	72	717	7	3	3	13	229	478	4	711	1816
% App. Total	25.6	1.6	72.8		0.4	89.5	10		53.8	23.1	23.1		32.2	67.2	0.6		
PHF	.889	.500	.922	.928	.375	.892	.750	.924	.583	.375	.250	.542	.909	.848	1.000	.867	.906



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00				17:00				16:30				17:00			
+0 mins.	27	0	74	101	2	141	12	155	3	0	2	5	53	103	1	157
+15 mins.	22	1	73	96	0	180	14	194	1	0	1	2	63	141	1	205
+30 mins.	21	2	55	78	1	159	22	182	1	1	0	2	52	128	1	181
+45 mins.	26	3	71	100	0	162	24	186	1	2	3	6	61	106	1	168
Total Volume	96	6	273	375	3	642	72	717	6	3	6	15	229	478	4	711
% App. Total	25.6	1.6	72.8		0.4	89.5	10		40	20	40		32.2	67.2	0.6	
PHF	.889	.500	.922	.928	.375	.892	.750	.924	.500	.375	.500	.625	.909	.848	1.000	.867





N/S Street : St Thomas Moore Road  
 E/W Street: Beacon Street  
 City/State : Brighton, MA  
 Weather : Clear

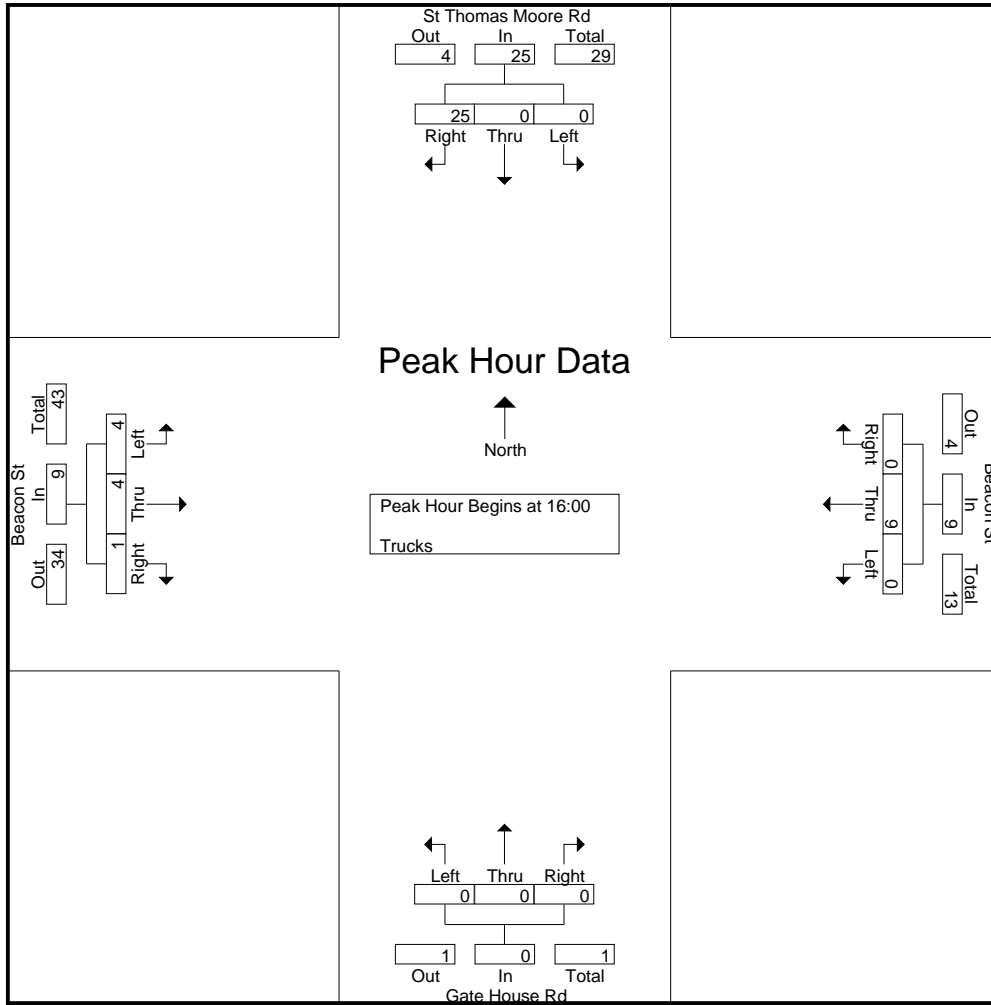
Accurate Counts  
 978-664-2565

File Name : 39000015  
 Site Code : 39000015  
 Start Date : 3/11/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	St Thomas Moore Rd From North				Beacon St From East				Gate House Rd From South				Beacon St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	0	0	8	0	0	2	0	0	0	0	0	0	2	2	0	0	0	14	14
16:15	0	0	4	0	0	2	0	0	0	0	0	0	1	2	1	0	0	10	10
16:30	0	0	7	0	0	4	0	0	0	0	0	0	1	0	0	0	0	12	12
16:45	0	0	6	0	0	1	0	0	0	0	0	0	0	0	0	0	0	7	7
Total	0	0	25	0	0	9	0	0	0	0	0	0	4	4	1	0	0	43	43
17:00	2	0	5	0	0	2	0	0	0	0	0	0	1	1	0	0	0	11	11
17:15	0	0	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	6	6
17:30	0	0	6	0	0	0	0	0	0	0	0	0	1	0	0	0	0	7	7
17:45	0	0	5	0	0	4	0	0	0	0	0	0	1	0	0	0	0	10	10
Total	2	0	21	0	0	7	0	0	0	0	0	0	3	1	0	0	0	34	34
Grand Total	2	0	46	0	0	16	0	0	0	0	0	0	7	5	1	0	0	77	77
Apprch %	4.2	0	95.8		0	100	0		0	0	0		53.8	38.5	7.7				
Total %	2.6	0	59.7		0	20.8	0		0	0	0		9.1	6.5	1.3		0	100	

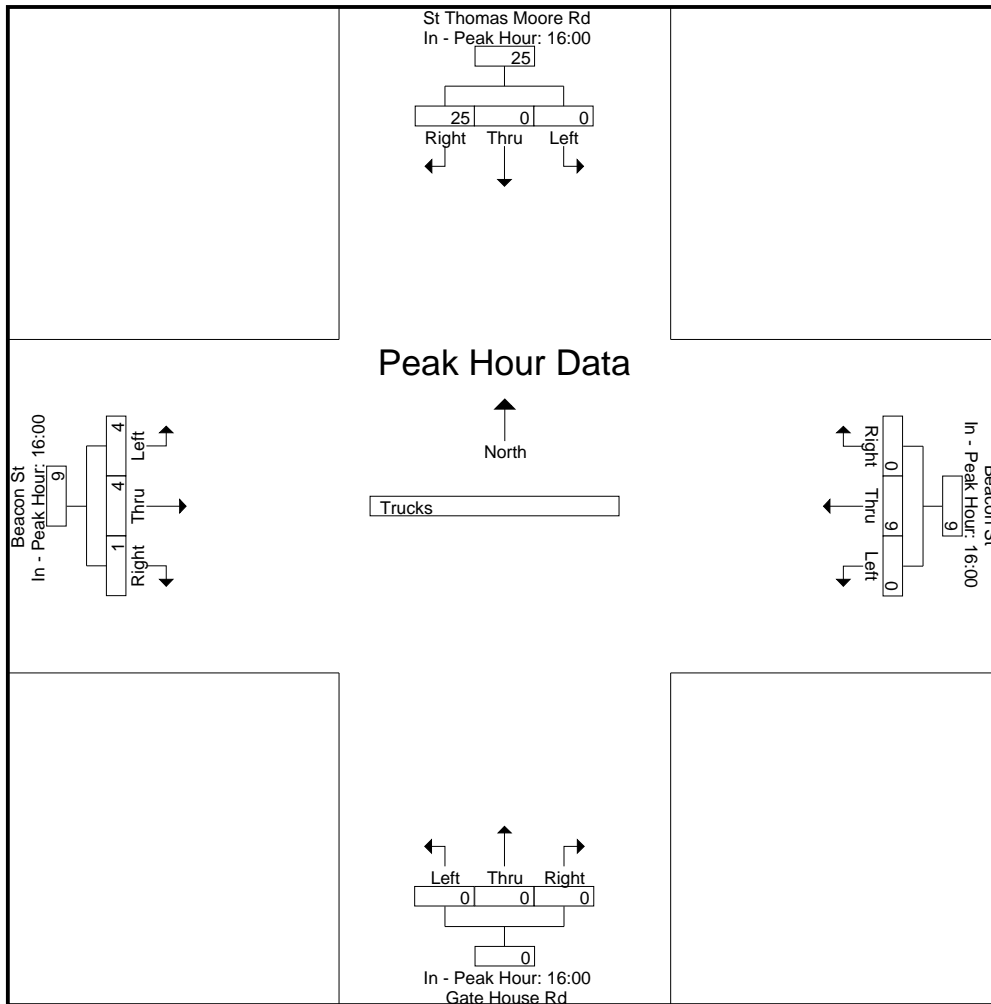
Start Time	St Thomas Moore Rd From North				Beacon St From East				Gate House Rd From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:00																	
16:00	0	0	8	8	0	2	0	2	0	0	0	0	2	2	0	4	14
16:15	0	0	4	4	0	2	0	2	0	0	0	0	1	2	1	4	10
16:30	0	0	7	7	0	4	0	4	0	0	0	0	1	0	0	1	12
16:45	0	0	6	6	0	1	0	1	0	0	0	0	0	0	0	0	7
Total Volume	0	0	25	25	0	9	0	9	0	0	0	0	4	4	1	9	43
% App. Total	0	0	100		0	100	0		0	0	0		44.4	44.4	11.1		
PHF	.000	.000	.781	.781	.000	.563	.000	.563	.000	.000	.000	.000	.500	.500	.250	.563	.768



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00				16:00				16:00				16:00			
+0 mins.	0	0	8	8	0	2	0	2	0	0	0	0	2	2	0	4
+15 mins.	0	0	4	4	0	2	0	2	0	0	0	0	1	2	1	4
+30 mins.	0	0	7	7	0	4	0	4	0	0	0	0	1	0	0	1
+45 mins.	0	0	6	6	0	1	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	25	25	0	9	0	9	0	0	0	0	4	4	1	9
% App. Total	0	0	100		0	100	0		0	0	0		44.4	44.4	11.1	
PHF	.000	.000	.781	.781	.000	.563	.000	.563	.000	.000	.000	.000	.500	.500	.250	.563



N/S Street : Brock St / Lake St  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

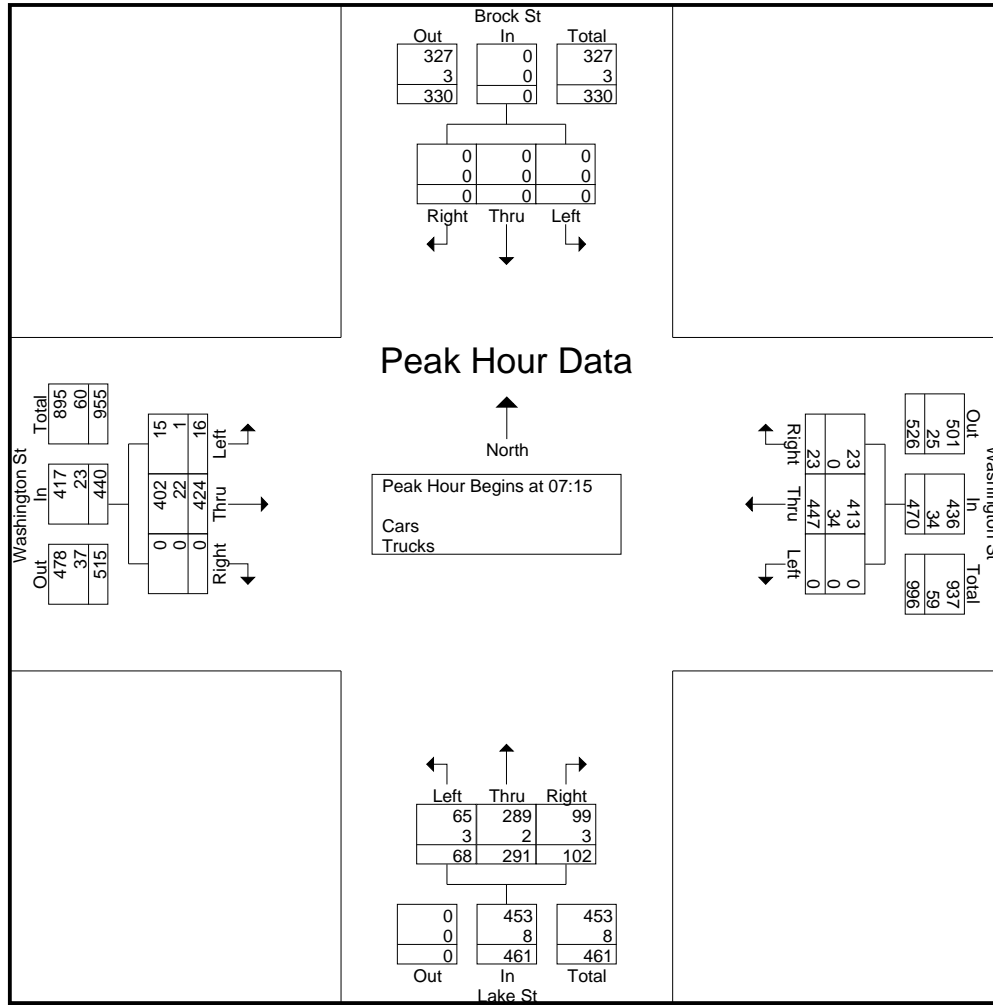
Accurate Counts  
 978-664-2565

File Name : 39000010  
 Site Code : 39000010  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Brock St From North				Washington St From East				Lake St From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	0	0	0	4	0	78	4	1	13	34	23	7	7	113	0	6	18	272	290
07:15	0	0	0	4	0	120	4	1	18	57	26	3	3	117	0	8	16	345	361
07:30	0	0	0	8	0	94	8	5	19	78	33	9	5	103	0	12	34	340	374
07:45	0	0	0	6	0	110	5	4	17	81	20	7	4	113	0	17	34	350	384
Total	0	0	0	22	0	402	21	11	67	250	102	26	19	446	0	43	102	1307	1409
08:00	0	0	0	6	0	123	6	1	14	75	23	9	4	91	0	29	45	336	381
08:15	0	0	0	7	0	97	8	2	12	68	33	5	3	107	0	23	37	328	365
08:30	0	0	0	4	0	91	8	2	15	74	21	9	3	111	0	10	25	323	348
08:45	0	0	0	4	0	95	10	1	13	70	22	5	1	124	0	2	12	335	347
Total	0	0	0	21	0	406	32	6	54	287	99	28	11	433	0	64	119	1322	1441
Grand Total	0	0	0	43	0	808	53	17	121	537	201	54	30	879	0	107	221	2629	2850
Apprch %	0	0	0		0	93.8	6.2		14.1	62.5	23.4		3.3	96.7	0				
Total %	0	0	0		0	30.7	2		4.6	20.4	7.6		1.1	33.4	0		7.8	92.2	
Cars	0	0	0		0	745	51		116	533	197		29	830	0		0	0	2722
% Cars	0	0	0	100	0	92.2	96.2	100	95.9	99.3	98	100	96.7	94.4	0	100	0	0	95.5
Trucks	0	0	0		0	63	2		5	4	4		1	49	0		0	0	128
% Trucks	0	0	0	0	0	7.8	3.8	0	4.1	0.7	2	0	3.3	5.6	0	0	0	0	4.5

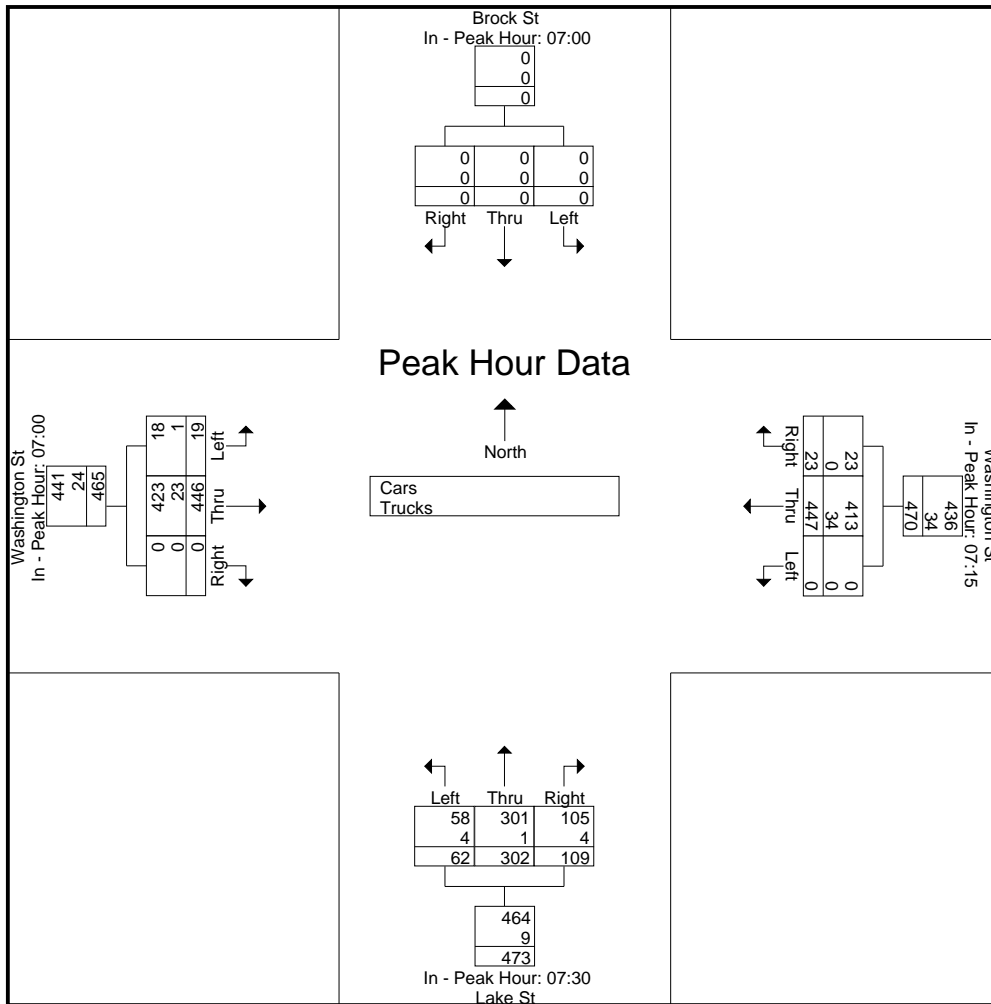
Start Time	Brock St From North				Washington St From East				Lake St From South				Washington St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15																	
07:15	0	0	0	0	0	120	4	124	18	57	26	101	3	117	0	120	345
07:30	0	0	0	0	0	94	8	102	19	78	33	130	5	103	0	108	340
07:45	0	0	0	0	0	110	5	115	17	81	20	118	4	113	0	117	350
08:00	0	0	0	0	0	123	6	129	14	75	23	112	4	91	0	95	336
Total Volume	0	0	0	0	0	447	23	470	68	291	102	461	16	424	0	440	1371
% App. Total	0	0	0		0	95.1	4.9		14.8	63.1	22.1		3.6	96.4	0		
PHF	.000	.000	.000	.000	.000	.909	.719	.911	.895	.898	.773	.887	.800	.906	.000	.917	.979
Cars	0	0	0	0	0	413	23	436	65	289	99	453	15	402	0	417	1306
% Cars	0	0	0	0	0	92.4	100	92.8	95.6	99.3	97.1	98.3	93.8	94.8	0	94.8	95.3
Trucks	0	0	0	0	0	34	0	34	3	2	3	8	1	22	0	23	65
% Trucks	0	0	0	0	0	7.6	0	7.2	4.4	0.7	2.9	1.7	6.3	5.2	0	5.2	4.7



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00				07:15				07:30				07:00			
+0 mins.	0	0	0	0	0	120	4	124	19	78	33	130	7	113	0	120
+15 mins.	0	0	0	0	0	94	8	102	17	81	20	118	3	117	0	120
+30 mins.	0	0	0	0	0	110	5	115	14	75	23	112	5	103	0	108
+45 mins.	0	0	0	0	0	123	6	129	12	68	33	113	4	113	0	117
Total Volume	0	0	0	0	0	447	23	470	62	302	109	473	19	446	0	465
% App. Total	0	0	0	0	0	95.1	4.9	99.1	13.1	63.8	23	96.9	4.1	95.9	0	96.9
PHF	.000	.000	.000	.000	.000	.909	.719	.911	.816	.932	.826	.910	.679	.953	.000	.969
Cars	0	0	0	0	0	413	23	436	58	301	105	464	18	423	0	441
% Cars	0	0	0	0	0	92.4	100	92.8	93.5	99.7	96.3	98.1	94.7	94.8	0	94.8
Trucks	0	0	0	0	0	34	0	34	4	1	4	9	1	23	0	24
% Trucks	0	0	0	0	0	7.6	0	7.2	6.5	0.3	3.7	1.9	5.3	5.2	0	5.2



N/S Street : Brock St / Lake St  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

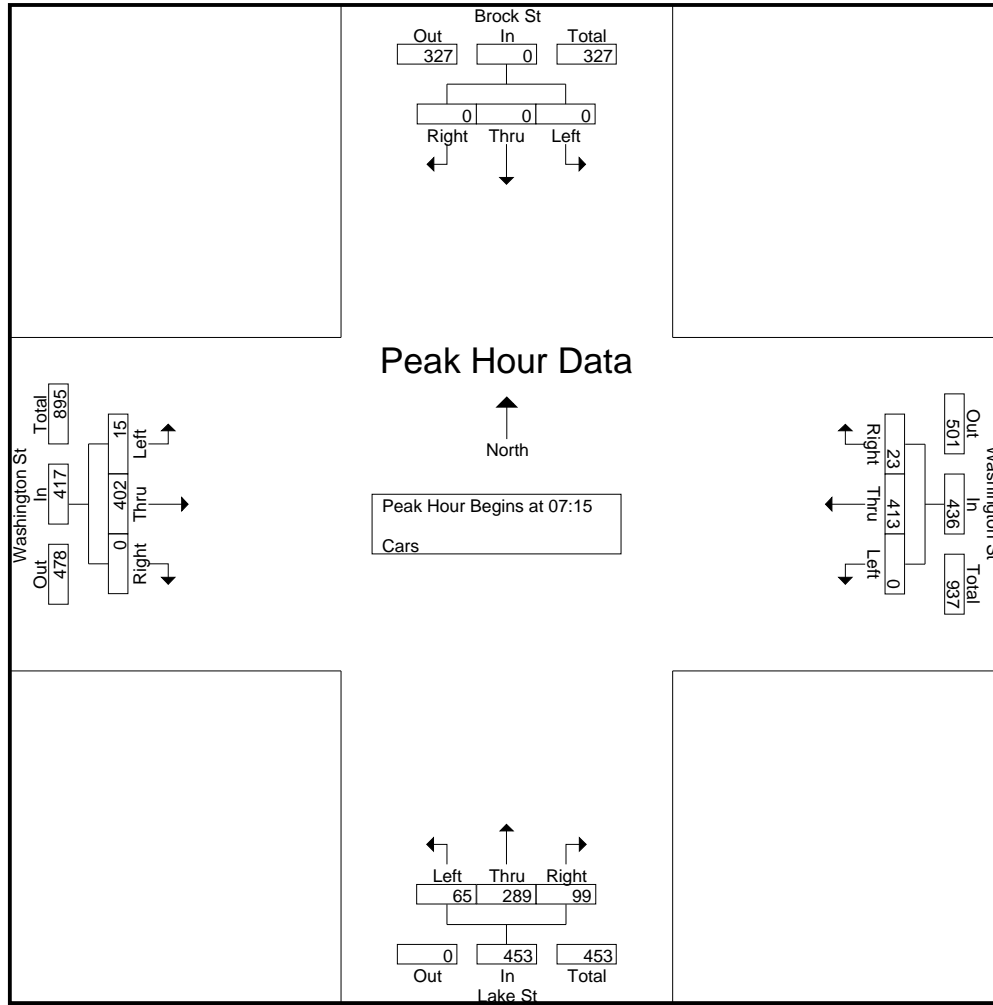
Accurate Counts  
 978-664-2565

File Name : 39000010  
 Site Code : 39000010  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Brock St From North				Washington St From East				Lake St From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	0	0	0	4	0	71	3	1	12	34	23	7	7	107	0	6	18	257	275
07:15	0	0	0	4	0	112	4	1	18	56	26	3	2	113	0	8	16	331	347
07:30	0	0	0	8	0	86	8	5	17	77	31	9	5	94	0	12	34	318	352
07:45	0	0	0	6	0	99	5	4	17	81	20	7	4	109	0	17	34	335	369
Total	0	0	0	22	0	368	20	11	64	248	100	26	18	423	0	43	102	1241	1343
08:00	0	0	0	6	0	116	6	1	13	75	22	9	4	86	0	29	45	322	367
08:15	0	0	0	7	0	89	8	2	11	68	32	5	3	99	0	23	37	310	347
08:30	0	0	0	4	0	86	8	2	15	72	21	9	3	106	0	10	25	311	336
08:45	0	0	0	4	0	86	9	1	13	70	22	5	1	116	0	2	12	317	329
Total	0	0	0	21	0	377	31	6	52	285	97	28	11	407	0	64	119	1260	1379
Grand Total	0	0	0	43	0	745	51	17	116	533	197	54	29	830	0	107	221	2501	2722
Apprch %	0	0	0		0	93.6	6.4		13.7	63	23.3		3.4	96.6	0				
Total %	0	0	0		0	29.8	2		4.6	21.3	7.9		1.2	33.2	0		8.1	91.9	

Start Time	Brock St From North				Washington St From East				Lake St From South				Washington St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15																	
07:15	0	0	0	0	0	112	4	116	18	56	26	100	2	113	0	115	331
07:30	0	0	0	0	0	86	8	94	17	77	31	125	5	94	0	99	318
07:45	0	0	0	0	0	99	5	104	17	81	20	118	4	109	0	113	335
08:00	0	0	0	0	0	116	6	122	13	75	22	110	4	86	0	90	322
Total Volume	0	0	0	0	0	413	23	436	65	289	99	453	15	402	0	417	1306
% App. Total	0	0	0		0	94.7	5.3		14.3	63.8	21.9		3.6	96.4	0		
PHF	.000	.000	.000	.000	.000	.890	.719	.893	.903	.892	.798	.906	.750	.889	.000	.907	.975

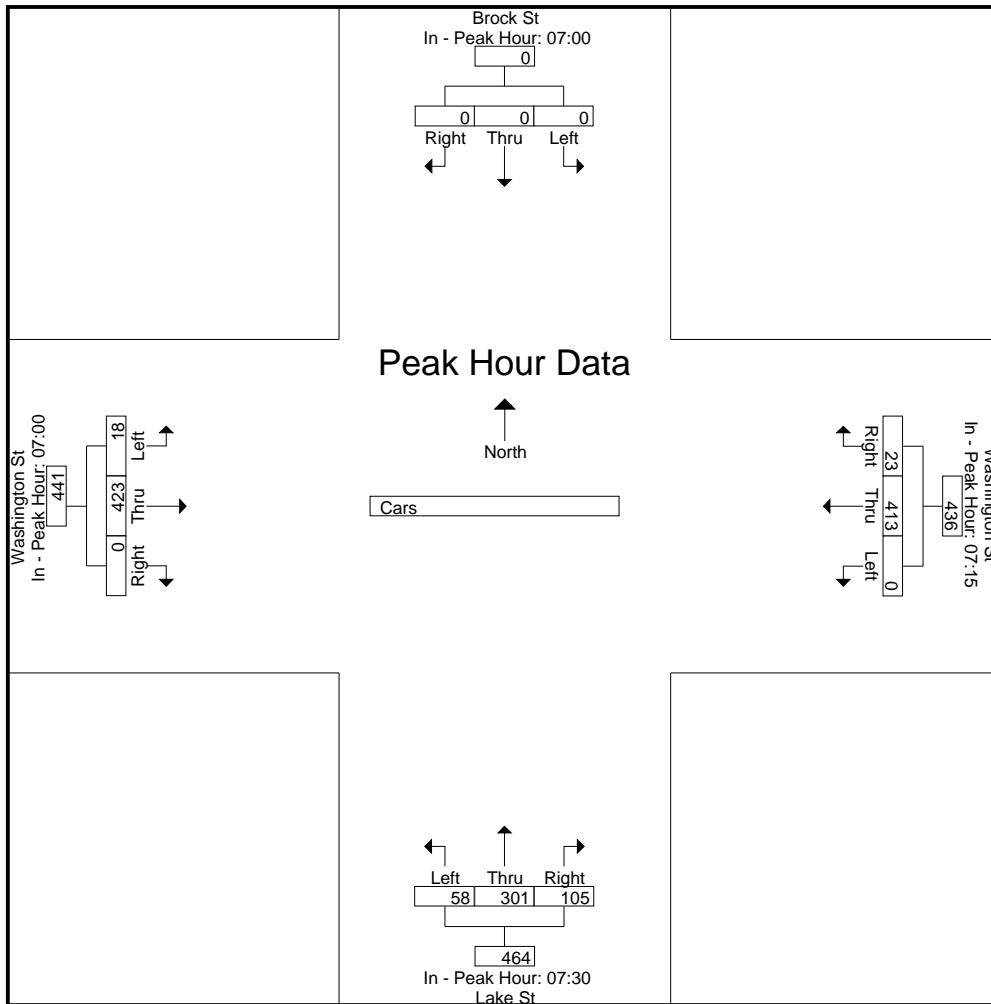


Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00				07:15				07:30				07:00			
+0 mins.	0	0	0	0	0	112	4	116	17	77	31	125	7	107	0	114
+15 mins.	0	0	0	0	0	86	8	94	17	81	20	118	2	113	0	115
+30 mins.	0	0	0	0	0	99	5	104	13	75	22	110	5	94	0	99
+45 mins.	0	0	0	0	0	116	6	122	11	68	32	111	4	109	0	113
Total Volume	0	0	0	0	0	413	23	436	58	301	105	464	18	423	0	441
% App. Total	0	0	0	0	0	94.7	5.3		12.5	64.9	22.6		4.1	95.9	0	
PHF	.000	.000	.000	.000	.000	.890	.719	.893	.853	.929	.820	.928	.643	.936	.000	.959





N/S Street : Brock St / Lake St  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

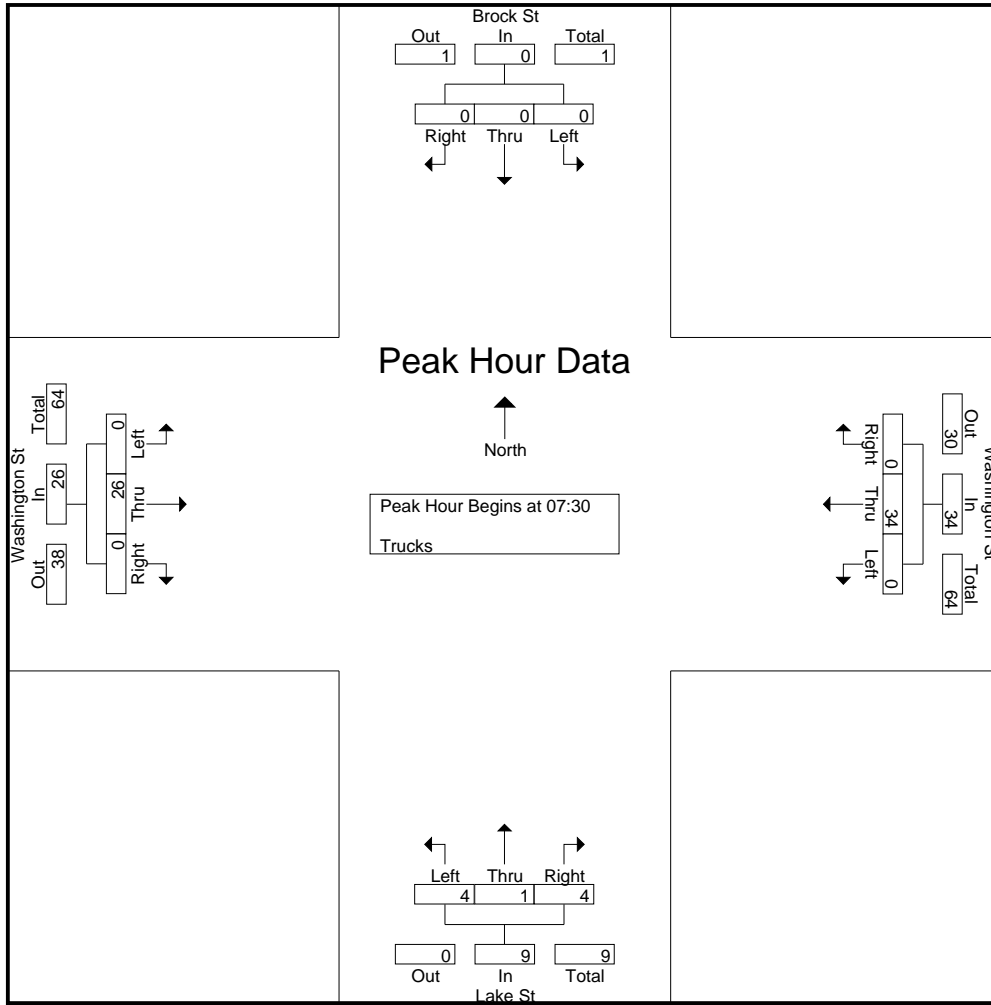
Accurate Counts  
 978-664-2565

File Name : 39000010  
 Site Code : 39000010  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Brock St From North				Washington St From East				Lake St From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	0	0	0	0	0	7	1	0	1	0	0	0	0	6	0	0	0	15	15
07:15	0	0	0	0	0	8	0	0	0	1	0	0	1	4	0	0	0	14	14
07:30	0	0	0	0	0	8	0	0	2	1	2	0	0	9	0	0	0	22	22
07:45	0	0	0	0	0	11	0	0	0	0	0	0	0	4	0	0	0	15	15
Total	0	0	0	0	0	34	1	0	3	2	2	0	1	23	0	0	0	66	66
08:00	0	0	0	0	0	7	0	0	1	0	1	0	0	5	0	0	0	14	14
08:15	0	0	0	0	0	8	0	0	1	0	1	0	0	8	0	0	0	18	18
08:30	0	0	0	0	0	5	0	0	0	2	0	0	0	5	0	0	0	12	12
08:45	0	0	0	0	0	9	1	0	0	0	0	0	0	8	0	0	0	18	18
Total	0	0	0	0	0	29	1	0	2	2	2	0	0	26	0	0	0	62	62
Grand Total	0	0	0	0	0	63	2	0	5	4	4	0	1	49	0	0	0	128	128
Apprch %	0	0	0		0	96.9	3.1		38.5	30.8	30.8		2	98	0				
Total %	0	0	0		0	49.2	1.6		3.9	3.1	3.1		0.8	38.3	0		0	100	

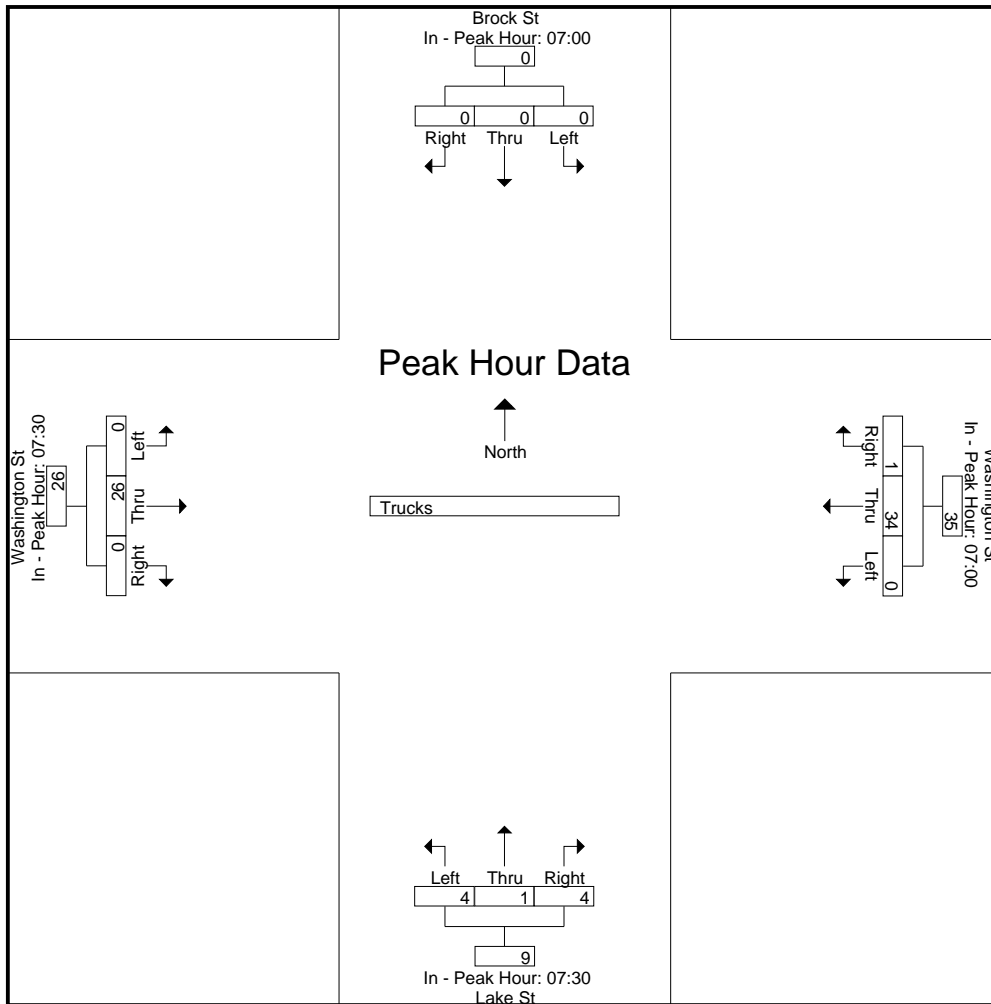
Start Time	Brock St From North				Washington St From East				Lake St From South				Washington St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	0	0	0	0	0	8	0	8	2	1	2	5	0	9	0	9	22
07:45	0	0	0	0	0	11	0	11	0	0	0	0	0	4	0	4	15
08:00	0	0	0	0	0	7	0	7	1	0	1	2	0	5	0	5	14
08:15	0	0	0	0	0	8	0	8	1	0	1	2	0	8	0	8	18
Total Volume	0	0	0	0	0	34	0	34	4	1	4	9	0	26	0	26	69
% App. Total	0	0	0		0	100	0		44.4	11.1	44.4		0	100	0		
PHF	.000	.000	.000	.000	.000	.773	.000	.773	.500	.250	.500	.450	.000	.722	.000	.722	.784



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00				07:00				07:30				07:30			
+0 mins.	0	0	0	0	0	7	1	8	2	1	2	5	0	9	0	9
+15 mins.	0	0	0	0	0	8	0	8	0	0	0	0	0	4	0	4
+30 mins.	0	0	0	0	0	8	0	8	1	0	1	2	0	5	0	5
+45 mins.	0	0	0	0	0	11	0	11	1	0	1	2	0	8	0	8
Total Volume	0	0	0	0	0	34	1	35	4	1	4	9	0	26	0	26
% App. Total	0	0	0	0	0	97.1	2.9		44.4	11.1	44.4		0	100	0	
PHF	.000	.000	.000	.000	.000	.773	.250	.795	.500	.250	.500	.450	.000	.722	.000	.722



N/S Street : Brock St / Lake St  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

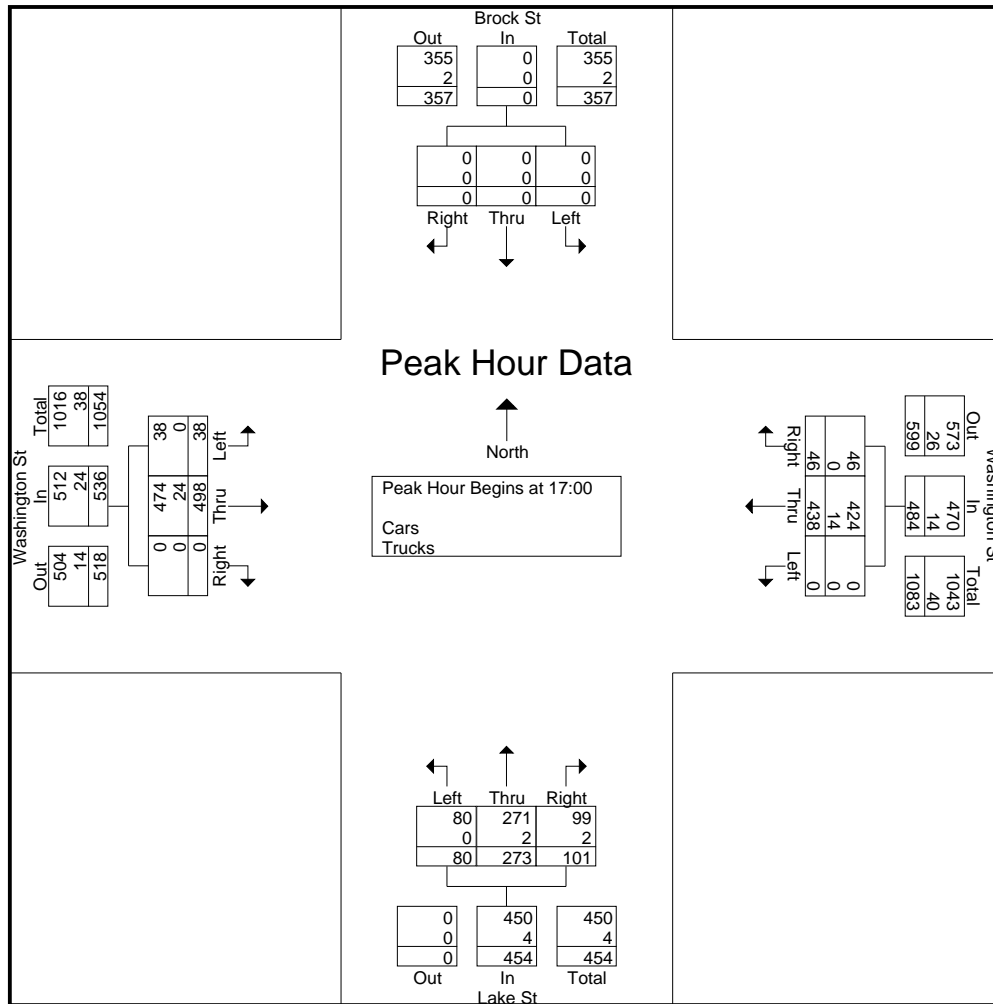
Accurate Counts  
 978-664-2565

File Name : 39000010  
 Site Code : 39000010  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Brock St From North				Washington St From East				Lake St From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	0	0	0	7	0	97	5	2	22	64	34	9	2	94	0	0	18	318	336
16:15	0	0	0	7	0	95	6	1	18	55	33	7	1	96	0	8	23	304	327
16:30	0	0	0	7	0	108	14	0	20	48	26	15	11	124	0	16	38	351	389
16:45	0	0	0	4	0	86	8	1	19	61	25	9	12	129	0	13	27	340	367
Total	0	0	0	25	0	386	33	4	79	228	118	40	26	443	0	37	106	1313	1419
17:00	0	0	0	19	0	102	16	1	19	67	23	17	12	129	0	8	45	368	413
17:15	0	0	0	7	0	111	15	1	22	77	25	19	4	113	0	10	37	367	404
17:30	0	0	0	15	0	117	5	7	25	60	26	15	4	121	0	8	45	358	403
17:45	0	0	0	11	0	108	10	4	14	69	27	18	18	135	0	11	44	381	425
Total	0	0	0	52	0	438	46	13	80	273	101	69	38	498	0	37	171	1474	1645
Grand Total	0	0	0	77	0	824	79	17	159	501	219	109	64	941	0	74	277	2787	3064
Apprch %	0	0	0		0	91.3	8.7		18.1	57	24.9		6.4	93.6	0				
Total %	0	0	0		0	29.6	2.8		5.7	18	7.9		2.3	33.8	0		9	91	
Cars	0	0	0		0	794	78		156	498	215		64	895	0		0	0	2977
% Cars	0	0	0	100	0	96.4	98.7	100	98.1	99.4	98.2	100	100	95.1	0	100	0	0	97.2
Trucks	0	0	0		0	30	1		3	3	4		0	46	0		0	0	87
% Trucks	0	0	0	0	0	3.6	1.3	0	1.9	0.6	1.8	0	0	4.9	0	0	0	0	2.8

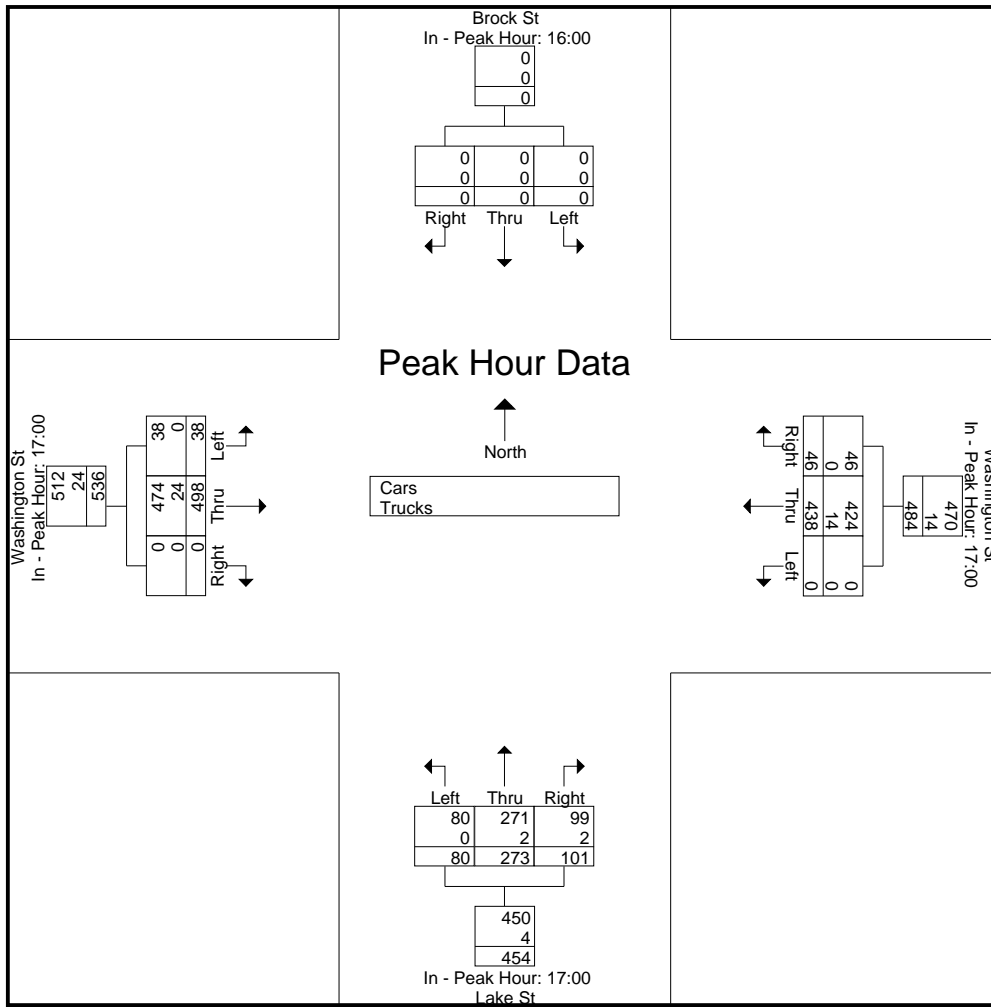
Start Time	Brock St From North				Washington St From East				Lake St From South				Washington St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	0	0	0	0	0	102	16	118	19	67	23	109	12	129	0	141	368
17:15	0	0	0	0	0	111	15	126	22	77	25	124	4	113	0	117	367
17:30	0	0	0	0	0	117	5	122	25	60	26	111	4	121	0	125	358
17:45	0	0	0	0	0	108	10	118	14	69	27	110	18	135	0	153	381
Total Volume	0	0	0	0	0	438	46	484	80	273	101	454	38	498	0	536	1474
% App. Total	0	0	0	0	0	90.5	9.5		17.6	60.1	22.2		7.1	92.9	0		
PHF	.000	.000	.000	.000	.000	.936	.719	.960	.800	.886	.935	.915	.528	.922	.000	.876	.967
Cars	0	0	0	0	0	424	46	470	80	271	99	450	38	474	0	512	1432
% Cars	0	0	0	0	0	96.8	100	97.1	100	99.3	98.0	99.1	100	95.2	0	95.5	97.2
Trucks	0	0	0	0	0	14	0	14	0	2	2	4	0	24	0	24	42
% Trucks	0	0	0	0	0	3.2	0	2.9	0	0.7	2.0	0.9	0	4.8	0	4.5	2.8



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00				17:00				17:00				17:00			
+0 mins.	0	0	0	0	0	102	16	118	19	67	23	109	12	129	0	141
+15 mins.	0	0	0	0	0	111	15	126	22	77	25	124	4	113	0	117
+30 mins.	0	0	0	0	0	117	5	122	25	60	26	111	4	121	0	125
+45 mins.	0	0	0	0	0	108	10	118	14	69	27	110	18	135	0	153
Total Volume	0	0	0	0	0	438	46	484	80	273	101	454	38	498	0	536
% App. Total	0	0	0	0	0	90.5	9.5		17.6	60.1	22.2		7.1	92.9	0	
PHF	.000	.000	.000	.000	.000	.936	.719	.960	.800	.886	.935	.915	.528	.922	.000	.876
Cars	0	0	0	0	0	424	46	470	80	271	99	450	38	474	0	512
% Cars	0	0	0	0	0	96.8	100	97.1	100	99.3	98	99.1	100	95.2	0	95.5
Trucks	0	0	0	0	0	14	0	14	0	2	2	4	0	24	0	24
% Trucks	0	0	0	0	0	3.2	0	2.9	0	0.7	2	0.9	0	4.8	0	4.5



N/S Street : Brock St / Lake St  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

Accurate Counts  
 978-664-2565

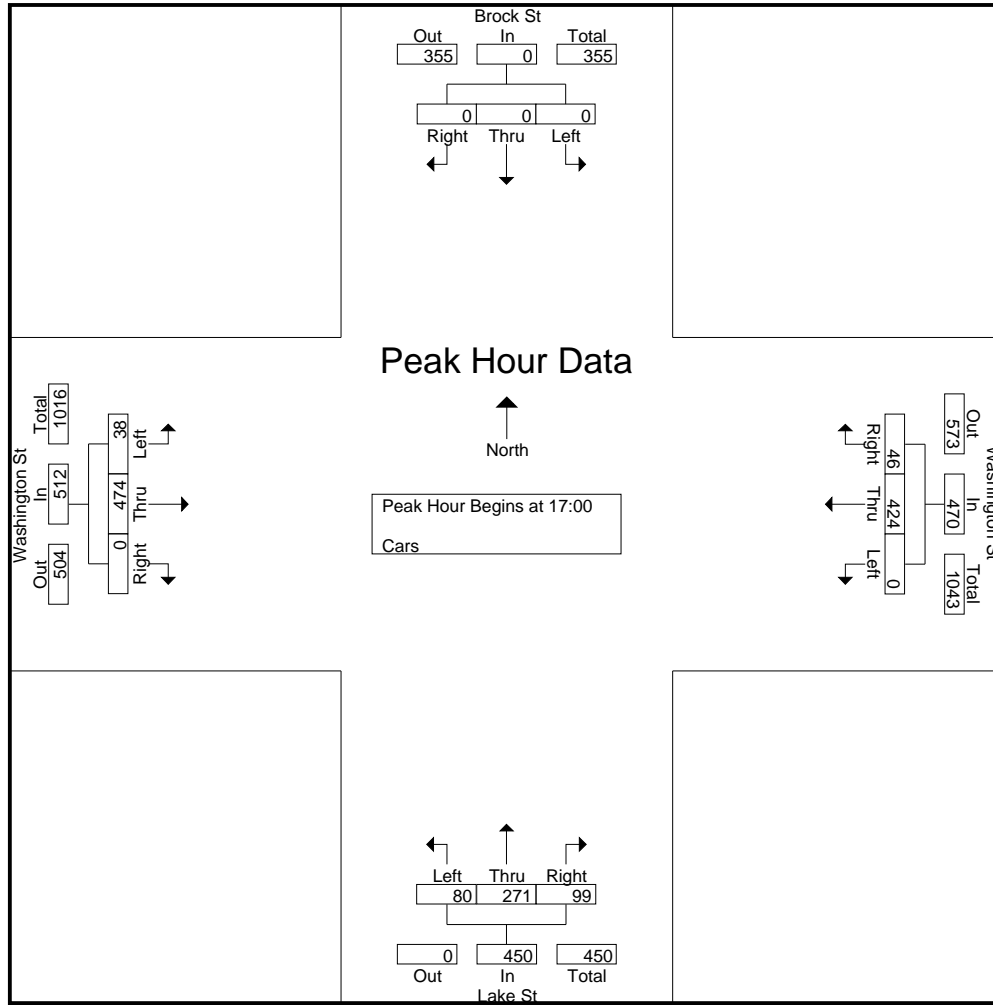
File Name : 39000010  
 Site Code : 39000010  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Brock St From North				Washington St From East				Lake St From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	0	0	0	7	0	94	4	2	22	64	33	9	2	89	0	0	18	308	326
16:15	0	0	0	7	0	91	6	1	16	55	33	7	1	91	0	8	23	293	316
16:30	0	0	0	7	0	106	14	0	20	48	25	15	11	119	0	16	38	343	381
16:45	0	0	0	4	0	79	8	1	18	60	25	9	12	122	0	13	27	324	351
Total	0	0	0	25	0	370	32	4	76	227	116	40	26	421	0	37	106	1268	1374
17:00	0	0	0	19	0	98	16	1	19	67	23	17	12	122	0	8	45	357	402
17:15	0	0	0	7	0	109	15	1	22	76	25	19	4	107	0	10	37	358	395
17:30	0	0	0	15	0	113	5	7	25	59	26	15	4	116	0	8	45	348	393
17:45	0	0	0	11	0	104	10	4	14	69	25	18	18	129	0	11	44	369	413
Total	0	0	0	52	0	424	46	13	80	271	99	69	38	474	0	37	171	1432	1603
Grand Total	0	0	0	77	0	794	78	17	156	498	215	109	64	895	0	74	277	2700	2977
Apprch %	0	0	0		0	91.1	8.9		18	57.3	24.7		6.7	93.3	0				
Total %	0	0	0		0	29.4	2.9		5.8	18.4	8		2.4	33.1	0		9.3	90.7	

Start Time	Brock St From North				Washington St From East				Lake St From South				Washington St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	0	0	0	0	0	98	16	114	19	67	23	109	12	122	0	134	357
17:15	0	0	0	0	0	109	15	124	22	76	25	123	4	107	0	111	358
17:30	0	0	0	0	0	113	5	118	25	59	26	110	4	116	0	120	348
17:45	0	0	0	0	0	104	10	114	14	69	25	108	18	129	0	147	369
Total Volume	0	0	0	0	0	424	46	470	80	271	99	450	38	474	0	512	1432
% App. Total	0	0	0		0	90.2	9.8		17.8	60.2	22		7.4	92.6	0		
PHF	.000	.000	.000	.000	.000	.938	.719	.948	.800	.891	.952	.915	.528	.919	.000	.871	.970

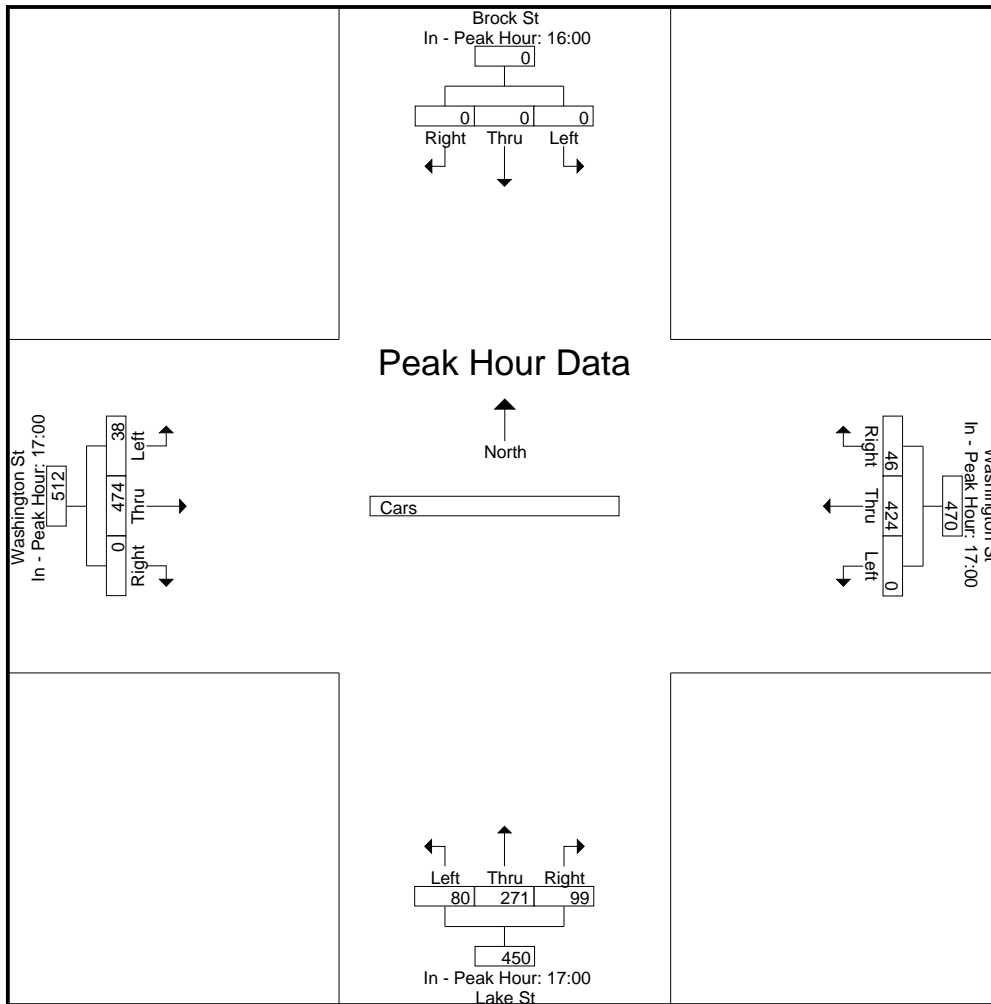




Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00				17:00				17:00				17:00			
+0 mins.	0	0	0	0	0	98	16	114	19	67	23	109	12	122	0	134
+15 mins.	0	0	0	0	0	109	15	124	22	76	25	123	4	107	0	111
+30 mins.	0	0	0	0	0	113	5	118	25	59	26	110	4	116	0	120
+45 mins.	0	0	0	0	0	104	10	114	14	69	25	108	18	129	0	147
Total Volume	0	0	0	0	0	424	46	470	80	271	99	450	38	474	0	512
% App. Total	0	0	0	0	0	90.2	9.8		17.8	60.2	22		7.4	92.6	0	
PHF	.000	.000	.000	.000	.000	.938	.719	.948	.800	.891	.952	.915	.528	.919	.000	.871



N/S Street : Brock St / Lake St  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

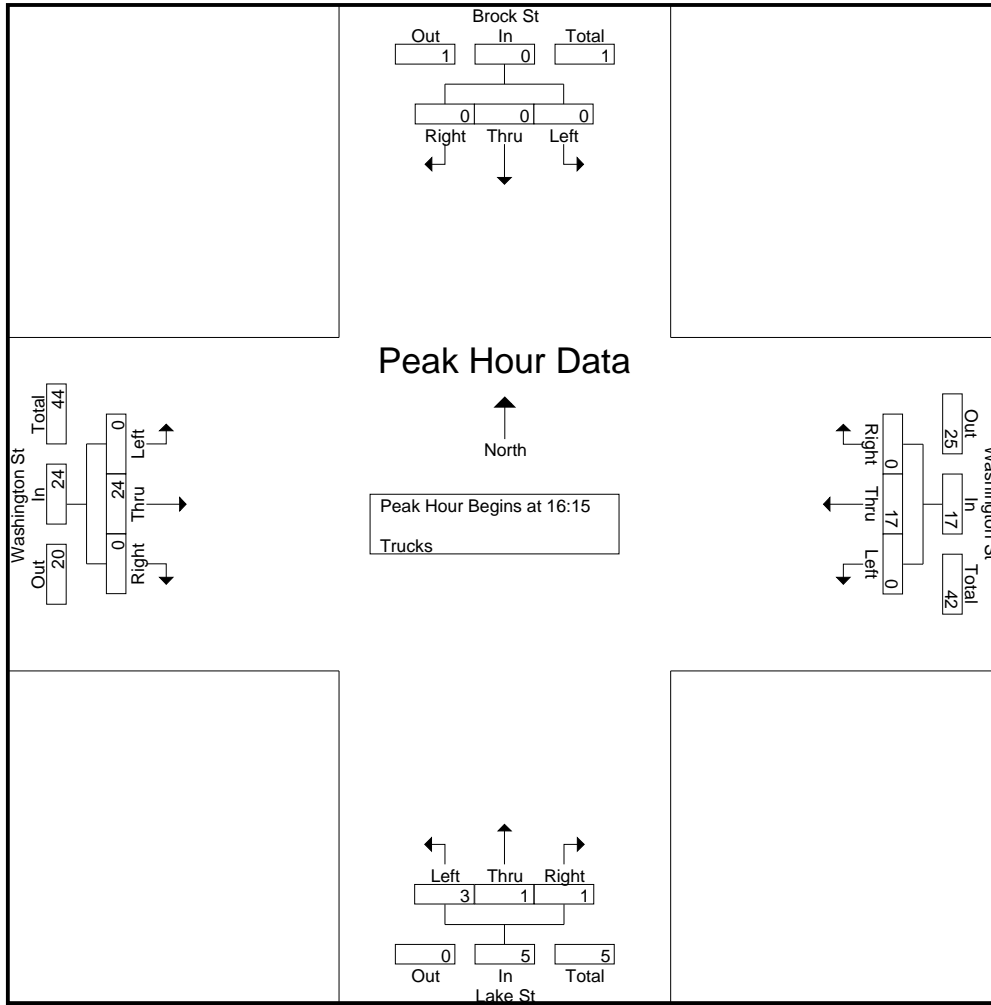
Accurate Counts  
 978-664-2565

File Name : 39000010  
 Site Code : 39000010  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Trucks

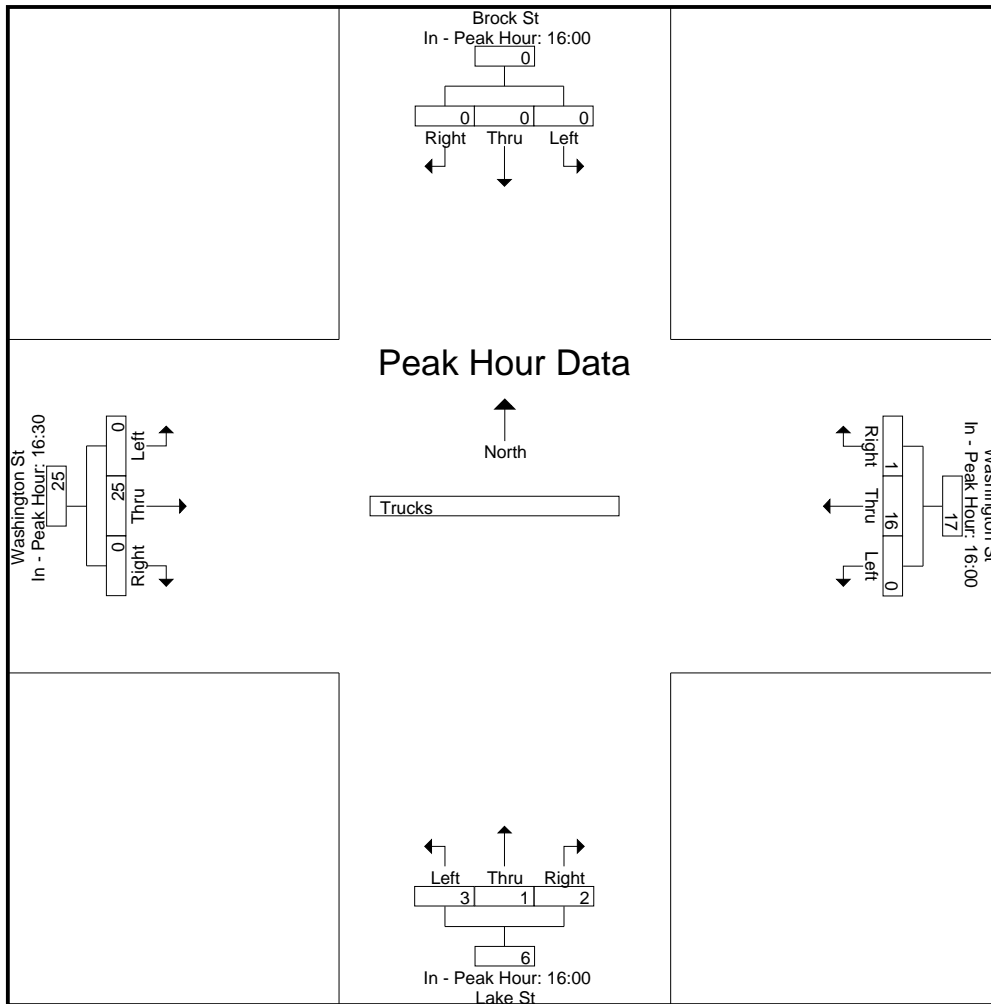
Start Time	Brock St From North				Washington St From East				Lake St From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	0	0	0	0	0	3	1	0	0	0	1	0	0	5	0	0	0	10	10
16:15	0	0	0	0	0	4	0	0	2	0	0	0	0	5	0	0	0	11	11
16:30	0	0	0	0	0	2	0	0	0	0	1	0	0	5	0	0	0	8	8
16:45	0	0	0	0	0	7	0	0	1	1	0	0	0	7	0	0	0	16	16
Total	0	0	0	0	0	16	1	0	3	1	2	0	0	22	0	0	0	45	45
17:00	0	0	0	0	0	4	0	0	0	0	0	0	0	7	0	0	0	11	11
17:15	0	0	0	0	0	2	0	0	0	1	0	0	0	6	0	0	0	9	9
17:30	0	0	0	0	0	4	0	0	0	1	0	0	0	5	0	0	0	10	10
17:45	0	0	0	0	0	4	0	0	0	0	2	0	0	6	0	0	0	12	12
Total	0	0	0	0	0	14	0	0	0	2	2	0	0	24	0	0	0	42	42
Grand Total	0	0	0	0	0	30	1	0	3	3	4	0	0	46	0	0	0	87	87
Apprch %	0	0	0		0	96.8	3.2		30	30	40		0	100	0				
Total %	0	0	0		0	34.5	1.1		3.4	3.4	4.6		0	52.9	0		0	100	

Start Time	Brock St From North				Washington St From East				Lake St From South				Washington St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:15																	
16:15	0	0	0	0	0	4	0	4	2	0	0	2	0	5	0	5	11
16:30	0	0	0	0	0	2	0	2	0	0	1	1	0	5	0	5	8
16:45	0	0	0	0	0	7	0	7	1	1	0	2	0	7	0	7	16
17:00	0	0	0	0	0	4	0	4	0	0	0	0	0	7	0	7	11
Total Volume	0	0	0	0	0	17	0	17	3	1	1	5	0	24	0	24	46
% App. Total	0	0	0		0	100	0		60	20	20		0	100	0		
PHF	.000	.000	.000	.000	.000	.607	.000	.607	.375	.250	.250	.625	.000	.857	.000	.857	.719



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	16:00				16:00				16:00				16:30			
+0 mins.	0	0	0	0	0	3	1	4	0	0	1	1	0	5	0	5
+15 mins.	0	0	0	0	0	4	0	4	2	0	0	2	0	7	0	7
+30 mins.	0	0	0	0	0	2	0	2	0	0	1	1	0	7	0	7
+45 mins.	0	0	0	0	0	7	0	7	1	1	0	2	0	6	0	6
Total Volume	0	0	0	0	0	16	1	17	3	1	2	6	0	25	0	25
% App. Total	0	0	0	0	0	94.1	5.9		50	16.7	33.3		0	100	0	
PHF	.000	.000	.000	.000	.000	.571	.250	.607	.375	.250	.500	.750	.000	.893	.000	.893



N/S Street : Lake Street  
 E/W Street: Kenrick St / Glenmont Rd  
 City/State : Brighton, MA  
 Weather : Rain

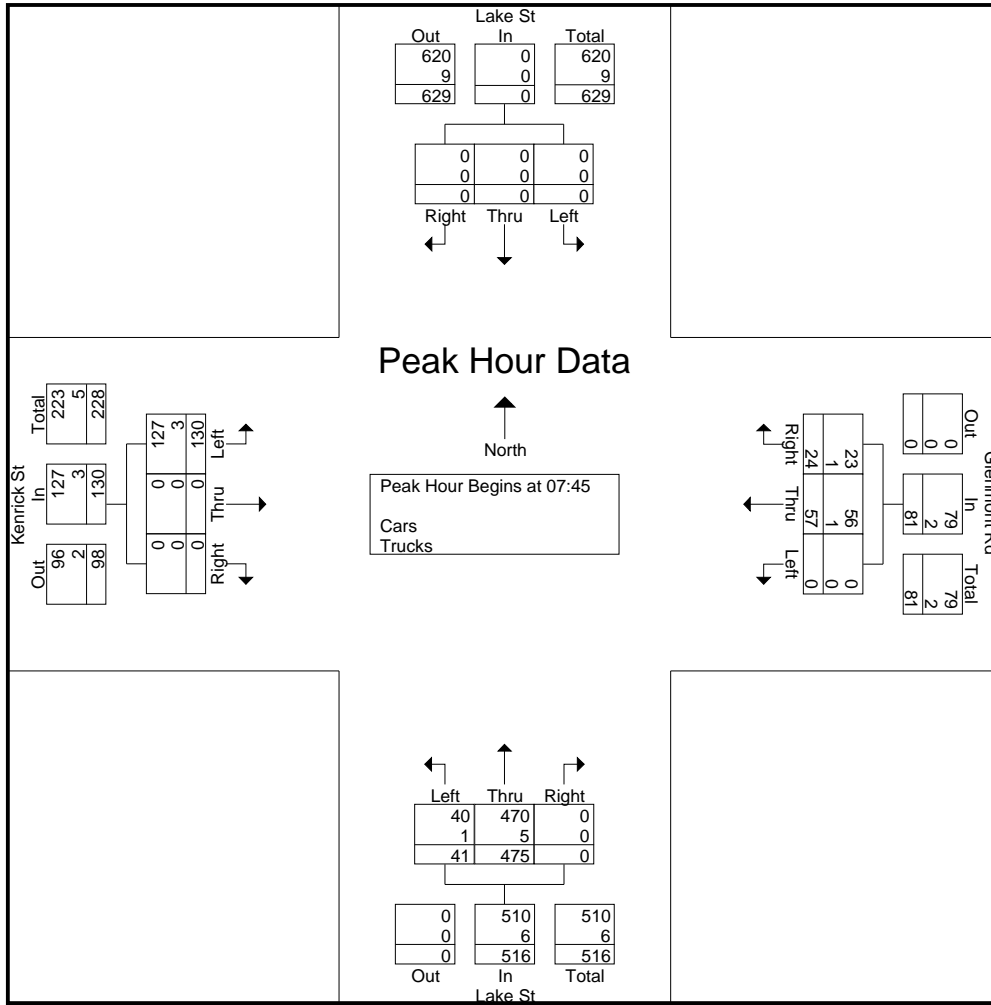
Accurate Counts  
 978-664-2565

File Name : 39000011  
 Site Code : 39000011  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Lake St From North				Glenmont Rd From East				Lake St From South				Kenrick St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	0	0	0	1	0	4	11	2	3	60	0	1	15	0	0	0	4	93	97
07:15	0	0	0	2	0	5	20	0	8	86	0	0	19	0	0	6	8	138	146
07:30	0	0	0	0	0	10	12	1	9	116	0	0	22	0	0	8	9	169	178
07:45	0	0	0	0	0	16	2	1	7	121	0	0	36	0	0	10	11	182	193
Total	0	0	0	3	0	35	45	4	27	383	0	1	92	0	0	24	32	582	614
08:00	0	0	0	0	0	16	9	1	14	115	0	1	38	0	0	11	13	192	205
08:15	0	0	0	0	0	12	7	1	11	109	0	0	26	0	0	9	10	165	175
08:30	0	0	0	2	0	13	6	1	9	130	0	2	30	0	0	5	10	188	198
08:45	0	0	0	0	0	9	5	0	4	99	0	0	38	0	0	8	8	155	163
Total	0	0	0	2	0	50	27	3	38	453	0	3	132	0	0	33	41	700	741
Grand Total	0	0	0	5	0	85	72	7	65	836	0	4	224	0	0	57	73	1282	1355
Apprch %	0	0	0		0	54.1	45.9		7.2	92.8	0		100	0	0				
Total %	0	0	0		0	6.6	5.6		5.1	65.2	0		17.5	0	0		5.4	94.6	
Cars	0	0	0		0	84	68		64	827	0		221	0	0		0	0	1337
% Cars	0	0	0	100	0	98.8	94.4	100	98.5	98.9	0	100	98.7	0	0	100	0	0	98.7
Trucks	0	0	0		0	1	4		1	9	0		3	0	0		0	0	18
% Trucks	0	0	0	0	0	1.2	5.6	0	1.5	1.1	0	0	1.3	0	0	0	0	0	1.3

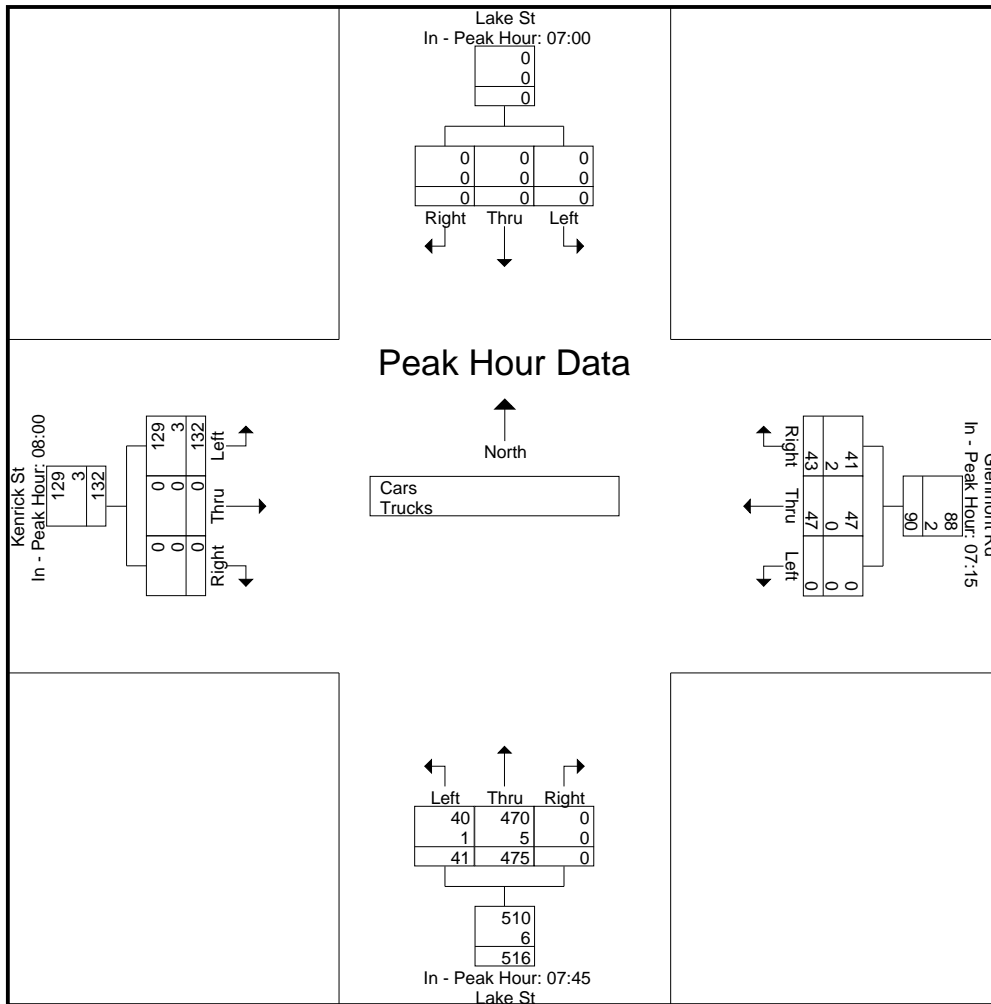
Start Time	Lake St From North				Glenmont Rd From East				Lake St From South				Kenrick St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	0	0	0	0	0	16	2	18	7	121	0	128	36	0	0	36	182
08:00	0	0	0	0	0	16	9	25	14	115	0	129	38	0	0	38	192
08:15	0	0	0	0	0	12	7	19	11	109	0	120	26	0	0	26	165
08:30	0	0	0	0	0	13	6	19	9	130	0	139	30	0	0	30	188
Total Volume	0	0	0	0	0	57	24	81	41	475	0	516	130	0	0	130	727
% App. Total	0	0	0		0	70.4	29.6		7.9	92.1	0		100	0	0		
PHF	.000	.000	.000	.000	.000	.891	.667	.810	.732	.913	.000	.928	.855	.000	.000	.855	.947
Cars	0	0	0	0	0	56	23	79	40	470	0	510	127	0	0	127	716
% Cars	0	0	0	0	0	98.2	95.8	97.5	97.6	98.9	0	98.8	97.7	0	0	97.7	98.5
Trucks	0	0	0	0	0	1	1	2	1	5	0	6	3	0	0	3	11
% Trucks	0	0	0	0	0	1.8	4.2	2.5	2.4	1.1	0	1.2	2.3	0	0	2.3	1.5



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00				07:15				07:45				08:00			
+0 mins.	0	0	0	0	0	5	20	25	7	121	0	128	38	0	0	38
+15 mins.	0	0	0	0	0	10	12	22	14	115	0	129	26	0	0	26
+30 mins.	0	0	0	0	0	16	2	18	11	109	0	120	30	0	0	30
+45 mins.	0	0	0	0	0	16	9	25	9	130	0	139	38	0	0	38
Total Volume	0	0	0	0	0	47	43	90	41	475	0	516	132	0	0	132
% App. Total	0	0	0	0	0	52.2	47.8		7.9	92.1	0		100	0	0	
PHF	.000	.000	.000	.000	.000	.734	.538	.900	.732	.913	.000	.928	.868	.000	.000	.868
Cars	0	0	0	0	0	47	41	88	40	470	0	510	129	0	0	129
% Cars	0	0	0	0	0	100	95.3	97.8	97.6	98.9	0	98.8	97.7	0	0	97.7
Trucks	0	0	0	0	0	0	2	2	1	5	0	6	3	0	0	3
% Trucks	0	0	0	0	0	0	4.7	2.2	2.4	1.1	0	1.2	2.3	0	0	2.3





N/S Street : Lake Street  
 E/W Street: Kenrick St / Glenmont Rd  
 City/State : Brighton, MA  
 Weather : Rain

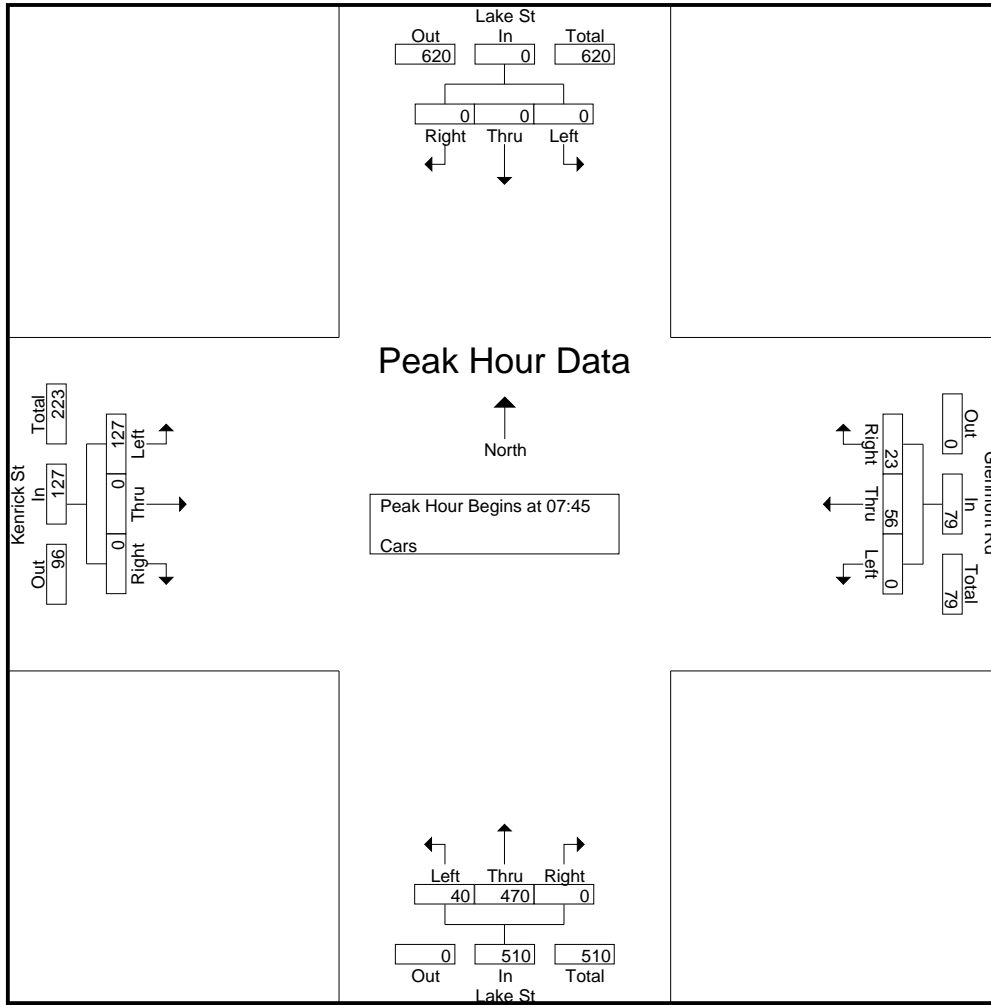
Accurate Counts  
 978-664-2565

File Name : 39000011  
 Site Code : 39000011  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Lake St From North				Glenmont Rd From East				Lake St From South				Kenrick St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	0	0	0	1	0	4	10	2	3	59	0	1	15	0	0	0	4	91	95
07:15	0	0	0	2	0	5	20	0	8	86	0	0	19	0	0	6	8	138	146
07:30	0	0	0	0	0	10	10	1	9	113	0	0	22	0	0	8	9	164	173
07:45	0	0	0	0	0	16	2	1	7	121	0	0	36	0	0	10	11	182	193
Total	0	0	0	3	0	35	42	4	27	379	0	1	92	0	0	24	32	575	607
08:00	0	0	0	0	0	16	9	1	14	114	0	1	37	0	0	11	13	190	203
08:15	0	0	0	0	0	12	7	1	10	106	0	0	25	0	0	9	10	160	170
08:30	0	0	0	2	0	12	5	1	9	129	0	2	29	0	0	5	10	184	194
08:45	0	0	0	0	0	9	5	0	4	99	0	0	38	0	0	8	8	155	163
Total	0	0	0	2	0	49	26	3	37	448	0	3	129	0	0	33	41	689	730
Grand Total	0	0	0	5	0	84	68	7	64	827	0	4	221	0	0	57	73	1264	1337
Apprch %	0	0	0		0	55.3	44.7		7.2	92.8	0		100	0	0				
Total %	0	0	0		0	6.6	5.4		5.1	65.4	0		17.5	0	0		5.5	94.5	

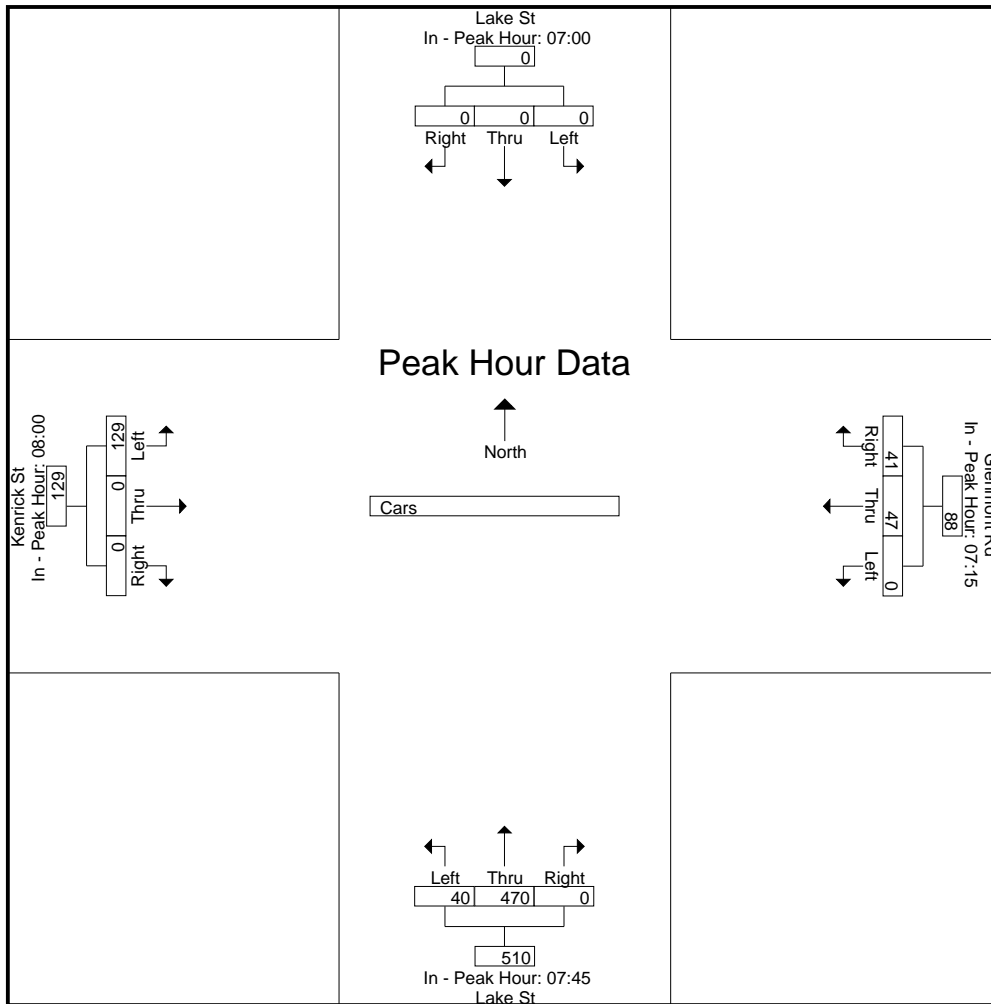
Start Time	Lake St From North				Glenmont Rd From East				Lake St From South				Kenrick St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	0	0	0	0	0	16	2	18	7	121	0	128	36	0	0	36	182
08:00	0	0	0	0	0	16	9	25	14	114	0	128	37	0	0	37	190
08:15	0	0	0	0	0	12	7	19	10	106	0	116	25	0	0	25	160
08:30	0	0	0	0	0	12	5	17	9	129	0	138	29	0	0	29	184
Total Volume	0	0	0	0	0	56	23	79	40	470	0	510	127	0	0	127	716
% App. Total	0	0	0		0	70.9	29.1		7.8	92.2	0		100	0	0		
PHF	.000	.000	.000	.000	.000	.875	.639	.790	.714	.911	.000	.924	.858	.000	.000	.858	.942



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00				07:15				07:45				08:00			
+0 mins.	0	0	0	0	0	5	20	25	7	121	0	128	37	0	0	37
+15 mins.	0	0	0	0	0	10	10	20	14	114	0	128	25	0	0	25
+30 mins.	0	0	0	0	0	16	2	18	10	106	0	116	29	0	0	29
+45 mins.	0	0	0	0	0	16	9	25	9	129	0	138	38	0	0	38
Total Volume	0	0	0	0	0	47	41	88	40	470	0	510	129	0	0	129
% App. Total	0	0	0	0	0	53.4	46.6		7.8	92.2	0		100	0	0	
PHF	.000	.000	.000	.000	.000	.734	.513	.880	.714	.911	.000	.924	.849	.000	.000	.849



N/S Street : Lake Street  
 E/W Street: Kenrick St / Glenmont Rd  
 City/State : Brighton, MA  
 Weather : Rain

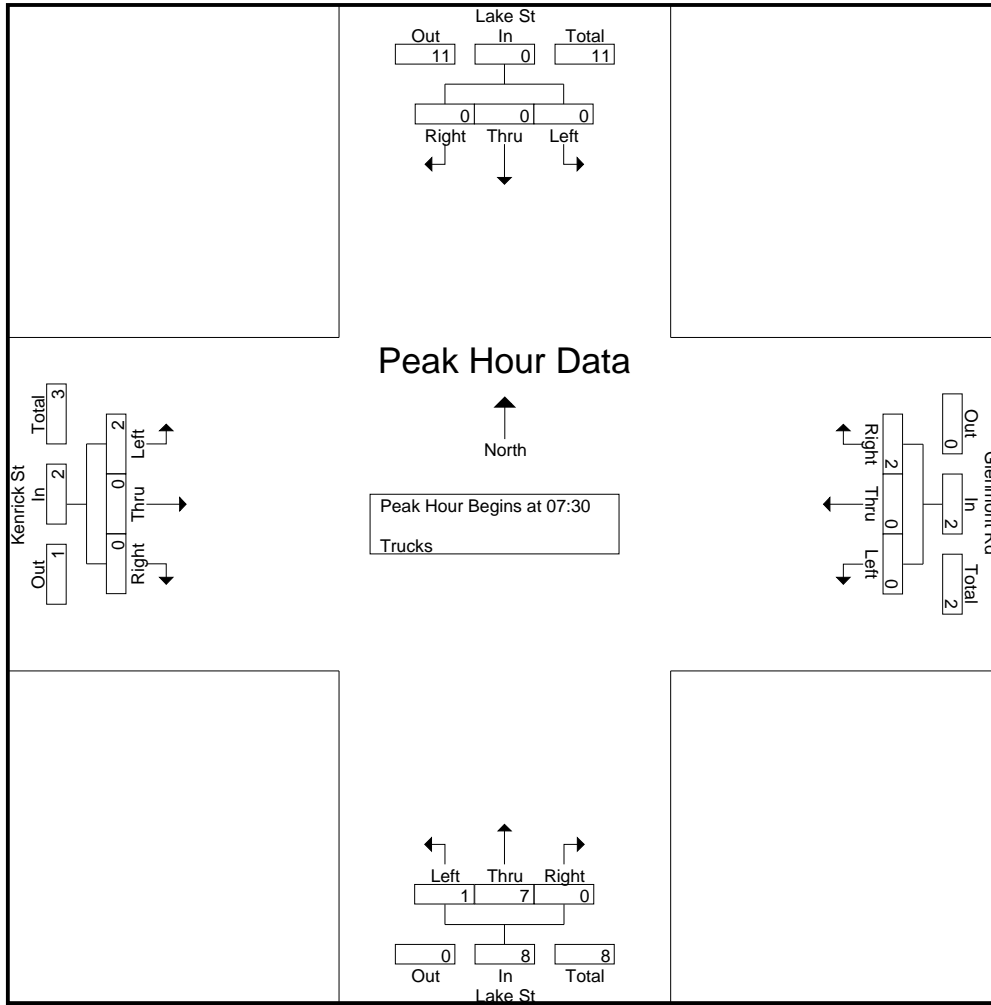
Accurate Counts  
 978-664-2565

File Name : 39000011  
 Site Code : 39000011  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Lake St From North				Glenmont Rd From East				Lake St From South				Kenrick St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	2
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	2	0	0	3	0	0	0	0	0	0	0	5	5
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	3	0	0	4	0	0	0	0	0	0	0	7	7
08:00	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	2
08:15	0	0	0	0	0	0	0	0	1	3	0	0	1	0	0	0	0	5	5
08:30	0	0	0	0	0	1	1	0	0	1	0	0	1	0	0	0	0	4	4
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	1	0	1	5	0	0	3	0	0	0	0	11	11
Grand Total	0	0	0	0	0	1	4	0	1	9	0	0	3	0	0	0	0	18	18
Apprch %	0	0	0		0	20	80		10	90	0		100	0	0				
Total %	0	0	0		0	5.6	22.2		5.6	50	0		16.7	0	0		0	100	

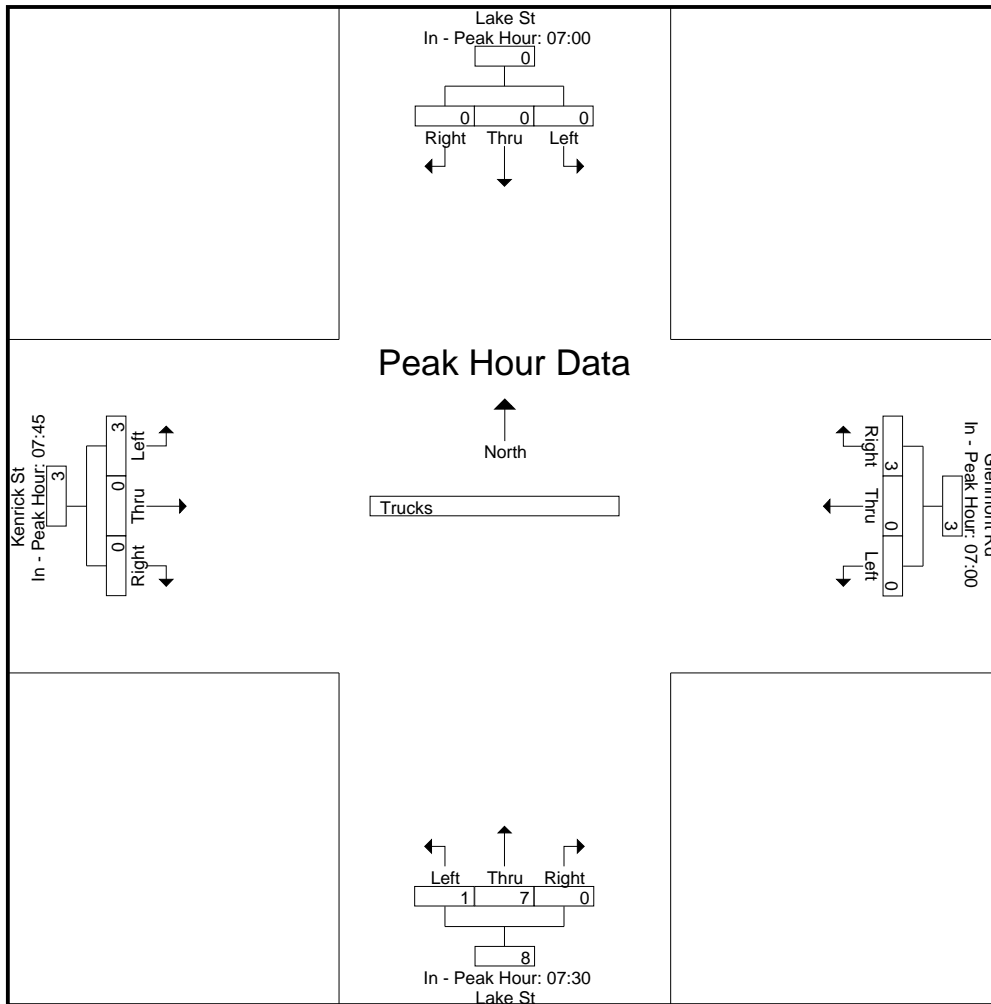
Start Time	Lake St From North				Glenmont Rd From East				Lake St From South				Kenrick St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	0	0	0	0	0	0	2	2	0	3	0	3	0	0	0	0	5
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	2
08:15	0	0	0	0	0	0	0	0	1	3	0	4	1	0	0	1	5
Total Volume	0	0	0	0	0	0	2	2	1	7	0	8	2	0	0	2	12
% App. Total	0	0	0		0	0	100		12.5	87.5	0		100	0	0		
PHF	.000	.000	.000	.000	.000	.000	.250	.250	.250	.583	.000	.500	.500	.000	.000	.500	.600



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00				07:30				07:45							
+0 mins.	0	0	0	0	0	0	1	1	0	3	0	3	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
+30 mins.	0	0	0	0	0	0	2	2	0	1	0	1	1	0	0	1
+45 mins.	0	0	0	0	0	0	0	0	1	3	0	4	1	0	0	1
Total Volume	0	0	0	0	0	0	3	3	1	7	0	8	3	0	0	3
% App. Total	0	0	0	0	0	0	100		12.5	87.5	0		100	0	0	
PHF	.000	.000	.000	.000	.000	.000	.375	.375	.250	.583	.000	.500	.750	.000	.000	.750



N/S Street : Lake Street  
 E/W Street: Kenrick St / Glenmont Rd  
 City/State : Brighton, MA  
 Weather : Rain

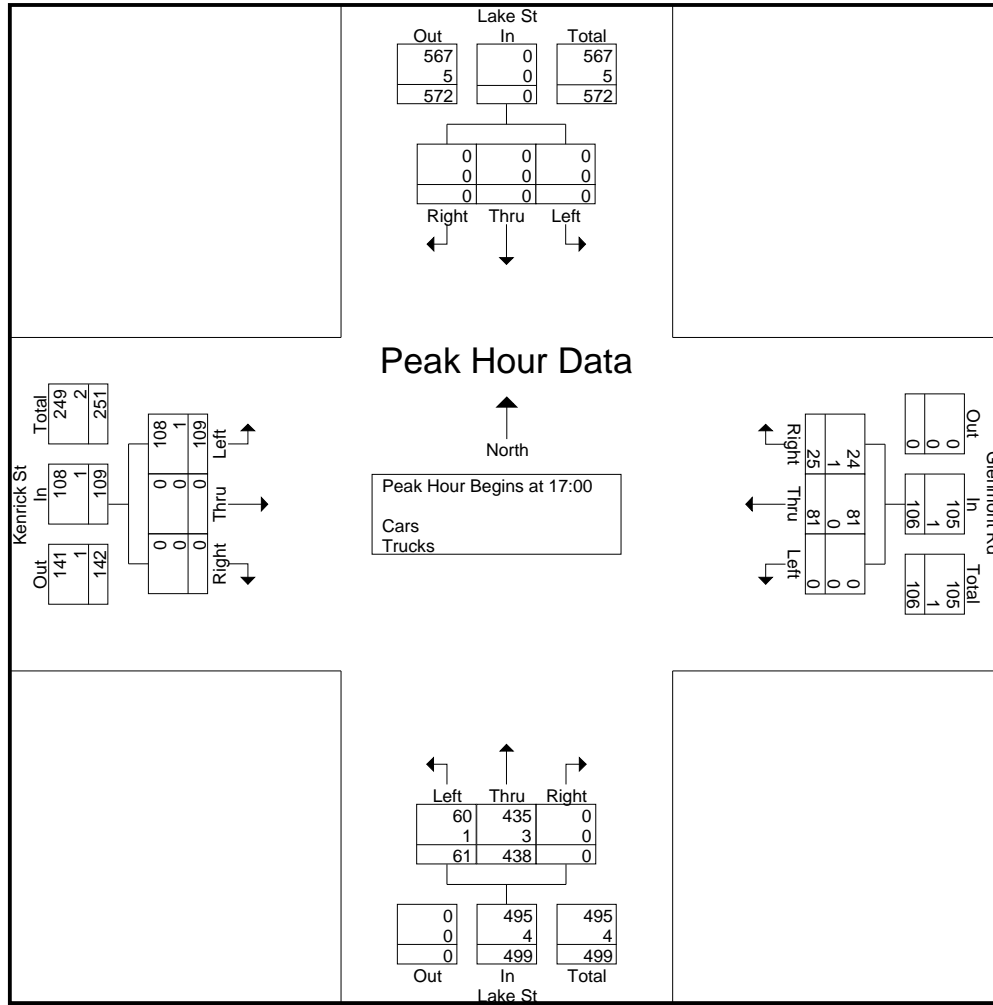
Accurate Counts  
 978-664-2565

File Name : 39000011  
 Site Code : 39000011  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Lake St From North				Glenmont Rd From East				Lake St From South				Kenrick St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	0	0	0	1	0	18	8	0	8	115	0	0	18	0	0	9	10	167	177
16:15	0	0	0	0	0	15	5	2	8	92	0	0	22	0	0	6	8	142	150
16:30	0	0	0	1	0	14	5	2	7	89	0	1	24	0	0	2	6	139	145
16:45	0	0	0	1	0	13	9	4	12	100	0	2	19	0	0	6	13	153	166
Total	0	0	0	3	0	60	27	8	35	396	0	3	83	0	0	23	37	601	638
17:00	0	0	0	1	0	16	5	4	11	125	0	0	19	0	0	4	9	176	185
17:15	0	0	0	3	0	21	5	3	21	120	0	0	26	0	0	11	17	193	210
17:30	0	0	0	1	0	24	8	6	16	97	0	0	35	0	0	9	16	180	196
17:45	0	0	0	0	0	20	7	3	13	96	0	2	29	0	0	18	23	165	188
Total	0	0	0	5	0	81	25	16	61	438	0	2	109	0	0	42	65	714	779
Grand Total	0	0	0	8	0	141	52	24	96	834	0	5	192	0	0	65	102	1315	1417
Apprch %	0	0	0		0	73.1	26.9		10.3	89.7	0		100	0	0				
Total %	0	0	0		0	10.7	4		7.3	63.4	0		14.6	0	0		7.2	92.8	
Cars	0	0	0		0	140	51		94	827	0		190	0	0		0	0	1404
% Cars	0	0	0	100	0	99.3	98.1	100	97.9	99.2	0	100	99	0	0	100	0	0	99.1
Trucks	0	0	0		0	1	1		2	7	0		2	0	0		0	0	13
% Trucks	0	0	0	0	0	0.7	1.9	0	2.1	0.8	0	0	1	0	0	0	0	0	0.9

Start Time	Lake St From North				Glenmont Rd From East				Lake St From South				Kenrick St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	0	0	0	0	0	16	5	21	11	125	0	136	19	0	0	19	176
17:15	0	0	0	0	0	21	5	26	21	120	0	141	26	0	0	26	193
17:30	0	0	0	0	0	24	8	32	16	97	0	113	35	0	0	35	180
17:45	0	0	0	0	0	20	7	27	13	96	0	109	29	0	0	29	165
Total Volume	0	0	0	0	0	81	25	106	61	438	0	499	109	0	0	109	714
% App. Total	0	0	0		0	76.4	23.6		12.2	87.8	0		100	0	0		
PHF	.000	.000	.000	.000	.000	.844	.781	.828	.726	.876	.000	.885	.779	.000	.000	.779	.925
Cars	0	0	0	0	0	81	24	105	60	435	0	495	108	0	0	108	708
% Cars	0	0	0	0	0	100	96.0	99.1	98.4	99.3	0	99.2	99.1	0	0	99.1	99.2
Trucks	0	0	0	0	0	0	1	1	1	3	0	4	1	0	0	1	6
% Trucks	0	0	0	0	0	0	4.0	0.9	1.6	0.7	0	0.8	0.9	0	0	0.9	0.8

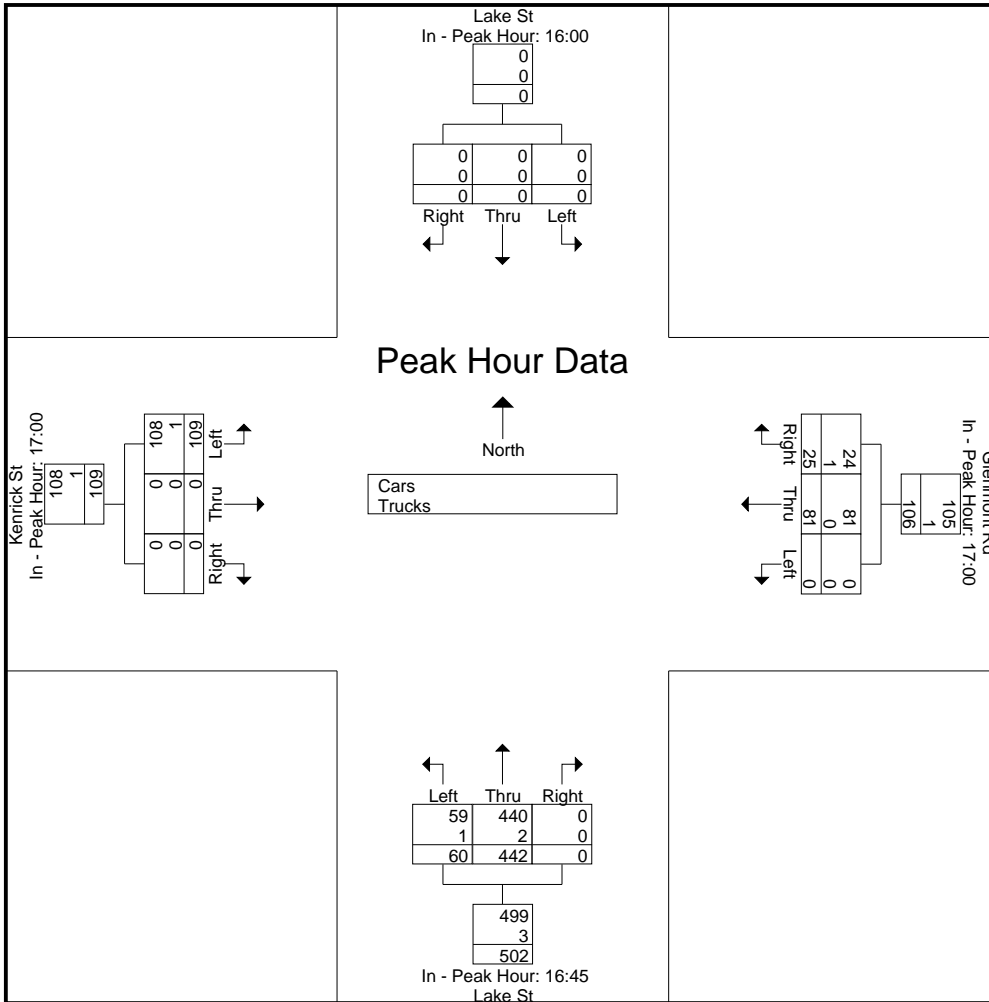


Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00				17:00				16:45				17:00			
+0 mins.	0	0	0	0	0	16	5	21	12	100	0	112	19	0	0	19
+15 mins.	0	0	0	0	0	21	5	26	11	125	0	136	26	0	0	26
+30 mins.	0	0	0	0	0	24	8	32	21	120	0	141	35	0	0	35
+45 mins.	0	0	0	0	0	20	7	27	16	97	0	113	29	0	0	29
Total Volume	0	0	0	0	0	81	25	106	60	442	0	502	109	0	0	109
% App. Total	0	0	0	0	0	76.4	23.6		12	88	0		100	0	0	
PHF	.000	.000	.000	.000	.000	.844	.781	.828	.714	.884	.000	.890	.779	.000	.000	.779
Cars	0	0	0	0	0	81	24	105	59	440	0	499	108	0	0	108
% Cars	0	0	0	0	0	100	96	99.1	98.3	99.5	0	99.4	99.1	0	0	99.1
Trucks	0	0	0	0	0	0	1	1	1	2	0	3	1	0	0	1
% Trucks	0	0	0	0	0	0	4	0.9	1.7	0.5	0	0.6	0.9	0	0	0.9





N/S Street : Lake Street  
 E/W Street: Kenrick St / Glenmont Rd  
 City/State : Brighton, MA  
 Weather : Rain

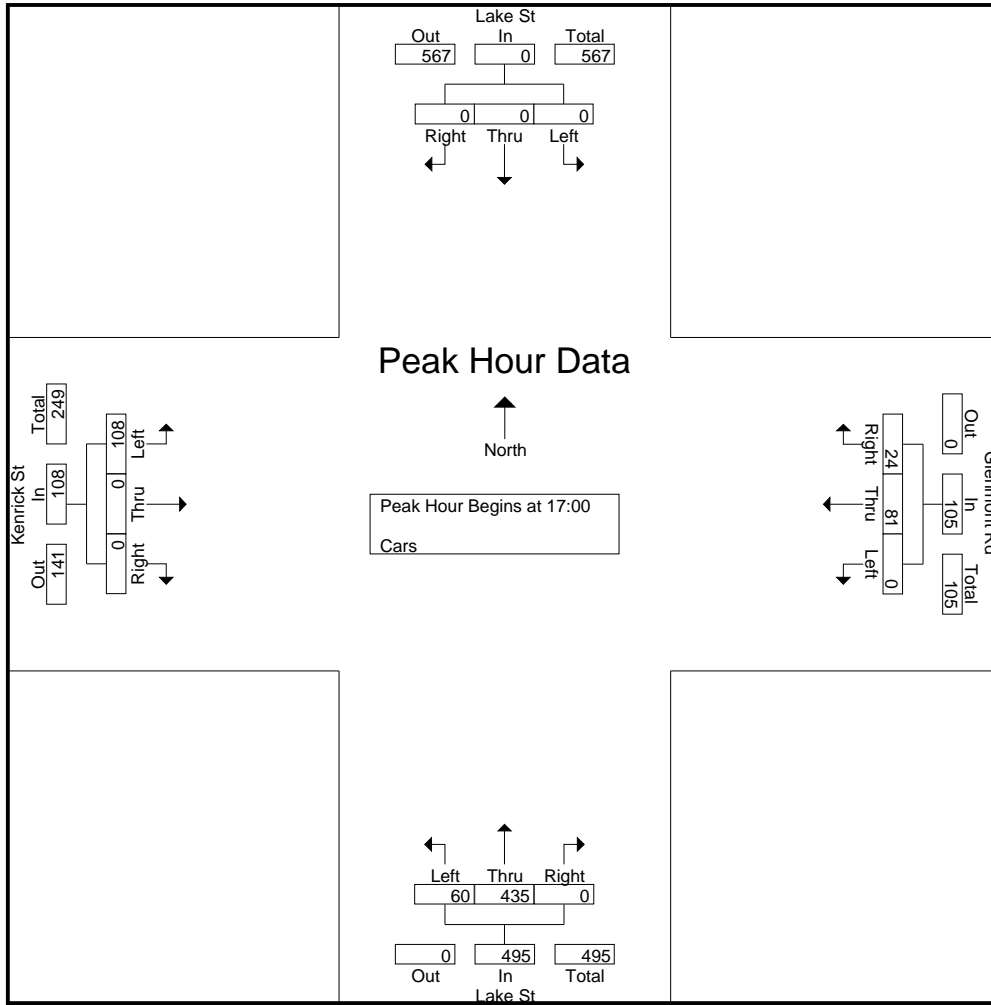
Accurate Counts  
 978-664-2565

File Name : 39000011  
 Site Code : 39000011  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Lake St From North				Glenmont Rd From East				Lake St From South				Kenrick St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	0	0	0	1	0	18	8	0	8	114	0	0	18	0	0	9	10	166	176
16:15	0	0	0	0	0	14	5	2	8	90	0	0	22	0	0	6	8	139	147
16:30	0	0	0	1	0	14	5	2	6	88	0	1	24	0	0	2	6	137	143
16:45	0	0	0	1	0	13	9	4	12	100	0	2	18	0	0	6	13	152	165
Total	0	0	0	3	0	59	27	8	34	392	0	3	82	0	0	23	37	594	631
17:00	0	0	0	1	0	16	5	4	11	124	0	0	19	0	0	4	9	175	184
17:15	0	0	0	3	0	21	5	3	20	120	0	0	26	0	0	11	17	192	209
17:30	0	0	0	1	0	24	7	6	16	96	0	0	35	0	0	9	16	178	194
17:45	0	0	0	0	0	20	7	3	13	95	0	2	28	0	0	18	23	163	186
Total	0	0	0	5	0	81	24	16	60	435	0	2	108	0	0	42	65	708	773
Grand Total	0	0	0	8	0	140	51	24	94	827	0	5	190	0	0	65	102	1302	1404
Apprch %	0	0	0		0	73.3	26.7		10.2	89.8	0		100	0	0				
Total %	0	0	0		0	10.8	3.9		7.2	63.5	0		14.6	0	0		7.3	92.7	

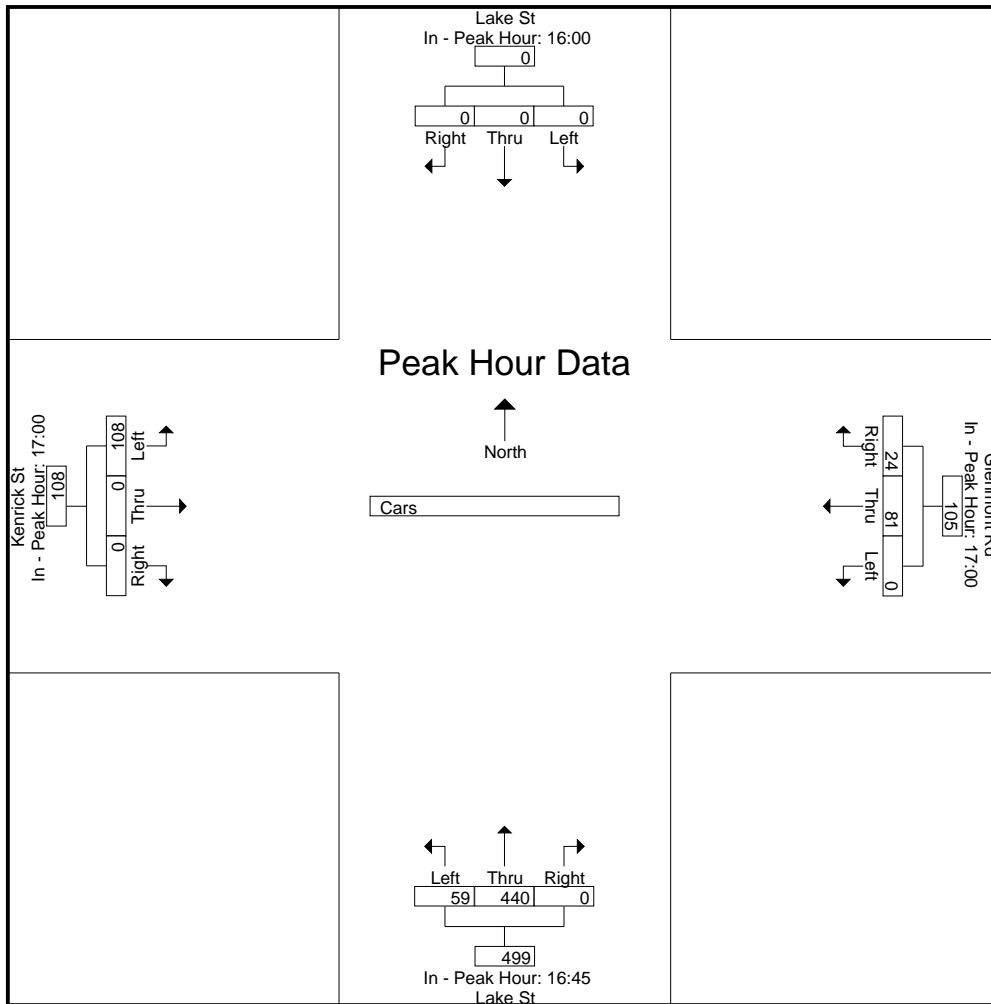
Start Time	Lake St From North				Glenmont Rd From East				Lake St From South				Kenrick St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	0	0	0	0	0	16	5	21	11	124	0	135	19	0	0	19	175
17:15	0	0	0	0	0	21	5	26	20	120	0	140	26	0	0	26	192
17:30	0	0	0	0	0	24	7	31	16	96	0	112	35	0	0	35	178
17:45	0	0	0	0	0	20	7	27	13	95	0	108	28	0	0	28	163
Total Volume	0	0	0	0	0	81	24	105	60	435	0	495	108	0	0	108	708
% App. Total	0	0	0		0	77.1	22.9		12.1	87.9	0		100	0	0		
PHF	.000	.000	.000	.000	.000	.844	.857	.847	.750	.877	.000	.884	.771	.000	.000	.771	.922



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00				17:00				16:45				17:00			
+0 mins.	0	0	0	0	0	16	5	21	12	100	0	112	19	0	0	19
+15 mins.	0	0	0	0	0	21	5	26	11	124	0	135	26	0	0	26
+30 mins.	0	0	0	0	0	24	7	31	20	120	0	140	35	0	0	35
+45 mins.	0	0	0	0	0	20	7	27	16	96	0	112	28	0	0	28
Total Volume	0	0	0	0	0	81	24	105	59	440	0	499	108	0	0	108
% App. Total	0	0	0	0	0	77.1	22.9		11.8	88.2	0		100	0	0	
PHF	.000	.000	.000	.000	.000	.844	.857	.847	.738	.887	.000	.891	.771	.000	.000	.771



N/S Street : Lake Street  
 E/W Street: Kenrick St / Glenmont Rd  
 City/State : Brighton, MA  
 Weather : Rain

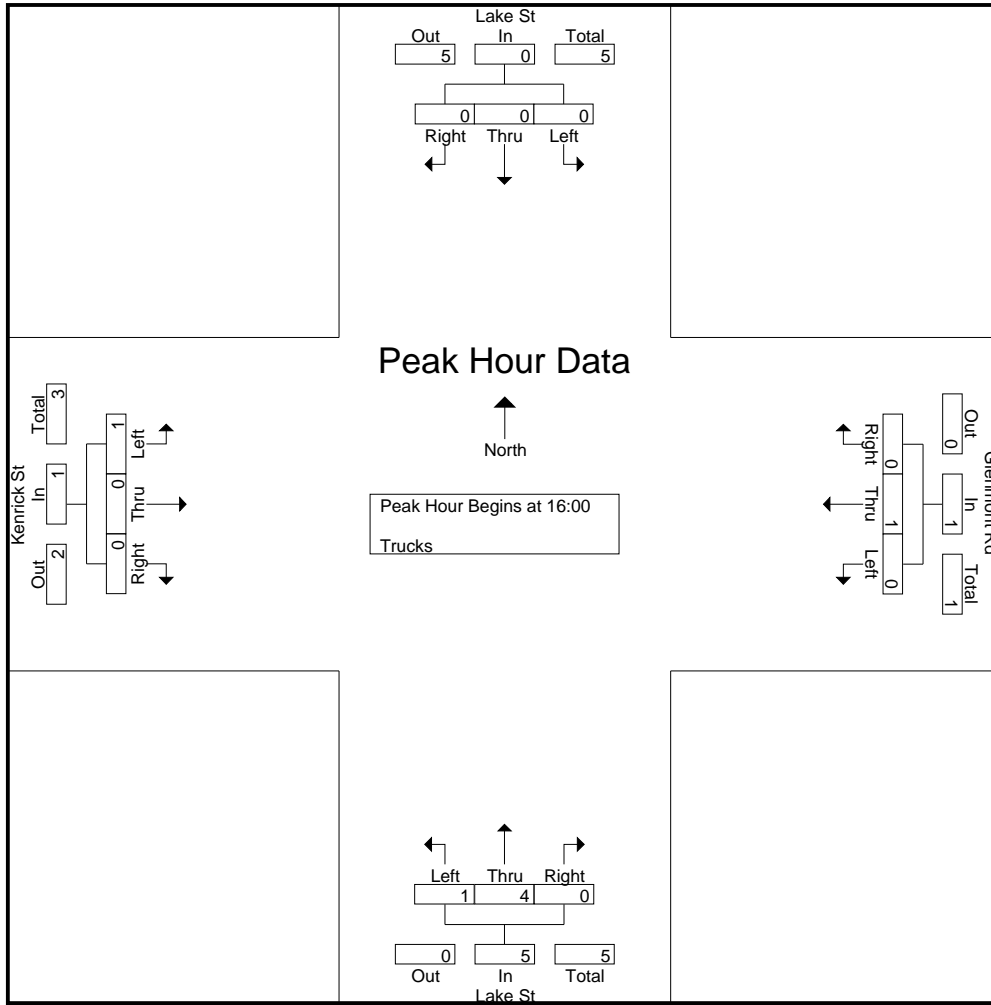
Accurate Counts  
 978-664-2565

File Name : 39000011  
 Site Code : 39000011  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Lake St From North				Glenmont Rd From East				Lake St From South				Kenrick St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
16:15	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	3	3
16:30	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2	2
16:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Total	0	0	0	0	0	1	0	0	1	4	0	0	1	0	0	0	0	7	7
17:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
17:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
17:30	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	2
17:45	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	2
Total	0	0	0	0	0	0	1	0	1	3	0	0	1	0	0	0	0	6	6
Grand Total	0	0	0	0	0	1	1	0	2	7	0	0	2	0	0	0	0	13	13
Apprch %	0	0	0		0	50	50		22.2	77.8	0		100	0	0				
Total %	0	0	0		0	7.7	7.7		15.4	53.8	0		15.4	0	0		0	100	

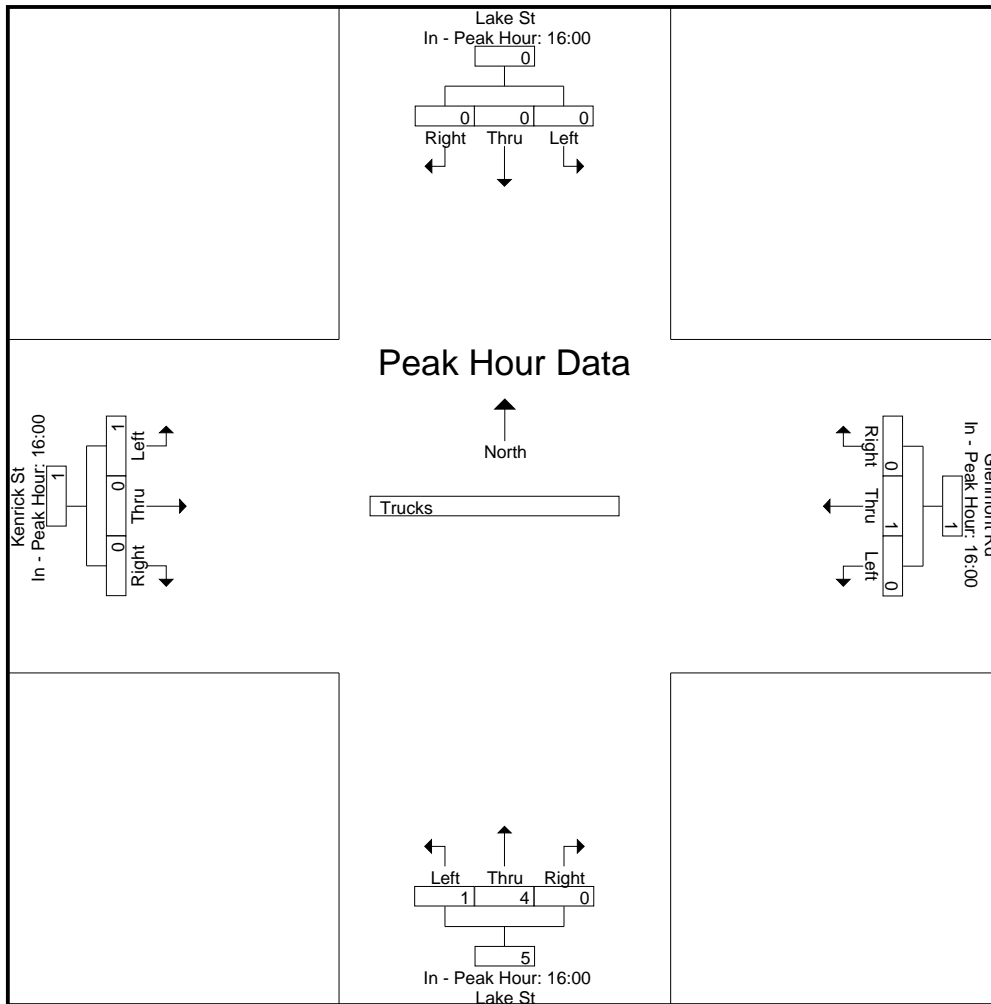
Start Time	Lake St From North				Glenmont Rd From East				Lake St From South				Kenrick St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:00																	
16:00	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
16:15	0	0	0	0	0	1	0	1	0	2	0	2	0	0	0	0	3
16:30	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	2
16:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total Volume	0	0	0	0	0	1	0	1	1	4	0	5	1	0	0	1	7
% App. Total	0	0	0		0	100	0		20	80	0		100	0	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.250	.500	.000	.625	.250	.000	.000	.250	.583



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00				16:00				16:00				16:00			
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	0	0	0	0	1	0	1	0	2	0	2	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Total Volume	0	0	0	0	0	1	0	1	1	4	0	5	1	0	0	1
% App. Total	0	0	0	0	0	100	0	0	20	80	0	0	100	0	0	0
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.250	.500	.000	.625	.250	.000	.000	.250



N/S Street : Foster Street  
 E/W Street: Rogers Park Avenue  
 City/State : Brighton, MA  
 Weather : Rain

Accurate Counts  
 978-664-2565

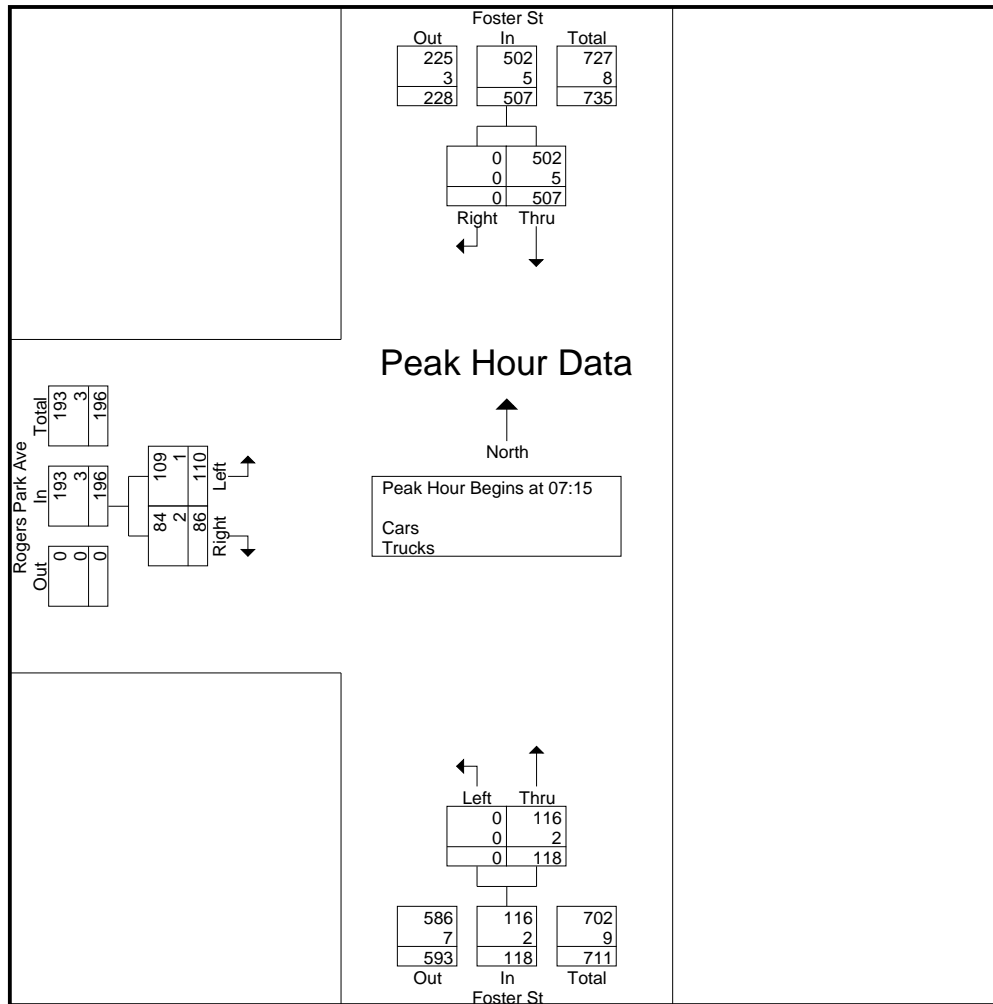
File Name : 39000012  
 Site Code : 39000012  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Foster St From North			Foster St From South			Rogers Park Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
07:00	108	0	0	0	27	0	31	11	11	11	177	188
07:15	132	0	1	0	24	2	32	22	16	19	210	229
07:30	128	0	3	0	23	2	21	23	15	20	195	215
07:45	115	0	0	0	34	0	24	23	6	6	196	202
Total	483	0	4	0	108	4	108	79	48	56	778	834
08:00	132	0	1	0	37	1	33	18	10	12	220	232
08:15	118	0	1	0	33	0	29	19	9	10	199	209
08:30	102	0	0	0	30	0	26	22	3	3	180	183
08:45	125	0	0	0	30	2	22	27	3	5	204	209
Total	477	0	2	0	130	3	110	86	25	30	803	833
Grand Total	960	0	6	0	238	7	218	165	73	86	1581	1667
Apprch %	100	0		0	100		56.9	43.1				
Total %	60.7	0		0	15.1		13.8	10.4		5.2	94.8	
Cars	945	0		0	234		214	161		0	0	1640
% Cars	98.4	0	100	0	98.3	100	98.2	97.6	100	0	0	98.4
Trucks	15	0		0	4		4	4		0	0	27
% Trucks	1.6	0	0	0	1.7	0	1.8	2.4	0	0	0	1.6

Start Time	Foster St From North			Foster St From South			Rogers Park Ave From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15										
07:15	132	0	132	0	24	24	32	22	54	210
07:30	128	0	128	0	23	23	21	23	44	195
07:45	115	0	115	0	34	34	24	23	47	196
08:00	132	0	132	0	37	37	33	18	51	220
Total Volume	507	0	507	0	118	118	110	86	196	821
% App. Total	100	0		0	100		56.1	43.9		
PHF	.960	.000	.960	.000	.797	.797	.833	.935	.907	.933
Cars	502	0	502	0	116	116	109	84	193	811
% Cars	99.0	0	99.0	0	98.3	98.3	99.1	97.7	98.5	98.8
Trucks	5	0	5	0	2	2	1	2	3	10
% Trucks	1.0	0	1.0	0	1.7	1.7	0.9	2.3	1.5	1.2

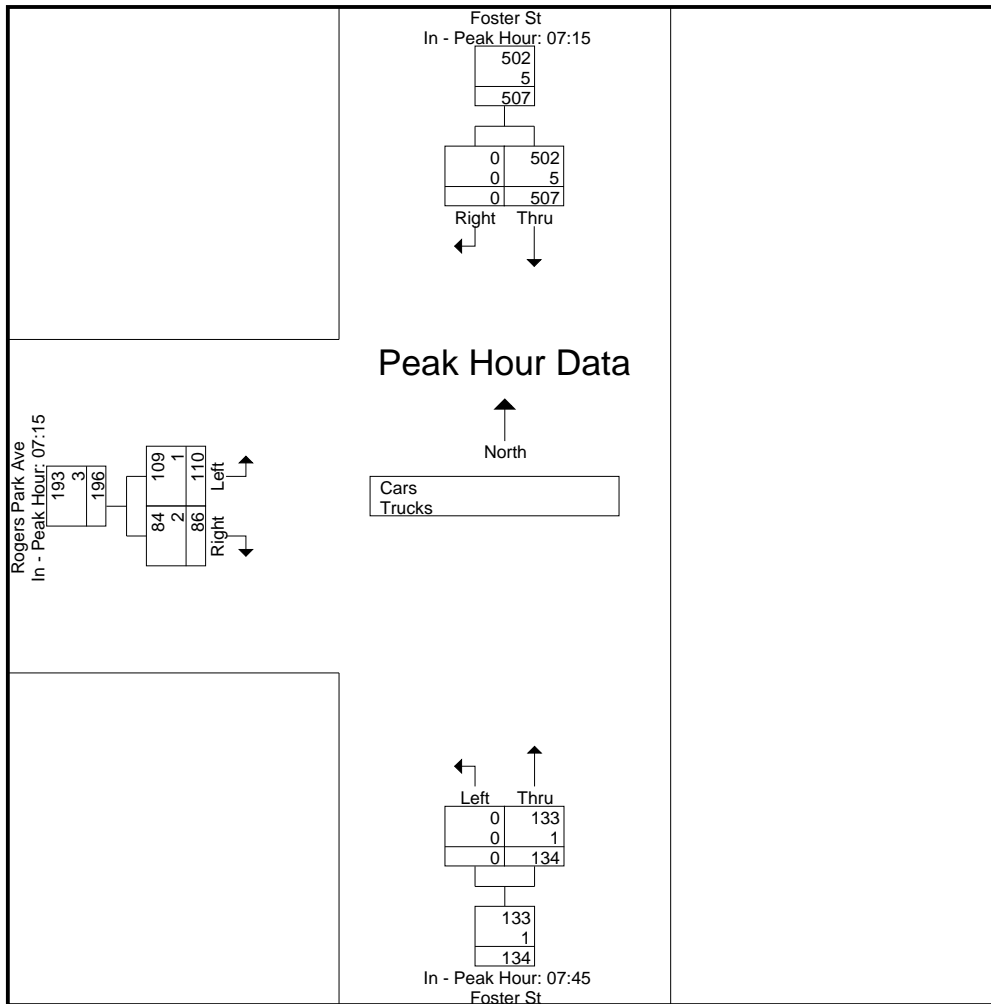




Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15			07:45			07:15		
+0 mins.	132	0	132	0	34	34	32	22	54
+15 mins.	128	0	128	0	37	37	21	23	44
+30 mins.	115	0	115	0	33	33	24	23	47
+45 mins.	132	0	132	0	30	30	33	18	51
Total Volume	507	0	507	0	134	134	110	86	196
% App. Total	100	0		0	100		56.1	43.9	
PHF	.960	.000	.960	.000	.905	.905	.833	.935	.907
Cars	502	0	502	0	133	133	109	84	193
% Cars	99	0	99	0	99.3	99.3	99.1	97.7	98.5
Trucks	5	0	5	0	1	1	1	2	3
% Trucks	1	0	1	0	0.7	0.7	0.9	2.3	1.5



N/S Street : Foster Street  
 E/W Street: Rogers Park Avenue  
 City/State : Brighton, MA  
 Weather : Rain

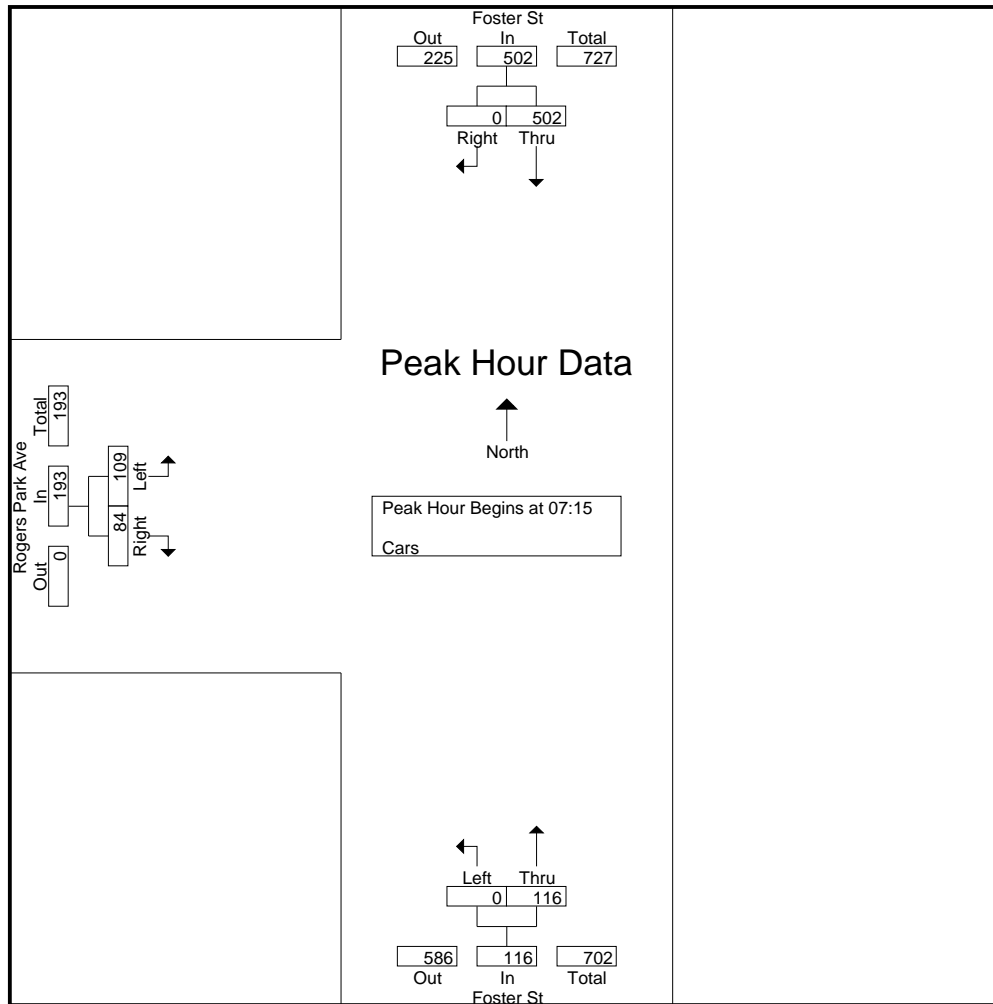
Accurate Counts  
 978-664-2565

File Name : 39000012  
 Site Code : 39000012  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Foster St From North			Foster St From South			Rogers Park Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
07:00	101	0	0	0	25	0	29	11	11	11	166	177
07:15	129	0	1	0	23	2	31	20	16	19	203	222
07:30	127	0	3	0	23	2	21	23	15	20	194	214
07:45	115	0	0	0	34	0	24	23	6	6	196	202
Total	472	0	4	0	105	4	105	77	48	56	759	815
08:00	131	0	1	0	36	1	33	18	10	12	218	230
08:15	118	0	1	0	33	0	29	17	9	10	197	207
08:30	101	0	0	0	30	0	26	22	3	3	179	182
08:45	123	0	0	0	30	2	21	27	3	5	201	206
Total	473	0	2	0	129	3	109	84	25	30	795	825
Grand Total	945	0	6	0	234	7	214	161	73	86	1554	1640
Apprch %	100	0		0	100		57.1	42.9				
Total %	60.8	0		0	15.1		13.8	10.4		5.2	94.8	

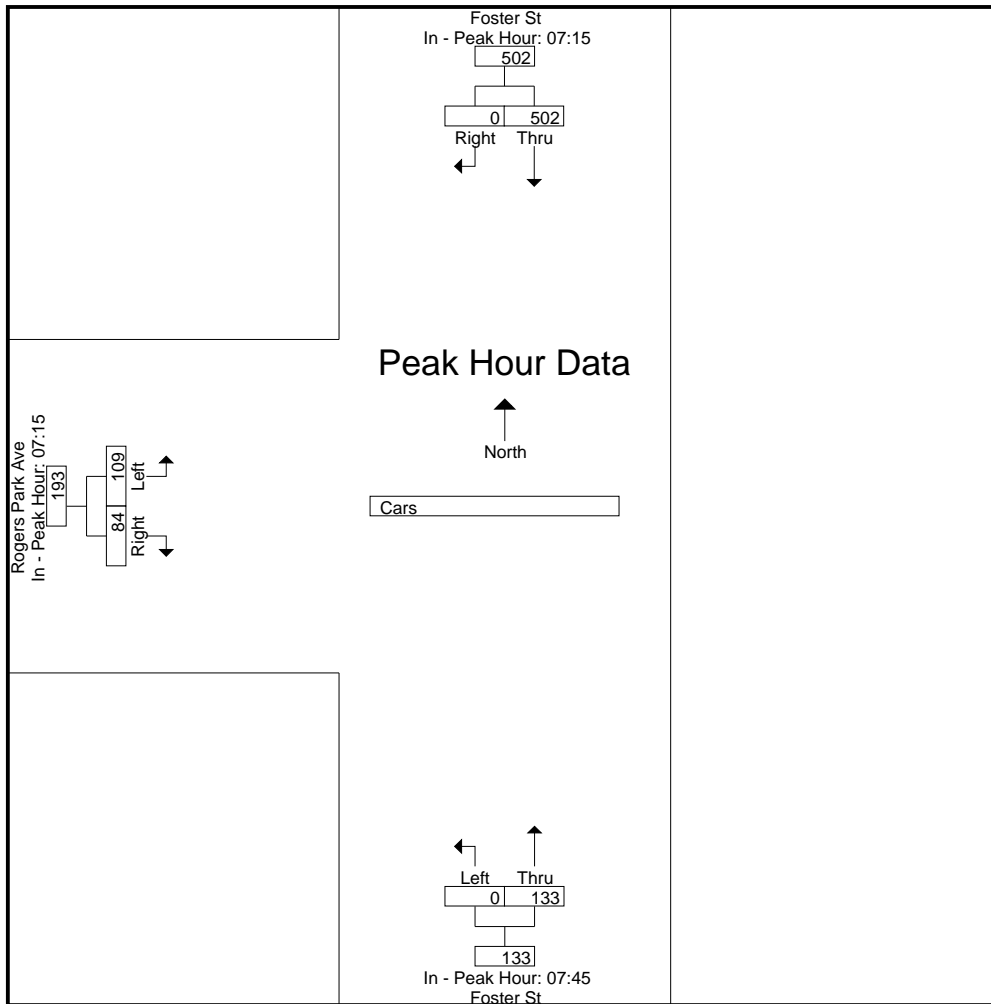
Start Time	Foster St From North			Foster St From South			Rogers Park Ave From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15										
07:15	129	0	129	0	23	23	31	20	51	203
07:30	127	0	127	0	23	23	21	23	44	194
07:45	115	0	115	0	34	34	24	23	47	196
08:00	131	0	131	0	36	36	33	18	51	218
Total Volume	502	0	502	0	116	116	109	84	193	811
% App. Total	100	0		0	100		56.5	43.5		
PHF	.958	.000	.958	.000	.806	.806	.826	.913	.946	.930



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15			07:45			07:15		
+0 mins.	129	0	129	0	34	34	31	20	51
+15 mins.	127	0	127	0	36	36	21	23	44
+30 mins.	115	0	115	0	33	33	24	23	47
+45 mins.	131	0	131	0	30	30	33	18	51
Total Volume	502	0	502	0	133	133	109	84	193
% App. Total	100	0		0	100		56.5	43.5	
PHF	.958	.000	.958	.000	.924	.924	.826	.913	.946



N/S Street : Foster Street  
 E/W Street: Rogers Park Avenue  
 City/State : Brighton, MA  
 Weather : Rain

Accurate Counts  
 978-664-2565

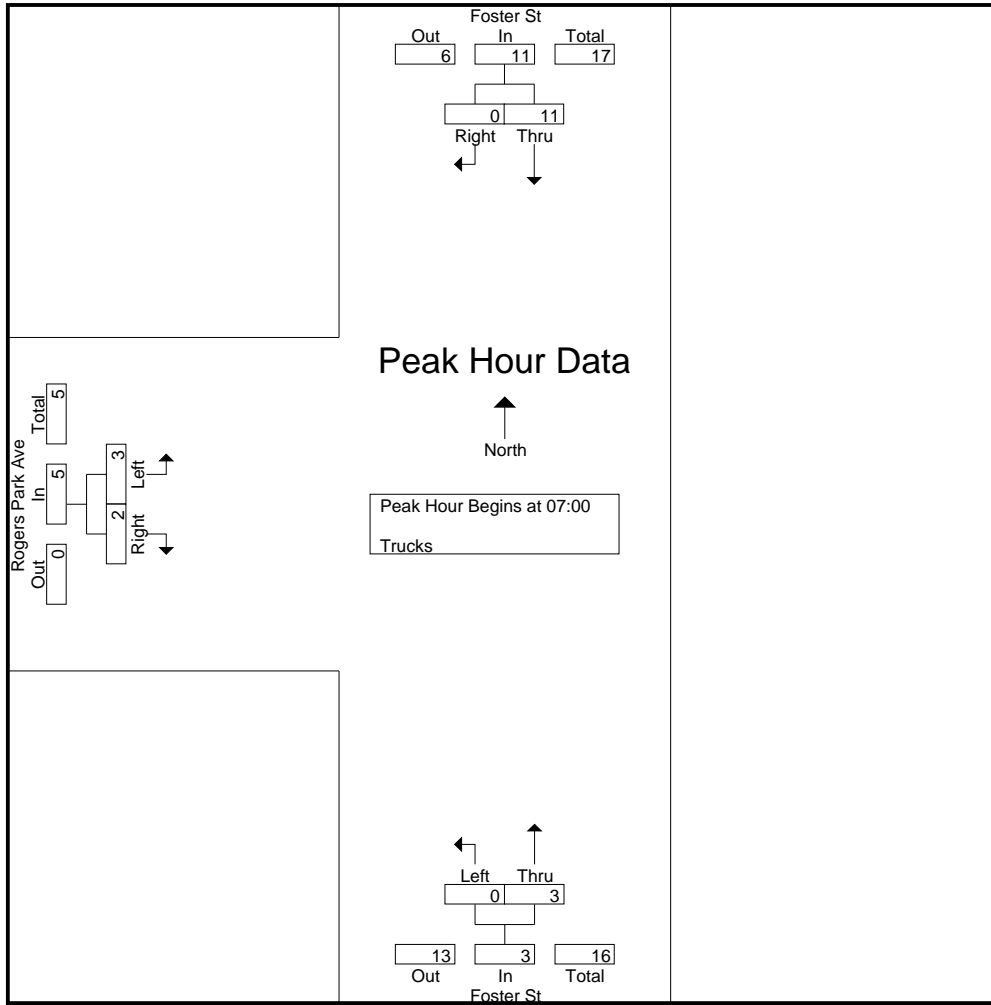
File Name : 39000012  
 Site Code : 39000012  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Foster St From North			Foster St From South			Rogers Park Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
07:00	7	0	0	0	2	0	2	0	0	0	11	11
07:15	3	0	0	0	1	0	1	2	0	0	7	7
07:30	1	0	0	0	0	0	0	0	0	0	1	1
07:45	0	0	0	0	0	0	0	0	0	0	0	0
Total	11	0	0	0	3	0	3	2	0	0	19	19
08:00	1	0	0	0	1	0	0	0	0	0	2	2
08:15	0	0	0	0	0	0	0	2	0	0	2	2
08:30	1	0	0	0	0	0	0	0	0	0	1	1
08:45	2	0	0	0	0	0	1	0	0	0	3	3
Total	4	0	0	0	1	0	1	2	0	0	8	8
Grand Total	15	0	0	0	4	0	4	4	0	0	27	27
Apprch %	100	0		0	100		50	50				
Total %	55.6	0		0	14.8		14.8	14.8		0	100	

Start Time	Foster St From North			Foster St From South			Rogers Park Ave From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00	7	0	7	0	2	2	2	0	2	11
07:15	3	0	3	0	1	1	1	2	3	7
07:30	1	0	1	0	0	0	0	0	0	1
07:45	0	0	0	0	0	0	0	0	0	0
Total Volume	11	0	11	0	3	3	3	2	5	19
% App. Total	100	0		0	100		60	40		
PHF	.393	.000	.393	.000	.375	.375	.375	.250	.417	.432

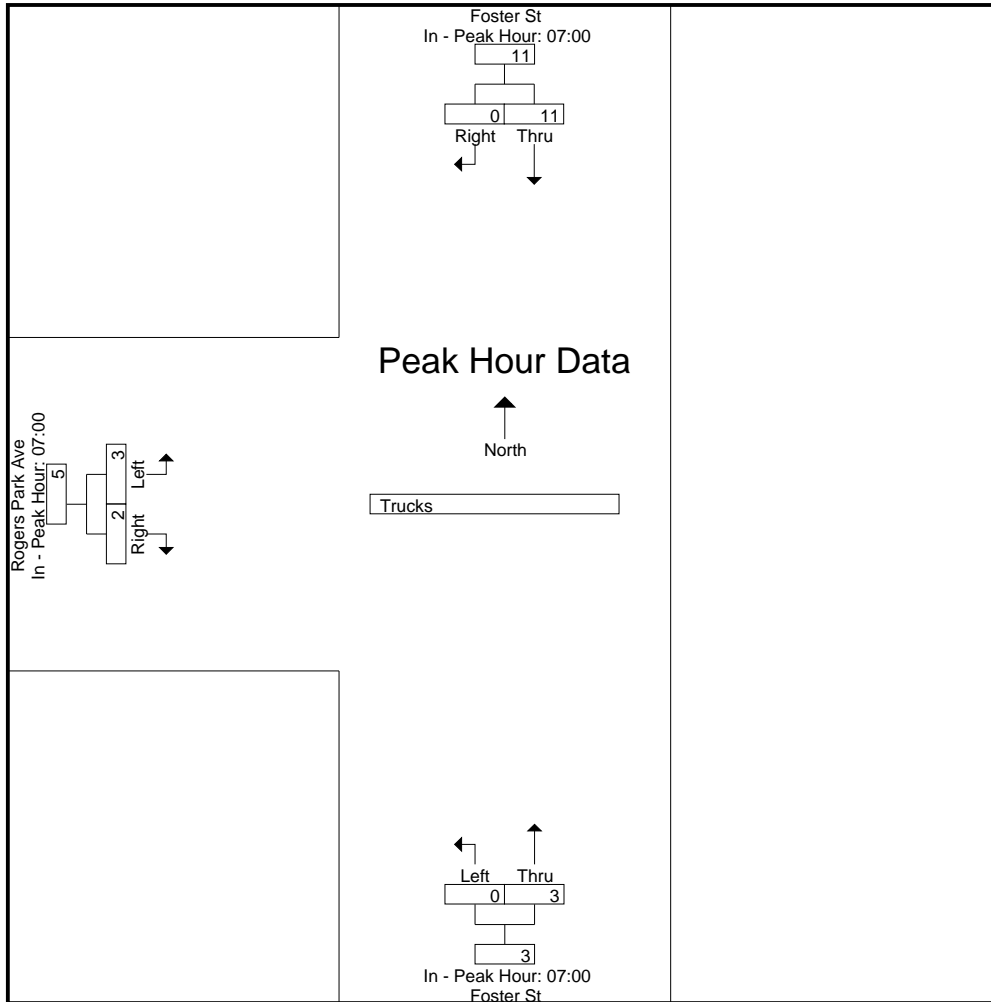
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:00



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00			07:00			07:00		
+0 mins.	7	0	7	0	2	2	2	0	2
+15 mins.	3	0	3	0	1	1	1	2	3
+30 mins.	1	0	1	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	11	0	11	0	3	3	3	2	5
% App. Total	100	0		0	100		60	40	
PHF	.393	.000	.393	.000	.375	.375	.375	.250	.417





N/S Street : Foster Street  
 E/W Street: Rogers Park Avenue  
 City/State : Brighton, MA  
 Weather : Rain

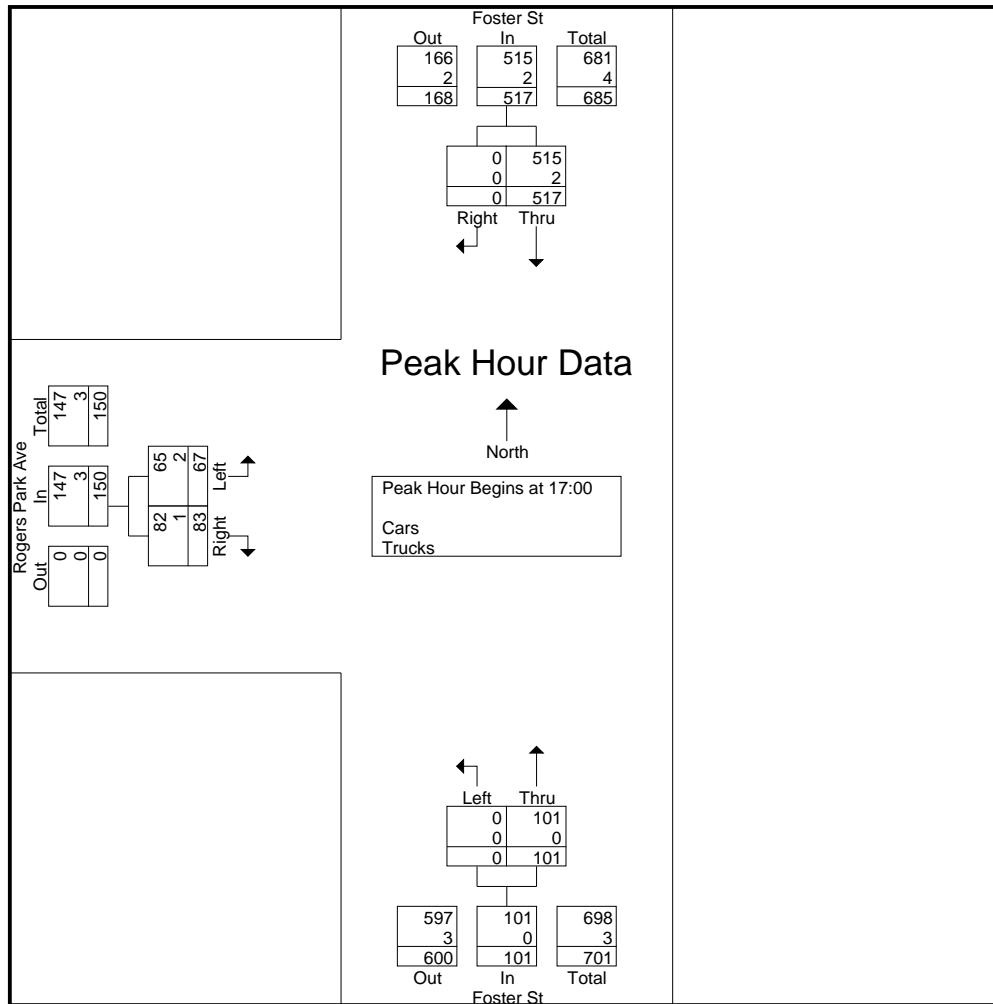
Accurate Counts  
 978-664-2565

File Name : 39000012  
 Site Code : 39000012  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Foster St From North			Foster St From South			Rogers Park Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
16:00	100	0	1	0	19	0	9	19	5	6	147	153
16:15	106	0	4	0	17	0	9	6	2	6	138	144
16:30	113	0	0	0	22	0	15	18	6	6	168	174
16:45	114	0	2	0	20	0	7	18	3	5	159	164
Total	433	0	7	0	78	0	40	61	16	23	612	635
17:00	125	0	3	0	26	0	12	20	5	8	183	191
17:15	133	0	0	0	27	0	22	22	7	7	204	211
17:30	116	0	5	0	20	0	15	21	13	18	172	190
17:45	143	0	0	0	28	0	18	20	13	13	209	222
Total	517	0	8	0	101	0	67	83	38	46	768	814
Grand Total	950	0	15	0	179	0	107	144	54	69	1380	1449
Apprch %	100	0		0	100		42.6	57.4				
Total %	68.8	0		0	13		7.8	10.4		4.8	95.2	
Cars	939	0		0	177		105	143		0	0	1433
% Cars	98.8	0	100	0	98.9	0	98.1	99.3	100	0	0	98.9
Trucks	11	0		0	2		2	1		0	0	16
% Trucks	1.2	0	0	0	1.1	0	1.9	0.7	0	0	0	1.1

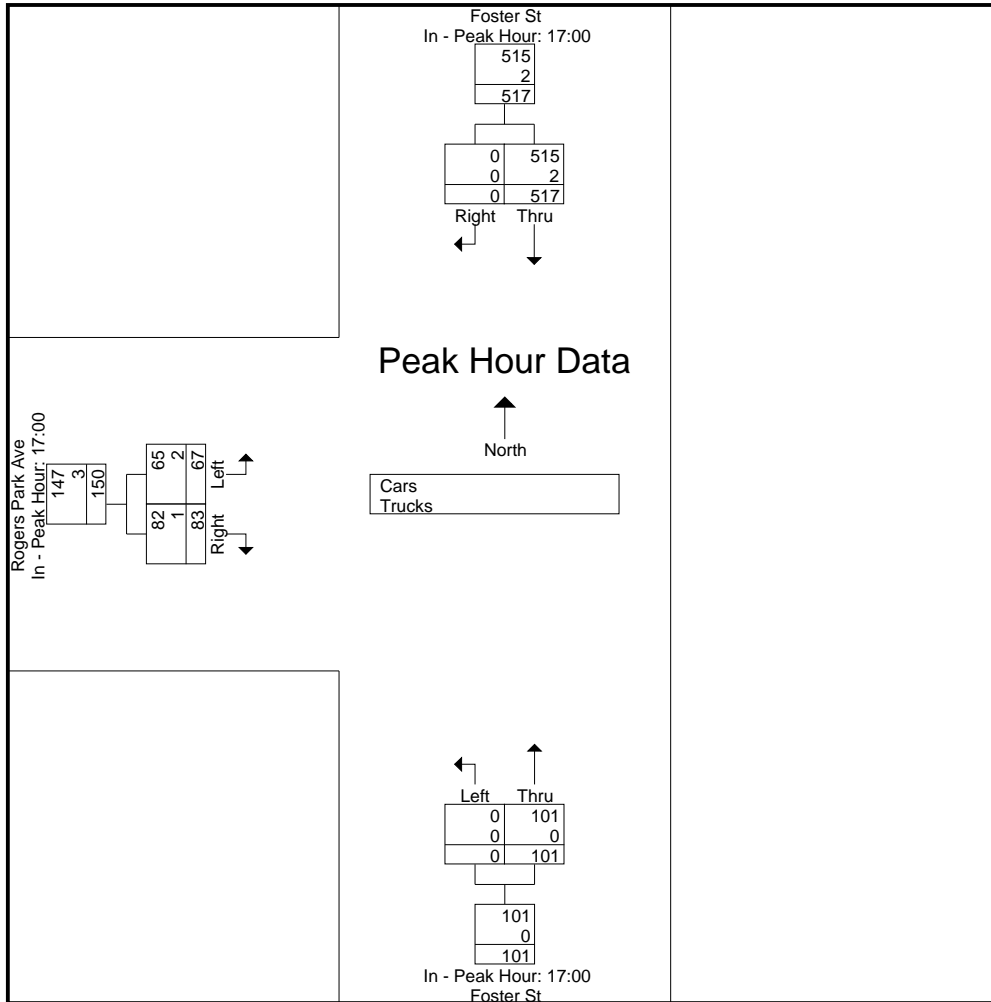
Start Time	Foster St From North			Foster St From South			Rogers Park Ave From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 17:00										
17:00	125	0	125	0	26	26	12	20	32	183
17:15	133	0	133	0	27	27	22	22	44	204
17:30	116	0	116	0	20	20	15	21	36	172
17:45	143	0	143	0	28	28	18	20	38	209
Total Volume	517	0	517	0	101	101	67	83	150	768
% App. Total	100	0		0	100		44.7	55.3		
PHF	.904	.000	.904	.000	.902	.902	.761	.943	.852	.919
Cars	515	0	515	0	101	101	65	82	147	763
% Cars	99.6	0	99.6	0	100	100	97.0	98.8	98.0	99.3
Trucks	2	0	2	0	0	0	2	1	3	5
% Trucks	0.4	0	0.4	0	0	0	3.0	1.2	2.0	0.7



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00			17:00			17:00		
+0 mins.	125	0	125	0	26	26	12	20	32
+15 mins.	133	0	133	0	27	27	22	22	44
+30 mins.	116	0	116	0	20	20	15	21	36
+45 mins.	143	0	143	0	28	28	18	20	38
Total Volume	517	0	517	0	101	101	67	83	150
% App. Total	100	0		0	100		44.7	55.3	
PHF	.904	.000	.904	.000	.902	.902	.761	.943	.852
Cars	515	0	515	0	101	101	65	82	147
% Cars	99.6	0	99.6	0	100	100	97	98.8	98
Trucks	2	0	2	0	0	0	2	1	3
% Trucks	0.4	0	0.4	0	0	0	3	1.2	2



N/S Street : Foster Street  
 E/W Street: Rogers Park Avenue  
 City/State : Brighton, MA  
 Weather : Rain

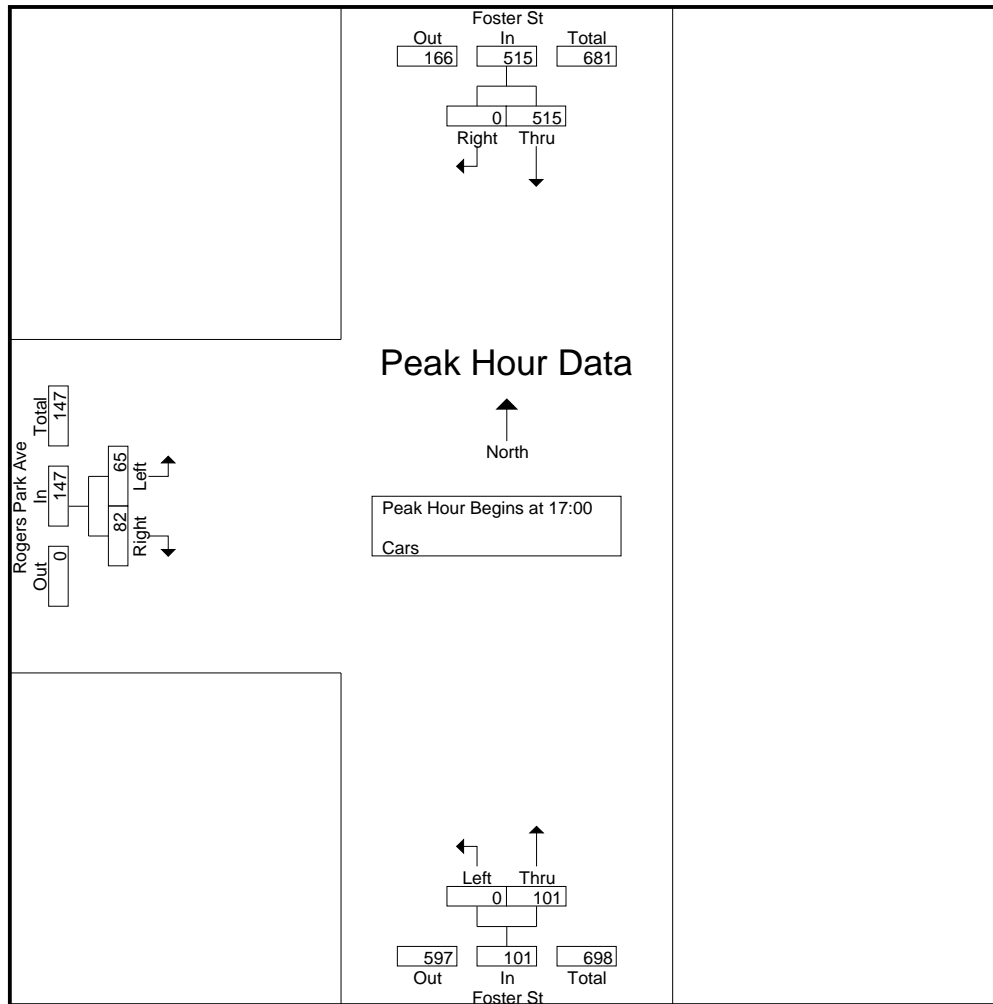
Accurate Counts  
 978-664-2565

File Name : 39000012  
 Site Code : 39000012  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Foster St From North			Foster St From South			Rogers Park Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
16:00	98	0	1	0	19	0	9	19	5	6	145	151
16:15	105	0	4	0	16	0	9	6	2	6	136	142
16:30	110	0	0	0	22	0	15	18	6	6	165	171
16:45	111	0	2	0	19	0	7	18	3	5	155	160
Total	424	0	7	0	76	0	40	61	16	23	601	624
17:00	124	0	3	0	26	0	11	19	5	8	180	188
17:15	132	0	0	0	27	0	21	22	7	7	202	209
17:30	116	0	5	0	20	0	15	21	13	18	172	190
17:45	143	0	0	0	28	0	18	20	13	13	209	222
Total	515	0	8	0	101	0	65	82	38	46	763	809
Grand Total	939	0	15	0	177	0	105	143	54	69	1364	1433
Apprch %	100	0		0	100		42.3	57.7				
Total %	68.8	0		0	13		7.7	10.5		4.8	95.2	

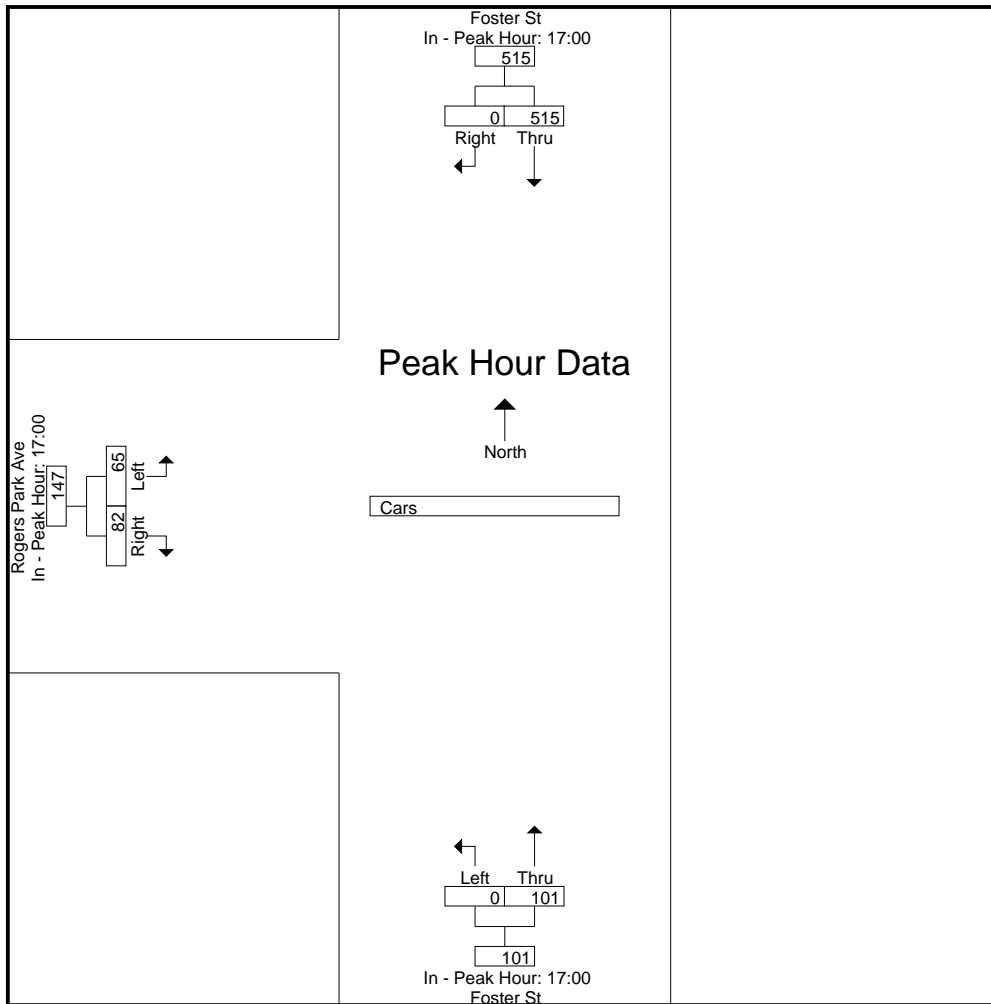
Start Time	Foster St From North			Foster St From South			Rogers Park Ave From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 17:00										
17:00	124	0	124	0	26	26	11	19	30	180
17:15	132	0	132	0	27	27	21	22	43	202
17:30	116	0	116	0	20	20	15	21	36	172
17:45	143	0	143	0	28	28	18	20	38	209
Total Volume	515	0	515	0	101	101	65	82	147	763
% App. Total	100	0		0	100		44.2	55.8		
PHF	.900	.000	.900	.000	.902	.902	.774	.932	.855	.913



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00			17:00			17:00		
+0 mins.	124	0	124	0	26	26	11	19	30
+15 mins.	132	0	132	0	27	27	21	22	43
+30 mins.	116	0	116	0	20	20	15	21	36
+45 mins.	143	0	143	0	28	28	18	20	38
Total Volume	515	0	515	0	101	101	65	82	147
% App. Total	100	0		0	100		44.2	55.8	
PHF	.900	.000	.900	.000	.902	.902	.774	.932	.855



N/S Street : Foster Street  
 E/W Street: Rogers Park Avenue  
 City/State : Brighton, MA  
 Weather : Rain

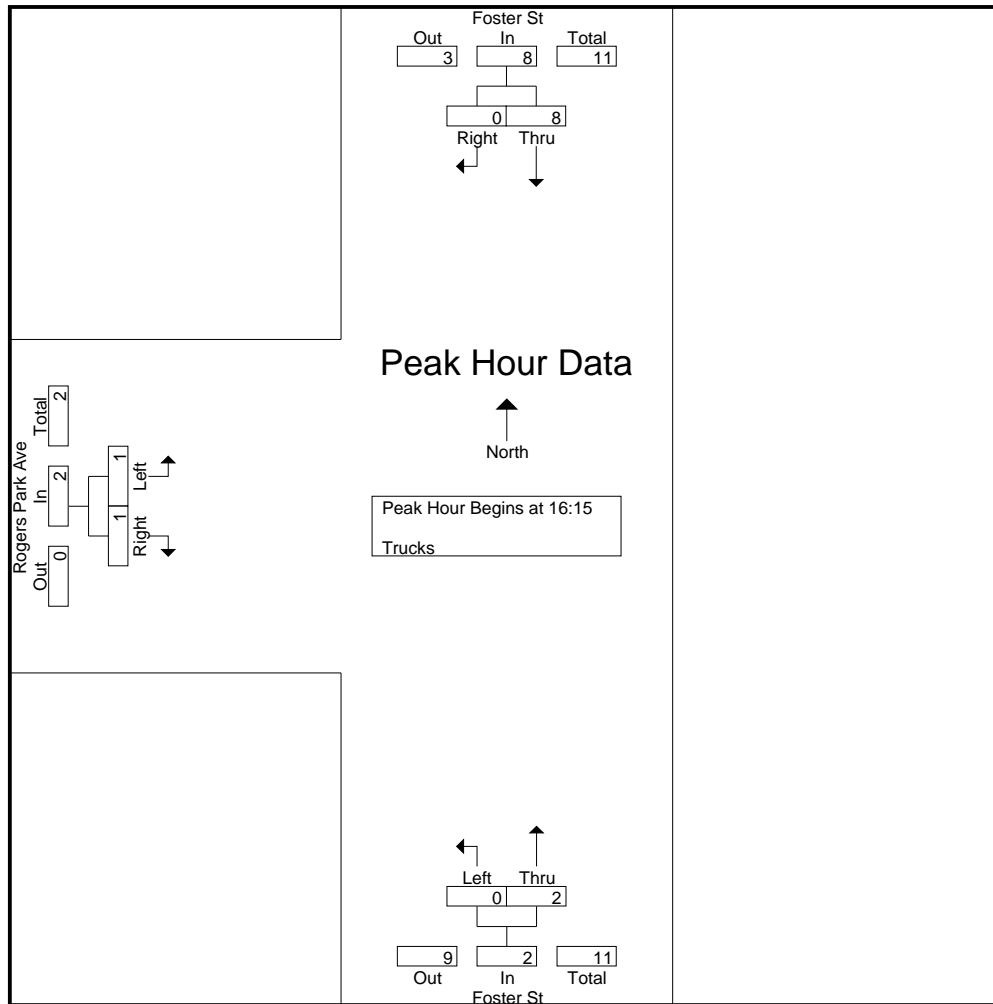
Accurate Counts  
 978-664-2565

File Name : 39000012  
 Site Code : 39000012  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Foster St From North			Foster St From South			Rogers Park Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
16:00	2	0	0	0	0	0	0	0	0	0	2	2
16:15	1	0	0	0	1	0	0	0	0	0	2	2
16:30	3	0	0	0	0	0	0	0	0	0	3	3
16:45	3	0	0	0	1	0	0	0	0	0	4	4
Total	9	0	0	0	2	0	0	0	0	0	11	11
17:00	1	0	0	0	0	0	1	1	0	0	3	3
17:15	1	0	0	0	0	0	1	0	0	0	2	2
17:30	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	0	0	0	2	1	0	0	5	5
Grand Total	11	0	0	0	2	0	2	1	0	0	16	16
Apprch %	100	0		0	100		66.7	33.3				
Total %	68.8	0		0	12.5		12.5	6.2		0	100	

Start Time	Foster St From North			Foster St From South			Rogers Park Ave From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 16:15										
16:15	1	0	1	0	1	1	0	0	0	2
16:30	3	0	3	0	0	0	0	0	0	3
16:45	3	0	3	0	1	1	0	0	0	4
17:00	1	0	1	0	0	0	1	1	2	3
Total Volume	8	0	8	0	2	2	1	1	2	12
% App. Total	100	0		0	100		50	50		
PHF	.667	.000	.667	.000	.500	.500	.250	.250	.250	.750

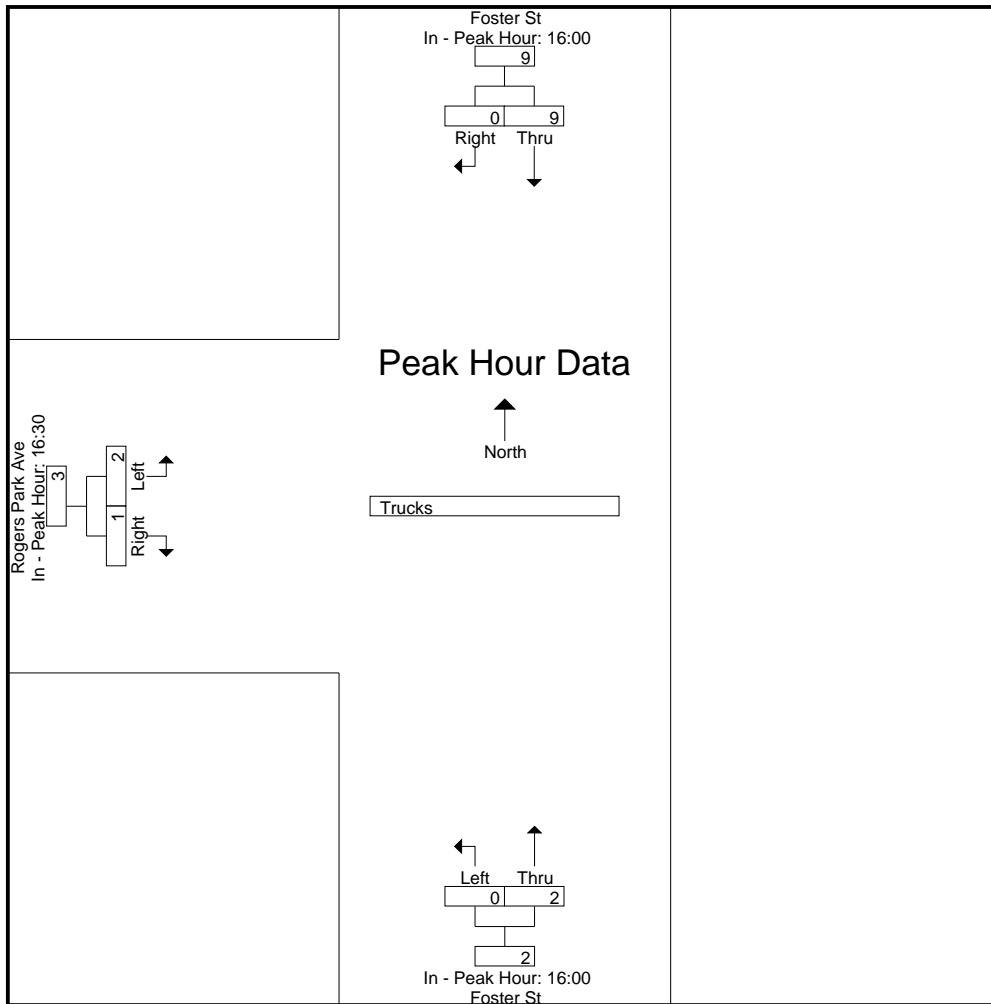


Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00			16:00			16:30		
+0 mins.	2	0	2	0	0	0	0	0	0
+15 mins.	1	0	1	0	1	1	0	0	0
+30 mins.	3	0	3	0	0	0	1	1	2
+45 mins.	3	0	3	0	1	1	1	0	1
Total Volume	9	0	9	0	2	2	2	1	3
% App. Total	100	0		0	100		66.7	33.3	
PHF	.750	.000	.750	.000	.500	.500	.500	.250	.375





N/S Street : Foster Street  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

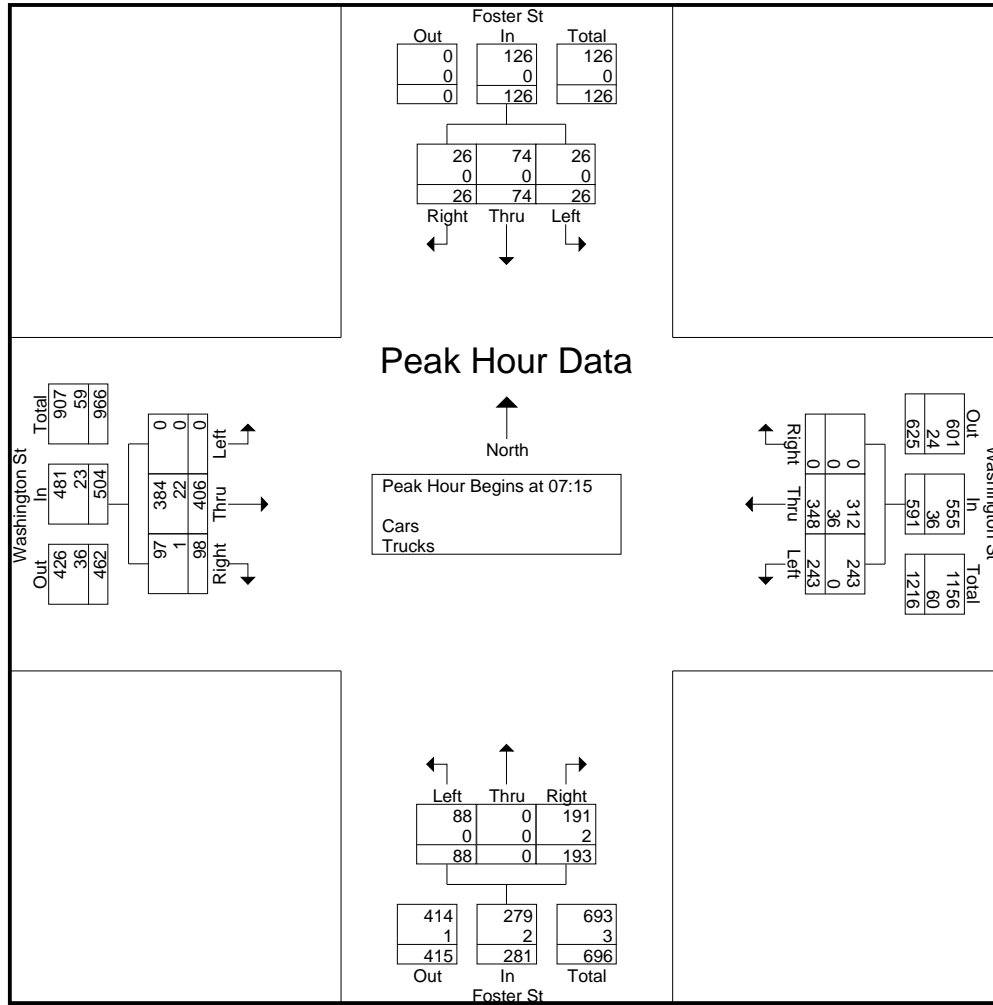
Accurate Counts  
 978-664-2565

File Name : 39000013  
 Site Code : 39000013  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Foster St From North				Washington St From East				Foster St From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	7	4	3	12	67	64	0	7	18	0	47	1	0	89	30	7	27	329	356
07:15	4	15	8	8	71	80	0	4	23	0	49	9	0	117	27	12	33	394	427
07:30	9	20	3	13	65	97	0	5	16	0	45	4	0	106	24	10	32	385	417
07:45	7	21	8	13	46	86	0	0	25	0	56	7	0	100	17	19	39	366	405
Total	27	60	22	46	249	327	0	16	82	0	197	21	0	412	98	48	131	1474	1605
08:00	6	18	7	4	61	85	0	1	24	0	43	3	0	83	30	15	23	357	380
08:15	3	17	11	13	45	84	0	4	29	0	44	5	0	106	34	10	32	373	405
08:30	8	14	11	4	39	66	0	0	23	0	44	8	0	98	40	10	22	343	365
08:45	6	25	6	6	63	84	0	1	26	0	43	5	0	119	37	6	18	409	427
Total	23	74	35	27	208	319	0	6	102	0	174	21	0	406	141	41	95	1482	1577
Grand Total	50	134	57	73	457	646	0	22	184	0	371	42	0	818	239	89	226	2956	3182
Apprch %	20.7	55.6	23.7		41.4	58.6	0		33.2	0	66.8		0	77.4	22.6				
Total %	1.7	4.5	1.9		15.5	21.9	0		6.2	0	12.6		0	27.7	8.1		7.1	92.9	
Cars	50	134	57		450	583	0		183	0	366		0	774	236		0	0	3059
% Cars	100	100	100	100	98.5	90.2	0	100	99.5	0	98.7	100	0	94.6	98.7	100	0	0	96.1
Trucks	0	0	0		7	63	0		1	0	5		0	44	3		0	0	123
% Trucks	0	0	0	0	1.5	9.8	0	0	0.5	0	1.3	0	0	5.4	1.3	0	0	0	3.9

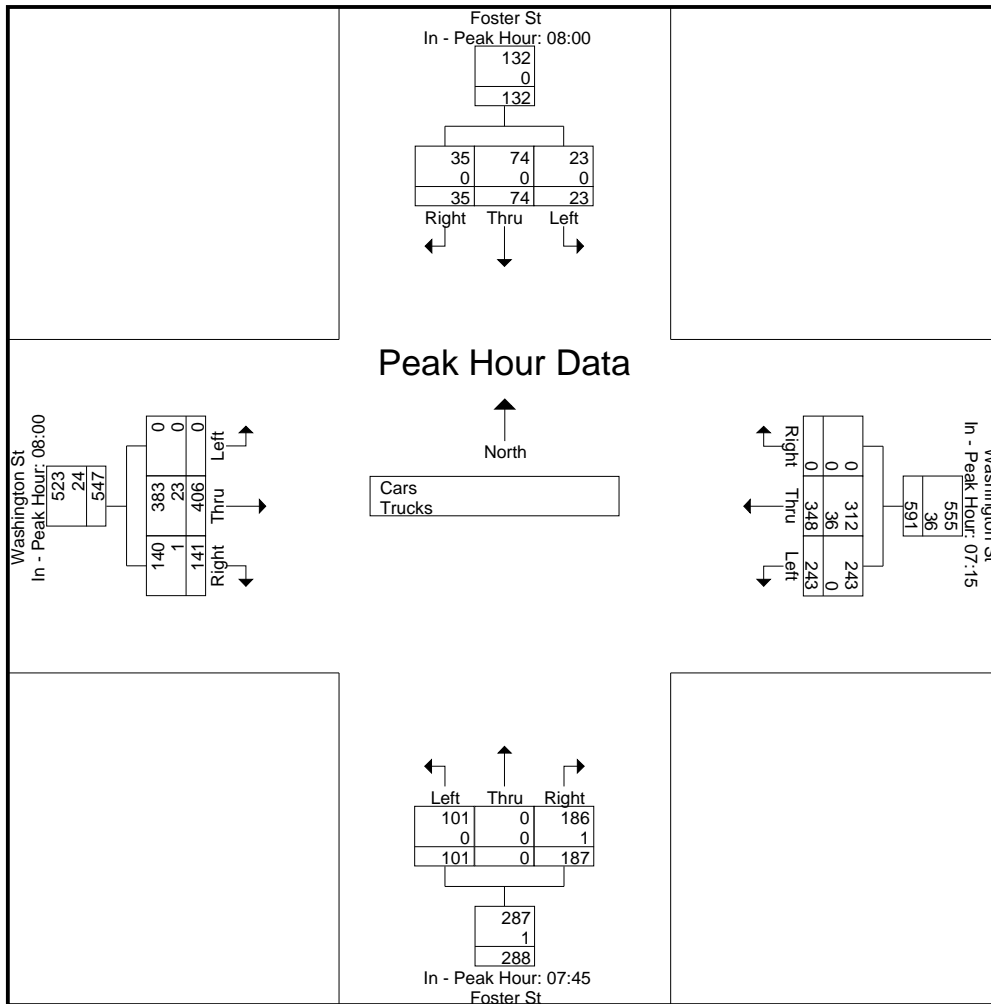
Start Time	Foster St From North				Washington St From East				Foster St From South				Washington St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15																	
07:15	4	15	8	27	71	80	0	151	23	0	49	72	0	117	27	144	394
07:30	9	20	3	32	65	97	0	162	16	0	45	61	0	106	24	130	385
07:45	7	21	8	36	46	86	0	132	25	0	56	81	0	100	17	117	366
08:00	6	18	7	31	61	85	0	146	24	0	43	67	0	83	30	113	357
Total Volume	26	74	26	126	243	348	0	591	88	0	193	281	0	406	98	504	1502
% App. Total	20.6	58.7	20.6		41.1	58.9	0		31.3	0	68.7		0	80.6	19.4		
PHF	.722	.881	.813	.875	.856	.897	.000	.912	.880	.000	.862	.867	.000	.868	.817	.875	.953
Cars	26	74	26	126	243	312	0	555	88	0	191	279	0	384	97	481	1441
% Cars	100	100	100	100	100	89.7	0	93.9	100	0	99.0	99.3	0	94.6	99.0	95.4	95.9
Trucks	0	0	0	0	0	36	0	36	0	0	2	2	0	22	1	23	61
% Trucks	0	0	0	0	0	10.3	0	6.1	0	0	1.0	0.7	0	5.4	1.0	4.6	4.1



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00				07:15				07:45				08:00			
+0 mins.	6	18	7	31	71	80	0	151	25	0	56	81	0	83	30	113
+15 mins.	3	17	11	31	65	97	0	162	24	0	43	67	0	106	34	140
+30 mins.	8	14	11	33	46	86	0	132	29	0	44	73	0	98	40	138
+45 mins.	6	25	6	37	61	85	0	146	23	0	44	67	0	119	37	156
Total Volume	23	74	35	132	243	348	0	591	101	0	187	288	0	406	141	547
% App. Total	17.4	56.1	26.5		41.1	58.9	0		35.1	0	64.9		0	74.2	25.8	
PHF	.719	.740	.795	.892	.856	.897	.000	.912	.871	.000	.835	.889	.000	.853	.881	.877
Cars	23	74	35	132	243	312	0	555	101	0	186	287	0	383	140	523
% Cars	100	100	100	100	100	89.7	0	93.9	100	0	99.5	99.7	0	94.3	99.3	95.6
Trucks	0	0	0	0	0	36	0	36	0	0	1	1	0	23	1	24
% Trucks	0	0	0	0	0	10.3	0	6.1	0	0	0.5	0.3	0	5.7	0.7	4.4



N/S Street : Foster Street  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

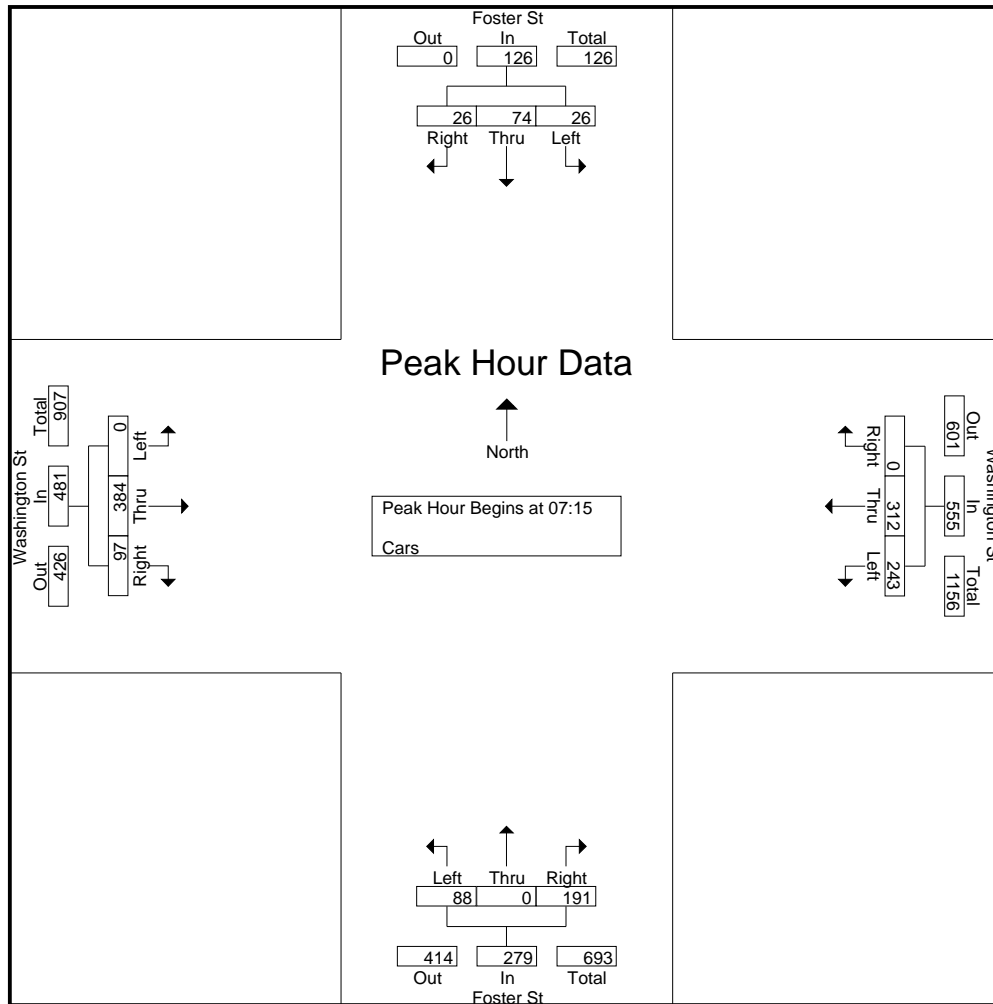
Accurate Counts  
 978-664-2565

File Name : 39000013  
 Site Code : 39000013  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Foster St From North				Washington St From East				Foster St From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	7	4	3	12	60	56	0	7	17	0	45	1	0	85	29	7	27	306	333
07:15	4	15	8	8	71	72	0	4	23	0	48	9	0	113	27	12	33	381	414
07:30	9	20	3	13	65	85	0	5	16	0	45	4	0	96	23	10	32	362	394
07:45	7	21	8	13	46	78	0	0	25	0	55	7	0	97	17	19	39	354	393
Total	27	60	22	46	242	291	0	16	81	0	193	21	0	391	96	48	131	1403	1534
08:00	6	18	7	4	61	77	0	1	24	0	43	3	0	78	30	15	23	344	367
08:15	3	17	11	13	45	78	0	4	29	0	44	5	0	99	34	10	32	360	392
08:30	8	14	11	4	39	59	0	0	23	0	44	8	0	93	39	10	22	330	352
08:45	6	25	6	6	63	78	0	1	26	0	42	5	0	113	37	6	18	396	414
Total	23	74	35	27	208	292	0	6	102	0	173	21	0	383	140	41	95	1430	1525
Grand Total	50	134	57	73	450	583	0	22	183	0	366	42	0	774	236	89	226	2833	3059
Apprch %	20.7	55.6	23.7		43.6	56.4	0		33.3	0	66.7		0	76.6	23.4				
Total %	1.8	4.7	2		15.9	20.6	0		6.5	0	12.9		0	27.3	8.3		7.4	92.6	

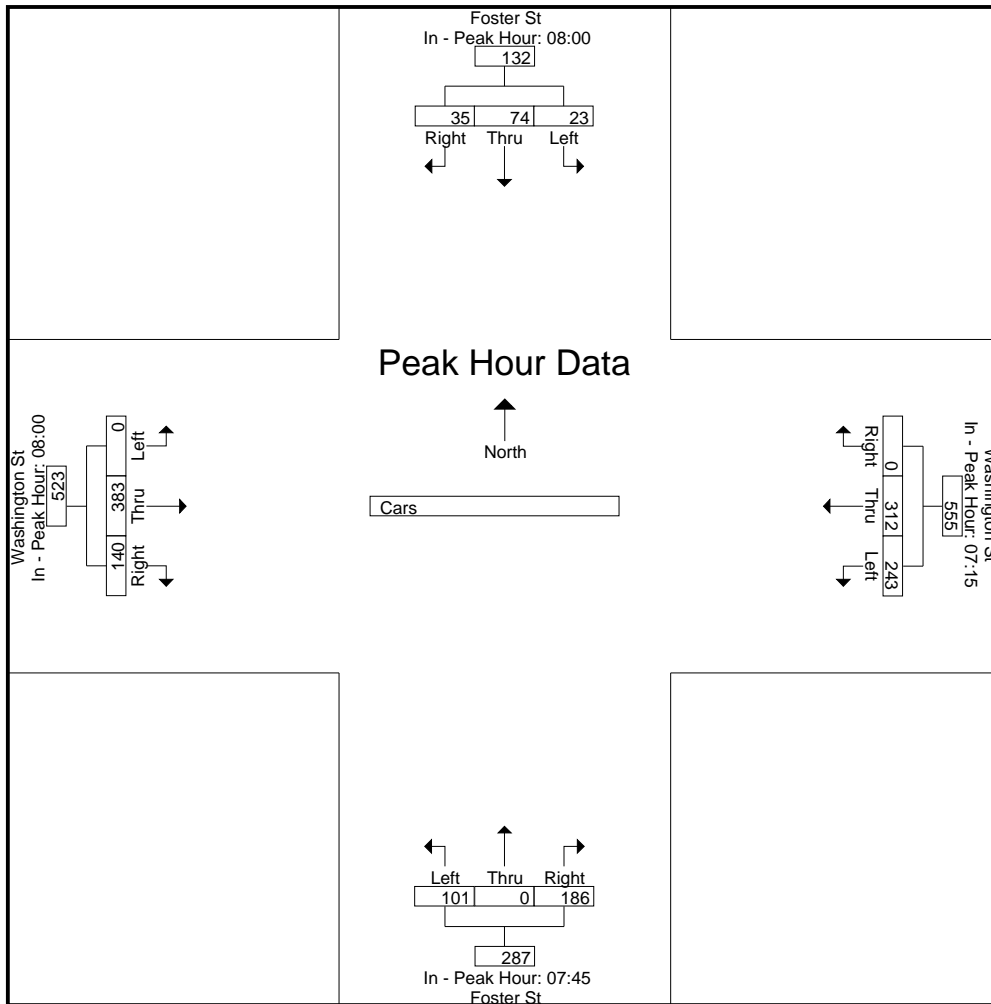
Start Time	Foster St From North				Washington St From East				Foster St From South				Washington St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15																	
07:15	4	15	8	27	71	72	0	143	23	0	48	71	0	113	27	140	381
07:30	9	20	3	32	65	85	0	150	16	0	45	61	0	96	23	119	362
07:45	7	21	8	36	46	78	0	124	25	0	55	80	0	97	17	114	354
08:00	6	18	7	31	61	77	0	138	24	0	43	67	0	78	30	108	344
Total Volume	26	74	26	126	243	312	0	555	88	0	191	279	0	384	97	481	1441
% App. Total	20.6	58.7	20.6		43.8	56.2	0		31.5	0	68.5		0	79.8	20.2		
PHF	.722	.881	.813	.875	.856	.918	.000	.925	.880	.000	.868	.872	.000	.850	.808	.859	.946



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00				07:15				07:45				08:00			
+0 mins.	6	18	7	31	71	72	0	143	25	0	55	80	0	78	30	108
+15 mins.	3	17	11	31	65	85	0	150	24	0	43	67	0	99	34	133
+30 mins.	8	14	11	33	46	78	0	124	29	0	44	73	0	93	39	132
+45 mins.	6	25	6	37	61	77	0	138	23	0	44	67	0	113	37	150
Total Volume	23	74	35	132	243	312	0	555	101	0	186	287	0	383	140	523
% App. Total	17.4	56.1	26.5		43.8	56.2	0		35.2	0	64.8		0	73.2	26.8	
PHF	.719	.740	.795	.892	.856	.918	.000	.925	.871	.000	.845	.897	.000	.847	.897	.872



N/S Street : Foster Street  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

Accurate Counts  
 978-664-2565

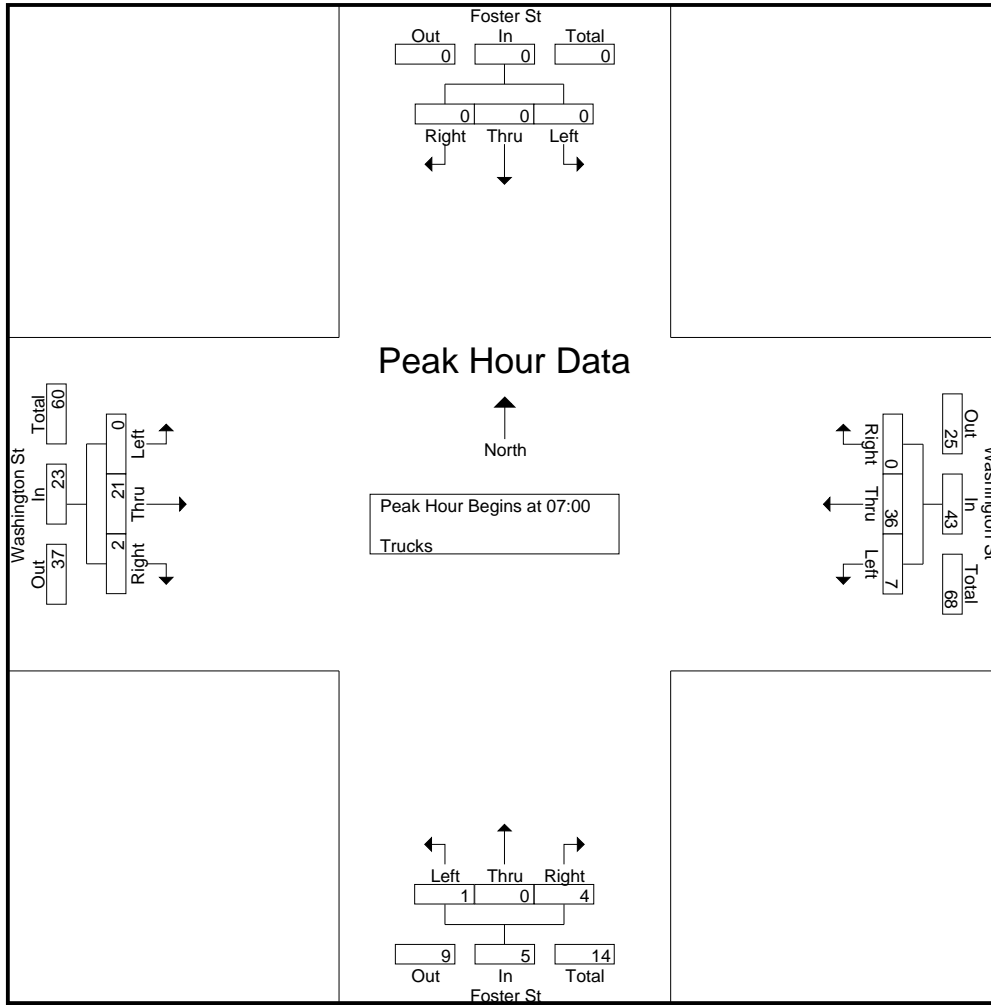
File Name : 39000013  
 Site Code : 39000013  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Foster St From North				Washington St From East				Foster St From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	0	0	0	0	7	8	0	0	1	0	2	0	0	4	1	0	0	23	23
07:15	0	0	0	0	0	8	0	0	0	0	1	0	0	4	0	0	0	13	13
07:30	0	0	0	0	0	12	0	0	0	0	0	0	0	10	1	0	0	23	23
07:45	0	0	0	0	0	8	0	0	0	0	1	0	0	3	0	0	0	12	12
Total	0	0	0	0	7	36	0	0	1	0	4	0	0	21	2	0	0	71	71
08:00	0	0	0	0	0	8	0	0	0	0	0	0	0	5	0	0	0	13	13
08:15	0	0	0	0	0	6	0	0	0	0	0	0	0	7	0	0	0	13	13
08:30	0	0	0	0	0	7	0	0	0	0	0	0	0	5	1	0	0	13	13
08:45	0	0	0	0	0	6	0	0	0	0	1	0	0	6	0	0	0	13	13
Total	0	0	0	0	0	27	0	0	0	0	1	0	0	23	1	0	0	52	52
Grand Total	0	0	0	0	7	63	0	0	1	0	5	0	0	44	3	0	0	123	123
Apprch %	0	0	0		10	90	0		16.7	0	83.3		0	93.6	6.4				
Total %	0	0	0		5.7	51.2	0		0.8	0	4.1		0	35.8	2.4		0	100	

Start Time	Foster St From North				Washington St From East				Foster St From South				Washington St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00																	
07:00	0	0	0	0	7	8	0	15	1	0	2	3	0	4	1	5	23
07:15	0	0	0	0	0	8	0	8	0	0	1	1	0	4	0	4	13
07:30	0	0	0	0	0	12	0	12	0	0	0	0	0	10	1	11	23
07:45	0	0	0	0	0	8	0	8	0	0	1	1	0	3	0	3	12
Total Volume	0	0	0	0	7	36	0	43	1	0	4	5	0	21	2	23	71
% App. Total	0	0	0		16.3	83.7	0		20	0	80		0	91.3	8.7		
PHF	.000	.000	.000	.000	.250	.750	.000	.717	.250	.000	.500	.417	.000	.525	.500	.523	.772

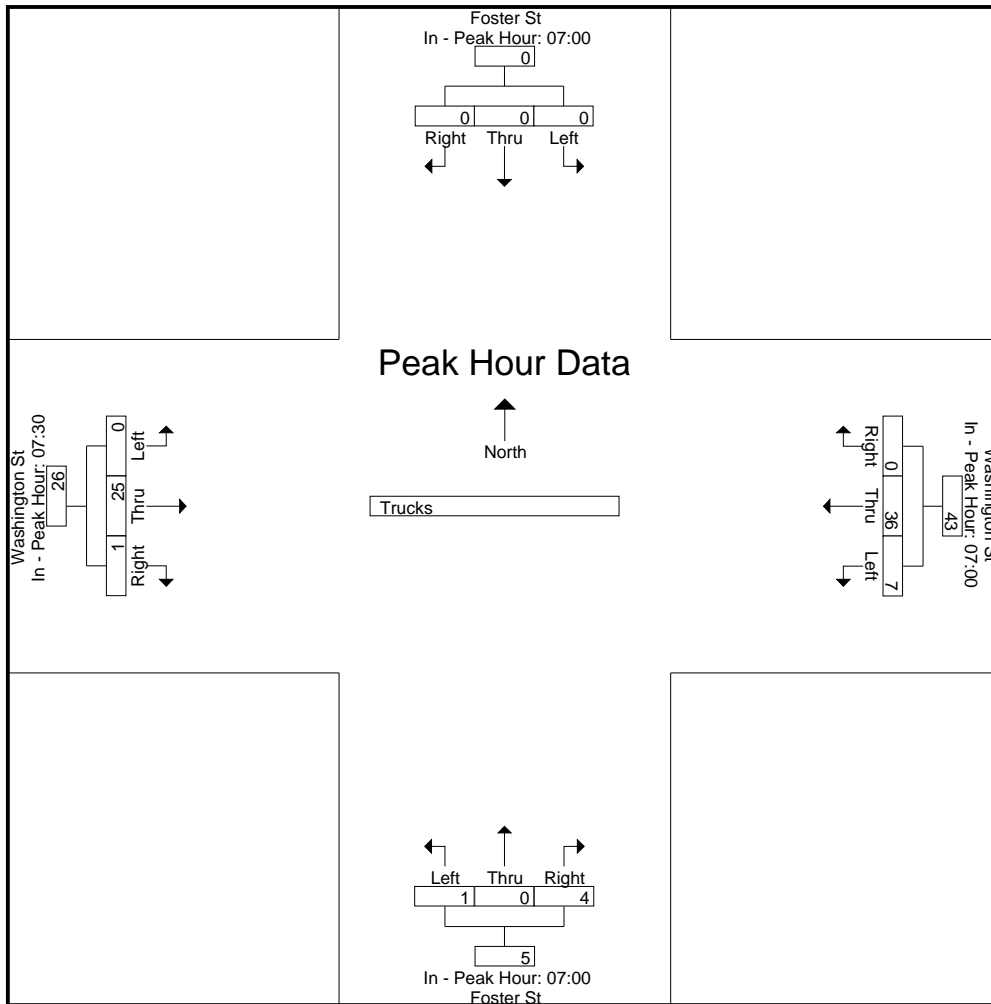




Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00				07:00				07:00				07:30			
+0 mins.	0	0	0	0	7	8	0	15	1	0	2	3	0	10	1	11
+15 mins.	0	0	0	0	0	8	0	8	0	0	1	1	0	3	0	3
+30 mins.	0	0	0	0	0	12	0	12	0	0	0	0	0	5	0	5
+45 mins.	0	0	0	0	0	8	0	8	0	0	1	1	0	7	0	7
Total Volume	0	0	0	0	7	36	0	43	1	0	4	5	0	25	1	26
% App. Total	0	0	0	0	16.3	83.7	0		20	0	80		0	96.2	3.8	
PHF	.000	.000	.000	.000	.250	.750	.000	.717	.250	.000	.500	.417	.000	.625	.250	.591



N/S Street : Foster Street  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

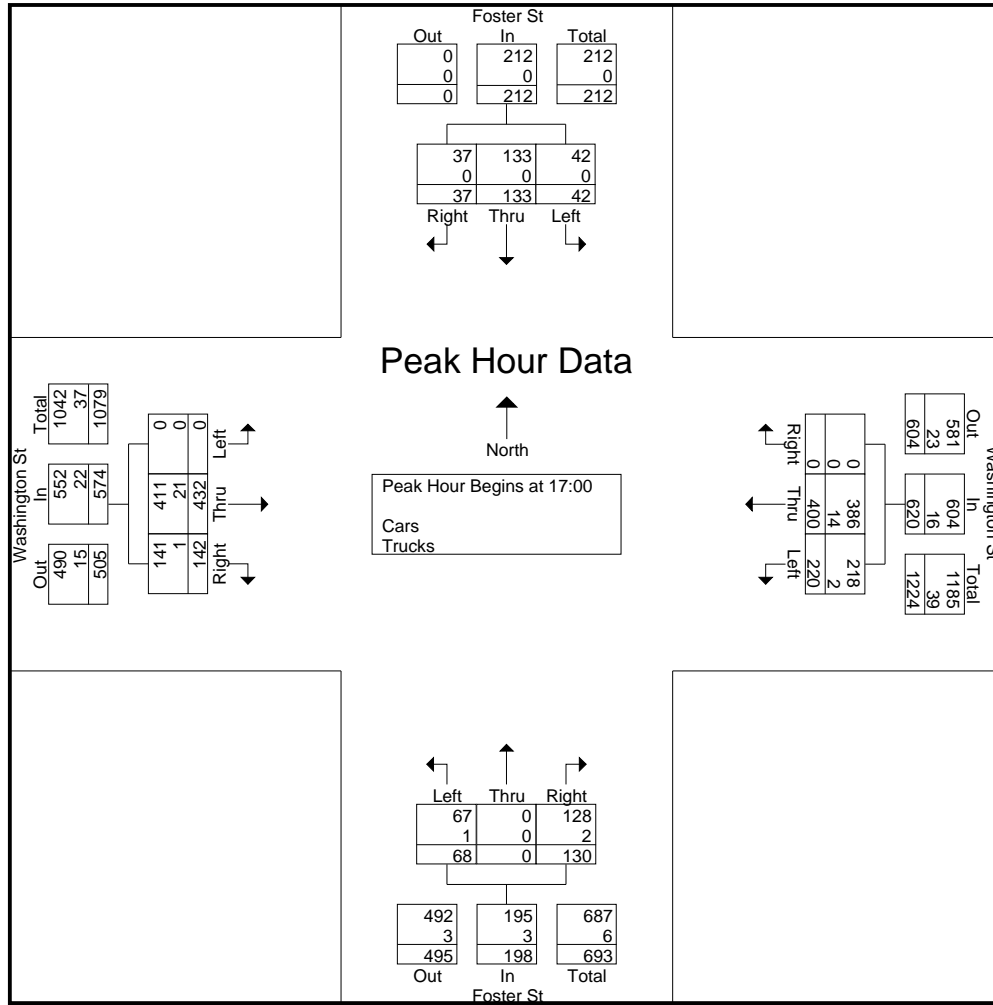
Accurate Counts  
 978-664-2565

File Name : 39000013  
 Site Code : 39000013  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Foster St From North				Washington St From East				Foster St From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	7	17	7	8	48	85	0	1	9	0	26	5	0	103	22	3	17	324	341
16:15	12	28	14	20	39	91	0	3	12	0	24	10	0	101	22	11	44	343	387
16:30	9	19	18	20	59	87	0	3	13	0	34	17	0	110	26	15	55	375	430
16:45	8	24	10	20	52	85	0	2	18	0	17	5	0	128	29	7	34	371	405
Total	36	88	49	68	198	348	0	9	52	0	101	37	0	442	99	36	150	1413	1563
17:00	15	31	9	15	43	91	0	3	16	0	37	12	0	104	41	4	34	387	421
17:15	10	38	8	18	53	107	0	7	19	0	35	18	0	108	30	8	51	408	459
17:30	5	29	9	30	61	103	0	11	17	0	26	17	0	95	34	11	69	379	448
17:45	12	35	11	22	63	99	0	4	16	0	32	20	0	125	37	11	57	430	487
Total	42	133	37	85	220	400	0	25	68	0	130	67	0	432	142	34	211	1604	1815
Grand Total	78	221	86	153	418	748	0	34	120	0	231	104	0	874	241	70	361	3017	3378
Apprch %	20.3	57.4	22.3		35.8	64.2	0		34.2	0	65.8		0	78.4	21.6				
Total %	2.6	7.3	2.9		13.9	24.8	0		4	0	7.7		0	29	8		10.7	89.3	
Cars	78	221	86		414	720	0		119	0	229		0	835	236		0	0	3299
% Cars	100	100	100	100	99	96.3	0	100	99.2	0	99.1	100	0	95.5	97.9	100	0	0	97.7
Trucks	0	0	0		4	28	0		1	0	2		0	39	5		0	0	79
% Trucks	0	0	0	0	1	3.7	0	0	0.8	0	0.9	0	0	4.5	2.1	0	0	0	2.3

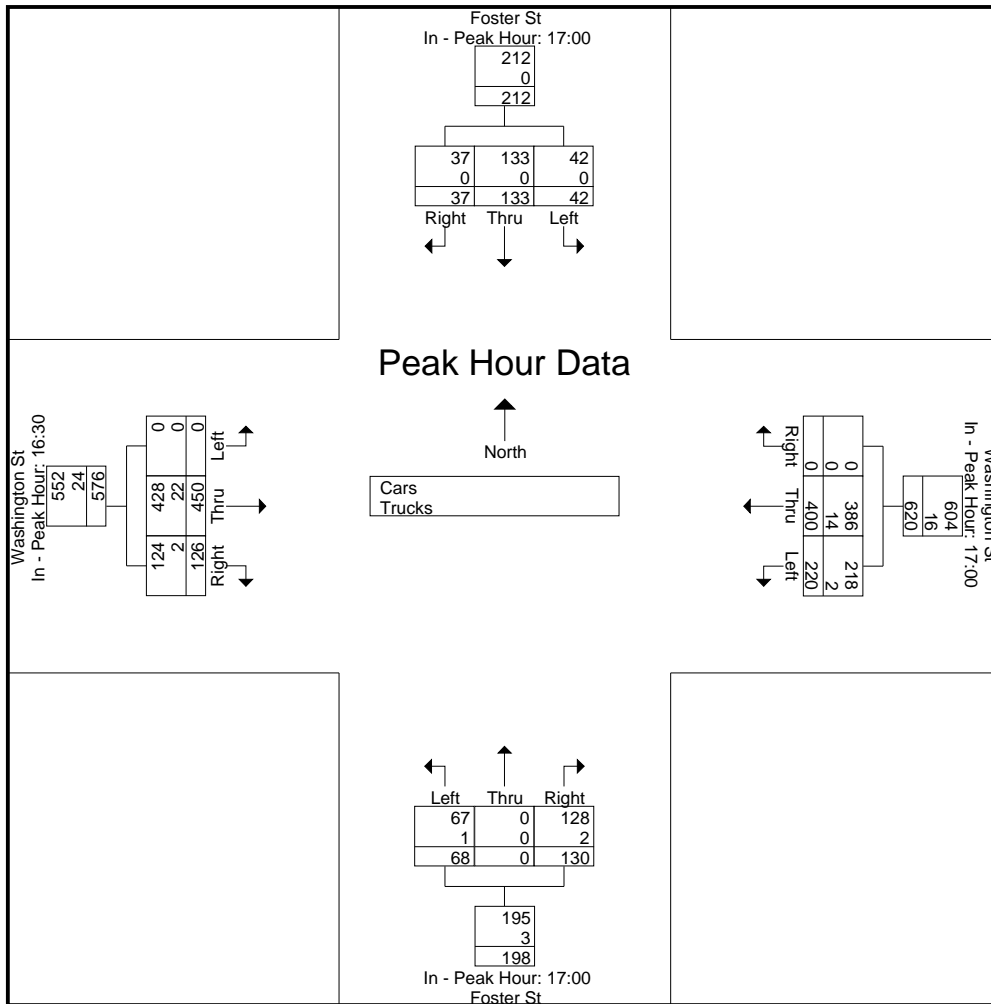
Start Time	Foster St From North				Washington St From East				Foster St From South				Washington St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	15	31	9	55	43	91	0	134	16	0	37	53	0	104	41	145	387
17:15	10	38	8	56	53	107	0	160	19	0	35	54	0	108	30	138	408
17:30	5	29	9	43	61	103	0	164	17	0	26	43	0	95	34	129	379
17:45	12	35	11	58	63	99	0	162	16	0	32	48	0	125	37	162	430
Total Volume	42	133	37	212	220	400	0	620	68	0	130	198	0	432	142	574	1604
% App. Total	19.8	62.7	17.5		35.5	64.5	0		34.3	0	65.7		0	75.3	24.7		
PHF	.700	.875	.841	.914	.873	.935	.000	.945	.895	.000	.878	.917	.000	.864	.866	.886	.933
Cars	42	133	37	212	218	386	0	604	67	0	128	195	0	411	141	552	1563
% Cars	100	100	100	100	99.1	96.5	0	97.4	98.5	0	98.5	98.5	0	95.1	99.3	96.2	97.4
Trucks	0	0	0	0	2	14	0	16	1	0	2	3	0	21	1	22	41
% Trucks	0	0	0	0	0.9	3.5	0	2.6	1.5	0	1.5	1.5	0	4.9	0.7	3.8	2.6



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00				17:00				17:00				16:30			
+0 mins.	15	31	9	55	43	91	0	134	16	0	37	53	0	110	26	136
+15 mins.	10	38	8	56	53	107	0	160	19	0	35	54	0	128	29	157
+30 mins.	5	29	9	43	61	103	0	164	17	0	26	43	0	104	41	145
+45 mins.	12	35	11	58	63	99	0	162	16	0	32	48	0	108	30	138
Total Volume	42	133	37	212	220	400	0	620	68	0	130	198	0	450	126	576
% App. Total	19.8	62.7	17.5		35.5	64.5	0		34.3	0	65.7		0	78.1	21.9	
PHF	.700	.875	.841	.914	.873	.935	.000	.945	.895	.000	.878	.917	.000	.879	.768	.917
Cars	42	133	37	212	218	386	0	604	67	0	128	195	0	428	124	552
% Cars	100	100	100	100	99.1	96.5	0	97.4	98.5	0	98.5	98.5	0	95.1	98.4	95.8
Trucks	0	0	0	0	2	14	0	16	1	0	2	3	0	22	2	24
% Trucks	0	0	0	0	0.9	3.5	0	2.6	1.5	0	1.5	1.5	0	4.9	1.6	4.2



N/S Street : Foster Street  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

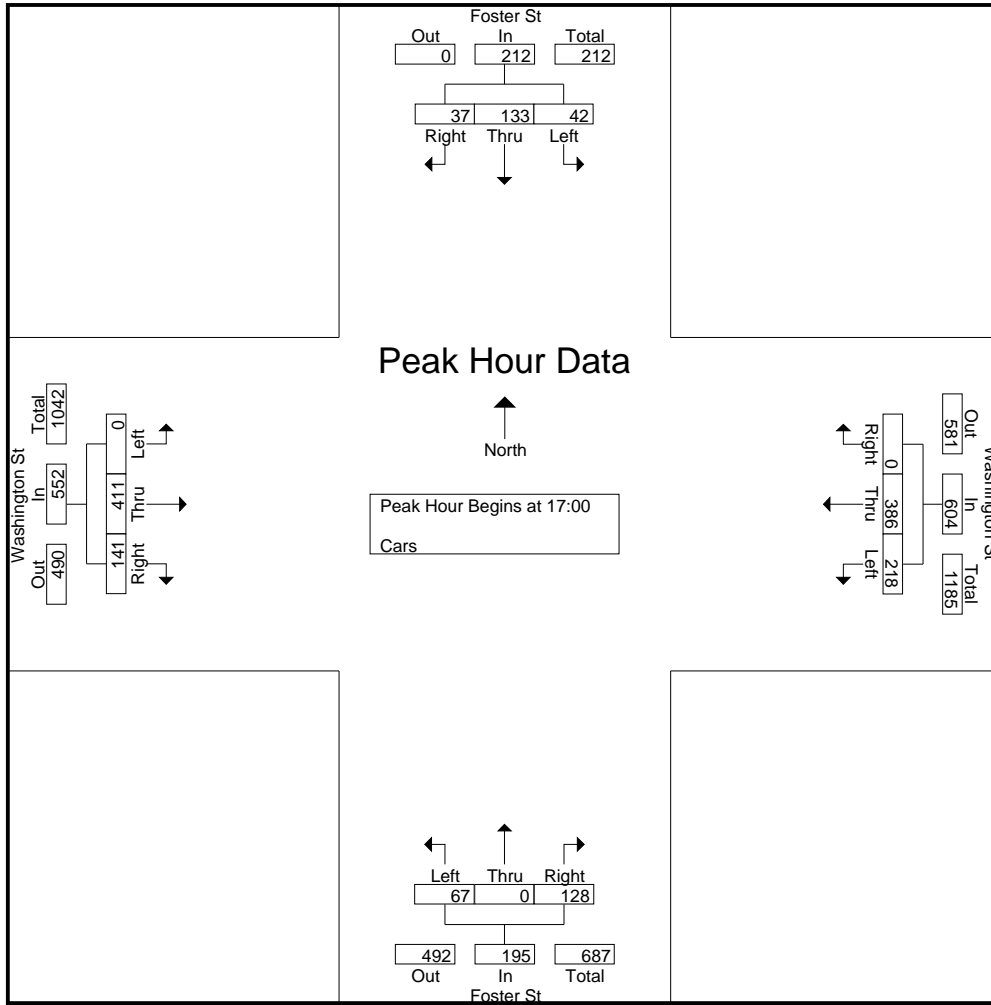
Accurate Counts  
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File Name : 39000013  
 Site Code : 39000013  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Foster St From North				Washington St From East				Foster St From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	7	17	7	8	47	82	0	1	9	0	26	5	0	100	21	3	17	316	333
16:15	12	28	14	20	39	87	0	3	12	0	24	10	0	98	20	11	44	334	378
16:30	9	19	18	20	59	85	0	3	13	0	34	17	0	104	26	15	55	367	422
16:45	8	24	10	20	51	80	0	2	18	0	17	5	0	122	28	7	34	358	392
Total	36	88	49	68	196	334	0	9	52	0	101	37	0	424	95	36	150	1375	1525
17:00	15	31	9	15	43	88	0	3	15	0	35	12	0	100	40	4	34	376	410
17:15	10	38	8	18	52	105	0	7	19	0	35	18	0	102	30	8	51	399	450
17:30	5	29	9	30	60	99	0	11	17	0	26	17	0	90	34	11	69	369	438
17:45	12	35	11	22	63	94	0	4	16	0	32	20	0	119	37	11	57	419	476
Total	42	133	37	85	218	386	0	25	67	0	128	67	0	411	141	34	211	1563	1774
Grand Total	78	221	86	153	414	720	0	34	119	0	229	104	0	835	236	70	361	2938	3299
Apprch %	20.3	57.4	22.3		36.5	63.5	0		34.2	0	65.8		0	78	22				
Total %	2.7	7.5	2.9		14.1	24.5	0		4.1	0	7.8		0	28.4	8		10.9	89.1	

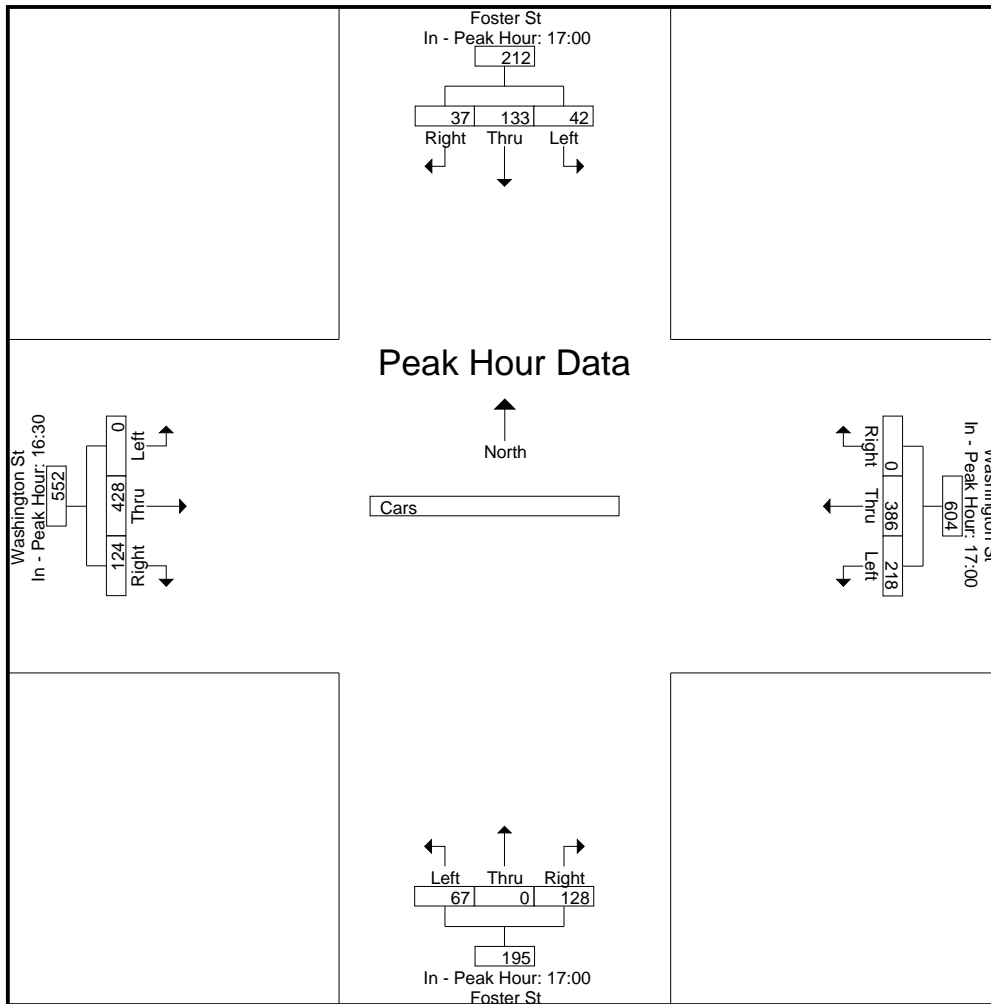
Start Time	Foster St From North				Washington St From East				Foster St From South				Washington St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	15	31	9	55	43	88	0	131	15	0	35	50	0	100	40	140	376
17:15	10	38	8	56	52	105	0	157	19	0	35	54	0	102	30	132	399
17:30	5	29	9	43	60	99	0	159	17	0	26	43	0	90	34	124	369
17:45	12	35	11	58	63	94	0	157	16	0	32	48	0	119	37	156	419
Total Volume	42	133	37	212	218	386	0	604	67	0	128	195	0	411	141	552	1563
% App. Total	19.8	62.7	17.5		36.1	63.9	0		34.4	0	65.6		0	74.5	25.5		
PHF	.700	.875	.841	.914	.865	.919	.000	.950	.882	.000	.914	.903	.000	.863	.881	.885	.933



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00				17:00				17:00				16:30			
+0 mins.	15	31	9	55	43	88	0	131	15	0	35	50	0	104	26	130
+15 mins.	10	38	8	56	52	105	0	157	19	0	35	54	0	122	28	150
+30 mins.	5	29	9	43	60	99	0	159	17	0	26	43	0	100	40	140
+45 mins.	12	35	11	58	63	94	0	157	16	0	32	48	0	102	30	132
Total Volume	42	133	37	212	218	386	0	604	67	0	128	195	0	428	124	552
% App. Total	19.8	62.7	17.5		36.1	63.9	0		34.4	0	65.6		0	77.5	22.5	
PHF	.700	.875	.841	.914	.865	.919	.000	.950	.882	.000	.914	.903	.000	.877	.775	.920





N/S Street : Foster Street  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

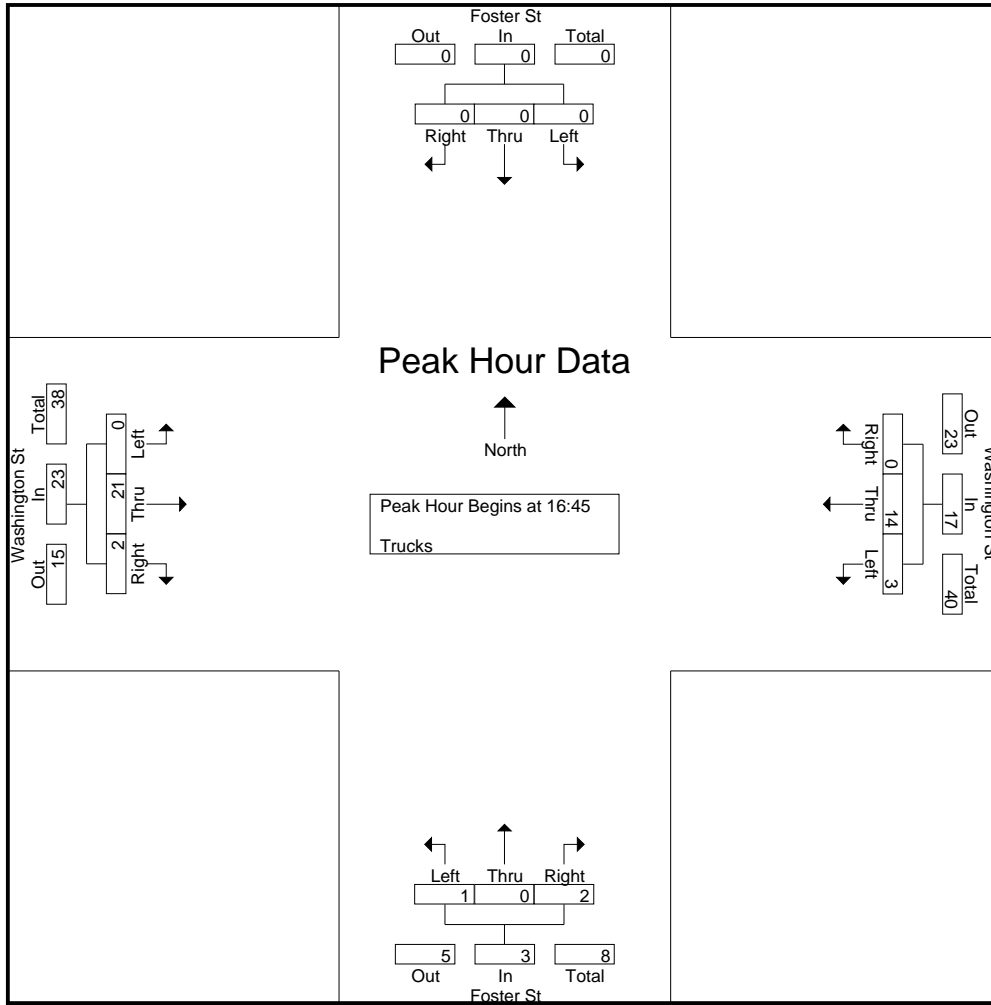
Accurate Counts  
 978-664-2565

File Name : 39000013  
 Site Code : 39000013  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Trucks

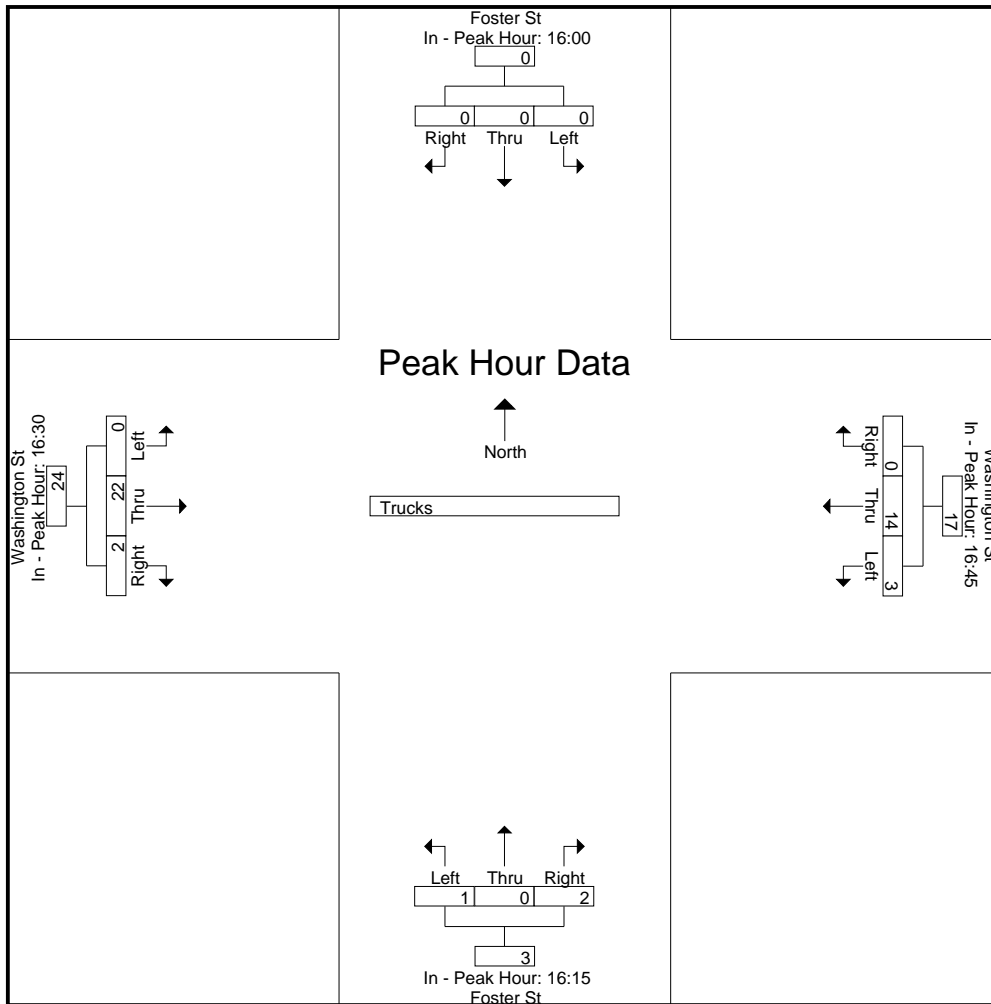
Start Time	Foster St From North				Washington St From East				Foster St From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	0	0	0	0	1	3	0	0	0	0	0	0	0	3	1	0	0	8	8
16:15	0	0	0	0	0	4	0	0	0	0	0	0	0	3	2	0	0	9	9
16:30	0	0	0	0	0	2	0	0	0	0	0	0	0	6	0	0	0	8	8
16:45	0	0	0	0	1	5	0	0	0	0	0	0	0	6	1	0	0	13	13
Total	0	0	0	0	2	14	0	0	0	0	0	0	0	18	4	0	0	38	38
17:00	0	0	0	0	0	3	0	0	1	0	2	0	0	4	1	0	0	11	11
17:15	0	0	0	0	1	2	0	0	0	0	0	0	0	6	0	0	0	9	9
17:30	0	0	0	0	1	4	0	0	0	0	0	0	0	5	0	0	0	10	10
17:45	0	0	0	0	0	5	0	0	0	0	0	0	0	6	0	0	0	11	11
Total	0	0	0	0	2	14	0	0	1	0	2	0	0	21	1	0	0	41	41
Grand Total	0	0	0	0	4	28	0	0	1	0	2	0	0	39	5	0	0	79	79
Apprch %	0	0	0		12.5	87.5	0		33.3	0	66.7		0	88.6	11.4				
Total %	0	0	0		5.1	35.4	0		1.3	0	2.5		0	49.4	6.3		0	100	

Start Time	Foster St From North				Washington St From East				Foster St From South				Washington St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:45																	
16:45	0	0	0	0	1	5	0	6	0	0	0	0	0	6	1	7	13
17:00	0	0	0	0	0	3	0	3	1	0	2	3	0	4	1	5	11
17:15	0	0	0	0	1	2	0	3	0	0	0	0	0	6	0	6	9
17:30	0	0	0	0	1	4	0	5	0	0	0	0	0	5	0	5	10
Total Volume	0	0	0	0	3	14	0	17	1	0	2	3	0	21	2	23	43
% App. Total	0	0	0		17.6	82.4	0		33.3	0	66.7		0	91.3	8.7		
PHF	.000	.000	.000	.000	.750	.700	.000	.708	.250	.000	.250	.250	.000	.875	.500	.821	.827



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	16:00				16:45				16:15				16:30			
+0 mins.	0	0	0	0	1	5	0	6	0	0	0	0	0	6	0	6
+15 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	6	1	7
+30 mins.	0	0	0	0	1	2	0	3	0	0	0	0	0	4	1	5
+45 mins.	0	0	0	0	1	4	0	5	1	0	2	3	0	6	0	6
Total Volume	0	0	0	0	3	14	0	17	1	0	2	3	0	22	2	24
% App. Total	0	0	0	0	17.6	82.4	0	70.8	33.3	0	66.7	25.0	0	91.7	8.3	85.7
PHF	.000	.000	.000	.000	.750	.700	.000	.708	.250	.000	.250	.250	.000	.917	.500	.857



N/S Street : Market St / Chestnut Hill  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

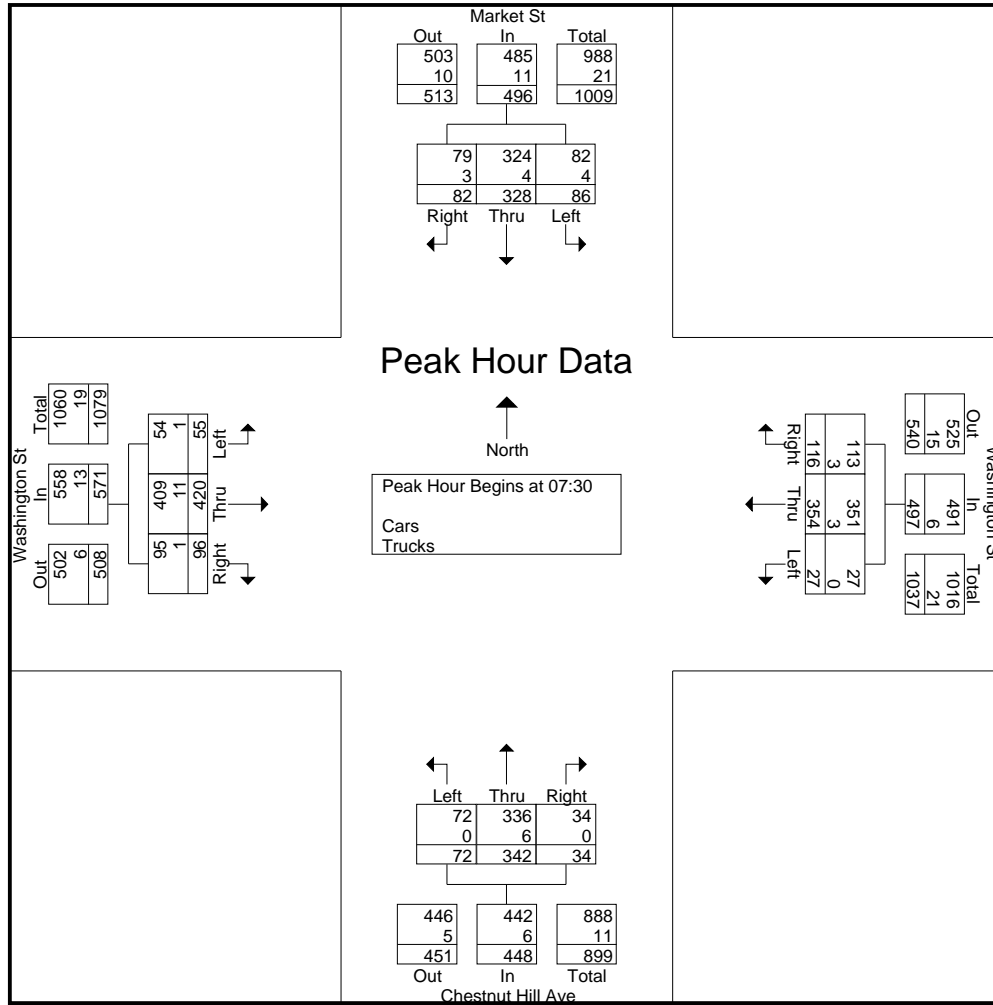
Accurate Counts  
 978-664-2565

File Name : 39000014  
 Site Code : 39000014  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Market St From North				Washington St From East				Chestnut Hill Ave From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	18	52	13	0	4	99	18	3	21	71	6	1	9	92	31	2	6	434	440
07:15	19	70	29	0	5	103	10	7	21	54	8	2	26	111	24	2	11	480	491
07:30	32	83	20	5	6	100	19	7	23	84	5	4	15	103	22	3	19	512	531
07:45	20	79	21	7	5	77	30	6	14	86	8	4	12	109	26	9	26	487	513
Total	89	284	83	12	20	379	77	23	79	295	27	11	62	415	103	16	62	1913	1975
08:00	16	79	27	2	5	88	31	6	19	86	9	5	12	104	27	6	19	503	522
08:15	18	87	14	0	11	89	36	14	16	86	12	10	16	104	21	6	30	510	540
08:30	22	75	22	4	11	68	30	6	12	77	13	7	15	95	23	5	22	463	485
08:45	20	80	26	1	10	96	31	6	16	86	2	4	20	118	19	5	16	524	540
Total	76	321	89	7	37	341	128	32	63	335	36	26	63	421	90	22	87	2000	2087
Grand Total	165	605	172	19	57	720	205	55	142	630	63	37	125	836	193	38	149	3913	4062
Apprch %	17.5	64.2	18.3		5.8	73.3	20.9		17	75.4	7.5		10.8	72.4	16.7				
Total %	4.2	15.5	4.4		1.5	18.4	5.2		3.6	16.1	1.6		3.2	21.4	4.9		3.7	96.3	
Cars	157	594	168		54	712	197		142	622	62		123	817	192		0	0	3989
% Cars	95.2	98.2	97.7	100	94.7	98.9	96.1	100	100	98.7	98.4	100	98.4	97.7	99.5	100	0	0	98.2
Trucks	8	11	4		3	8	8		0	8	1		2	19	1		0	0	73
% Trucks	4.8	1.8	2.3	0	5.3	1.1	3.9	0	0	1.3	1.6	0	1.6	2.3	0.5	0	0	0	1.8

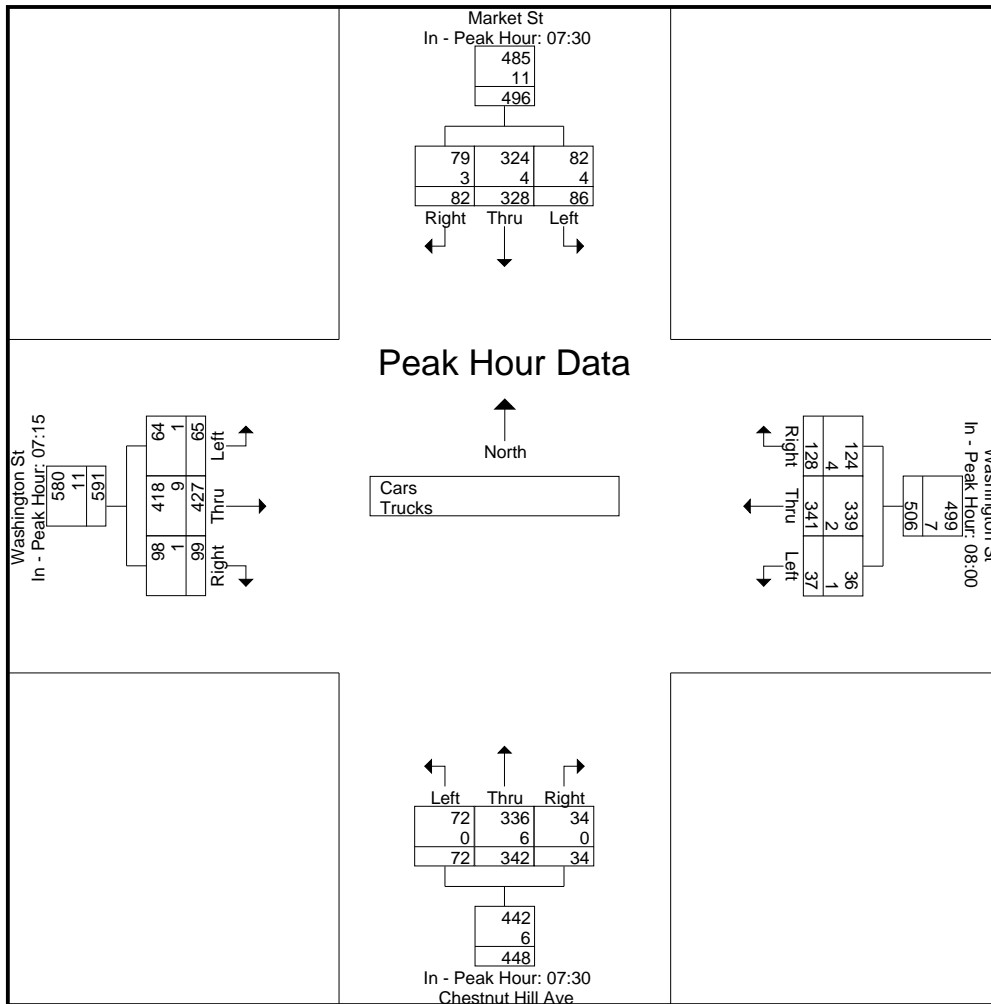
Start Time	Market St From North				Washington St From East				Chestnut Hill Ave From South				Washington St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	32	83	20	135	6	100	19	125	23	84	5	112	15	103	22	140	512
07:45	20	79	21	120	5	77	30	112	14	86	8	108	12	109	26	147	487
08:00	16	79	27	122	5	88	31	124	19	86	9	114	12	104	27	143	503
08:15	18	87	14	119	11	89	36	136	16	86	12	114	16	104	21	141	510
Total Volume	86	328	82	496	27	354	116	497	72	342	34	448	55	420	96	571	2012
% App. Total	17.3	66.1	16.5		5.4	71.2	23.3		16.1	76.3	7.6		9.6	73.6	16.8		
PHF	.672	.943	.759	.919	.614	.885	.806	.914	.783	.994	.708	.982	.859	.963	.889	.971	.982
Cars	82	324	79	485	27	351	113	491	72	336	34	442	54	409	95	558	1976
% Cars	95.3	98.8	96.3	97.8	100	99.2	97.4	98.8	100	98.2	100	98.7	98.2	97.4	99.0	97.7	98.2
Trucks	4	4	3	11	0	3	3	6	0	6	0	6	1	11	1	13	36
% Trucks	4.7	1.2	3.7	2.2	0	0.8	2.6	1.2	0	1.8	0	1.3	1.8	2.6	1.0	2.3	1.8



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30				08:00				07:30				07:15			
+0 mins.	32	83	20	135	5	88	31	124	23	84	5	112	26	111	24	161
+15 mins.	20	79	21	120	11	89	36	136	14	86	8	108	15	103	22	140
+30 mins.	16	79	27	122	11	68	30	109	19	86	9	114	12	109	26	147
+45 mins.	18	87	14	119	10	96	31	137	16	86	12	114	12	104	27	143
Total Volume	86	328	82	496	37	341	128	506	72	342	34	448	65	427	99	591
% App. Total	17.3	66.1	16.5		7.3	67.4	25.3		16.1	76.3	7.6		11	72.3	16.8	
PHF	.672	.943	.759	.919	.841	.888	.889	.923	.783	.994	.708	.982	.625	.962	.917	.918
Cars	82	324	79	485	36	339	124	499	72	336	34	442	64	418	98	580
% Cars	95.3	98.8	96.3	97.8	97.3	99.4	96.9	98.6	100	98.2	100	98.7	98.5	97.9	99	98.1
Trucks	4	4	3	11	1	2	4	7	0	6	0	6	1	9	1	11
% Trucks	4.7	1.2	3.7	2.2	2.7	0.6	3.1	1.4	0	1.8	0	1.3	1.5	2.1	1	1.9



N/S Street : Market St / Chestnut Hill  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

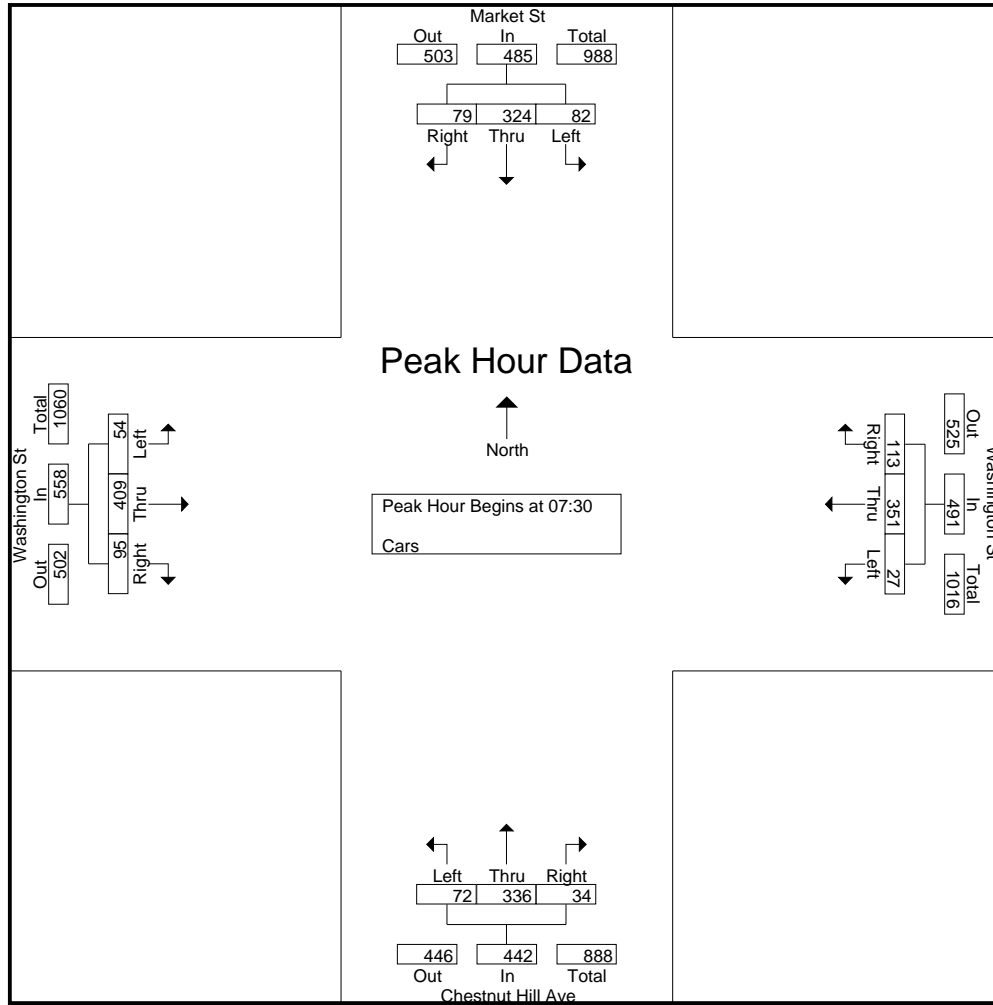
Accurate Counts  
 978-664-2565

File Name : 39000014  
 Site Code : 39000014  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Market St From North				Washington St From East				Chestnut Hill Ave From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00	17	51	13	0	3	97	17	3	21	71	6	1	9	90	31	2	6	426	432
07:15	17	69	29	0	4	102	9	7	21	54	8	2	26	109	24	2	11	472	483
07:30	32	83	18	5	6	98	18	7	23	82	5	4	15	100	21	3	19	501	520
07:45	19	77	20	7	5	76	29	6	14	84	8	4	12	108	26	9	26	478	504
Total	85	280	80	12	18	373	73	23	79	291	27	11	62	407	102	16	62	1877	1939
08:00	16	77	27	2	5	88	30	6	19	85	9	5	11	101	27	6	19	495	514
08:15	15	87	14	0	11	89	36	14	16	85	12	10	16	100	21	6	30	502	532
08:30	21	74	22	4	10	68	27	6	12	76	12	7	15	93	23	5	22	453	475
08:45	20	76	25	1	10	94	31	6	16	85	2	4	19	116	19	5	16	513	529
Total	72	314	88	7	36	339	124	32	63	331	35	26	61	410	90	22	87	1963	2050
Grand Total	157	594	168	19	54	712	197	55	142	622	62	37	123	817	192	38	149	3840	3989
Apprch %	17.1	64.6	18.3		5.6	73.9	20.5		17.2	75.3	7.5		10.9	72.2	17				
Total %	4.1	15.5	4.4		1.4	18.5	5.1		3.7	16.2	1.6		3.2	21.3	5		3.7	96.3	

Start Time	Market St From North				Washington St From East				Chestnut Hill Ave From South				Washington St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	32	83	18	133	6	98	18	122	23	82	5	110	15	100	21	136	501
07:45	19	77	20	116	5	76	29	110	14	84	8	106	12	108	26	146	478
08:00	16	77	27	120	5	88	30	123	19	85	9	113	11	101	27	139	495
08:15	15	87	14	116	11	89	36	136	16	85	12	113	16	100	21	137	502
Total Volume	82	324	79	485	27	351	113	491	72	336	34	442	54	409	95	558	1976
% App. Total	16.9	66.8	16.3		5.5	71.5	23		16.3	76	7.7		9.7	73.3	17		
PHF	.641	.931	.731	.912	.614	.895	.785	.903	.783	.988	.708	.978	.844	.947	.880	.955	.984

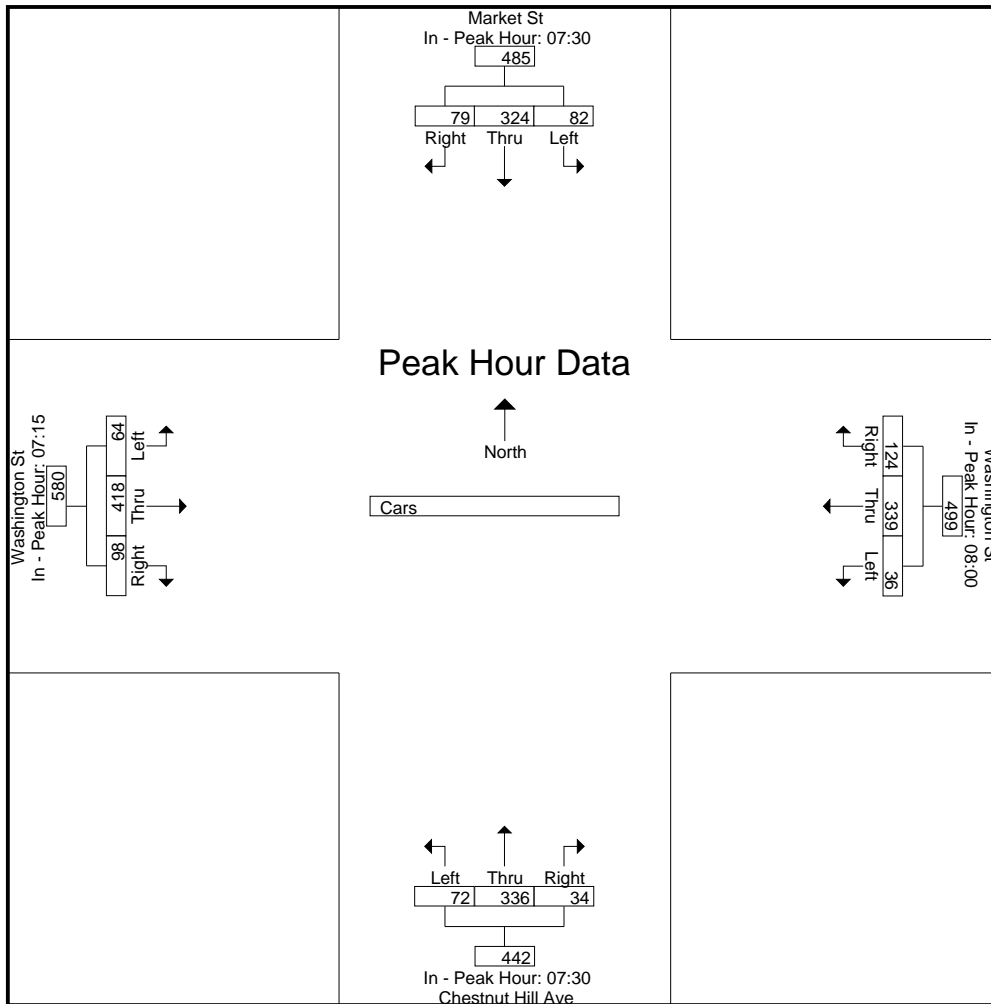


Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30				08:00				07:30				07:15			
+0 mins.	32	83	18	133	5	88	30	123	23	82	5	110	26	109	24	159
+15 mins.	19	77	20	116	11	89	36	136	14	84	8	106	15	100	21	136
+30 mins.	16	77	27	120	10	68	27	105	19	85	9	113	12	108	26	146
+45 mins.	15	87	14	116	10	94	31	135	16	85	12	113	11	101	27	139
Total Volume	82	324	79	485	36	339	124	499	72	336	34	442	64	418	98	580
% App. Total	16.9	66.8	16.3		7.2	67.9	24.8		16.3	76	7.7		11	72.1	16.9	
PHF	.641	.931	.731	.912	.818	.902	.861	.917	.783	.988	.708	.978	.615	.959	.907	.912





N/S Street : Market St / Chestnut Hill  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

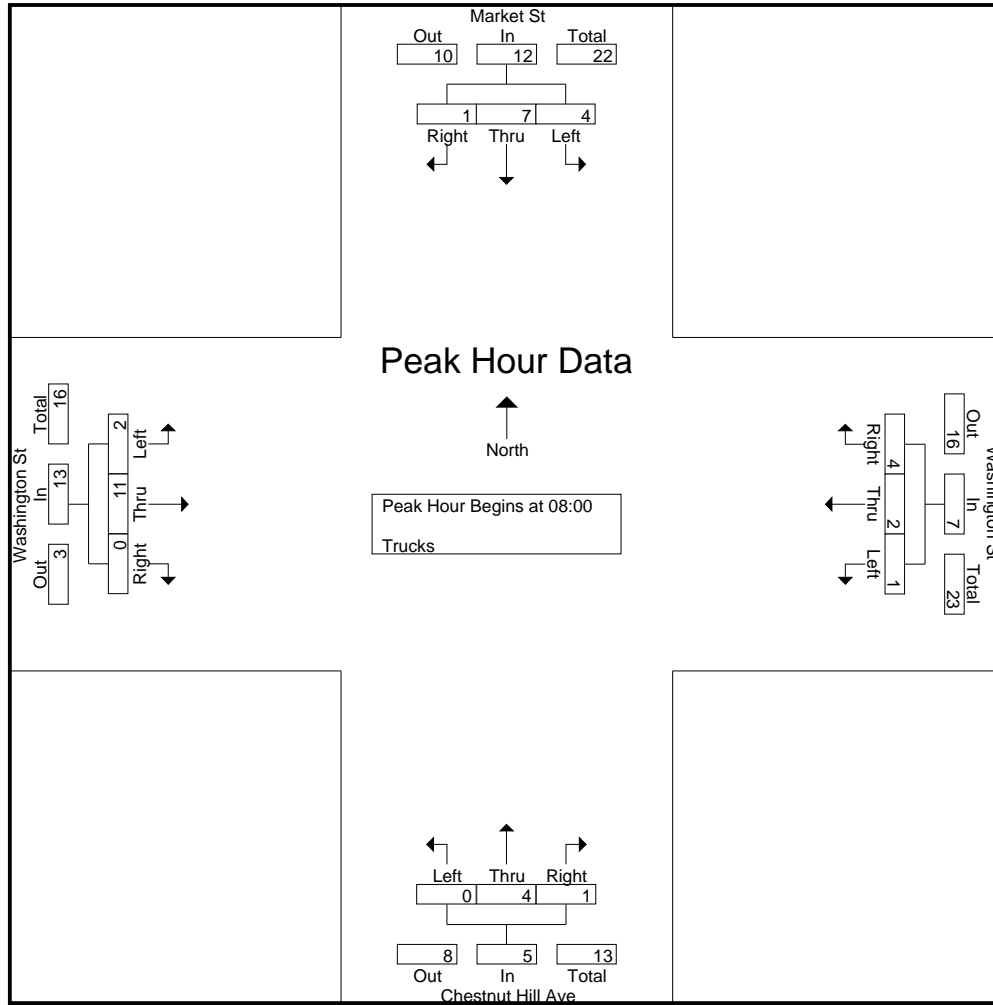
Accurate Counts  
 978-664-2565

File Name : 39000014  
 Site Code : 39000014  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Trucks

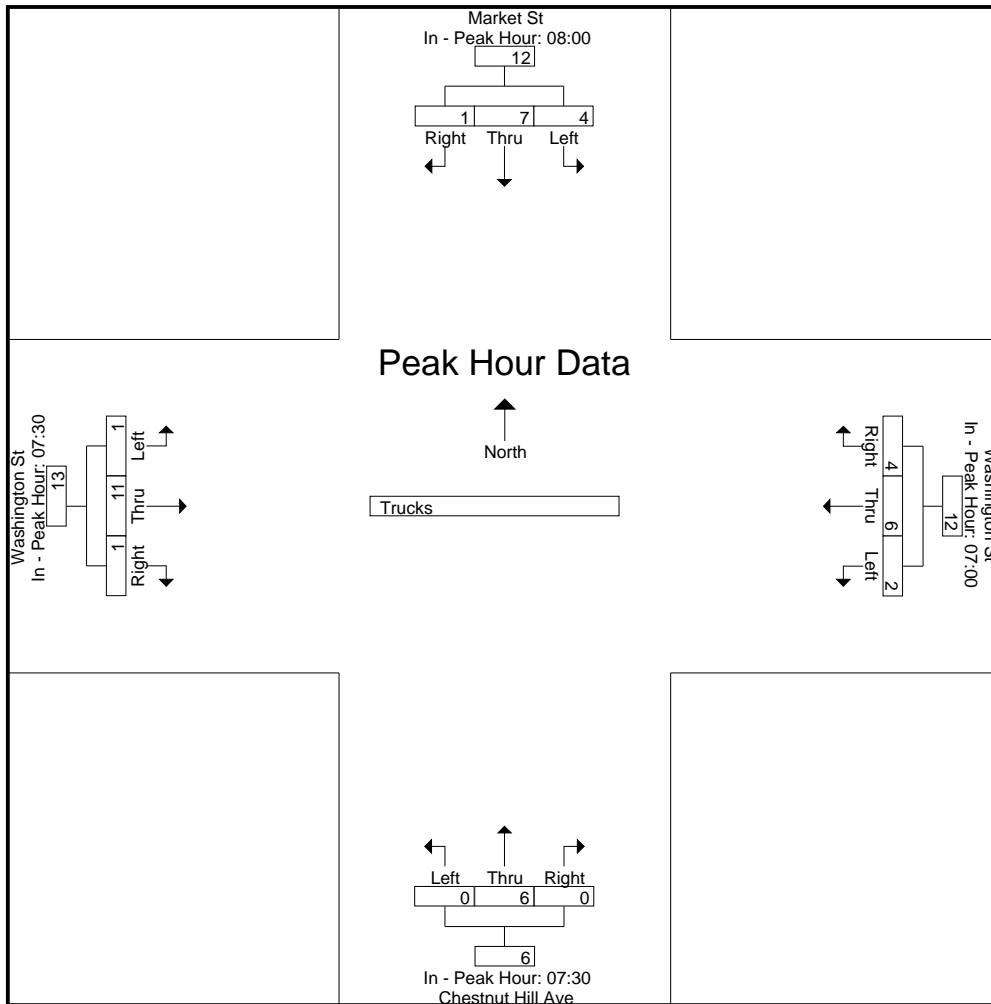
Start Time	Market St From North				Washington St From East				Chestnut Hill Ave From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds				
07:00	1	1	0	0	1	2	1	0	0	0	0	0	0	2	0	0	0	0	8	8
07:15	2	1	0	0	1	1	1	0	0	0	0	0	0	2	0	0	0	0	8	8
07:30	0	0	2	0	0	2	1	0	0	2	0	0	0	3	1	0	0	0	11	11
07:45	1	2	1	0	0	1	1	0	0	2	0	0	0	1	0	0	0	0	9	9
Total	4	4	3	0	2	6	4	0	0	4	0	0	0	8	1	0	0	0	36	36
08:00	0	2	0	0	0	0	1	0	0	1	0	0	1	3	0	0	0	0	8	8
08:15	3	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	0	0	8	8
08:30	1	1	0	0	1	0	3	0	0	1	1	0	0	2	0	0	0	0	10	10
08:45	0	4	1	0	0	2	0	0	0	1	0	0	1	2	0	0	0	0	11	11
Total	4	7	1	0	1	2	4	0	0	4	1	0	2	11	0	0	0	0	37	37
Grand Total	8	11	4	0	3	8	8	0	0	8	1	0	2	19	1	0	0	0	73	73
Apprch %	34.8	47.8	17.4		15.8	42.1	42.1		0	88.9	11.1		9.1	86.4	4.5					
Total %	11	15.1	5.5		4.1	11	11		0	11	1.4		2.7	26	1.4			0	100	

Start Time	Market St From North				Washington St From East				Chestnut Hill Ave From South				Washington St From West				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 08:00																		
08:00	0	2	0	2	0	0	1	1	0	1	0	1	1	1	3	0	4	8
08:15	3	0	0	3	0	0	0	0	0	1	0	1	0	4	0	0	4	8
08:30	1	1	0	2	1	0	3	4	0	1	1	2	0	2	0	2	10	
08:45	0	4	1	5	0	2	0	2	0	1	0	1	1	2	0	3	11	
Total Volume	4	7	1	12	1	2	4	7	0	4	1	5	2	11	0	13	37	
% App. Total	33.3	58.3	8.3		14.3	28.6	57.1		0	80	20		15.4	84.6	0			
PHF	.333	.438	.250	.600	.250	.250	.333	.438	.000	1.000	.250	.625	.500	.688	.000	.813	.841	



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	08:00				07:00				07:30				07:30			
+0 mins.	0	2	0	2	1	2	1	4	0	2	0	2	0	3	1	4
+15 mins.	3	0	0	3	1	1	1	3	0	2	0	2	0	1	0	1
+30 mins.	1	1	0	2	0	2	1	3	0	1	0	1	1	3	0	4
+45 mins.	0	4	1	5	0	1	1	2	0	1	0	1	0	4	0	4
Total Volume	4	7	1	12	2	6	4	12	0	6	0	6	1	11	1	13
% App. Total	33.3	58.3	8.3		16.7	50	33.3		0	100	0		7.7	84.6	7.7	
PHF	.333	.438	.250	.600	.500	.750	1.000	.750	.000	.750	.000	.750	.250	.688	.250	.813



N/S Street : Market St / Chestnut Hill  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

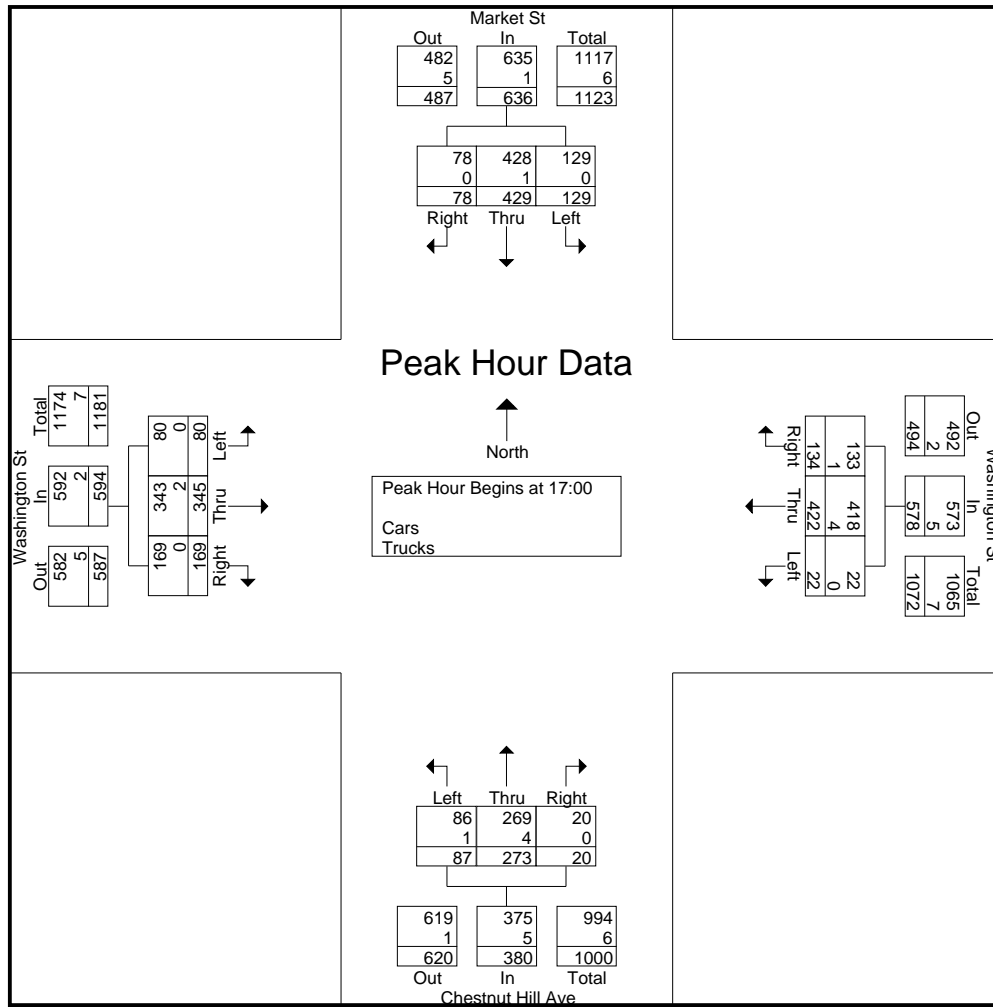
Accurate Counts  
 978-664-2565

File Name : 39000014  
 Site Code : 39000014  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Market St From North				Washington St From East				Chestnut Hill Ave From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	21	83	31	5	9	62	19	6	27	67	10	9	17	78	35	6	26	459	485
16:15	26	100	29	8	4	86	39	10	20	78	5	3	17	72	37	5	26	513	539
16:30	36	94	26	8	9	101	22	6	13	58	9	7	25	89	29	5	26	511	537
16:45	24	93	23	12	4	86	31	16	19	72	8	16	20	88	39	7	51	507	558
Total	107	370	109	33	26	335	111	38	79	275	32	35	79	327	140	23	129	1990	2119
17:00	37	104	12	18	7	91	30	11	20	68	3	10	20	88	38	7	46	518	564
17:15	28	104	11	14	4	116	25	13	24	73	4	21	17	94	38	10	58	538	596
17:30	31	111	26	12	3	114	47	8	17	67	3	14	16	71	46	11	45	552	597
17:45	33	110	29	6	8	101	32	9	26	65	10	6	27	92	47	5	26	580	606
Total	129	429	78	50	22	422	134	41	87	273	20	51	80	345	169	33	175	2188	2363
Grand Total	236	799	187	83	48	757	245	79	166	548	52	86	159	672	309	56	304	4178	4482
Apprch %	19.3	65.4	15.3		4.6	72.1	23.3		21.7	71.5	6.8		13.9	58.9	27.1				
Total %	5.6	19.1	4.5		1.1	18.1	5.9		4	13.1	1.2		3.8	16.1	7.4		6.8	93.2	
Cars	236	796	186		48	752	241		165	542	52		158	669	309		0	0	4458
% Cars	100	99.6	99.5	100	100	99.3	98.4	100	99.4	98.9	100	100	99.4	99.6	100	100	0	0	99.5
Trucks	0	3	1		0	5	4		1	6	0		1	3	0		0	0	24
% Trucks	0	0.4	0.5	0	0	0.7	1.6	0	0.6	1.1	0	0	0.6	0.4	0	0	0	0	0.5

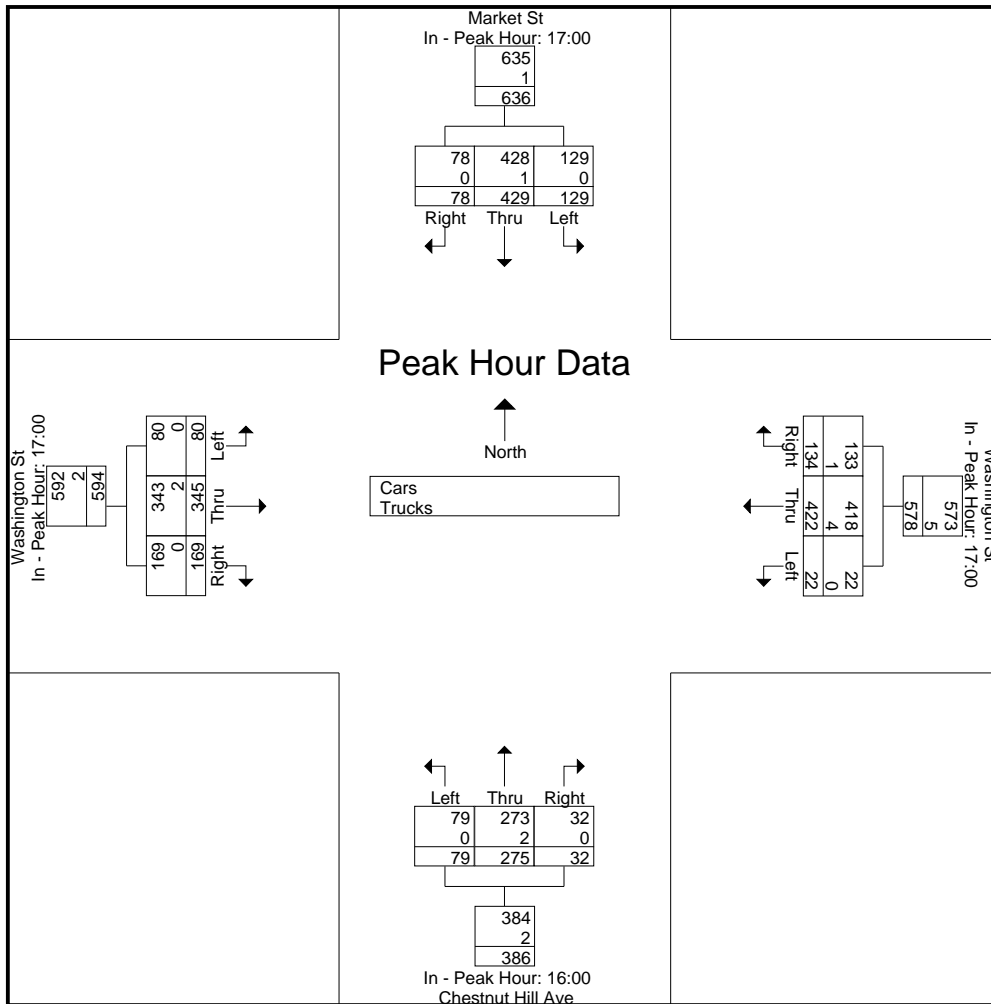
Start Time	Market St From North				Washington St From East				Chestnut Hill Ave From South				Washington St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	37	104	12	153	7	91	30	128	20	68	3	91	20	88	38	146	518
17:15	28	104	11	143	4	116	25	145	24	73	4	101	17	94	38	149	538
17:30	31	111	26	168	3	114	47	164	17	67	3	87	16	71	46	133	552
17:45	33	110	29	172	8	101	32	141	26	65	10	101	27	92	47	166	580
Total Volume	129	429	78	636	22	422	134	578	87	273	20	380	80	345	169	594	2188
% App. Total	20.3	67.5	12.3		3.8	73	23.2		22.9	71.8	5.3		13.5	58.1	28.5		
PHF	.872	.966	.672	.924	.688	.909	.713	.881	.837	.935	.500	.941	.741	.918	.899	.895	.943
Cars	129	428	78	635	22	418	133	573	86	269	20	375	80	343	169	592	2175
% Cars	100	99.8	100	99.8	100	99.1	99.3	99.1	98.9	98.5	100	98.7	100	99.4	100	99.7	99.4
Trucks	0	1	0	1	0	4	1	5	1	4	0	5	0	2	0	2	13
% Trucks	0	0.2	0	0.2	0	0.9	0.7	0.9	1.1	1.5	0	1.3	0	0.6	0	0.3	0.6



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00				17:00				16:00				17:00			
+0 mins.	37	104	12	153	7	91	30	128	27	67	10	104	20	88	38	146
+15 mins.	28	104	11	143	4	116	25	145	20	78	5	103	17	94	38	149
+30 mins.	31	111	26	168	3	114	47	164	13	58	9	80	16	71	46	133
+45 mins.	33	110	29	172	8	101	32	141	19	72	8	99	27	92	47	166
Total Volume	129	429	78	636	22	422	134	578	79	275	32	386	80	345	169	594
% App. Total	20.3	67.5	12.3		3.8	73	23.2		20.5	71.2	8.3		13.5	58.1	28.5	
PHF	.872	.966	.672	.924	.688	.909	.713	.881	.731	.881	.800	.928	.741	.918	.899	.895
Cars	129	428	78	635	22	418	133	573	79	273	32	384	80	343	169	592
% Cars	100	99.8	100	99.8	100	99.1	99.3	99.1	100	99.3	100	99.5	100	99.4	100	99.7
Trucks	0	1	0	1	0	4	1	5	0	2	0	2	0	2	0	2
% Trucks	0	0.2	0	0.2	0	0.9	0.7	0.9	0	0.7	0	0.5	0	0.6	0	0.3



N/S Street : Market St / Chestnut Hill  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

Accurate Counts  
 978-664-2565

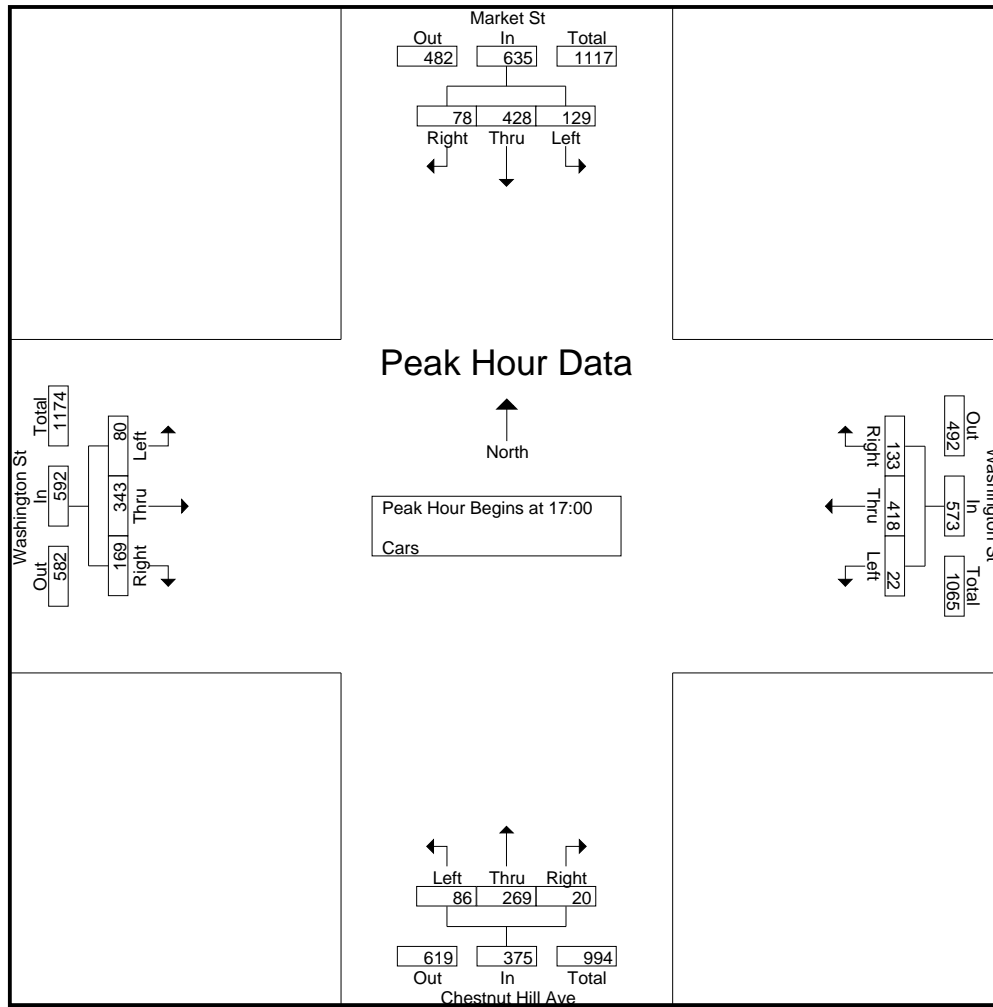
File Name : 39000014  
 Site Code : 39000014  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Market St From North				Washington St From East				Chestnut Hill Ave From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	21	83	31	5	9	61	19	6	27	67	10	9	17	77	35	6	26	457	483
16:15	26	100	29	8	4	86	37	10	20	77	5	3	16	72	37	5	26	509	535
16:30	36	92	26	8	9	101	22	6	13	57	9	7	25	89	29	5	26	508	534
16:45	24	93	22	12	4	86	30	16	19	72	8	16	20	88	39	7	51	505	556
Total	107	368	108	33	26	334	108	38	79	273	32	35	78	326	140	23	129	1979	2108
17:00	37	104	12	18	7	91	30	11	20	66	3	10	20	86	38	7	46	514	560
17:15	28	104	11	14	4	115	25	13	23	72	4	21	17	94	38	10	58	535	593
17:30	31	111	26	12	3	111	46	8	17	67	3	14	16	71	46	11	45	548	593
17:45	33	109	29	6	8	101	32	9	26	64	10	6	27	92	47	5	26	578	604
Total	129	428	78	50	22	418	133	41	86	269	20	51	80	343	169	33	175	2175	2350
Grand Total	236	796	186	83	48	752	241	79	165	542	52	86	158	669	309	56	304	4154	4458
Apprch %	19.4	65.4	15.3		4.6	72.2	23.2		21.7	71.4	6.9		13.9	58.9	27.2				
Total %	5.7	19.2	4.5		1.2	18.1	5.8		4	13	1.3		3.8	16.1	7.4		6.8	93.2	

Start Time	Market St From North				Washington St From East				Chestnut Hill Ave From South				Washington St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	37	104	12	153	7	91	30	128	20	66	3	89	20	86	38	144	514
17:15	28	104	11	143	4	115	25	144	23	72	4	99	17	94	38	149	535
17:30	31	111	26	168	3	111	46	160	17	67	3	87	16	71	46	133	548
17:45	33	109	29	171	8	101	32	141	26	64	10	100	27	92	47	166	578
Total Volume	129	428	78	635	22	418	133	573	86	269	20	375	80	343	169	592	2175
% App. Total	20.3	67.4	12.3		3.8	72.9	23.2		22.9	71.7	5.3		13.5	57.9	28.5		
PHF	.872	.964	.672	.928	.688	.909	.723	.895	.827	.934	.500	.938	.741	.912	.899	.892	.941

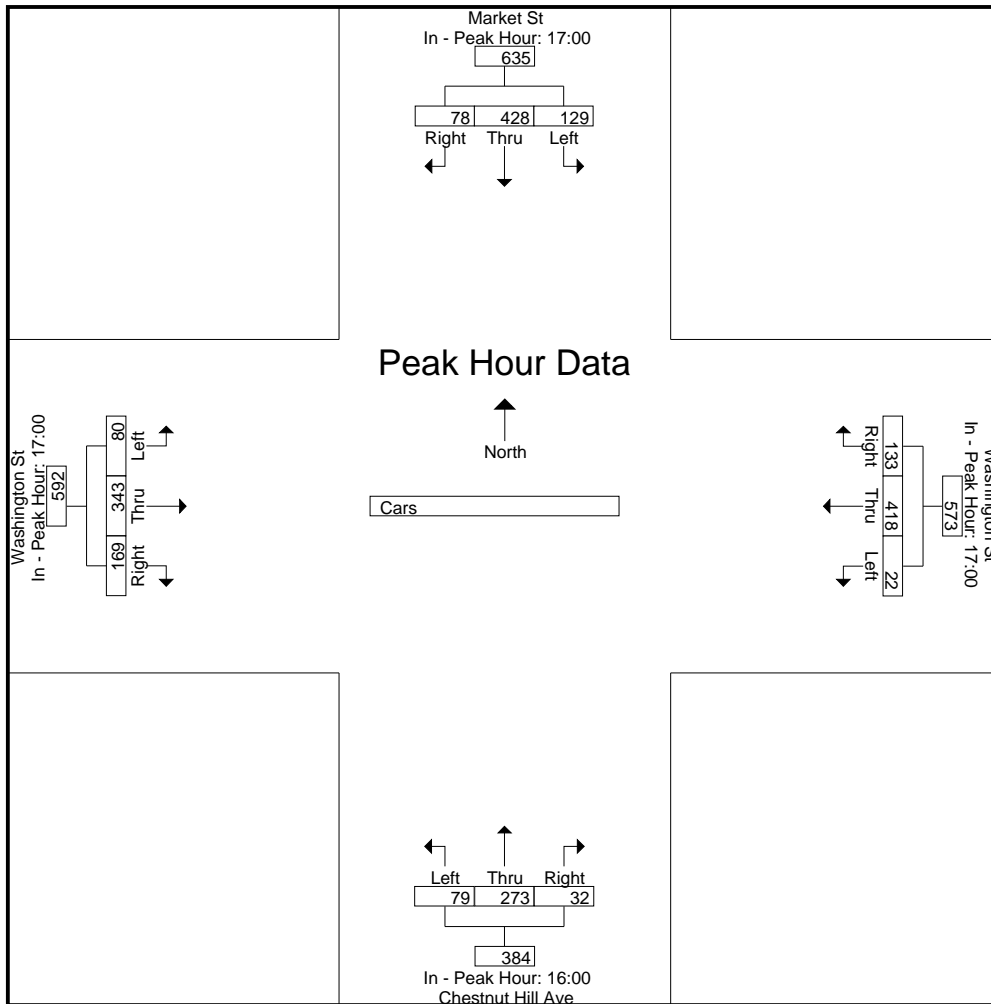




Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00				17:00				16:00				17:00			
+0 mins.	37	104	12	153	7	91	30	128	27	67	10	104	20	86	38	144
+15 mins.	28	104	11	143	4	115	25	144	20	77	5	102	17	94	38	149
+30 mins.	31	111	26	168	3	111	46	160	13	57	9	79	16	71	46	133
+45 mins.	33	109	29	171	8	101	32	141	19	72	8	99	27	92	47	166
Total Volume	129	428	78	635	22	418	133	573	79	273	32	384	80	343	169	592
% App. Total	20.3	67.4	12.3		3.8	72.9	23.2		20.6	71.1	8.3		13.5	57.9	28.5	
PHF	.872	.964	.672	.928	.688	.909	.723	.895	.731	.886	.800	.923	.741	.912	.899	.892



N/S Street : Market St / Chestnut Hill  
 E/W Street: Washington Street  
 City/State : Brighton, MA  
 Weather : Rain

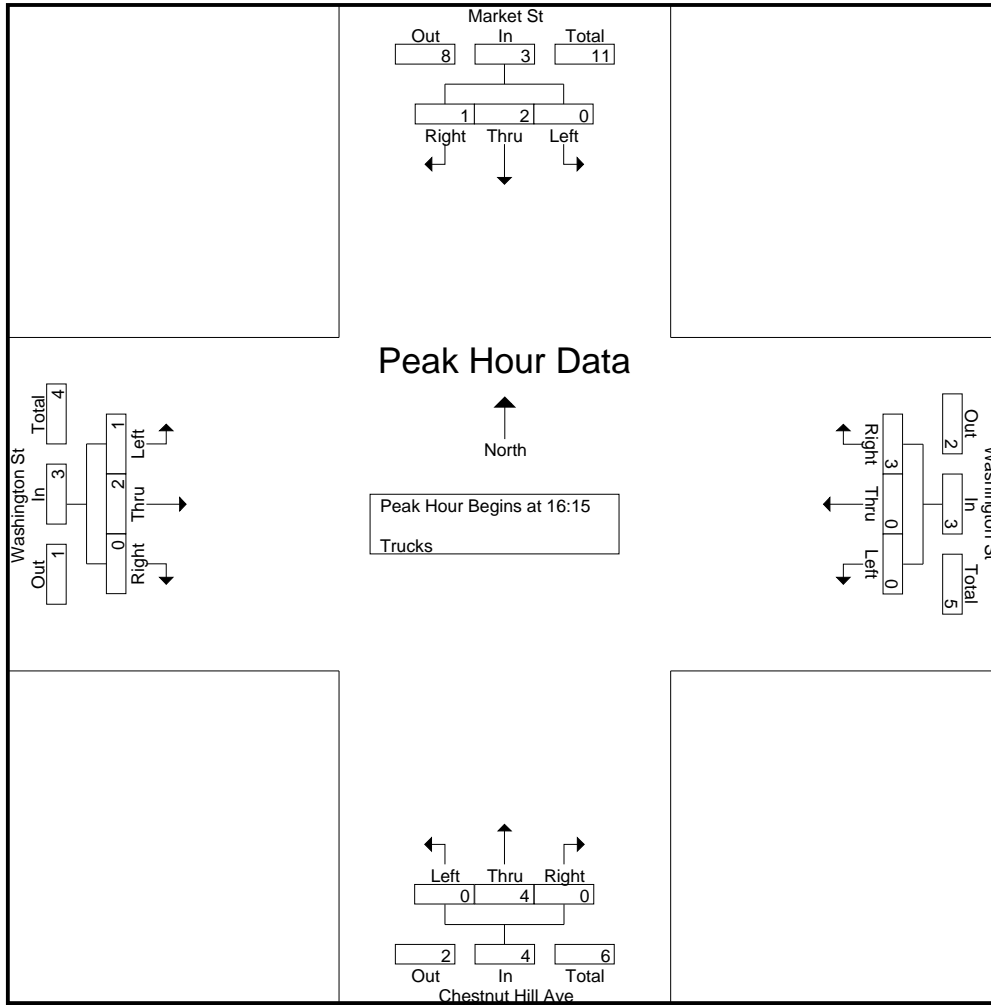
Accurate Counts  
 978-664-2565

File Name : 39000014  
 Site Code : 39000014  
 Start Date : 3/12/2008  
 Page No : 1

Groups Printed- Trucks

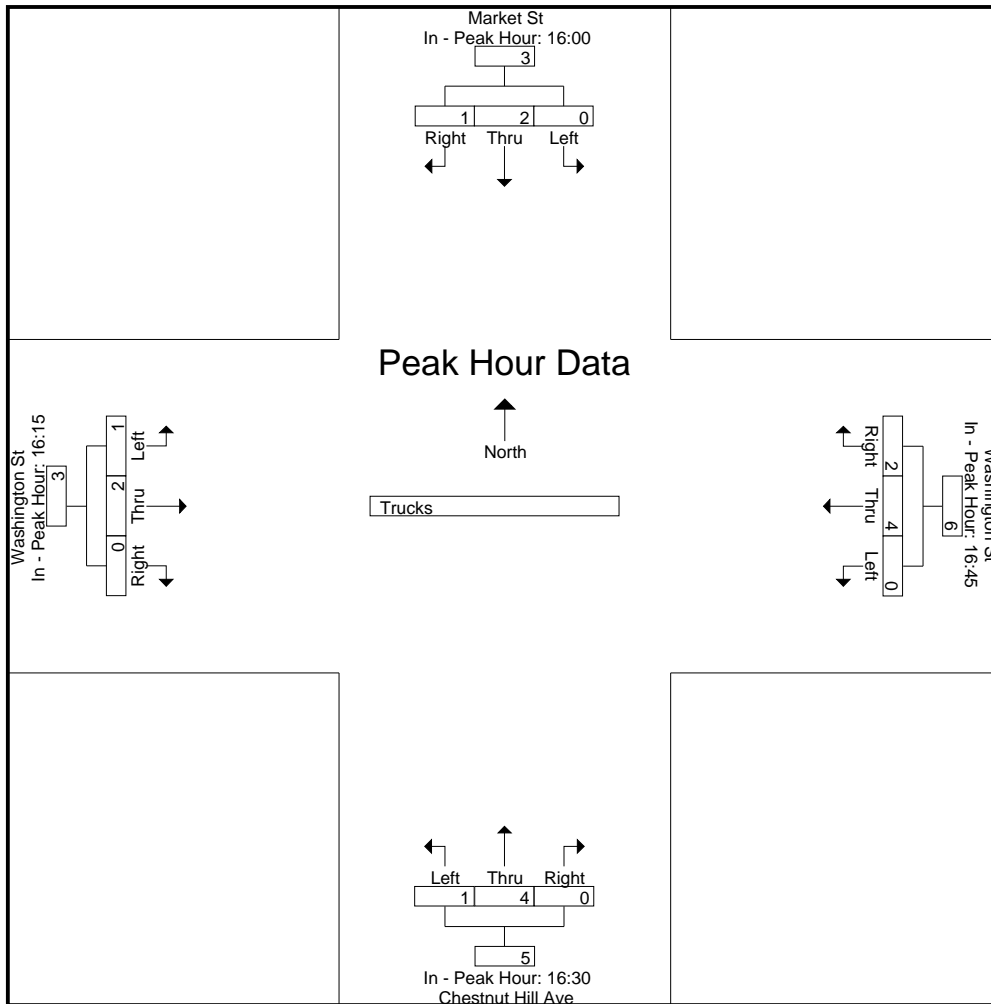
Start Time	Market St From North				Washington St From East				Chestnut Hill Ave From South				Washington St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
16:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	2
16:15	0	0	0	0	0	0	2	0	0	1	0	0	1	0	0	0	0	4	4
16:30	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	3
16:45	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	2	1	0	0	1	3	0	0	2	0	0	1	1	0	0	0	11	11
17:00	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	4	4
17:15	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	3	3
17:30	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	4	4
17:45	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	2
Total	0	1	0	0	0	4	1	0	1	4	0	0	0	2	0	0	0	13	13
Grand Total	0	3	1	0	0	5	4	0	1	6	0	0	1	3	0	0	0	24	24
Apprch %	0	75	25		0	55.6	44.4		14.3	85.7	0		25	75	0				
Total %	0	12.5	4.2		0	20.8	16.7		4.2	25	0		4.2	12.5	0		0	100	

Start Time	Market St From North				Washington St From East				Chestnut Hill Ave From South				Washington St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:15																	
16:15	0	0	0	0	0	0	2	2	0	1	0	1	1	0	0	1	4
16:30	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
16:45	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	2
17:00	0	0	0	0	0	0	0	0	0	2	0	2	0	2	0	2	4
Total Volume	0	2	1	3	0	0	3	3	0	4	0	4	1	2	0	3	13
% App. Total	0	66.7	33.3		0	0	100		0	100	0		33.3	66.7	0		
PHF	.000	.250	.250	.375	.000	.000	.375	.375	.000	.500	.000	.500	.250	.250	.000	.375	.813



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	16:00				16:45				16:30				16:15			
+0 mins.	0	0	0	0	0	0	1	1	0	1	0	1	1	0	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	2	0	2	0	1	0	1	0	2	0	2	0	0	0	0
+45 mins.	0	0	1	1	0	3	1	4	1	1	0	2	0	2	0	2
Total Volume	0	2	1	3	0	4	2	6	1	4	0	5	1	2	0	3
% App. Total	0	66.7	33.3		0	66.7	33.3		20	80	0		33.3	66.7	0	
PHF	.000	.250	.250	.375	.000	.333	.500	.375	.250	.500	.000	.625	.250	.250	.000	.375



N/S Street : St. Thomas More Road  
 E/W Street: Campanella Way  
 City/State : Brighton, MA  
 Weather : Clear

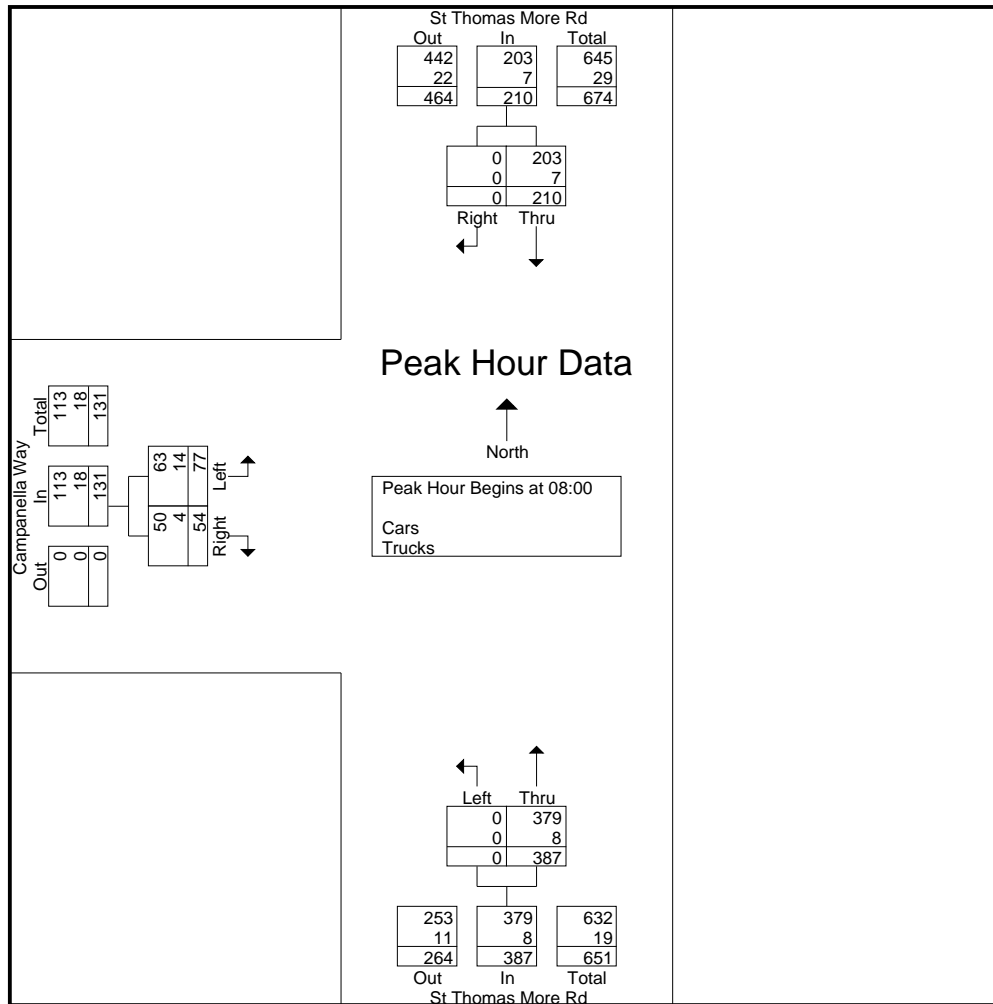
Accurate Counts  
 978-664-2565

File Name : 39000016  
 Site Code : 39000016  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	St Thomas More Rd From North			St Thomas More Rd From South			Campanella Way From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
07:00	30	0	0	0	47	1	14	12	4	5	103	108
07:15	21	0	0	0	71	0	23	26	1	1	141	142
07:30	27	0	0	0	52	0	15	22	5	5	116	121
07:45	38	0	0	0	81	2	22	13	4	6	154	160
Total	116	0	0	0	251	3	74	73	14	17	514	531
08:00	48	0	0	0	82	0	21	8	1	1	159	160
08:15	45	0	0	0	99	4	17	10	4	8	171	179
08:30	53	0	0	0	96	2	18	11	5	7	178	185
08:45	64	0	0	0	110	4	21	25	6	10	220	230
Total	210	0	0	0	387	10	77	54	16	26	728	754
Grand Total	326	0	0	0	638	13	151	127	30	43	1242	1285
Apprch %	100	0		0	100		54.3	45.7				
Total %	26.2	0		0	51.4		12.2	10.2		3.3	96.7	
Cars	316	0		0	620		125	121		0	0	1225
% Cars	96.9	0	0	0	97.2	100	82.8	95.3	100	0	0	95.3
Trucks	10	0		0	18		26	6		0	0	60
% Trucks	3.1	0	0	0	2.8	0	17.2	4.7	0	0	0	4.7

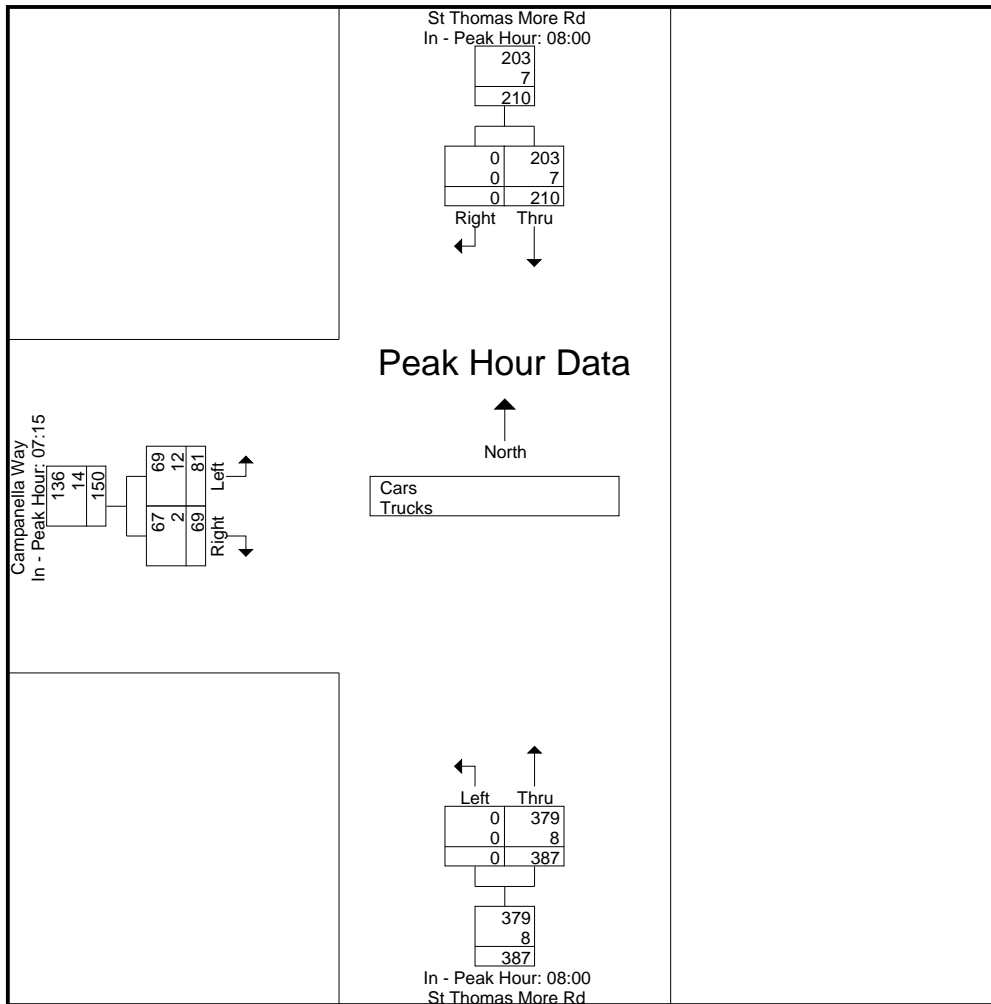
Start Time	St Thomas More Rd From North			St Thomas More Rd From South			Campanella Way From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00										
08:00	48	0	48	0	82	82	21	8	29	159
08:15	45	0	45	0	99	99	17	10	27	171
08:30	53	0	53	0	96	96	18	11	29	178
08:45	64	0	64	0	110	110	21	25	46	220
Total Volume	210	0	210	0	387	387	77	54	131	728
% App. Total	100	0		0	100		58.8	41.2		
PHF	.820	.000	.820	.000	.880	.880	.917	.540	.712	.827
Cars	203	0	203	0	379	379	63	50	113	695
% Cars	96.7	0	96.7	0	97.9	97.9	81.8	92.6	86.3	95.5
Trucks	7	0	7	0	8	8	14	4	18	33
% Trucks	3.3	0	3.3	0	2.1	2.1	18.2	7.4	13.7	4.5



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00			08:00			07:15		
+0 mins.	48	0	48	0	82	82	23	26	49
+15 mins.	45	0	45	0	99	99	15	22	37
+30 mins.	53	0	53	0	96	96	22	13	35
+45 mins.	64	0	64	0	110	110	21	8	29
Total Volume	210	0	210	0	387	387	81	69	150
% App. Total	100	0		0	100		54	46	
PHF	.820	.000	.820	.000	.880	.880	.880	.663	.765
Cars	203	0	203	0	379	379	69	67	136
% Cars	96.7	0	96.7	0	97.9	97.9	85.2	97.1	90.7
Trucks	7	0	7	0	8	8	12	2	14
% Trucks	3.3	0	3.3	0	2.1	2.1	14.8	2.9	9.3





N/S Street : St. Thomas More Road  
 E/W Street: Campanella Way  
 City/State : Brighton, MA  
 Weather : Clear

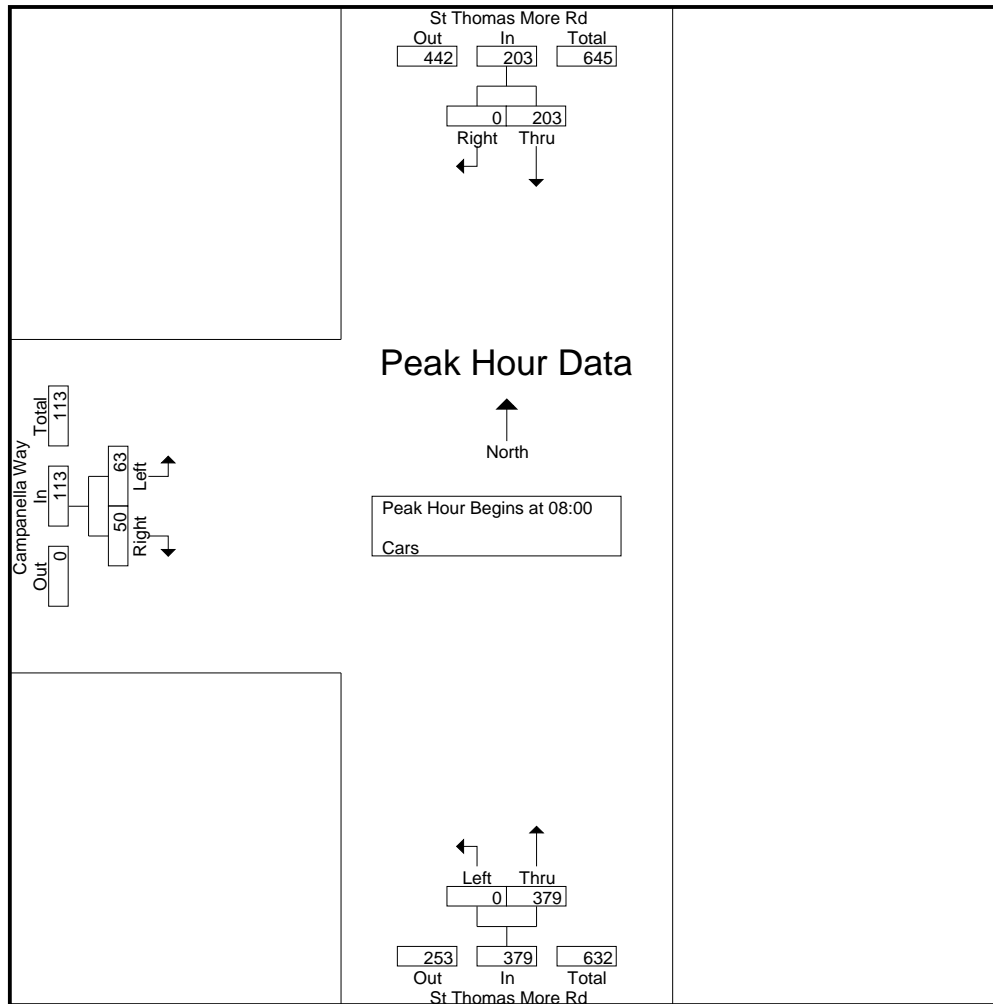
Accurate Counts  
 978-664-2565

File Name : 39000016  
 Site Code : 39000016  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars

Start Time	St Thomas More Rd From North			St Thomas More Rd From South			Campanella Way From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
07:00	29	0	0	0	44	1	10	12	4	5	95	100
07:15	21	0	0	0	67	0	21	24	1	1	133	134
07:30	26	0	0	0	50	0	13	22	5	5	111	116
07:45	37	0	0	0	80	2	18	13	4	6	148	154
Total	113	0	0	0	241	3	62	71	14	17	487	504
08:00	43	0	0	0	80	0	17	8	1	1	148	149
08:15	44	0	0	0	98	4	15	10	4	8	167	175
08:30	52	0	0	0	94	2	14	9	5	7	169	176
08:45	64	0	0	0	107	4	17	23	6	10	211	221
Total	203	0	0	0	379	10	63	50	16	26	695	721
Grand Total	316	0	0	0	620	13	125	121	30	43	1182	1225
Apprch %	100	0		0	100		50.8	49.2				
Total %	26.7	0		0	52.5		10.6	10.2		3.5	96.5	

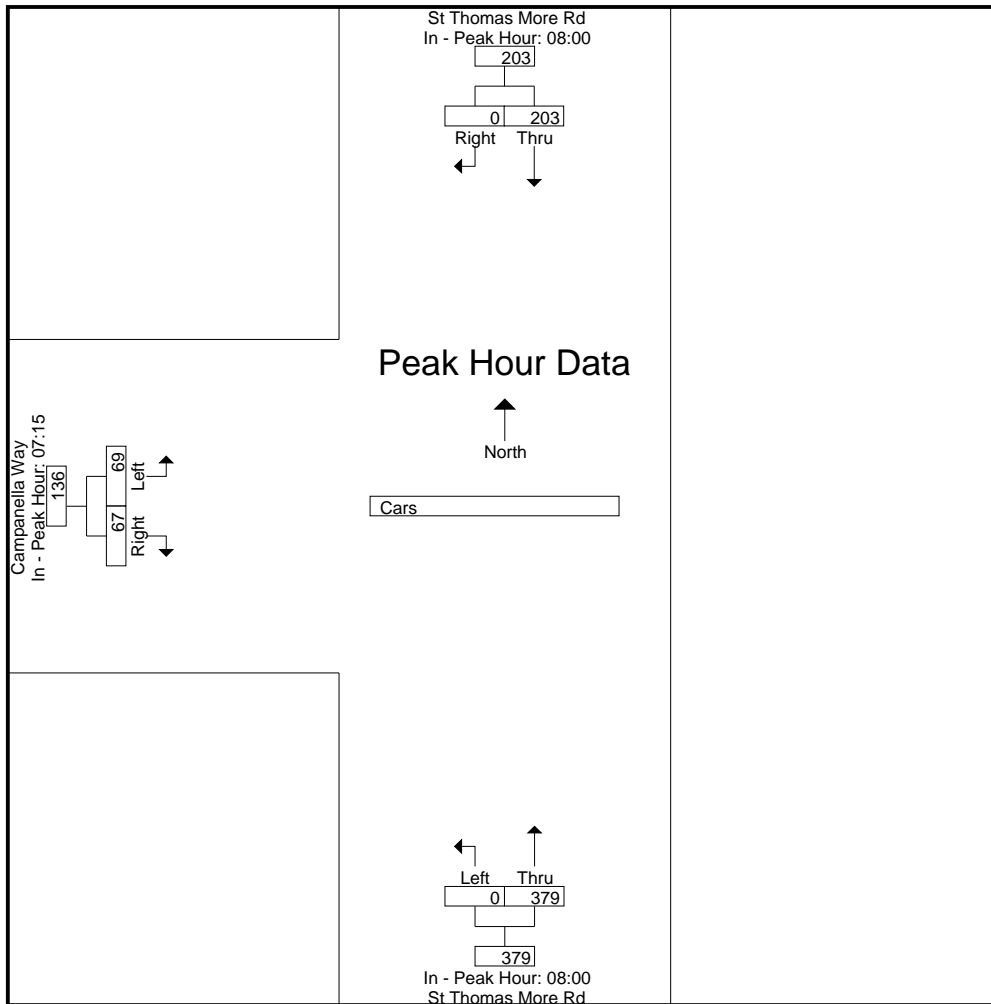
Start Time	St Thomas More Rd From North			St Thomas More Rd From South			Campanella Way From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00										
08:00	43	0	43	0	80	80	17	8	25	148
08:15	44	0	44	0	98	98	15	10	25	167
08:30	52	0	52	0	94	94	14	9	23	169
08:45	64	0	64	0	107	107	17	23	40	211
Total Volume	203	0	203	0	379	379	63	50	113	695
% App. Total	100	0		0	100		55.8	44.2		
PHF	.793	.000	.793	.000	.886	.886	.926	.543	.706	.823



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00			08:00			07:15		
+0 mins.	43	0	43	0	80	80	21	24	45
+15 mins.	44	0	44	0	98	98	13	22	35
+30 mins.	52	0	52	0	94	94	18	13	31
+45 mins.	64	0	64	0	107	107	17	8	25
Total Volume	203	0	203	0	379	379	69	67	136
% App. Total	100	0		0	100		50.7	49.3	
PHF	.793	.000	.793	.000	.886	.886	.821	.698	.756



N/S Street : St. Thomas More Road  
 E/W Street: Campanella Way  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

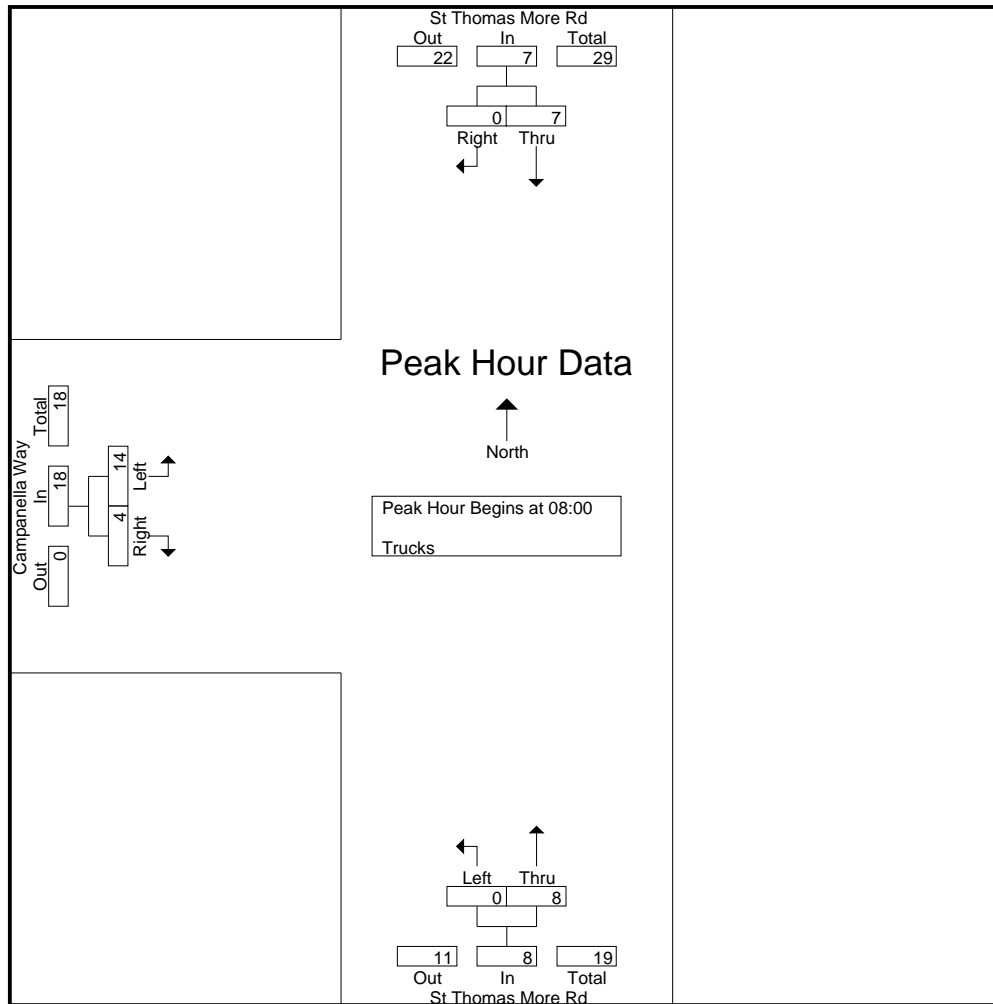
File Name : 39000016  
 Site Code : 39000016  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	St Thomas More Rd From North			St Thomas More Rd From South			Campanella Way From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
07:00	1	0	0	0	3	0	4	0	0	0	8	8
07:15	0	0	0	0	4	0	2	2	0	0	8	8
07:30	1	0	0	0	2	0	2	0	0	0	5	5
07:45	1	0	0	0	1	0	4	0	0	0	6	6
Total	3	0	0	0	10	0	12	2	0	0	27	27
08:00	5	0	0	0	2	0	4	0	0	0	11	11
08:15	1	0	0	0	1	0	2	0	0	0	4	4
08:30	1	0	0	0	2	0	4	2	0	0	9	9
08:45	0	0	0	0	3	0	4	2	0	0	9	9
Total	7	0	0	0	8	0	14	4	0	0	33	33
Grand Total	10	0	0	0	18	0	26	6	0	0	60	60
Apprch %	100	0		0	100		81.2	18.8				
Total %	16.7	0		0	30		43.3	10		0	100	

Start Time	St Thomas More Rd From North			St Thomas More Rd From South			Campanella Way From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
08:00	5	0	5	0	2	2	4	0	4	11
08:15	1	0	1	0	1	1	2	0	2	4
08:30	1	0	1	0	2	2	4	2	6	9
08:45	0	0	0	0	3	3	4	2	6	9
Total Volume	7	0	7	0	8	8	14	4	18	33
% App. Total	100	0		0	100		77.8	22.2		
PHF	.350	.000	.350	.000	.667	.667	.875	.500	.750	.750

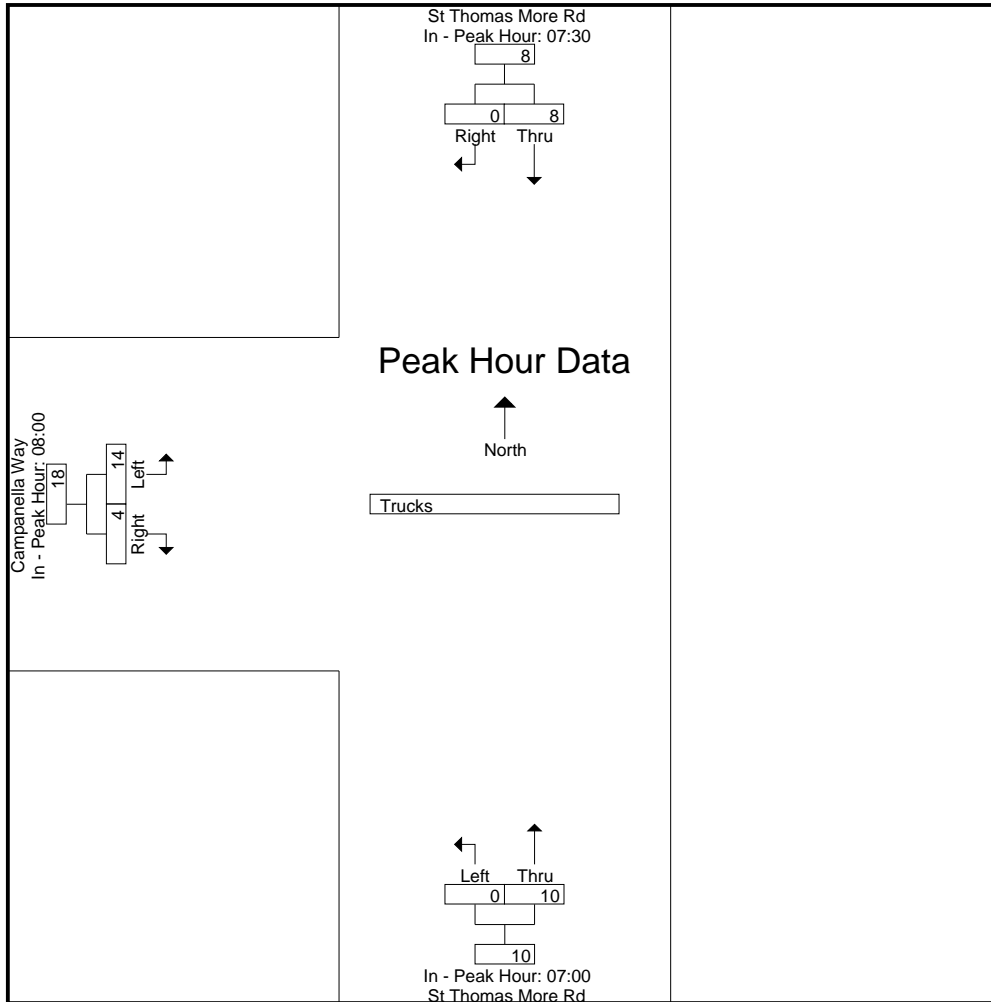
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 08:00



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30			07:00			08:00		
+0 mins.	1	0	1	0	3	3	4	0	4
+15 mins.	1	0	1	0	4	4	2	0	2
+30 mins.	5	0	5	0	2	2	4	2	6
+45 mins.	1	0	1	0	1	1	4	2	6
Total Volume	8	0	8	0	10	10	14	4	18
% App. Total	100	0		0	100		77.8	22.2	
PHF	.400	.000	.400	.000	.625	.625	.875	.500	.750



N/S Street : St. Thomas More Road  
 E/W Street: Campanella Way  
 City/State : Brighton, MA  
 Weather : Clear

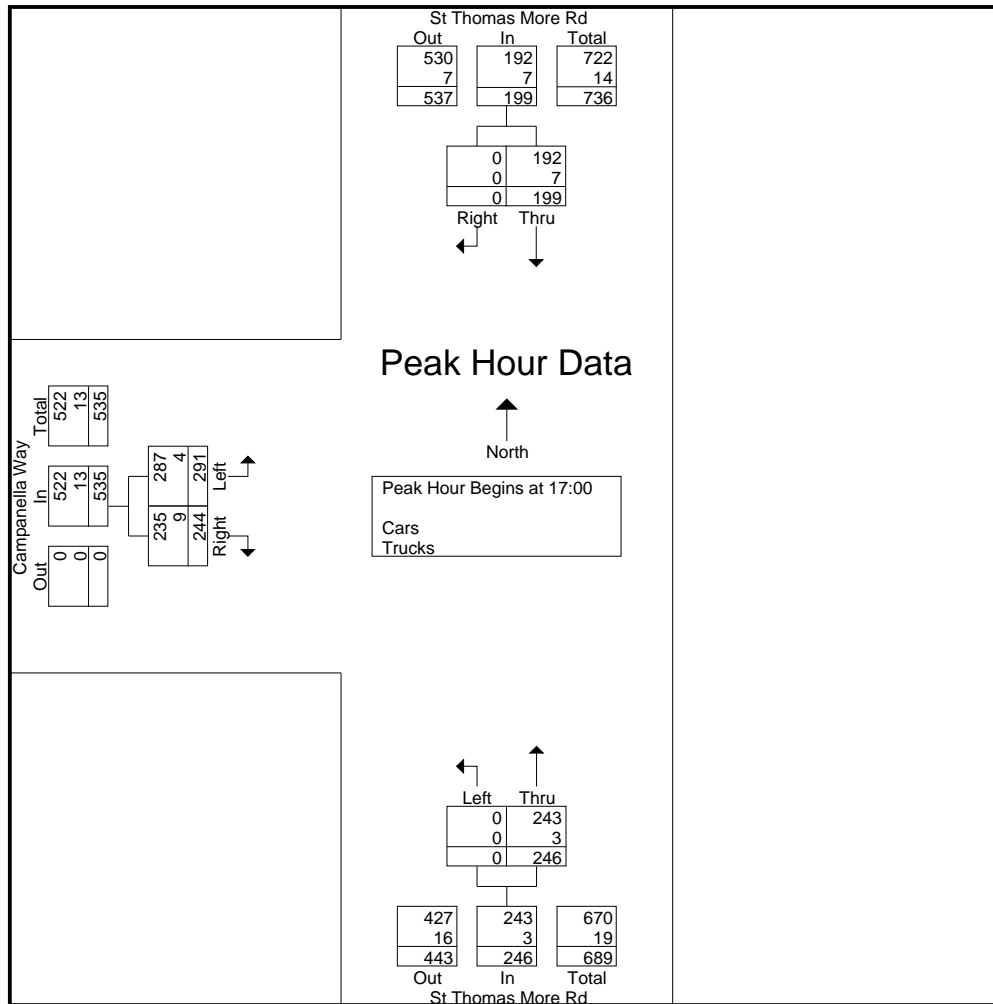
Accurate Counts  
 978-664-2565

File Name : 39000016  
 Site Code : 39000016  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	St Thomas More Rd From North			St Thomas More Rd From South			Campanella Way From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
16:00	70	0	0	0	56	0	62	45	4	4	233	237
16:15	65	0	0	0	76	2	61	50	8	10	252	262
16:30	46	0	0	0	58	2	62	44	9	11	210	221
16:45	46	0	0	0	59	0	57	49	1	1	211	212
Total	227	0	0	0	249	4	242	188	22	26	906	932
17:00	56	0	0	0	63	5	84	72	4	9	275	284
17:15	47	0	0	0	64	17	74	70	12	29	255	284
17:30	43	0	0	0	60	9	66	54	12	21	223	244
17:45	53	0	0	0	59	2	67	48	14	16	227	243
Total	199	0	0	0	246	33	291	244	42	75	980	1055
Grand Total	426	0	0	0	495	37	533	432	64	101	1886	1987
Apprch %	100	0		0	100		55.2	44.8				
Total %	22.6	0		0	26.2		28.3	22.9		5.1	94.9	
Cars	407	0		0	490		527	414		0	0	1939
% Cars	95.5	0	0	0	99	100	98.9	95.8	100	0	0	97.6
Trucks	19	0		0	5		6	18		0	0	48
% Trucks	4.5	0	0	0	1	0	1.1	4.2	0	0	0	2.4

Start Time	St Thomas More Rd From North			St Thomas More Rd From South			Campanella Way From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 17:00										
17:00	56	0	56	0	63	63	84	72	156	275
17:15	47	0	47	0	64	64	74	70	144	255
17:30	43	0	43	0	60	60	66	54	120	223
17:45	53	0	53	0	59	59	67	48	115	227
Total Volume	199	0	199	0	246	246	291	244	535	980
% App. Total	100	0		0	100		54.4	45.6		
PHF	.888	.000	.888	.000	.961	.961	.866	.847	.857	.891
Cars	192	0	192	0	243	243	287	235	522	957
% Cars	96.5	0	96.5	0	98.8	98.8	98.6	96.3	97.6	97.7
Trucks	7	0	7	0	3	3	4	9	13	23
% Trucks	3.5	0	3.5	0	1.2	1.2	1.4	3.7	2.4	2.3

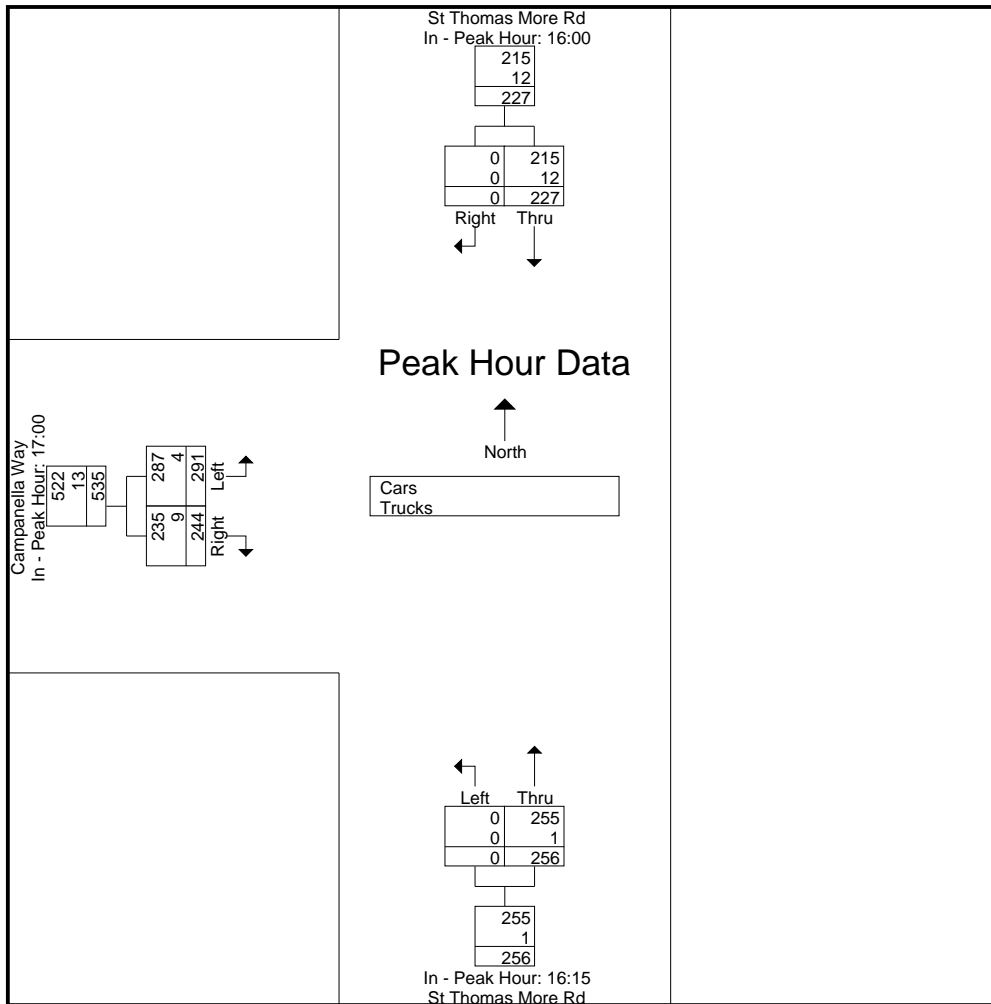


Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00			16:15			17:00		
+0 mins.	70	0	70	0	76	76	84	72	156
+15 mins.	65	0	65	0	58	58	74	70	144
+30 mins.	46	0	46	0	59	59	66	54	120
+45 mins.	46	0	46	0	63	63	67	48	115
Total Volume	227	0	227	0	256	256	291	244	535
% App. Total	100	0		0	100		54.4	45.6	
PHF	.811	.000	.811	.000	.842	.842	.866	.847	.857
Cars	215	0	215	0	255	255	287	235	522
% Cars	94.7	0	94.7	0	99.6	99.6	98.6	96.3	97.6
Trucks	12	0	12	0	1	1	4	9	13
% Trucks	5.3	0	5.3	0	0.4	0.4	1.4	3.7	2.4





N/S Street : St. Thomas More Road  
 E/W Street: Campanella Way  
 City/State : Brighton, MA  
 Weather : Clear

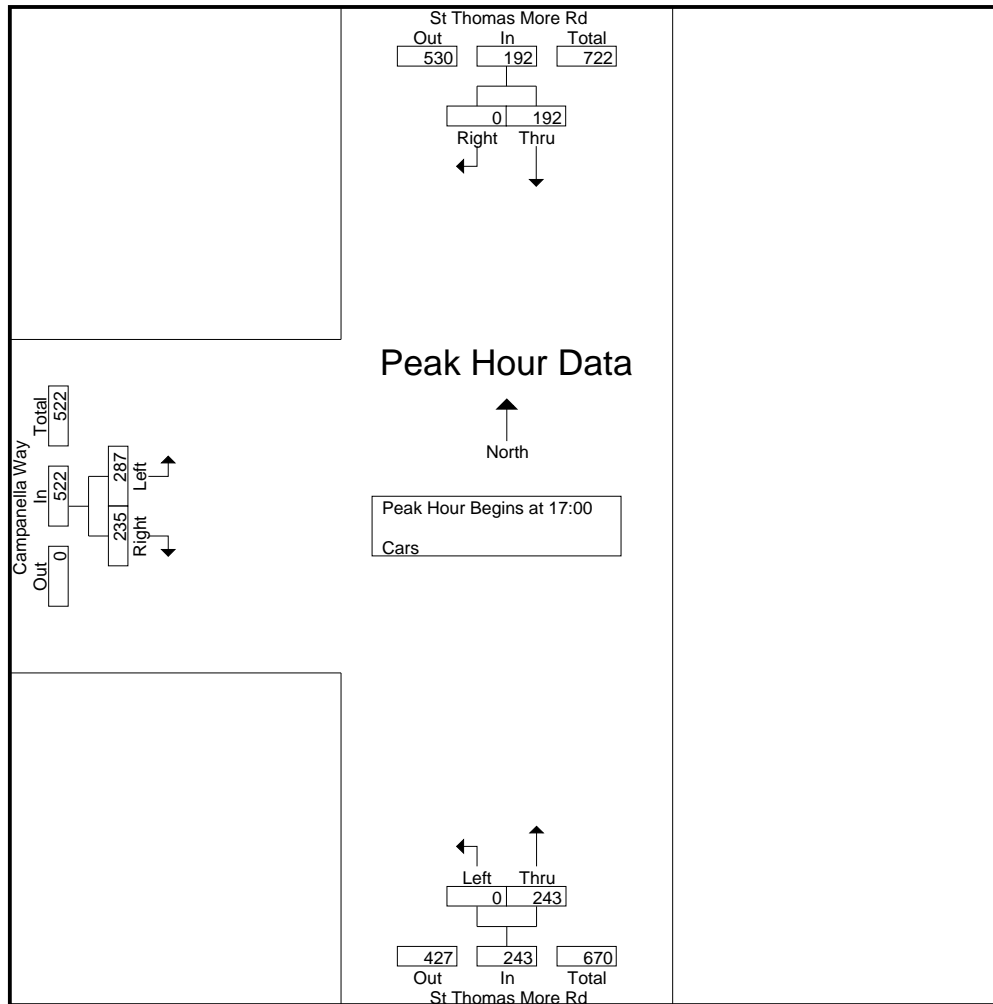
Accurate Counts  
 978-664-2565

File Name : 39000016  
 Site Code : 39000016  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars

Start Time	St Thomas More Rd From North			St Thomas More Rd From South			Campanella Way From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
16:00	66	0	0	0	55	0	61	43	4	4	225	229
16:15	62	0	0	0	76	2	61	47	8	10	246	256
16:30	43	0	0	0	57	2	61	43	9	11	204	215
16:45	44	0	0	0	59	0	57	46	1	1	206	207
Total	215	0	0	0	247	4	240	179	22	26	881	907
17:00	53	0	0	0	63	5	83	69	4	9	268	277
17:15	46	0	0	0	64	17	74	69	12	29	253	282
17:30	41	0	0	0	58	9	63	52	12	21	214	235
17:45	52	0	0	0	58	2	67	45	14	16	222	238
Total	192	0	0	0	243	33	287	235	42	75	957	1032
Grand Total	407	0	0	0	490	37	527	414	64	101	1838	1939
Apprch %	100	0		0	100		56	44				
Total %	22.1	0		0	26.7		28.7	22.5		5.2	94.8	

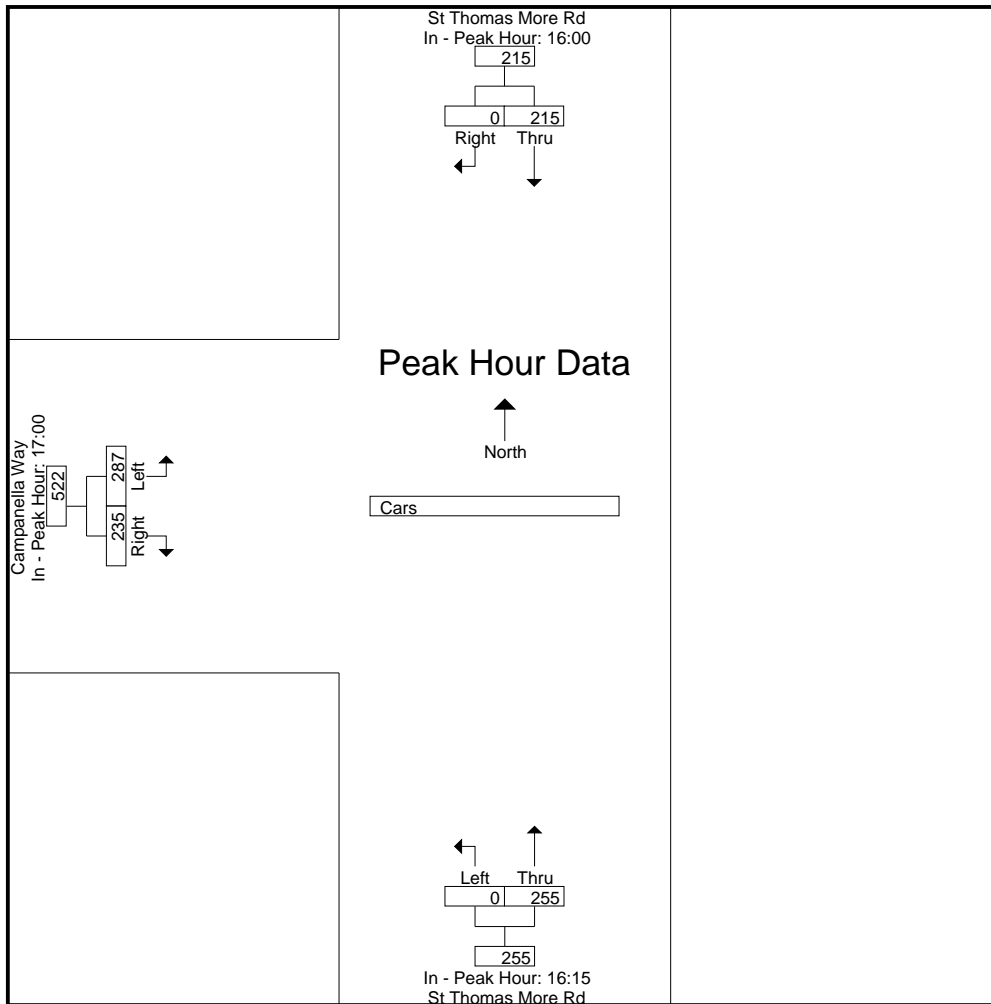
Start Time	St Thomas More Rd From North			St Thomas More Rd From South			Campanella Way From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 17:00										
17:00	53	0	53	0	63	63	83	69	152	268
17:15	46	0	46	0	64	64	74	69	143	253
17:30	41	0	41	0	58	58	63	52	115	214
17:45	52	0	52	0	58	58	67	45	112	222
Total Volume	192	0	192	0	243	243	287	235	522	957
% App. Total	100	0		0	100		55	45		
PHF	.906	.000	.906	.000	.949	.949	.864	.851	.859	.893



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00			16:15			17:00		
+0 mins.	66	0	66	0	76	76	83	69	152
+15 mins.	62	0	62	0	57	57	74	69	143
+30 mins.	43	0	43	0	59	59	63	52	115
+45 mins.	44	0	44	0	63	63	67	45	112
Total Volume	215	0	215	0	255	255	287	235	522
% App. Total	100	0		0	100		55	45	
PHF	.814	.000	.814	.000	.839	.839	.864	.851	.859



N/S Street : St. Thomas More Road  
 E/W Street: Campanella Way  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

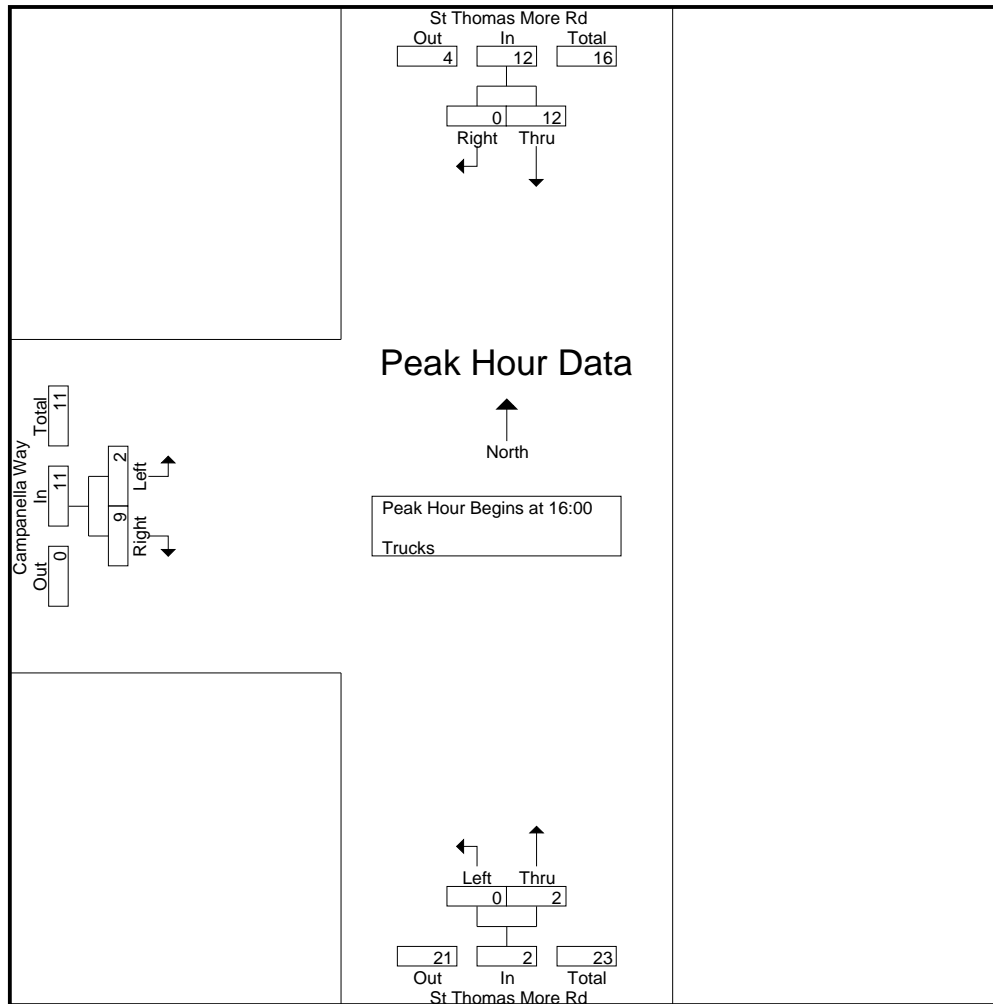
File Name : 39000016  
 Site Code : 39000016  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	St Thomas More Rd From North			St Thomas More Rd From South			Campanella Way From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
16:00	4	0	0	0	1	0	1	2	0	0	8	8
16:15	3	0	0	0	0	0	0	3	0	0	6	6
16:30	3	0	0	0	1	0	1	1	0	0	6	6
16:45	2	0	0	0	0	0	0	3	0	0	5	5
Total	12	0	0	0	2	0	2	9	0	0	25	25
17:00	3	0	0	0	0	0	1	3	0	0	7	7
17:15	1	0	0	0	0	0	0	1	0	0	2	2
17:30	2	0	0	0	2	0	3	2	0	0	9	9
17:45	1	0	0	0	1	0	0	3	0	0	5	5
Total	7	0	0	0	3	0	4	9	0	0	23	23
Grand Total	19	0	0	0	5	0	6	18	0	0	48	48
Apprch %	100	0		0	100		25	75				
Total %	39.6	0		0	10.4		12.5	37.5		0	100	

Start Time	St Thomas More Rd From North			St Thomas More Rd From South			Campanella Way From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
16:00	4	0	4	0	1	1	1	2	3	8
16:15	3	0	3	0	0	0	0	3	3	6
16:30	3	0	3	0	1	1	1	1	2	6
16:45	2	0	2	0	0	0	0	3	3	5
Total Volume	12	0	12	0	2	2	2	9	11	25
% App. Total	100	0		0	100		18.2	81.8		
PHF	.750	.000	.750	.000	.500	.500	.500	.750	.917	.781

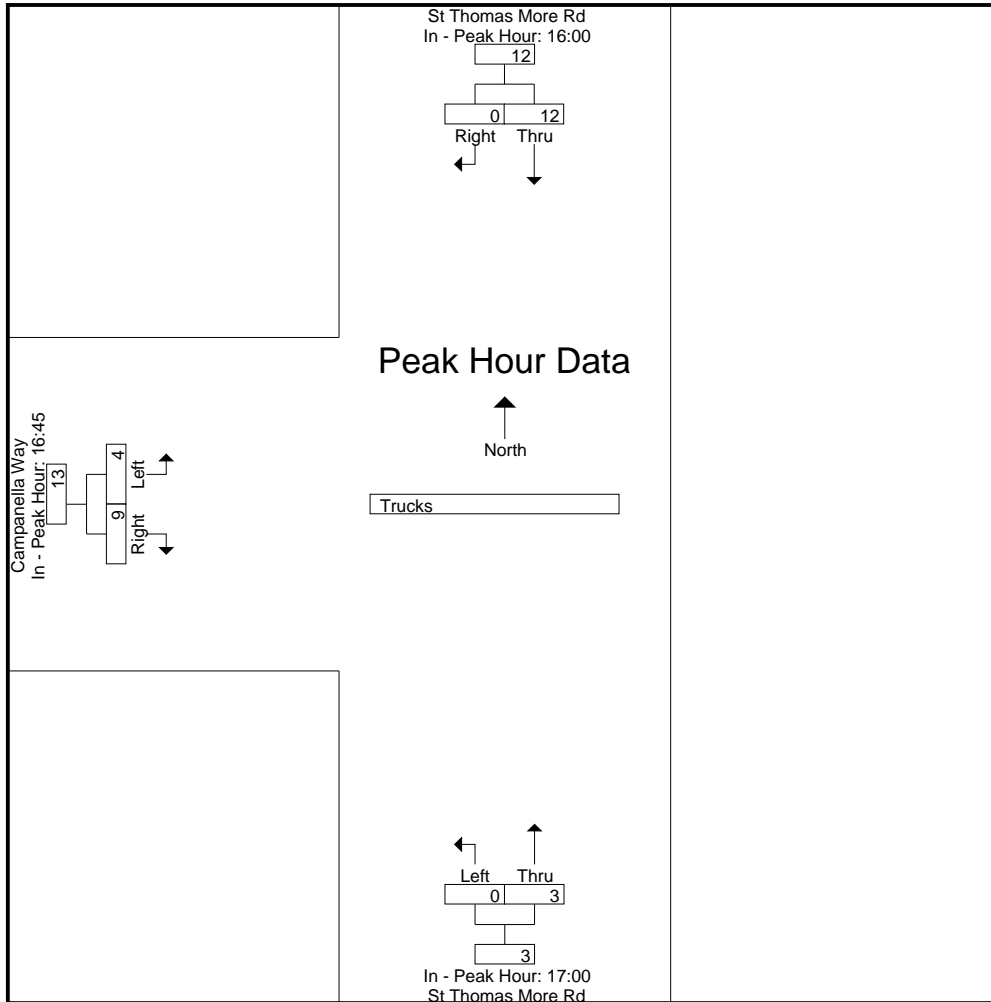
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 16:00



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00			17:00			16:45		
+0 mins.	4	0	4	0	0	0	0	3	3
+15 mins.	3	0	3	0	0	0	1	3	4
+30 mins.	3	0	3	0	2	2	0	1	1
+45 mins.	2	0	2	0	1	1	3	2	5
Total Volume	12	0	12	0	3	3	4	9	13
% App. Total	100	0		0	100		30.8	69.2	
PHF	.750	.000	.750	.000	.375	.375	.333	.750	.650



N/S Street : Foster Street  
 E/W Street: Driveway  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

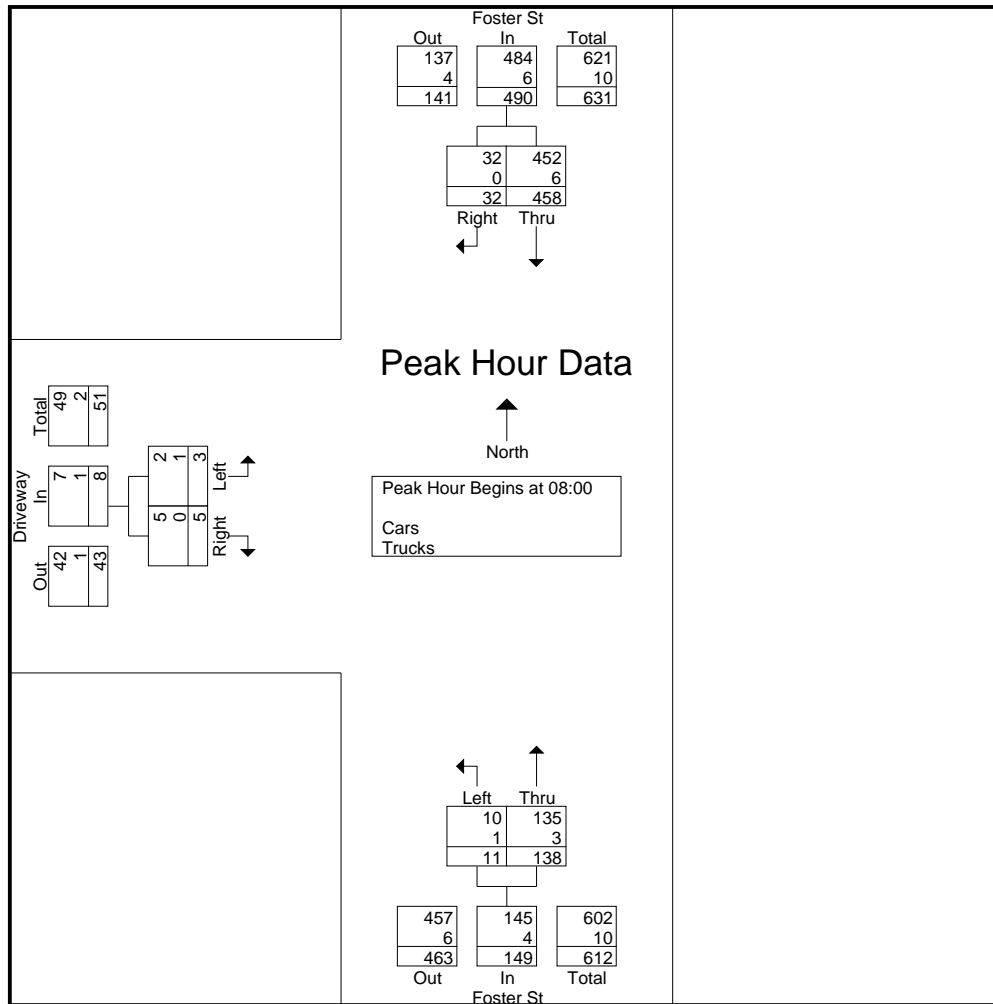
File Name : 39000017  
 Site Code : 39000017  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Foster St From North			Foster St From South			Driveway From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
07:00	67	3	0	4	34	0	0	1	3	3	109	112
07:15	72	9	0	0	35	0	0	2	4	4	118	122
07:30	106	4	0	1	33	0	0	1	1	1	145	146
07:45	109	9	0	0	47	0	1	3	0	0	169	169
Total	354	25	0	5	149	0	1	7	8	8	541	549
08:00	109	5	0	4	32	0	0	3	0	0	153	153
08:15	106	4	0	2	39	0	1	1	0	0	153	153
08:30	118	8	0	3	29	0	1	0	0	0	159	159
08:45	125	15	0	2	38	0	1	1	0	0	182	182
Total	458	32	0	11	138	0	3	5	0	0	647	647
Grand Total	812	57	0	16	287	0	4	12	8	8	1188	1196
Apprch %	93.4	6.6		5.3	94.7		25	75				
Total %	68.4	4.8		1.3	24.2		0.3	1		0.7	99.3	
Cars	802	57		15	284		3	12		0	0	1181
% Cars	98.8	100	0	93.8	99	0	75	100	100	0	0	98.7
Trucks	10	0		1	3		1	0		0	0	15
% Trucks	1.2	0	0	6.2	1	0	25	0	0	0	0	1.3

Start Time	Foster St From North			Foster St From South			Driveway From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00										
08:00	109	5	114	4	32	36	0	3	3	153
08:15	106	4	110	2	39	41	1	1	2	153
08:30	118	8	126	3	29	32	1	0	1	159
08:45	125	15	140	2	38	40	1	1	2	182
Total Volume	458	32	490	11	138	149	3	5	8	647
% App. Total	93.5	6.5		7.4	92.6		37.5	62.5		
PHF	.916	.533	.875	.688	.885	.909	.750	.417	.667	.889
Cars	452	32	484	10	135	145	2	5	7	636
% Cars	98.7	100	98.8	90.9	97.8	97.3	66.7	100	87.5	98.3
Trucks	6	0	6	1	3	4	1	0	1	11
% Trucks	1.3	0	1.2	9.1	2.2	2.7	33.3	0	12.5	1.7

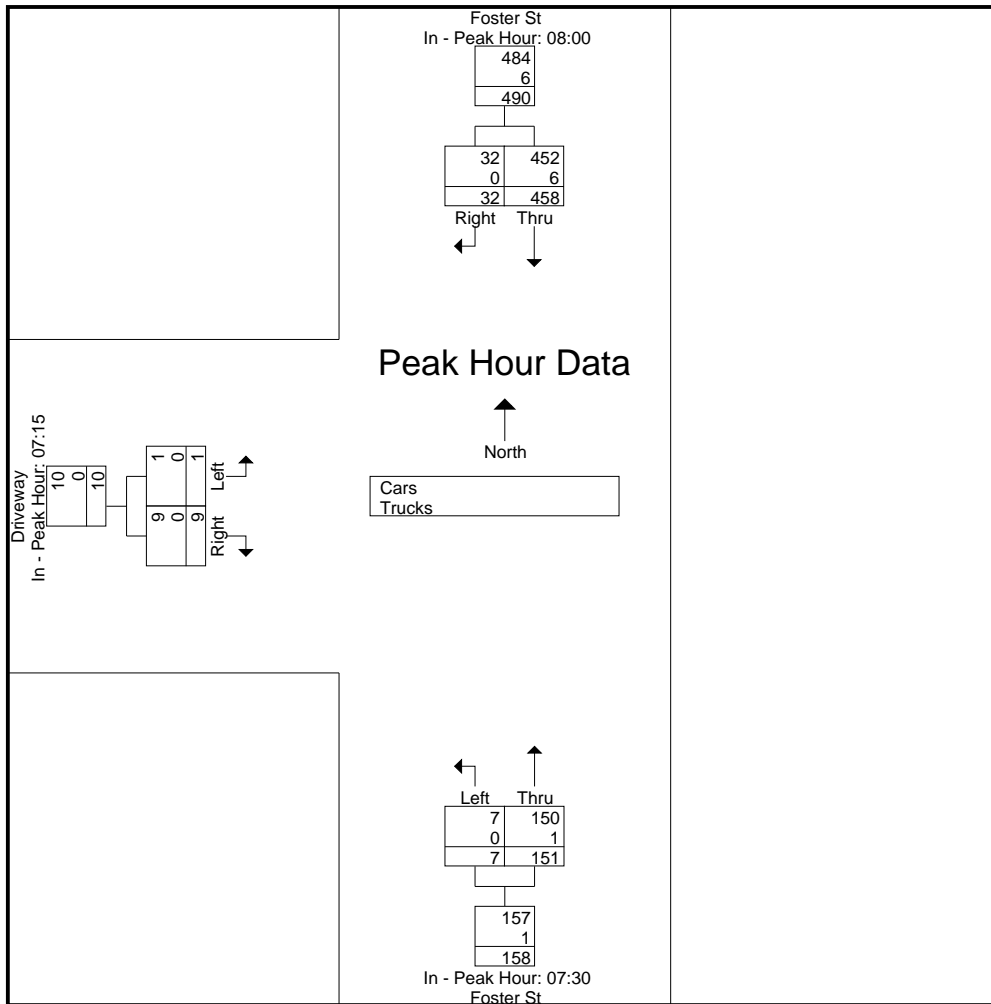




Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00			07:30			07:15		
+0 mins.	109	5	114	1	33	34	0	2	2
+15 mins.	106	4	110	0	47	47	0	1	1
+30 mins.	118	8	126	4	32	36	1	3	4
+45 mins.	125	15	140	2	39	41	0	3	3
Total Volume	458	32	490	7	151	158	1	9	10
% App. Total	93.5	6.5		4.4	95.6		10	90	
PHF	.916	.533	.875	.438	.803	.840	.250	.750	.625
Cars	452	32	484	7	150	157	1	9	10
% Cars	98.7	100	98.8	100	99.3	99.4	100	100	100
Trucks	6	0	6	0	1	1	0	0	0
% Trucks	1.3	0	1.2	0	0.7	0.6	0	0	0



N/S Street : Foster Street  
 E/W Street: Driveway  
 City/State : Brighton, MA  
 Weather : Clear

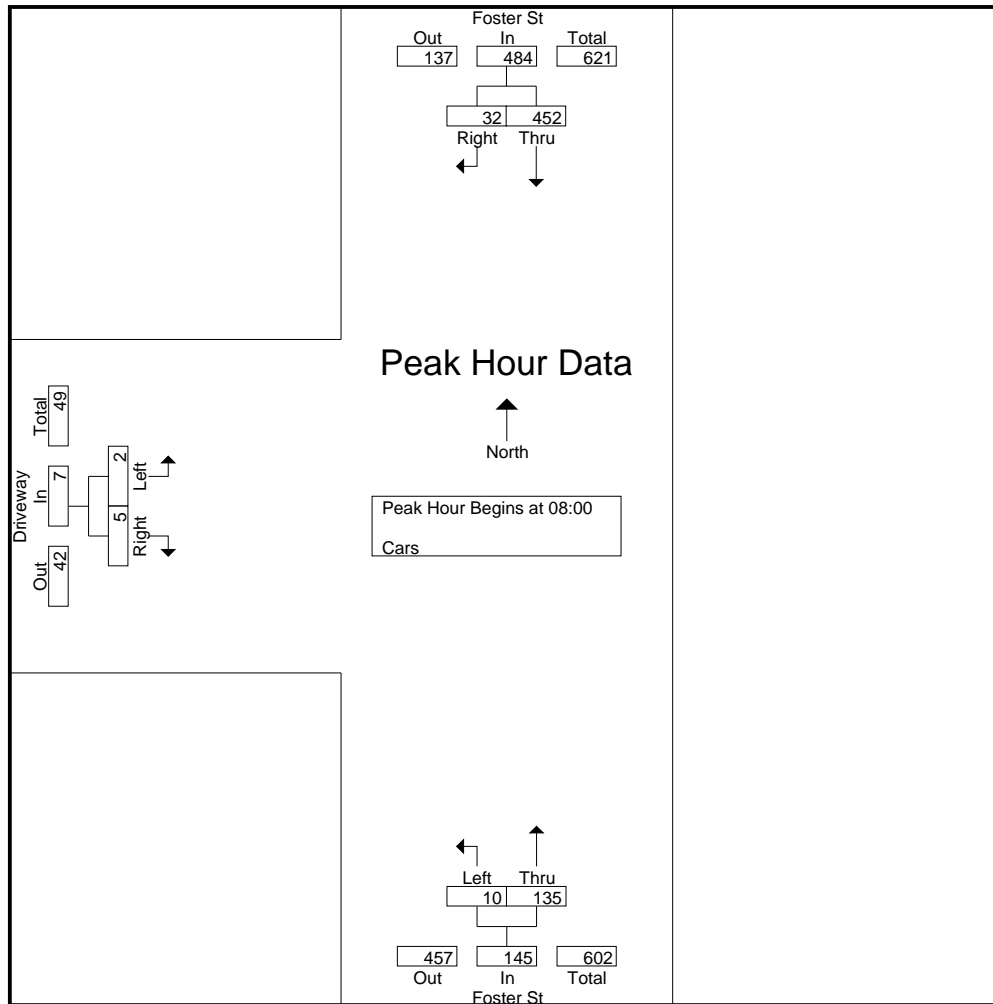
Accurate Counts  
 978-664-2565

File Name : 39000017  
 Site Code : 39000017  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Foster St From North			Foster St From South			Driveway From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
07:00	66	3	0	4	34	0	0	1	3	3	108	111
07:15	72	9	0	0	35	0	0	2	4	4	118	122
07:30	104	4	0	1	33	0	0	1	1	1	143	144
07:45	108	9	0	0	47	0	1	3	0	0	168	168
Total	350	25	0	5	149	0	1	7	8	8	537	545
08:00	108	5	0	4	32	0	0	3	0	0	152	152
08:15	105	4	0	2	38	0	1	1	0	0	151	151
08:30	118	8	0	3	29	0	1	0	0	0	159	159
08:45	121	15	0	1	36	0	0	1	0	0	174	174
Total	452	32	0	10	135	0	2	5	0	0	636	636
Grand Total	802	57	0	15	284	0	3	12	8	8	1173	1181
Apprch %	93.4	6.6		5	95		20	80				
Total %	68.4	4.9		1.3	24.2		0.3	1		0.7	99.3	

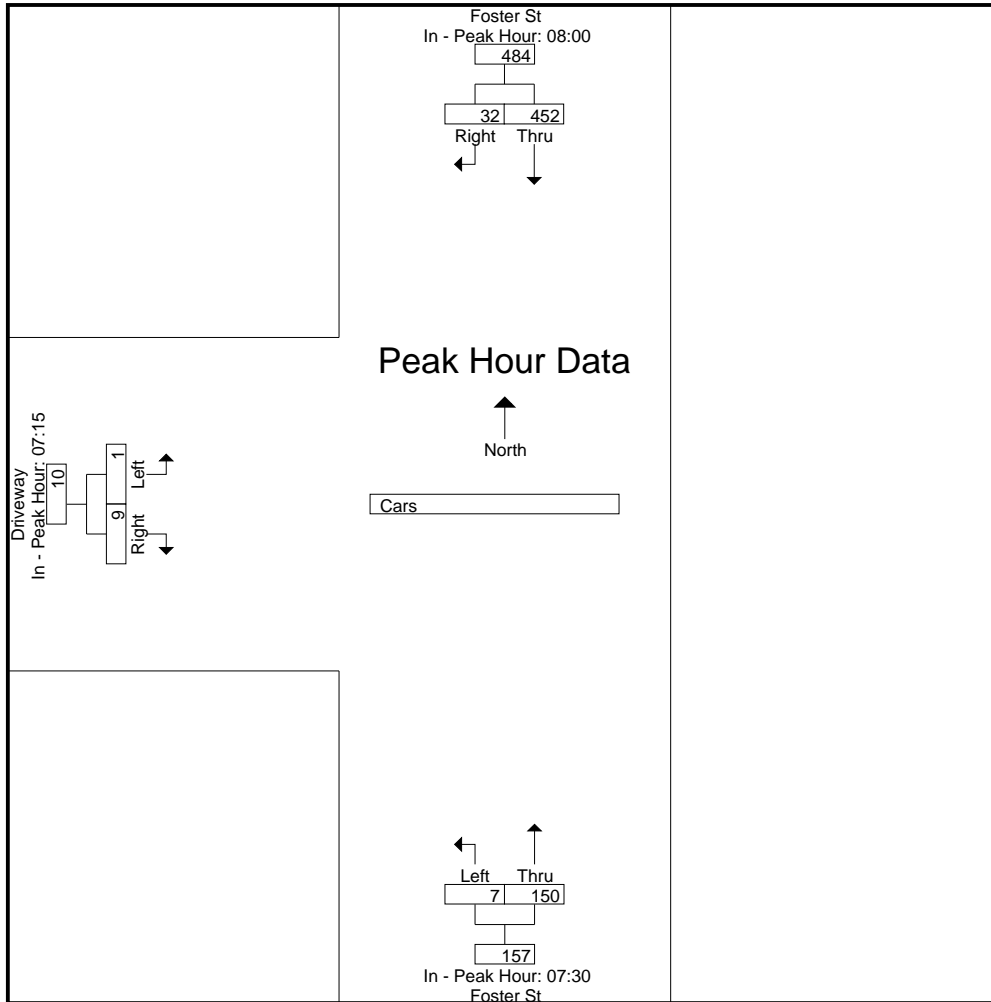
Start Time	Foster St From North			Foster St From South			Driveway From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00										
08:00	108	5	113	4	32	36	0	3	3	152
08:15	105	4	109	2	38	40	1	1	2	151
08:30	118	8	126	3	29	32	1	0	1	159
08:45	121	15	136	1	36	37	0	1	1	174
Total Volume	452	32	484	10	135	145	2	5	7	636
% App. Total	93.4	6.6		6.9	93.1		28.6	71.4		
PHF	.934	.533	.890	.625	.888	.906	.500	.417	.583	.914



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00			07:30			07:15		
+0 mins.	108	5	113	1	33	34	0	2	2
+15 mins.	105	4	109	0	47	47	0	1	1
+30 mins.	118	8	126	4	32	36	1	3	4
+45 mins.	121	15	136	2	38	40	0	3	3
Total Volume	452	32	484	7	150	157	1	9	10
% App. Total	93.4	6.6		4.5	95.5		10	90	
PHF	.934	.533	.890	.438	.798	.835	.250	.750	.625



N/S Street : Foster Street  
 E/W Street: Driveway  
 City/State : Brighton, MA  
 Weather : Clear

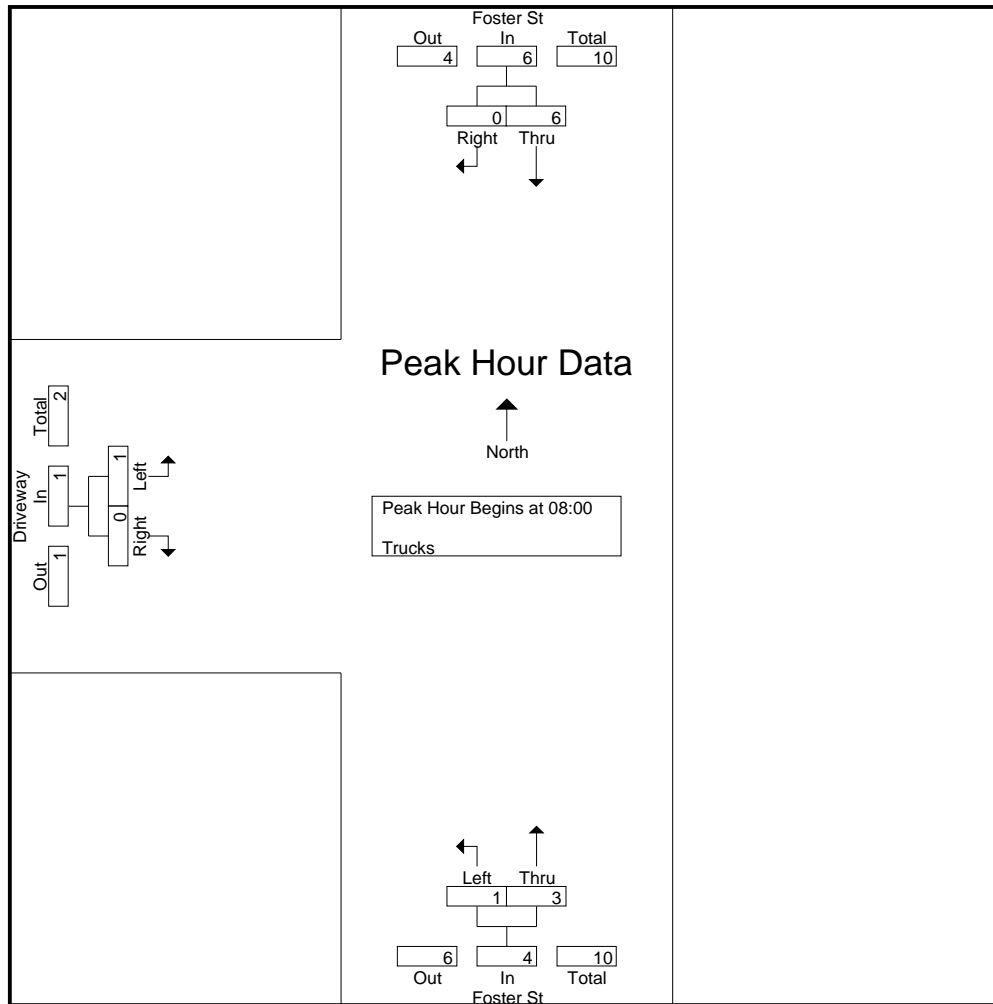
Accurate Counts  
 978-664-2565

File Name : 39000017  
 Site Code : 39000017  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Foster St From North			Foster St From South			Driveway From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
07:00	1	0	0	0	0	0	0	0	0	0	1	1
07:15	0	0	0	0	0	0	0	0	0	0	0	0
07:30	2	0	0	0	0	0	0	0	0	0	2	2
07:45	1	0	0	0	0	0	0	0	0	0	1	1
Total	4	0	0	0	0	0	0	0	0	0	4	4
08:00	1	0	0	0	0	0	0	0	0	0	1	1
08:15	1	0	0	0	1	0	0	0	0	0	2	2
08:30	0	0	0	0	0	0	0	0	0	0	0	0
08:45	4	0	0	1	2	0	1	0	0	0	8	8
Total	6	0	0	1	3	0	1	0	0	0	11	11
Grand Total	10	0	0	1	3	0	1	0	0	0	15	15
Apprch %	100	0		25	75		100	0				
Total %	66.7	0		6.7	20		6.7	0		0	100	

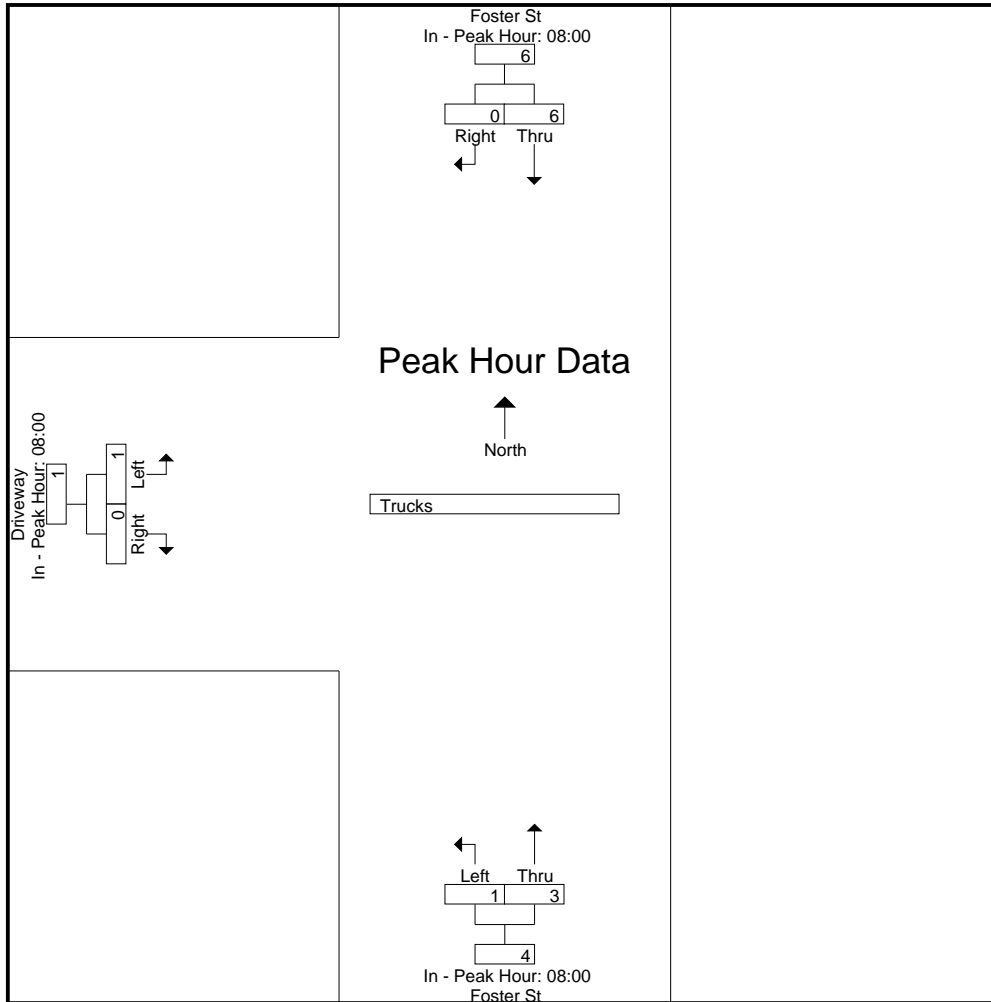
Start Time	Foster St From North			Foster St From South			Driveway From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00										
08:00	1	0	1	0	0	0	0	0	0	1
08:15	1	0	1	0	1	1	0	0	0	2
08:30	0	0	0	0	0	0	0	0	0	0
08:45	4	0	4	1	2	3	1	0	1	8
Total Volume	6	0	6	1	3	4	1	0	1	11
% App. Total	100	0		25	75		100	0		
PHF	.375	.000	.375	.250	.375	.333	.250	.000	.250	.344



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00			08:00			08:00		
+0 mins.	1	0	1	0	0	0	0	0	0
+15 mins.	1	0	1	0	1	1	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	4	0	4	1	2	3	1	0	1
Total Volume	6	0	6	1	3	4	1	0	1
% App. Total	100	0		25	75		100	0	
PHF	.375	.000	.375	.250	.375	.333	.250	.000	.250





N/S Street : Foster Street  
 E/W Street: Driveway  
 City/State : Brighton, MA  
 Weather : Clear

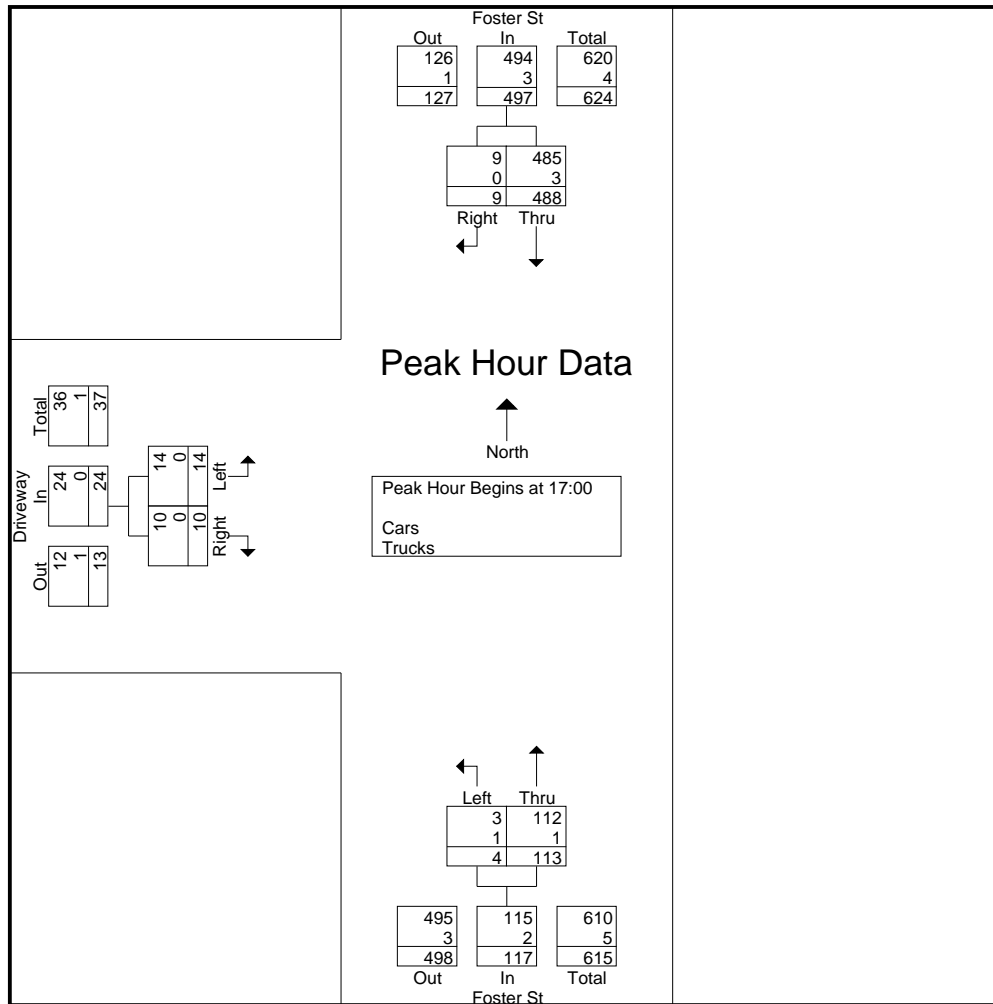
Accurate Counts  
 978-664-2565

File Name : 39000017  
 Site Code : 39000017  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Foster St From North			Foster St From South			Driveway From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
16:00	107	0	0	2	28	0	3	1	0	0	141	141
16:15	114	5	0	2	21	2	1	2	2	4	145	149
16:30	118	4	0	1	32	0	4	1	1	1	160	161
16:45	84	4	1	0	17	0	2	4	3	4	111	115
Total	423	13	1	5	98	2	10	8	6	9	557	566
17:00	108	2	0	2	29	1	6	2	6	7	149	156
17:15	127	1	0	1	38	0	4	2	3	3	173	176
17:30	117	2	0	1	24	0	1	1	1	1	146	147
17:45	136	4	1	0	22	0	3	5	2	3	170	173
Total	488	9	1	4	113	1	14	10	12	14	638	652
Grand Total	911	22	2	9	211	3	24	18	18	23	1195	1218
Apprch %	97.6	2.4		4.1	95.9		57.1	42.9				
Total %	76.2	1.8		0.8	17.7		2	1.5		1.9	98.1	
Cars	903	22		8	207		24	18		0	0	1205
% Cars	99.1	100	100	88.9	98.1	100	100	100	100	0	0	98.9
Trucks	8	0		1	4		0	0		0	0	13
% Trucks	0.9	0	0	11.1	1.9	0	0	0	0	0	0	1.1

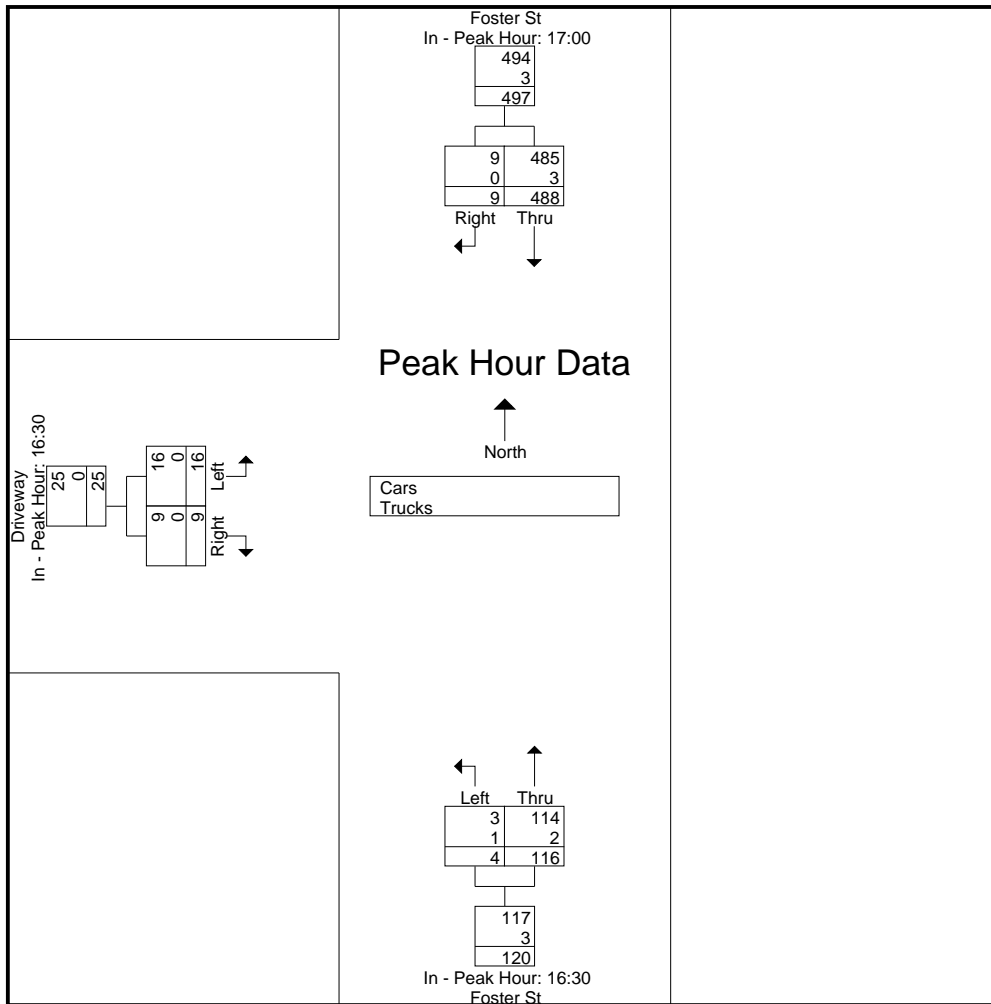
Start Time	Foster St From North			Foster St From South			Driveway From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 17:00										
17:00	108	2	110	2	29	31	6	2	8	149
17:15	127	1	128	1	38	39	4	2	6	173
17:30	117	2	119	1	24	25	1	1	2	146
17:45	136	4	140	0	22	22	3	5	8	170
Total Volume	488	9	497	4	113	117	14	10	24	638
% App. Total	98.2	1.8		3.4	96.6		58.3	41.7		
PHF	.897	.563	.888	.500	.743	.750	.583	.500	.750	.922
Cars	485	9	494	3	112	115	14	10	24	633
% Cars	99.4	100	99.4	75.0	99.1	98.3	100	100	100	99.2
Trucks	3	0	3	1	1	2	0	0	0	5
% Trucks	0.6	0	0.6	25.0	0.9	1.7	0	0	0	0.8



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00			16:30			16:30		
+0 mins.	108	2	110	1	32	33	4	1	5
+15 mins.	127	1	128	0	17	17	2	4	6
+30 mins.	117	2	119	2	29	31	6	2	8
+45 mins.	136	4	140	1	38	39	4	2	6
Total Volume	488	9	497	4	116	120	16	9	25
% App. Total	98.2	1.8		3.3	96.7		64	36	
PHF	.897	.563	.888	.500	.763	.769	.667	.563	.781
Cars	485	9	494	3	114	117	16	9	25
% Cars	99.4	100	99.4	75	98.3	97.5	100	100	100
Trucks	3	0	3	1	2	3	0	0	0
% Trucks	0.6	0	0.6	25	1.7	2.5	0	0	0



N/S Street : Foster Street  
 E/W Street: Driveway  
 City/State : Brighton, MA  
 Weather : Clear

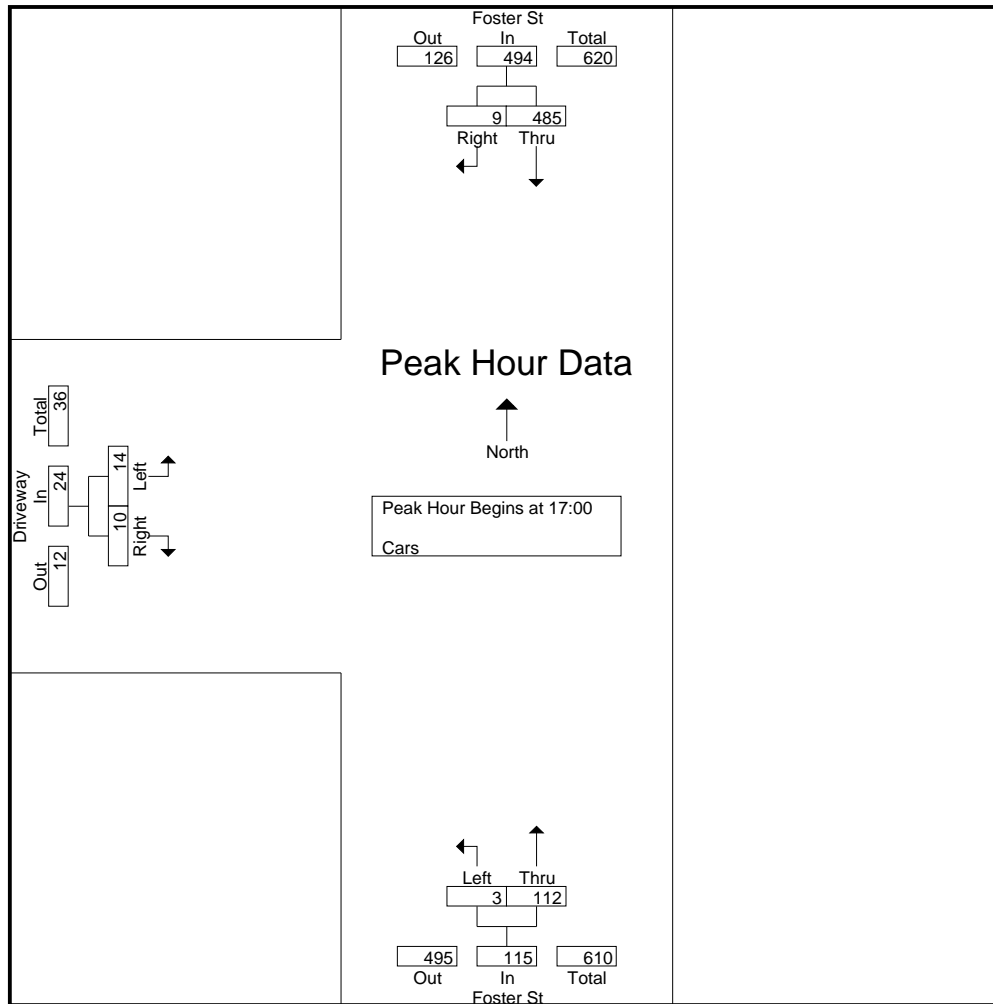
Accurate Counts  
 978-664-2565

File Name : 39000017  
 Site Code : 39000017  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Foster St From North			Foster St From South			Driveway From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
16:00	105	0	0	2	28	0	3	1	0	0	139	139
16:15	111	5	0	2	20	2	1	2	2	4	141	145
16:30	118	4	0	1	31	0	4	1	1	1	159	160
16:45	84	4	1	0	16	0	2	4	3	4	110	114
Total	418	13	1	5	95	2	10	8	6	9	549	558
17:00	106	2	0	1	29	1	6	2	6	7	146	153
17:15	127	1	0	1	38	0	4	2	3	3	173	176
17:30	117	2	0	1	24	0	1	1	1	1	146	147
17:45	135	4	1	0	21	0	3	5	2	3	168	171
Total	485	9	1	3	112	1	14	10	12	14	633	647
Grand Total	903	22	2	8	207	3	24	18	18	23	1182	1205
Apprch %	97.6	2.4		3.7	96.3		57.1	42.9				
Total %	76.4	1.9		0.7	17.5		2	1.5		1.9	98.1	

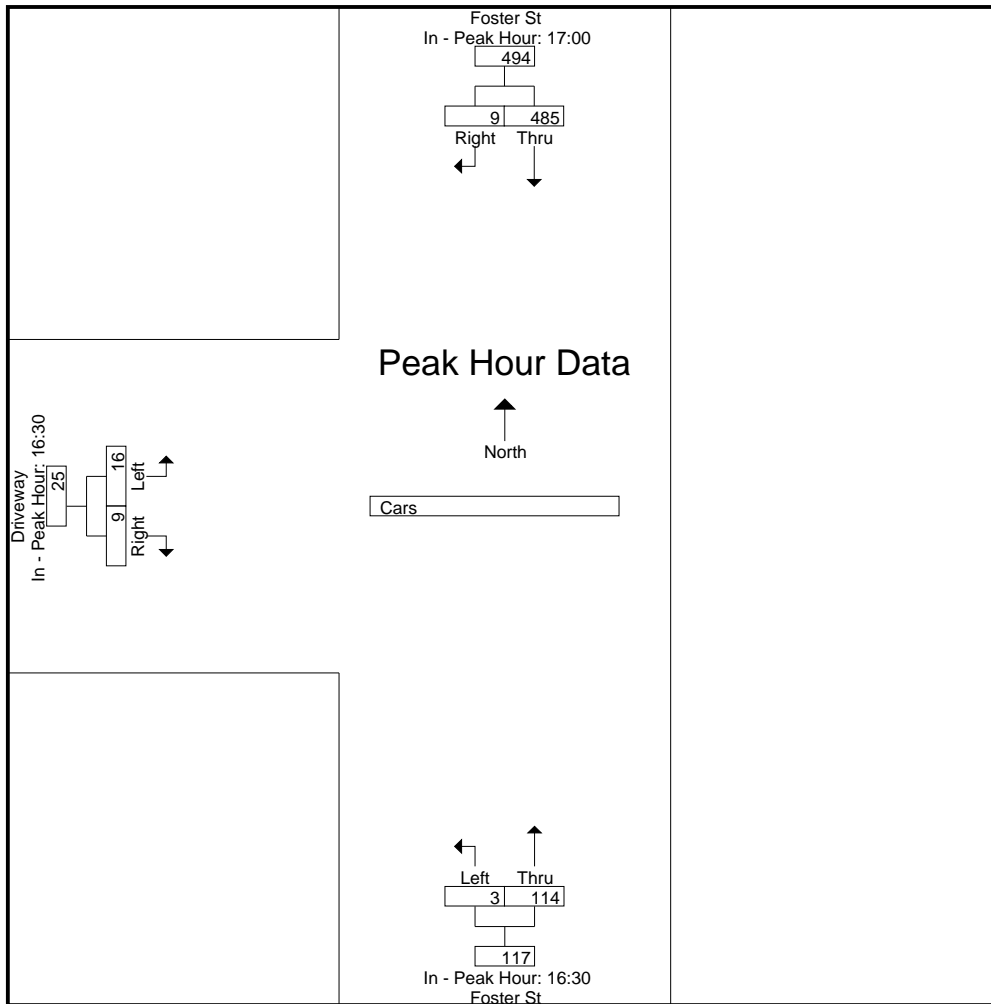
Start Time	Foster St From North			Foster St From South			Driveway From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 17:00										
17:00	106	2	108	1	29	30	6	2	8	146
17:15	127	1	128	1	38	39	4	2	6	173
17:30	117	2	119	1	24	25	1	1	2	146
17:45	135	4	139	0	21	21	3	5	8	168
Total Volume	485	9	494	3	112	115	14	10	24	633
% App. Total	98.2	1.8		2.6	97.4		58.3	41.7		
PHF	.898	.563	.888	.750	.737	.737	.583	.500	.750	.915



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00			16:30			16:30		
+0 mins.	106	2	108	1	31	32	4	1	5
+15 mins.	127	1	128	0	16	16	2	4	6
+30 mins.	117	2	119	1	29	30	6	2	8
+45 mins.	135	4	139	1	38	39	4	2	6
Total Volume	485	9	494	3	114	117	16	9	25
% App. Total	98.2	1.8		2.6	97.4		64	36	
PHF	.898	.563	.888	.750	.750	.750	.667	.563	.781



N/S Street : Foster Street  
 E/W Street: Driveway  
 City/State : Brighton, MA  
 Weather : Clear

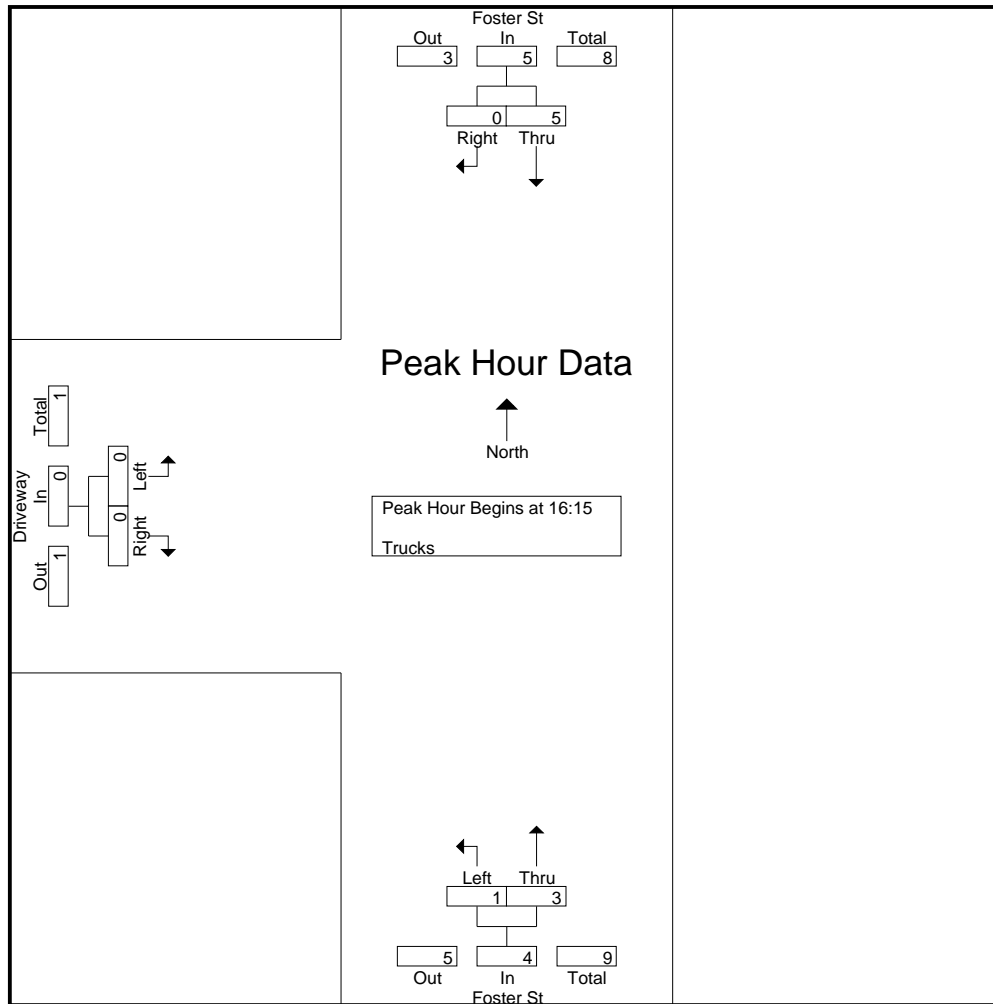
Accurate Counts  
 978-664-2565

File Name : 39000017  
 Site Code : 39000017  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Foster St From North			Foster St From South			Driveway From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
16:00	2	0	0	0	0	0	0	0	0	0	2	2
16:15	3	0	0	0	1	0	0	0	0	0	4	4
16:30	0	0	0	0	1	0	0	0	0	0	1	1
16:45	0	0	0	0	1	0	0	0	0	0	1	1
Total	5	0	0	0	3	0	0	0	0	0	8	8
17:00	2	0	0	1	0	0	0	0	0	0	3	3
17:15	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0
17:45	1	0	0	0	1	0	0	0	0	0	2	2
Total	3	0	0	1	1	0	0	0	0	0	5	5
Grand Total	8	0	0	1	4	0	0	0	0	0	13	13
Apprch %	100	0		20	80		0	0				
Total %	61.5	0		7.7	30.8		0	0		0	100	

Start Time	Foster St From North			Foster St From South			Driveway From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 16:15										
16:15	3	0	3	0	1	1	0	0	0	4
16:30	0	0	0	0	1	1	0	0	0	1
16:45	0	0	0	0	1	1	0	0	0	1
17:00	2	0	2	1	0	1	0	0	0	3
Total Volume	5	0	5	1	3	4	0	0	0	9
% App. Total	100	0		25	75		0	0		
PHF	.417	.000	.417	.250	.750	1.000	.000	.000	.000	.563

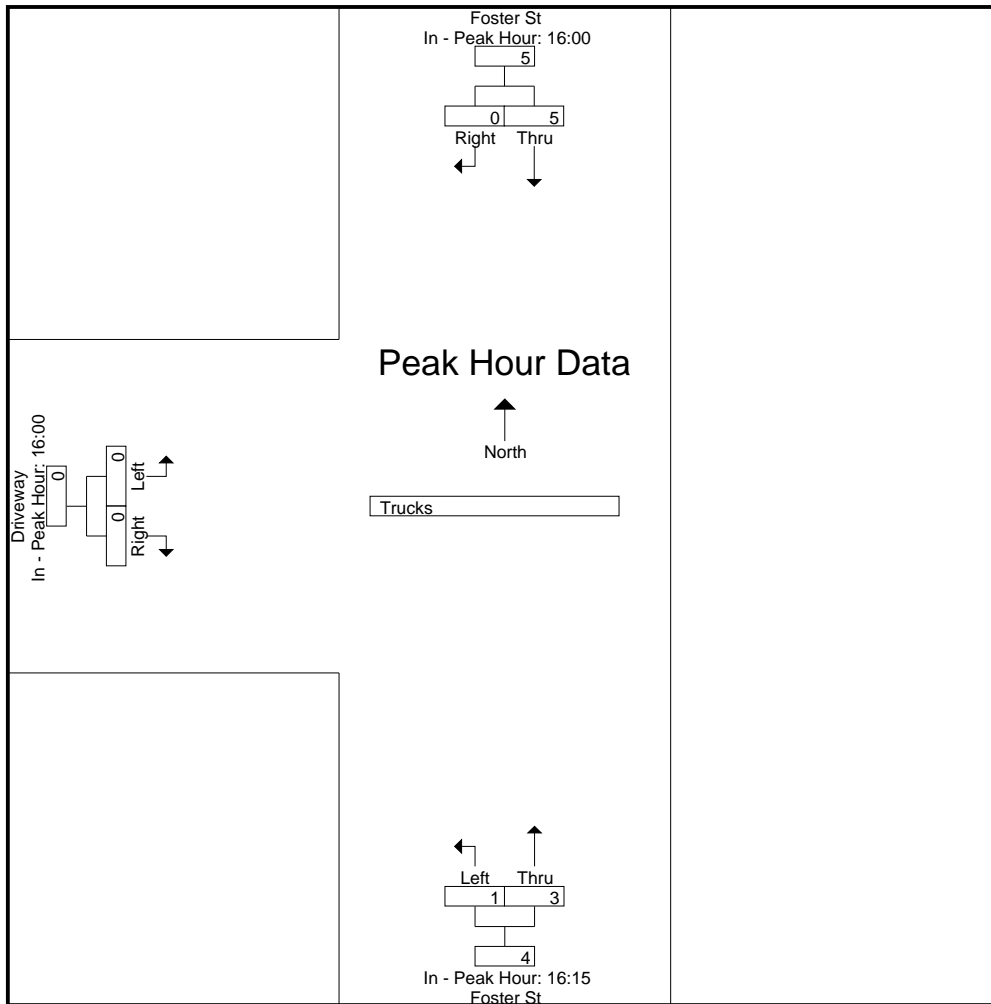


Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00			16:15			16:00		
+0 mins.	2	0	2	0	1	1	0	0	0
+15 mins.	3	0	3	0	1	1	0	0	0
+30 mins.	0	0	0	0	1	1	0	0	0
+45 mins.	0	0	0	1	0	1	0	0	0
Total Volume	5	0	5	1	3	4	0	0	0
% App. Total	100	0		25	75		0	0	
PHF	.417	.000	.417	.250	.750	1.000	.000	.000	.000





N/S Street : BC Driveway  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

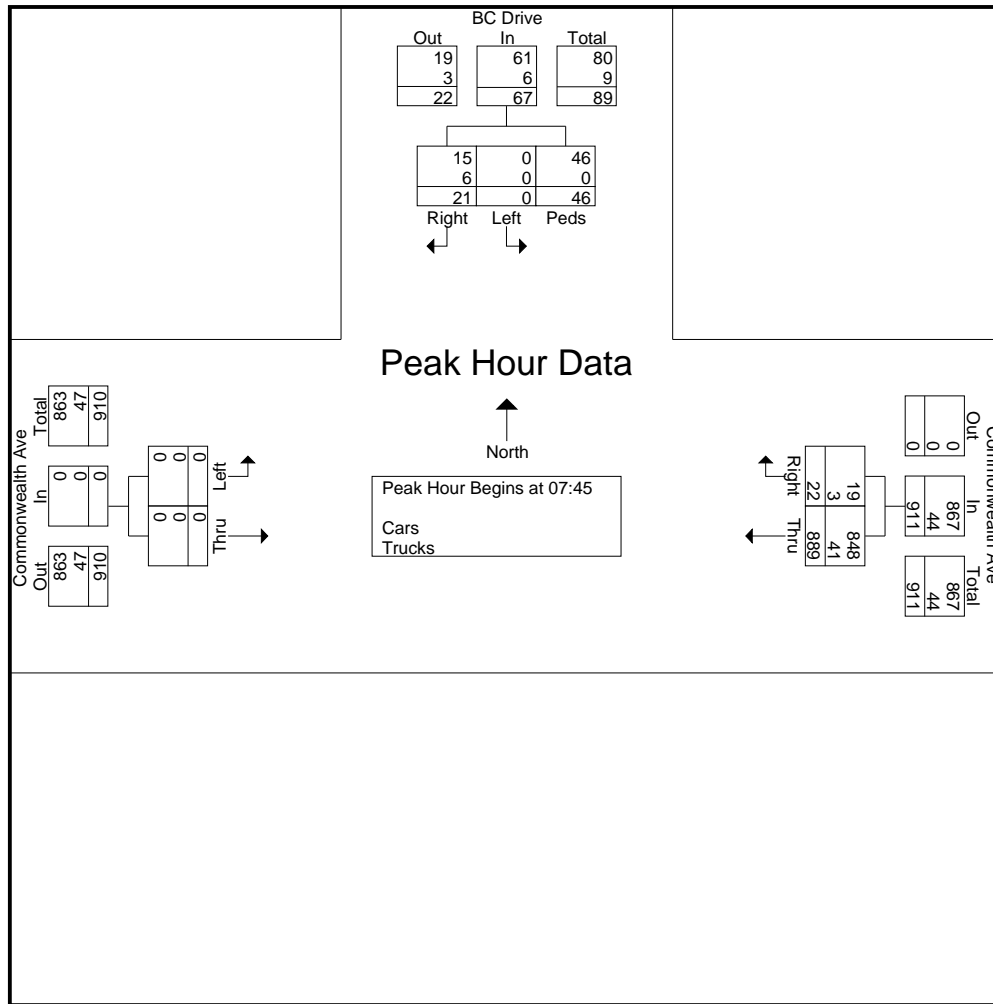
Accurate Counts  
 978-664-2565

File Name : 39000018  
 Site Code : 39000018  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	BC Drive From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	0	2	4	112	0	0	0	0	0	0	118	118
07:15	0	3	5	142	1	0	0	0	0	0	151	151
07:30	0	1	4	191	0	0	0	0	0	0	196	196
07:45	0	6	3	203	4	0	0	0	0	0	216	216
Total	0	12	16	648	5	0	0	0	0	0	681	681
08:00	0	6	5	228	9	0	0	0	0	0	248	248
08:15	0	6	10	231	7	0	0	0	2	2	254	256
08:30	0	3	28	227	2	0	0	0	0	0	260	260
08:45	0	9	10	185	5	0	0	0	0	0	209	209
Total	0	24	53	871	23	0	0	0	2	2	971	973
Grand Total	0	36	69	1519	28	0	0	0	2	2	1652	1654
Apprch %	0	34.3	65.7	98.2	1.8		0	0				
Total %	0	2.2	4.2	91.9	1.7		0	0		0.1	99.9	
Cars	0	25	69	1446	25		0	0		0	0	1567
% Cars	0	69.4	100	95.2	89.3	0	0	0	100	0	0	94.7
Trucks	0	11	0	73	3		0	0		0	0	87
% Trucks	0	30.6	0	4.8	10.7	0	0	0	0	0	0	5.3

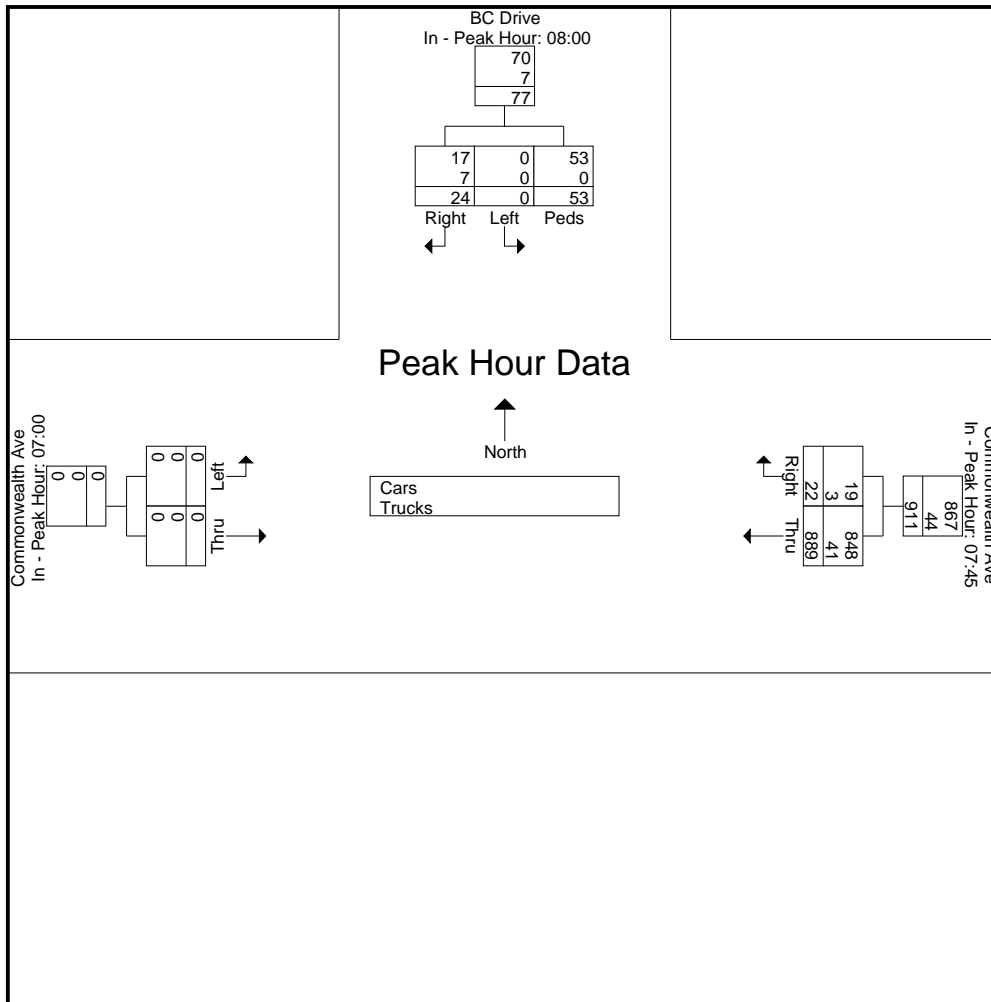
Start Time	BC Drive From North				Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	Peds	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 07:45											
07:45	0	6	3	9	203	4	207	0	0	0	216
08:00	0	6	5	11	228	9	237	0	0	0	248
08:15	0	6	10	16	231	7	238	0	0	0	254
08:30	0	3	28	31	227	2	229	0	0	0	260
Total Volume	0	21	46	67	889	22	911	0	0	0	978
% App. Total	0	31.3	68.7		97.6	2.4		0	0		
PHF	.000	.875	.411	.540	.962	.611	.957	.000	.000	.000	.940
Cars	0	15	46	61	848	19	867	0	0	0	928
% Cars	0	71.4	100	91.0	95.4	86.4	95.2	0	0	0	94.9
Trucks	0	6	0	6	41	3	44	0	0	0	50
% Trucks	0	28.6	0	9.0	4.6	13.6	4.8	0	0	0	5.1



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00				07:45			07:00		
+0 mins.	0	6	5	11	203	4	207	0	0	0
+15 mins.	0	6	10	16	228	9	237	0	0	0
+30 mins.	0	3	28	31	231	7	238	0	0	0
+45 mins.	0	9	10	19	227	2	229	0	0	0
Total Volume	0	24	53	77	889	22	911	0	0	0
% App. Total	0	31.2	68.8		97.6	2.4		0	0	
PHF	.000	.667	.473	.621	.962	.611	.957	.000	.000	.000
Cars	0	17	53	70	848	19	867	0	0	0
% Cars	0	70.8	100	90.9	95.4	86.4	95.2	0	0	0
Trucks	0	7	0	7	41	3	44	0	0	0
% Trucks	0	29.2	0	9.1	4.6	13.6	4.8	0	0	0



N/S Street : BC Driveway  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

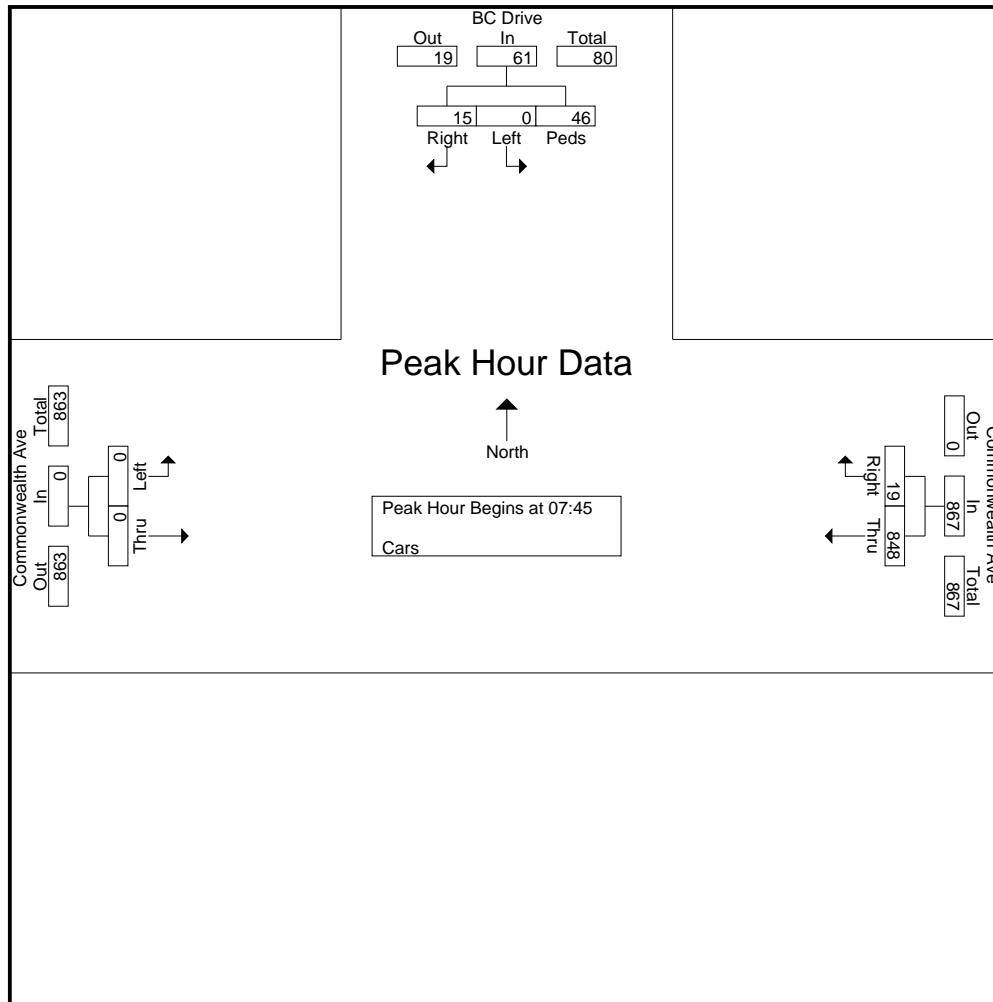
File Name : 39000018  
 Site Code : 39000018  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars

Start Time	BC Drive From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	0	1	4	108	0	0	0	0	0	0	113	113
07:15	0	3	5	133	1	0	0	0	0	0	142	142
07:30	0	1	4	182	0	0	0	0	0	0	187	187
07:45	0	3	3	192	2	0	0	0	0	0	200	200
Total	0	8	16	615	3	0	0	0	0	0	642	642
08:00	0	4	5	216	9	0	0	0	0	0	234	234
08:15	0	6	10	221	6	0	0	0	2	2	243	245
08:30	0	2	28	219	2	0	0	0	0	0	251	251
08:45	0	5	10	175	5	0	0	0	0	0	195	195
Total	0	17	53	831	22	0	0	0	2	2	923	925
Grand Total	0	25	69	1446	25	0	0	0	2	2	1565	1567
Apprch %	0	26.6	73.4	98.3	1.7		0	0				
Total %	0	1.6	4.4	92.4	1.6		0	0		0.1	99.9	

Start Time	BC Drive From North				Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	Peds	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:45	0	3	3	6	192	2	194	0	0	0	200
08:00	0	4	5	9	216	9	225	0	0	0	234
08:15	0	6	10	16	221	6	227	0	0	0	243
08:30	0	2	28	30	219	2	221	0	0	0	251
Total Volume	0	15	46	61	848	19	867	0	0	0	928
% App. Total	0	24.6	75.4		97.8	2.2		0	0		
PHF	.000	.625	.411	.508	.959	.528	.955	.000	.000	.000	.924

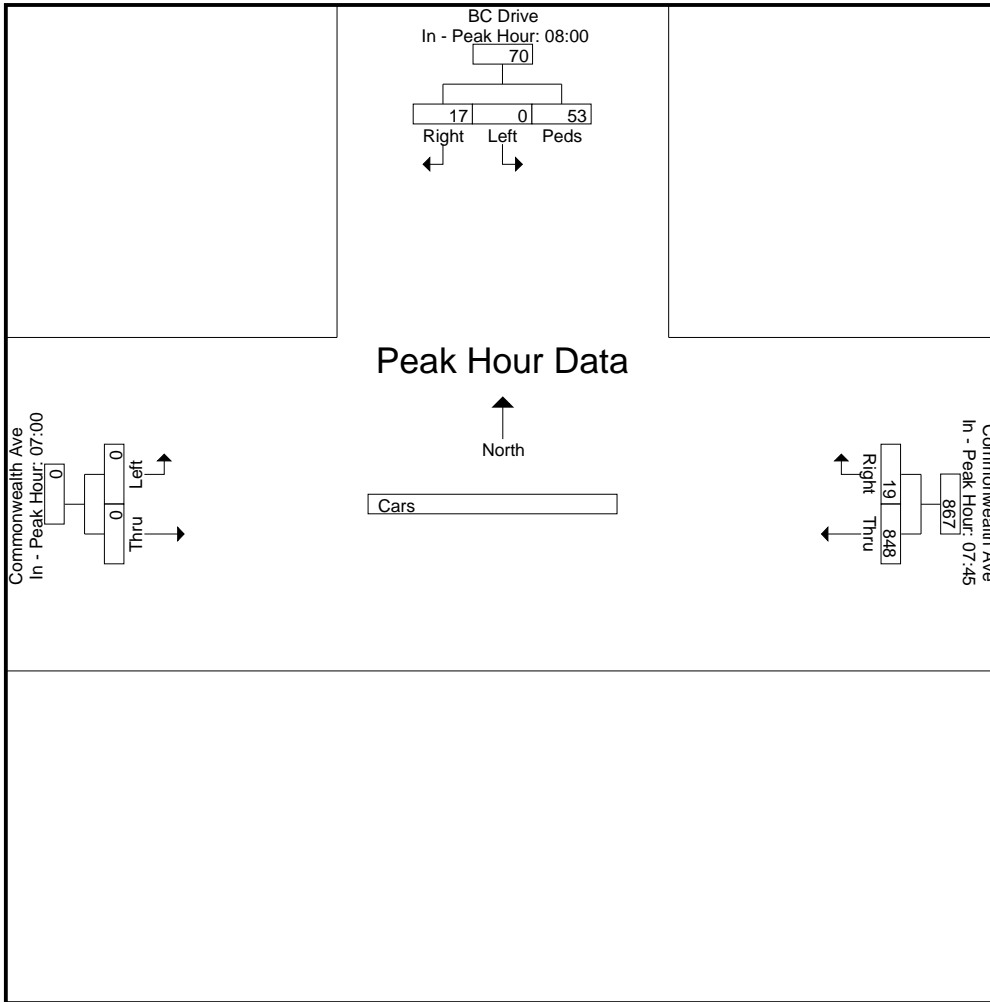
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:45



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00				07:45			07:00		
+0 mins.	0	4	5	9	192	2	194	0	0	0
+15 mins.	0	6	10	16	216	9	225	0	0	0
+30 mins.	0	2	28	30	221	6	227	0	0	0
+45 mins.	0	5	10	15	219	2	221	0	0	0
Total Volume	0	17	53	70	848	19	867	0	0	0
% App. Total	0	24.3	75.7		97.8	2.2		0	0	
PHF	.000	.708	.473	.583	.959	.528	.955	.000	.000	.000



N/S Street : BC Driveway  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000018  
 Site Code : 39000018  
 Start Date : 3/25/2008  
 Page No : 1

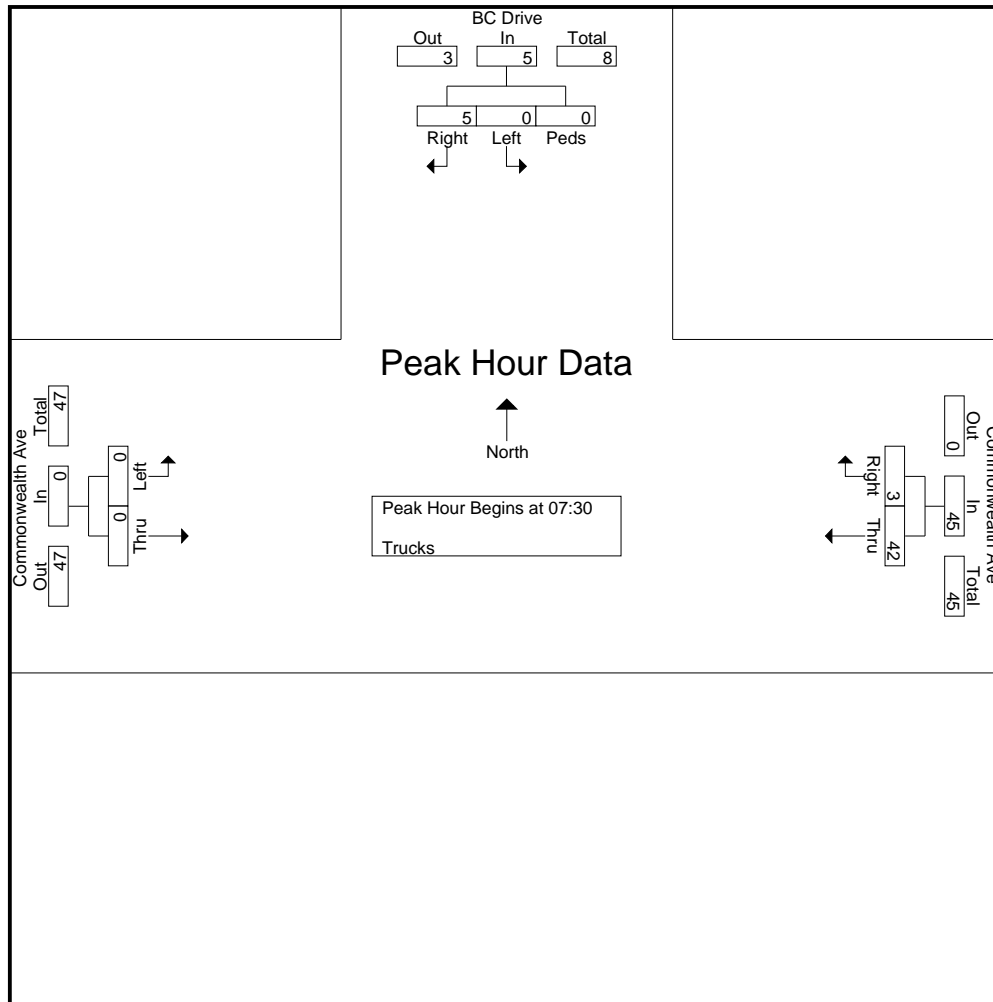
Groups Printed- Trucks

Start Time	BC Drive From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	0	1	0	4	0	0	0	0	0	0	5	5
07:15	0	0	0	9	0	0	0	0	0	0	9	9
07:30	0	0	0	9	0	0	0	0	0	0	9	9
07:45	0	3	0	11	2	0	0	0	0	0	16	16
Total	0	4	0	33	2	0	0	0	0	0	39	39
08:00	0	2	0	12	0	0	0	0	0	0	14	14
08:15	0	0	0	10	1	0	0	0	0	0	11	11
08:30	0	1	0	8	0	0	0	0	0	0	9	9
08:45	0	4	0	10	0	0	0	0	0	0	14	14
Total	0	7	0	40	1	0	0	0	0	0	48	48
Grand Total	0	11	0	73	3	0	0	0	0	0	87	87
Apprch %	0	100	0	96.1	3.9		0	0				
Total %	0	12.6	0	83.9	3.4		0	0		0	100	

Start Time	BC Drive From North				Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	Peds	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:30	0	0	0	0	9	0	9	0	0	0	9
07:45	0	3	0	3	11	2	13	0	0	0	16
08:00	0	2	0	2	12	0	12	0	0	0	14
08:15	0	0	0	0	10	1	11	0	0	0	11
Total Volume	0	5	0	5	42	3	45	0	0	0	50
% App. Total	0	100	0		93.3	6.7		0	0		
PHF	.000	.417	.000	.417	.875	.375	.865	.000	.000	.000	.781

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:30

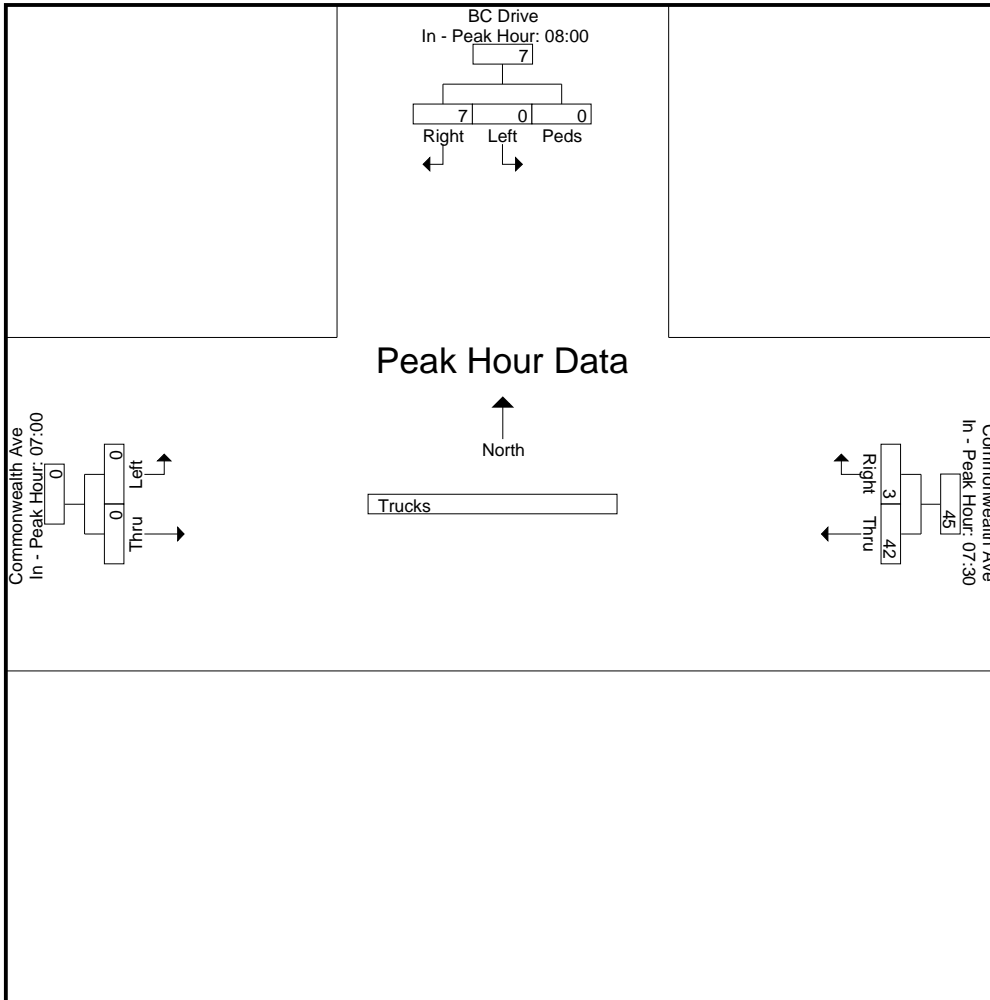




Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00				07:30			07:00		
+0 mins.	0	2	0	2	9	0	9	0	0	0
+15 mins.	0	0	0	0	11	2	13	0	0	0
+30 mins.	0	1	0	1	12	0	12	0	0	0
+45 mins.	0	4	0	4	10	1	11	0	0	0
Total Volume	0	7	0	7	42	3	45	0	0	0
% App. Total	0	100	0		93.3	6.7		0	0	
PHF	.000	.438	.000	.438	.875	.375	.865	.000	.000	.000



N/S Street : BC Driveway  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

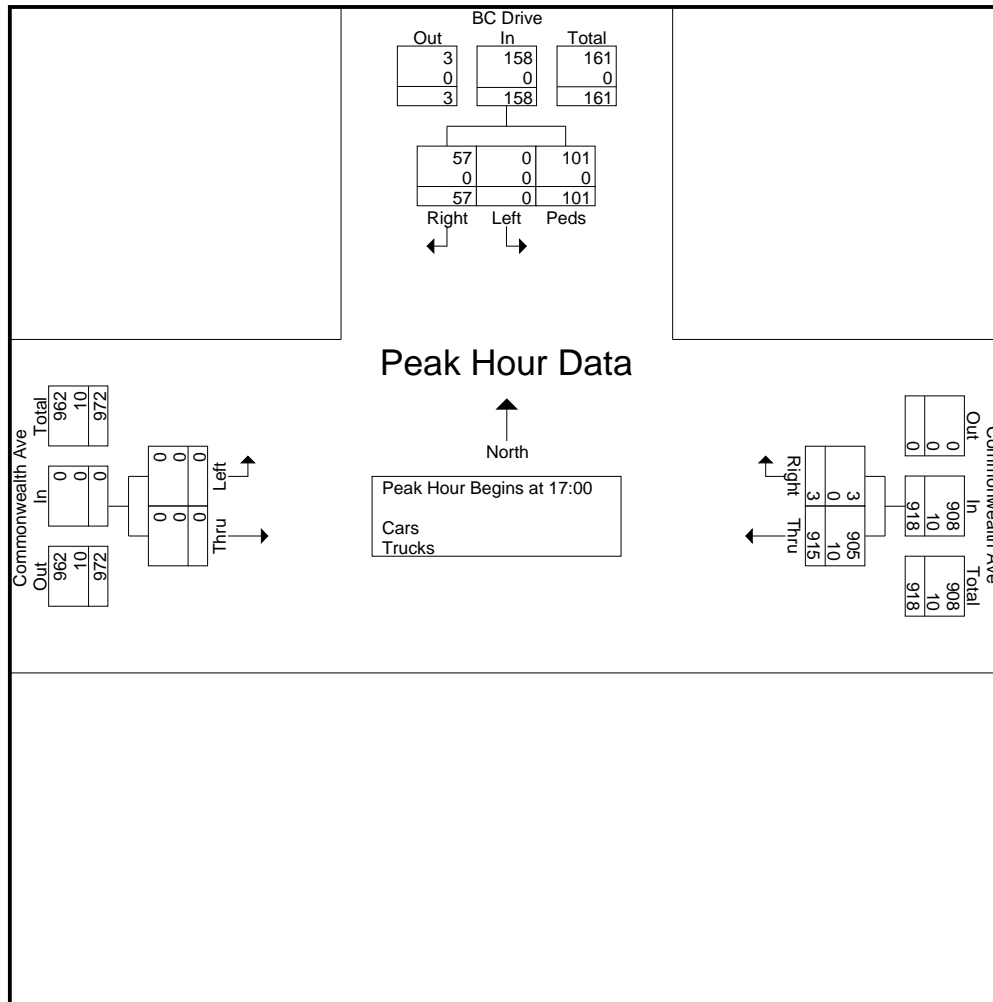
Accurate Counts  
 978-664-2565

File Name : 39000018  
 Site Code : 39000018  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	BC Drive From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	0	3	7	225	0	0	0	0	0	0	235	235
16:15	0	8	9	235	4	0	0	0	2	2	256	258
16:30	0	13	42	216	6	0	0	0	0	0	277	277
16:45	0	10	9	186	5	0	0	0	0	0	210	210
Total	0	34	67	862	15	0	0	0	2	2	978	980
17:00	0	15	20	207	1	0	0	0	0	0	243	243
17:15	0	11	33	227	0	0	0	0	0	0	271	271
17:30	0	16	32	235	1	0	0	0	0	0	284	284
17:45	0	15	16	246	1	0	0	0	0	0	278	278
Total	0	57	101	915	3	0	0	0	0	0	1076	1076
Grand Total	0	91	168	1777	18	0	0	0	2	2	2054	2056
Apprch %	0	35.1	64.9	99	1		0	0				
Total %	0	4.4	8.2	86.5	0.9		0	0		0.1	99.9	
Cars	0	89	168	1738	17		0	0		0	0	2014
% Cars	0	97.8	100	97.8	94.4	0	0	0	100	0	0	98
Trucks	0	2	0	39	1		0	0		0	0	42
% Trucks	0	2.2	0	2.2	5.6	0	0	0	0	0	0	2

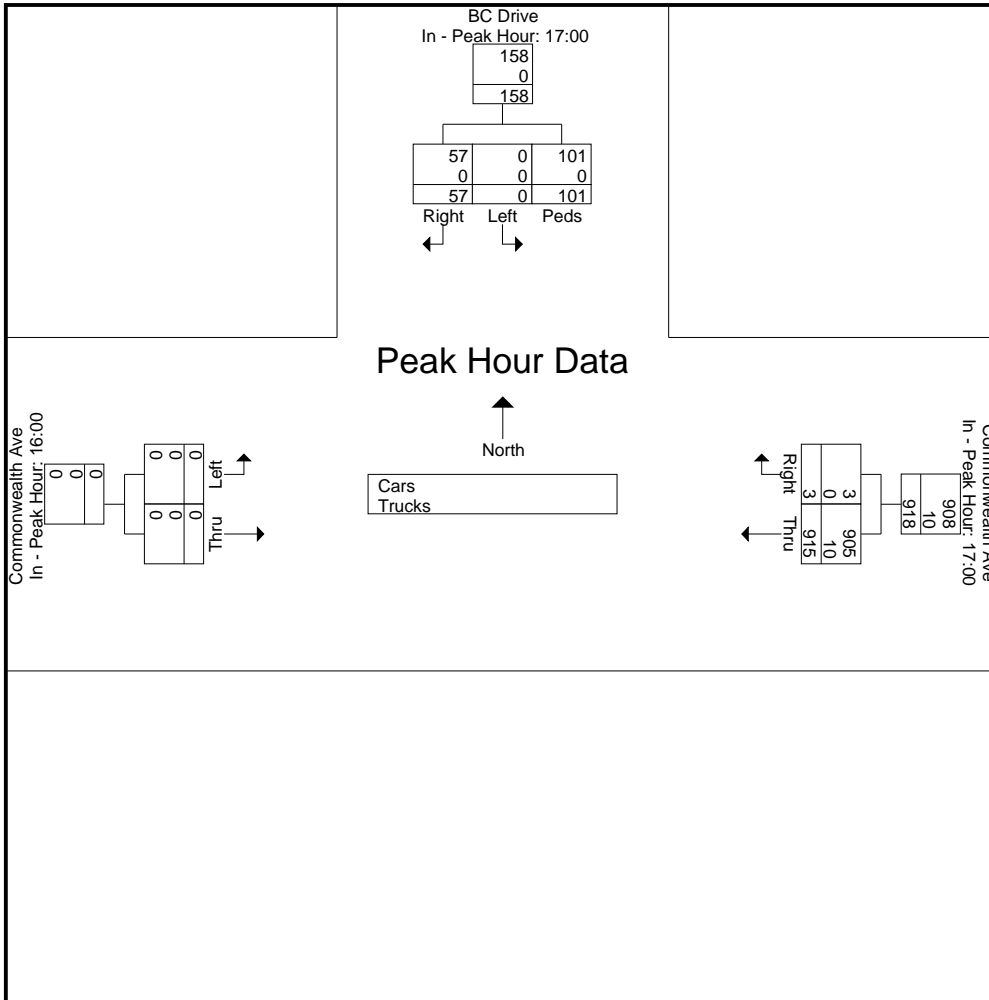
Start Time	BC Drive From North				Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	Peds	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 17:00											
17:00	0	15	20	35	207	1	208	0	0	0	243
17:15	0	11	33	44	227	0	227	0	0	0	271
17:30	0	16	32	48	235	1	236	0	0	0	284
17:45	0	15	16	31	246	1	247	0	0	0	278
Total Volume	0	57	101	158	915	3	918	0	0	0	1076
% App. Total	0	36.1	63.9		99.7	0.3		0	0		
PHF	.000	.891	.765	.823	.930	.750	.929	.000	.000	.000	.947
Cars	0	57	101	158	905	3	908	0	0	0	1066
% Cars	0	100	100	100	98.9	100	98.9	0	0	0	99.1
Trucks	0	0	0	0	10	0	10	0	0	0	10
% Trucks	0	0	0	0	1.1	0	1.1	0	0	0	0.9



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00				17:00			16:00		
+0 mins.	0	15	20	35	207	1	208	0	0	0
+15 mins.	0	11	33	44	227	0	227	0	0	0
+30 mins.	0	16	32	48	235	1	236	0	0	0
+45 mins.	0	15	16	31	246	1	247	0	0	0
Total Volume	0	57	101	158	915	3	918	0	0	0
% App. Total	0	36.1	63.9		99.7	0.3		0	0	
PHF	.000	.891	.765	.823	.930	.750	.929	.000	.000	.000
Cars	0	57	101	158	905	3	908	0	0	0
% Cars	0	100	100	100	98.9	100	98.9	0	0	0
Trucks	0	0	0	0	10	0	10	0	0	0
% Trucks	0	0	0	0	1.1	0	1.1	0	0	0



N/S Street : BC Driveway  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

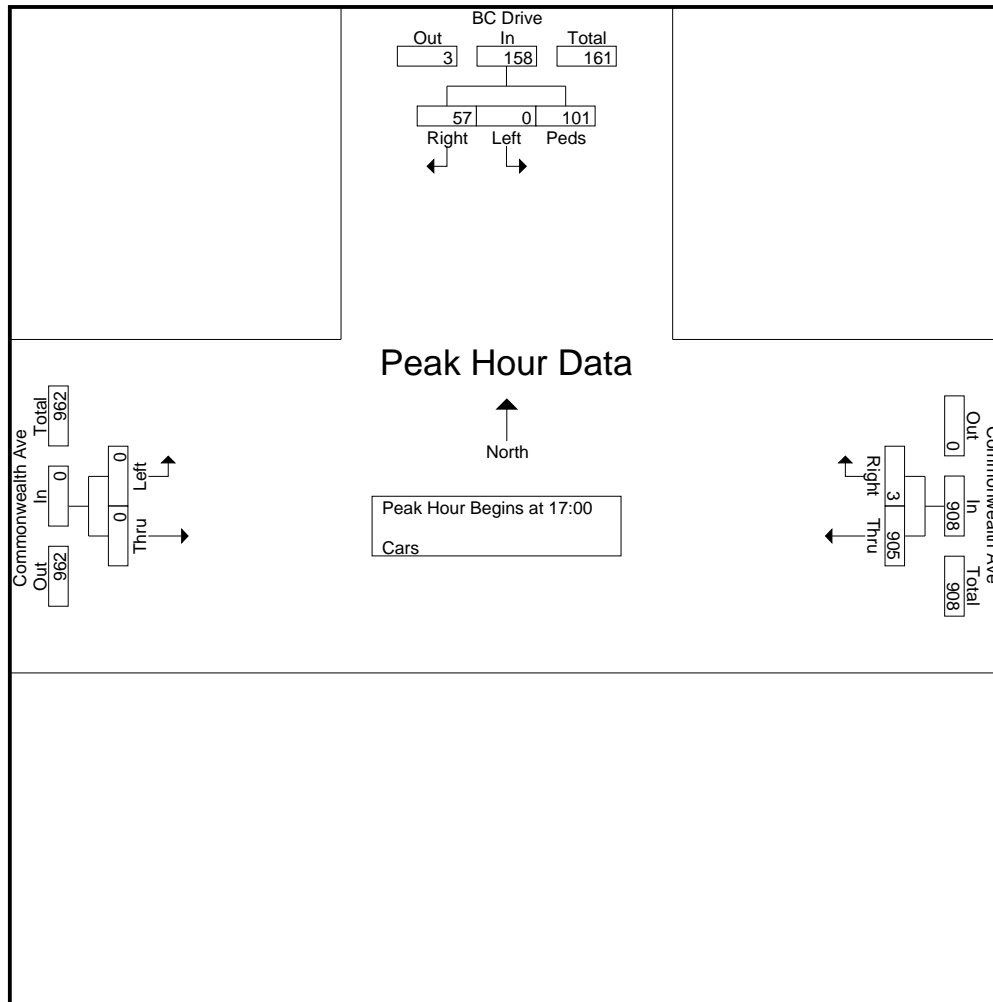
File Name : 39000018  
 Site Code : 39000018  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars

Start Time	BC Drive From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	0	3	7	219	0	0	0	0	0	0	229	229
16:15	0	8	9	227	3	0	0	0	2	2	247	249
16:30	0	11	42	208	6	0	0	0	0	0	267	267
16:45	0	10	9	179	5	0	0	0	0	0	203	203
Total	0	32	67	833	14	0	0	0	2	2	946	948
17:00	0	15	20	204	1	0	0	0	0	0	240	240
17:15	0	11	33	225	0	0	0	0	0	0	269	269
17:30	0	16	32	232	1	0	0	0	0	0	281	281
17:45	0	15	16	244	1	0	0	0	0	0	276	276
Total	0	57	101	905	3	0	0	0	0	0	1066	1066
Grand Total	0	89	168	1738	17	0	0	0	2	2	2012	2014
Apprch %	0	34.6	65.4	99	1		0	0				
Total %	0	4.4	8.3	86.4	0.8		0	0		0.1	99.9	

Start Time	BC Drive From North				Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	Peds	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
17:00	0	15	20	35	204	1	205	0	0	0	240
17:15	0	11	33	44	225	0	225	0	0	0	269
17:30	0	16	32	48	232	1	233	0	0	0	281
17:45	0	15	16	31	244	1	245	0	0	0	276
Total Volume	0	57	101	158	905	3	908	0	0	0	1066
% App. Total	0	36.1	63.9		99.7	0.3		0	0		
PHF	.000	.891	.765	.823	.927	.750	.927	.000	.000	.000	.948

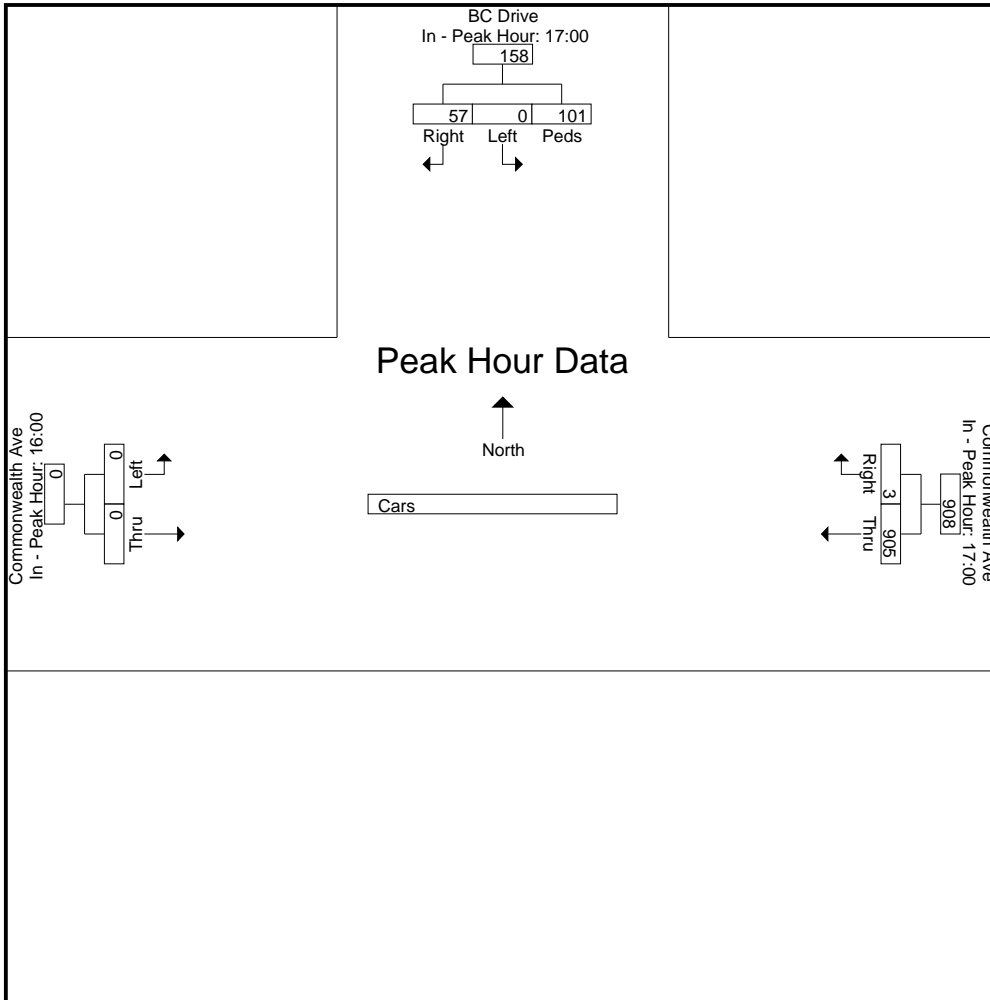
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 17:00



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00				17:00			16:00		
+0 mins.	0	15	20	35	204	1	205	0	0	0
+15 mins.	0	11	33	44	225	0	225	0	0	0
+30 mins.	0	16	32	48	232	1	233	0	0	0
+45 mins.	0	15	16	31	244	1	245	0	0	0
Total Volume	0	57	101	158	905	3	908	0	0	0
% App. Total	0	36.1	63.9		99.7	0.3		0	0	
PHF	.000	.891	.765	.823	.927	.750	.927	.000	.000	.000





N/S Street : BC Driveway  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

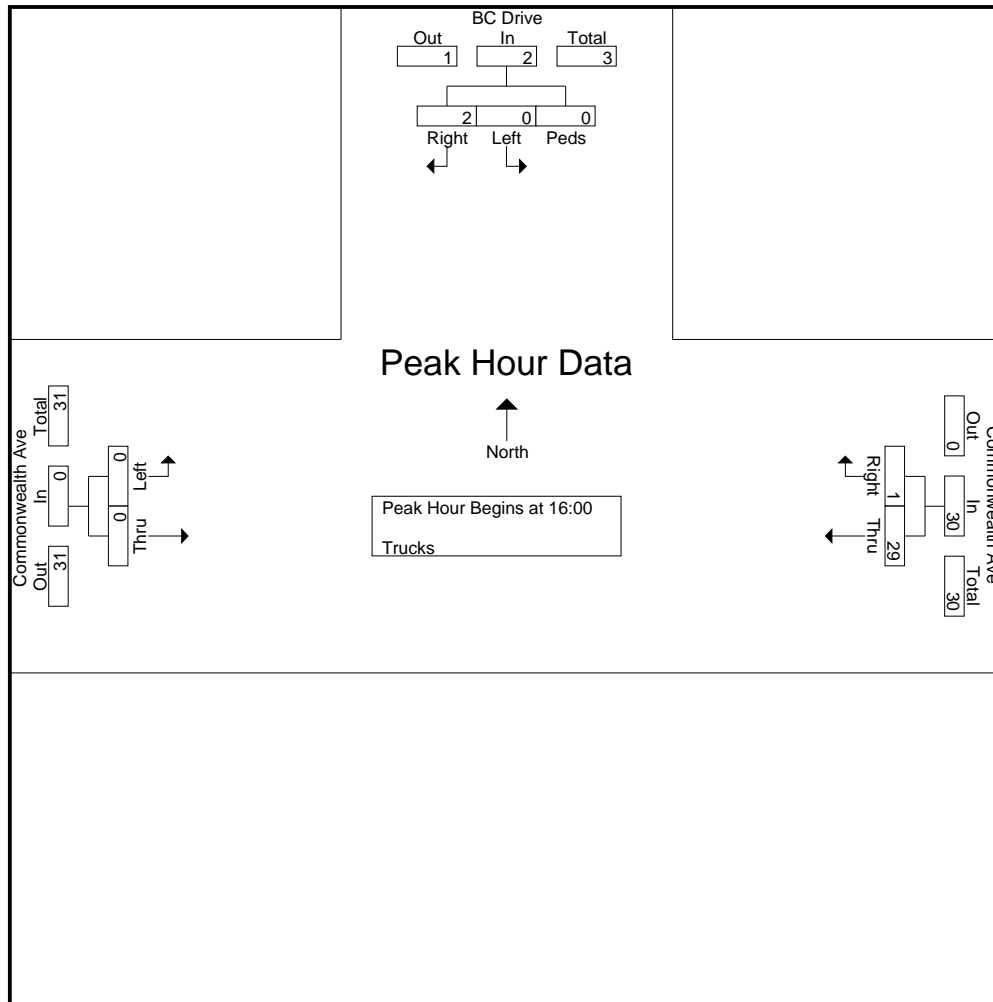
File Name : 39000018  
 Site Code : 39000018  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	BC Drive From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	0	0	0	6	0	0	0	0	0	0	6	6
16:15	0	0	0	8	1	0	0	0	0	0	9	9
16:30	0	2	0	8	0	0	0	0	0	0	10	10
16:45	0	0	0	7	0	0	0	0	0	0	7	7
Total	0	2	0	29	1	0	0	0	0	0	32	32
17:00	0	0	0	3	0	0	0	0	0	0	3	3
17:15	0	0	0	2	0	0	0	0	0	0	2	2
17:30	0	0	0	3	0	0	0	0	0	0	3	3
17:45	0	0	0	2	0	0	0	0	0	0	2	2
Total	0	0	0	10	0	0	0	0	0	0	10	10
Grand Total	0	2	0	39	1	0	0	0	0	0	42	42
Apprch %	0	100	0	97.5	2.5		0	0				
Total %	0	4.8	0	92.9	2.4		0	0		0	100	

Start Time	BC Drive From North				Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	Peds	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
16:00	0	0	0	0	6	0	6	0	0	0	6
16:15	0	0	0	0	8	1	9	0	0	0	9
16:30	0	2	0	2	8	0	8	0	0	0	10
16:45	0	0	0	0	7	0	7	0	0	0	7
Total Volume	0	2	0	2	29	1	30	0	0	0	32
% App. Total	0	100	0		96.7	3.3		0	0		
PHF	.000	.250	.000	.250	.906	.250	.833	.000	.000	.000	.800

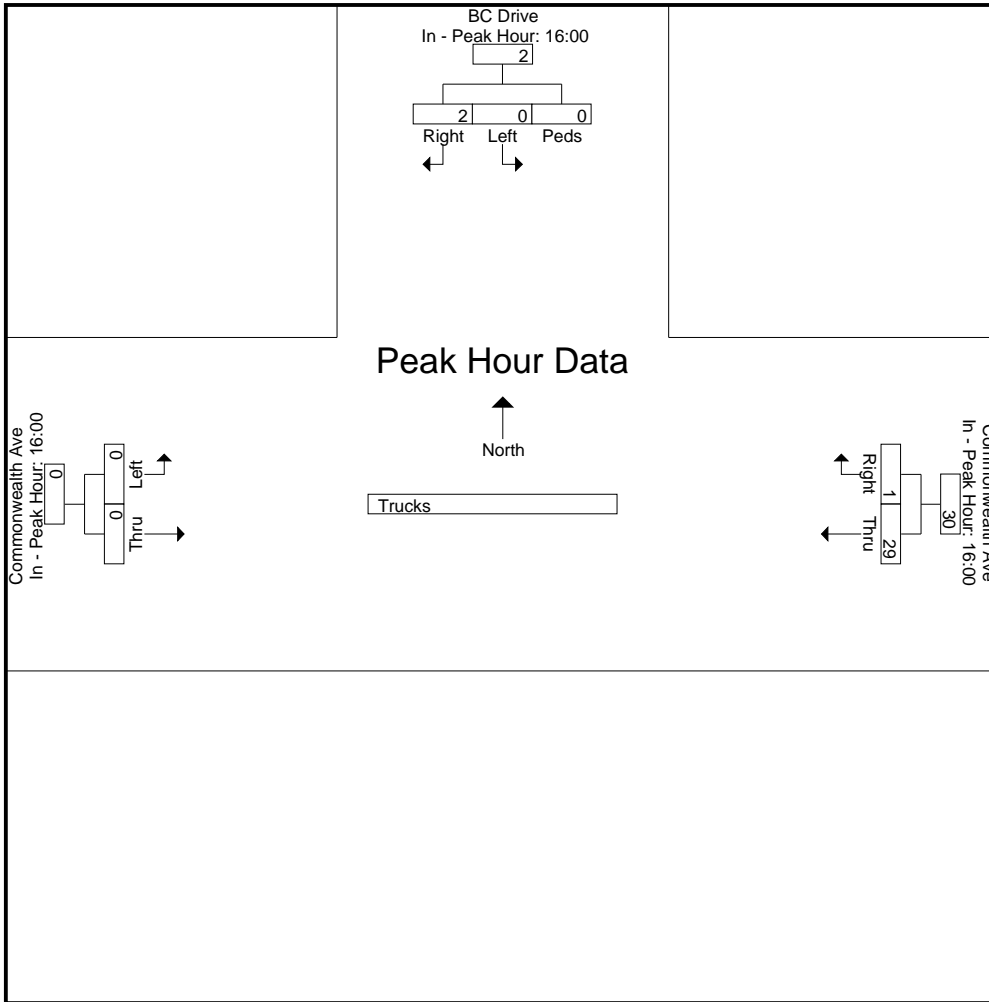
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 16:00



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00				16:00			16:00		
+0 mins.	0	0	0	0	6	0	6	0	0	0
+15 mins.	0	0	0	0	8	1	9	0	0	0
+30 mins.	0	2	0	2	8	0	8	0	0	0
+45 mins.	0	0	0	0	7	0	7	0	0	0
Total Volume	0	2	0	2	29	1	30	0	0	0
% App. Total	0	100	0		96.7	3.3		0	0	
PHF	.000	.250	.000	.250	.906	.250	.833	.000	.000	.000



N/S Street : Father Herlihy Drive  
 E/W Street: St. Thomas More Way  
 City/State : Brighton, MA  
 Weather : Clear

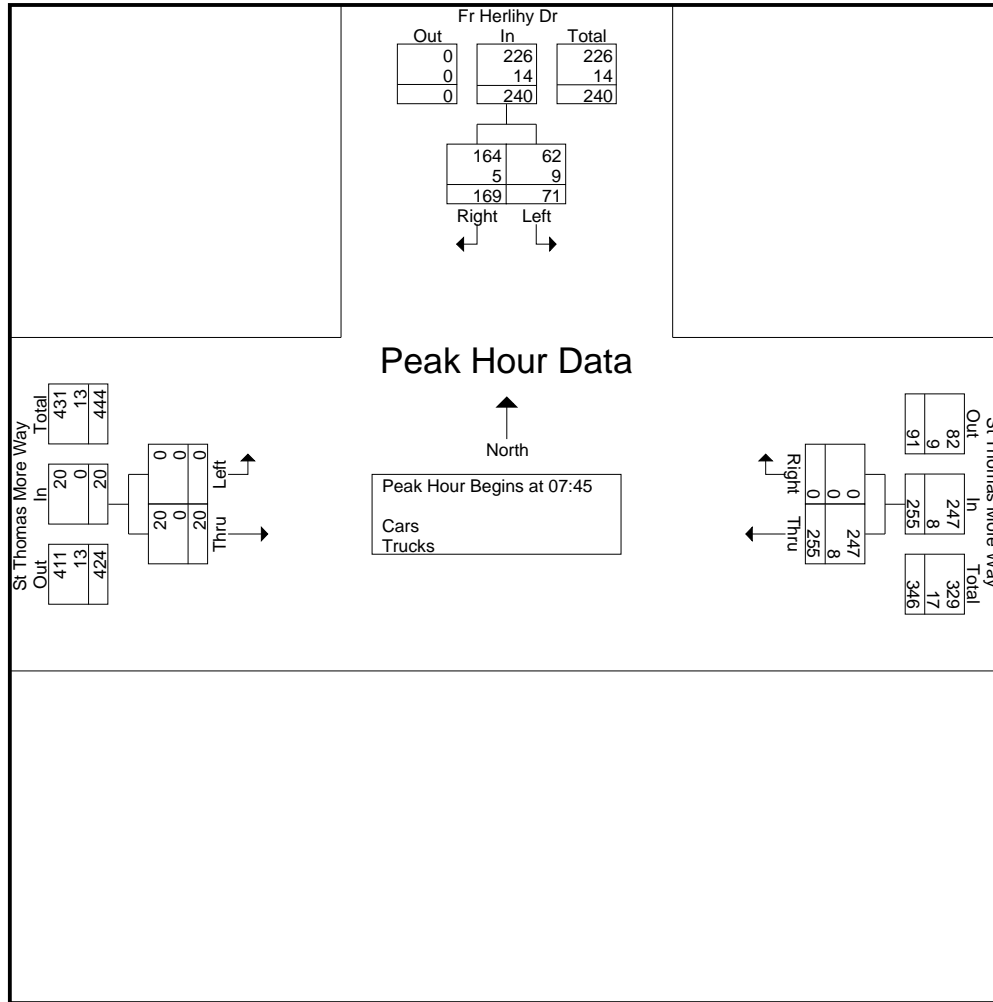
Accurate Counts  
 978-664-2565

File Name : 39000019  
 Site Code : 39000019  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Fr Herlihy Dr From North			St Thomas More Way From East			St Thomas More Way From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	11	22	0	23	0	0	0	3	0	0	59	59
07:15	6	26	0	47	0	0	0	2	0	0	81	81
07:30	15	37	0	34	0	0	0	4	0	0	90	90
07:45	20	31	5	36	0	0	0	3	4	9	90	99
Total	52	116	5	140	0	0	0	12	4	9	320	329
08:00	16	39	5	51	0	0	0	5	0	5	111	116
08:15	15	48	3	77	0	2	0	5	3	8	145	153
08:30	20	51	3	91	0	2	0	7	1	6	169	175
08:45	0	0	0	0	0	0	0	0	0	0	0	0
Total	51	138	11	219	0	4	0	17	4	19	425	444
Grand Total	103	254	16	359	0	4	0	29	8	28	745	773
Apprch %	28.9	71.1		100	0		0	100				
Total %	13.8	34.1		48.2	0		0	3.9		3.6	96.4	
Cars	87	245		342	0		0	29		0	0	731
% Cars	84.5	96.5	100	95.3	0	100	0	100	100	0	0	94.6
Trucks	16	9		17	0		0	0		0	0	42
% Trucks	15.5	3.5	0	4.7	0	0	0	0	0	0	0	5.4

Start Time	Fr Herlihy Dr From North			St Thomas More Way From East			St Thomas More Way From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45										
07:45	20	31	51	36	0	36	0	3	3	90
08:00	16	39	55	51	0	51	0	5	5	111
08:15	15	48	63	77	0	77	0	5	5	145
08:30	20	51	71	91	0	91	0	7	7	169
Total Volume	71	169	240	255	0	255	0	20	20	515
% App. Total	29.6	70.4		100	0		0	100		
PHF	.888	.828	.845	.701	.000	.701	.000	.714	.714	.762
Cars	62	164	226	247	0	247	0	20	20	493
% Cars	87.3	97.0	94.2	96.9	0	96.9	0	100	100	95.7
Trucks	9	5	14	8	0	8	0	0	0	22
% Trucks	12.7	3.0	5.8	3.1	0	3.1	0	0	0	4.3



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45			07:45			07:45		
+0 mins.	20	31	51	36	0	36	0	3	3
+15 mins.	16	39	55	51	0	51	0	5	5
+30 mins.	15	48	63	77	0	77	0	5	5
+45 mins.	20	51	71	91	0	91	0	7	7
Total Volume	71	169	240	255	0	255	0	20	20
% App. Total	29.6	70.4		100	0		0	100	
PHF	.888	.828	.845	.701	.000	.701	.000	.714	.714
Cars	62	164	226	247	0	247	0	20	20
% Cars	87.3	97	94.2	96.9	0	96.9	0	100	100
Trucks	9	5	14	8	0	8	0	0	0
% Trucks	12.7	3	5.8	3.1	0	3.1	0	0	0



N/S Street : Father Herlihy Drive  
 E/W Street: St. Thomas More Way  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

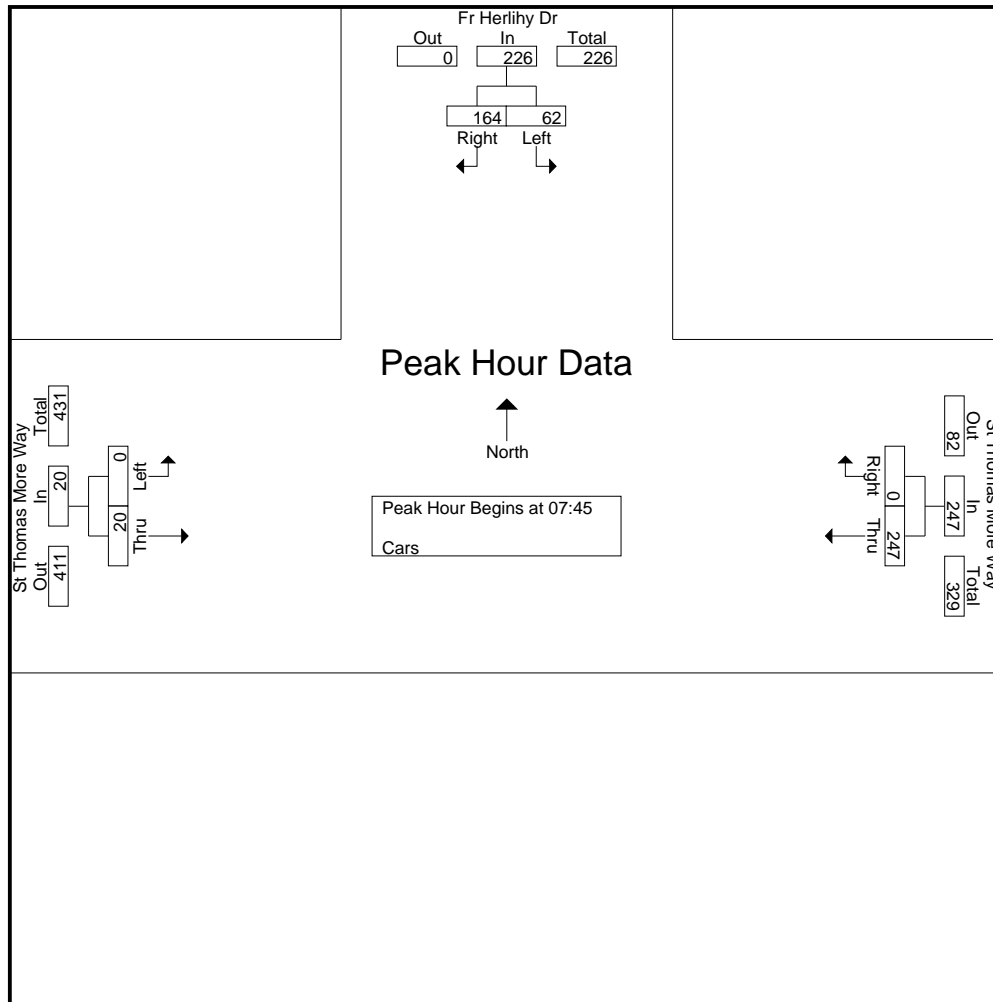
File Name : 39000019  
 Site Code : 39000019  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Fr Herlihy Dr From North			St Thomas More Way From East			St Thomas More Way From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	7	19	0	18	0	0	0	3	0	0	47	47
07:15	5	25	0	43	0	0	0	2	0	0	75	75
07:30	13	37	0	34	0	0	0	4	0	0	88	88
07:45	20	31	5	36	0	0	0	3	4	9	90	99
Total	45	112	5	131	0	0	0	12	4	9	300	309
08:00	12	38	5	47	0	0	0	5	0	5	102	107
08:15	13	46	3	75	0	2	0	5	3	8	139	147
08:30	17	49	3	89	0	2	0	7	1	6	162	168
08:45	0	0	0	0	0	0	0	0	0	0	0	0
Total	42	133	11	211	0	4	0	17	4	19	403	422
Grand Total	87	245	16	342	0	4	0	29	8	28	703	731
Apprch %	26.2	73.8		100	0		0	100				
Total %	12.4	34.9		48.6	0		0	4.1		3.8	96.2	

Start Time	Fr Herlihy Dr From North			St Thomas More Way From East			St Thomas More Way From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:45	20	31	51	36	0	36	0	3	3	90
08:00	12	38	50	47	0	47	0	5	5	102
08:15	13	46	59	75	0	75	0	5	5	139
08:30	17	49	66	89	0	89	0	7	7	162
Total Volume	62	164	226	247	0	247	0	20	20	493
% App. Total	27.4	72.6		100	0		0	100		
PHF	.775	.837	.856	.694	.000	.694	.000	.714	.714	.761

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:45

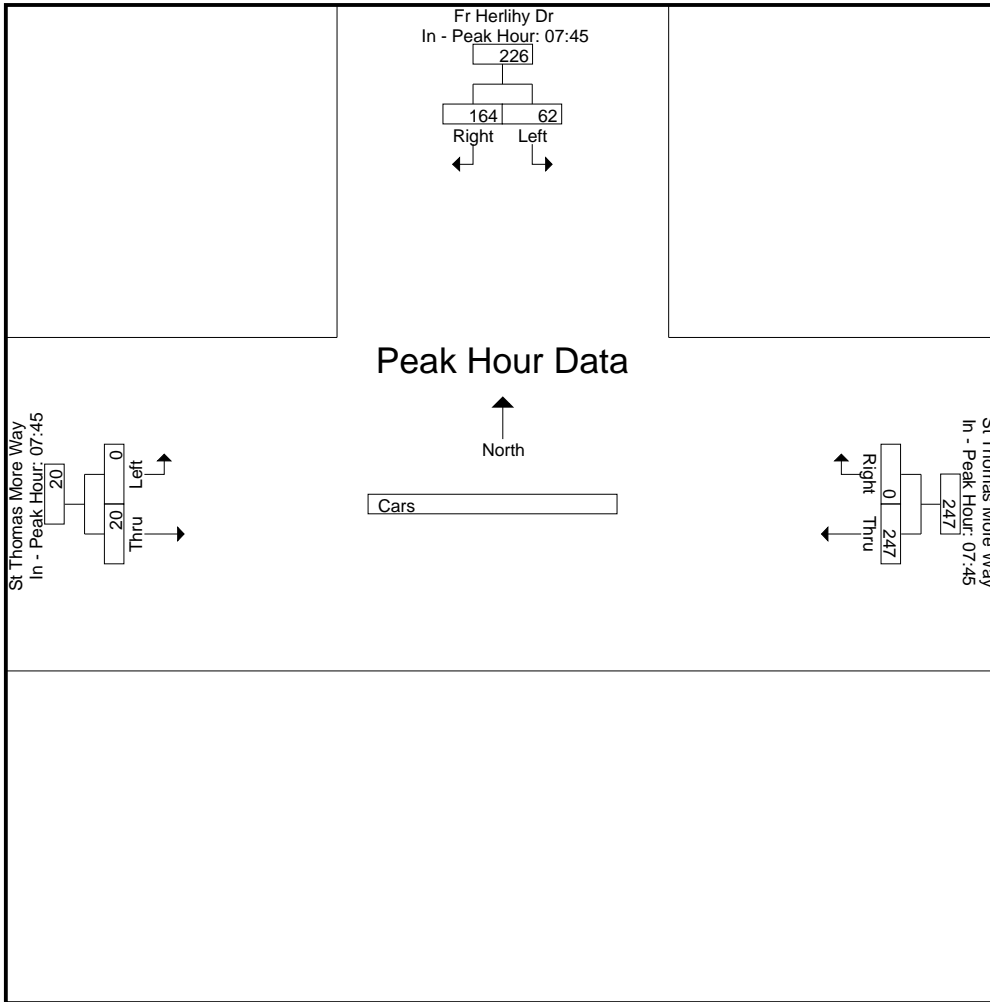


Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45			07:45			07:45		
+0 mins.	20	31	51	36	0	36	0	3	3
+15 mins.	12	38	50	47	0	47	0	5	5
+30 mins.	13	46	59	75	0	75	0	5	5
+45 mins.	17	49	66	89	0	89	0	7	7
Total Volume	62	164	226	247	0	247	0	20	20
% App. Total	27.4	72.6		100	0		0	100	
PHF	.775	.837	.856	.694	.000	.694	.000	.714	.714





N/S Street : Father Herlihy Drive  
 E/W Street: St. Thomas More Way  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

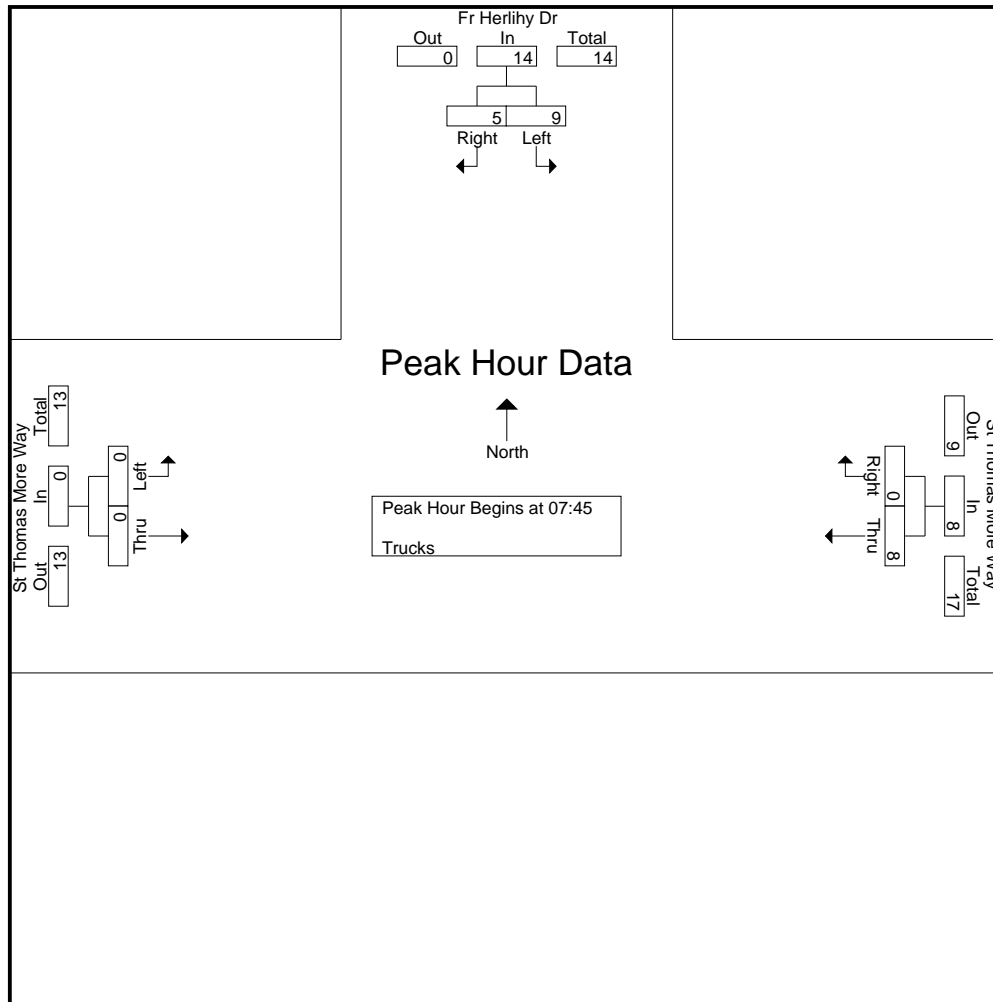
File Name : 39000019  
 Site Code : 39000019  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Fr Herlihy Dr From North			St Thomas More Way From East			St Thomas More Way From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	4	3	0	5	0	0	0	0	0	0	12	12
07:15	1	1	0	4	0	0	0	0	0	0	6	6
07:30	2	0	0	0	0	0	0	0	0	0	2	2
07:45	0	0	0	0	0	0	0	0	0	0	0	0
Total	7	4	0	9	0	0	0	0	0	0	20	20
08:00	4	1	0	4	0	0	0	0	0	0	9	9
08:15	2	2	0	2	0	0	0	0	0	0	6	6
08:30	3	2	0	2	0	0	0	0	0	0	7	7
08:45	0	0	0	0	0	0	0	0	0	0	0	0
Total	9	5	0	8	0	0	0	0	0	0	22	22
Grand Total	16	9	0	17	0	0	0	0	0	0	42	42
Apprch %	64	36		100	0		0	0				
Total %	38.1	21.4		40.5	0		0	0		0	100	

Start Time	Fr Herlihy Dr From North			St Thomas More Way From East			St Thomas More Way From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:45	0	0	0	0	0	0	0	0	0	0
08:00	4	1	5	4	0	4	0	0	0	9
08:15	2	2	4	2	0	2	0	0	0	6
08:30	3	2	5	2	0	2	0	0	0	7
Total Volume	9	5	14	8	0	8	0	0	0	22
% App. Total	64.3	35.7		100	0		0	0		
PHF	.563	.625	.700	.500	.000	.500	.000	.000	.000	.611

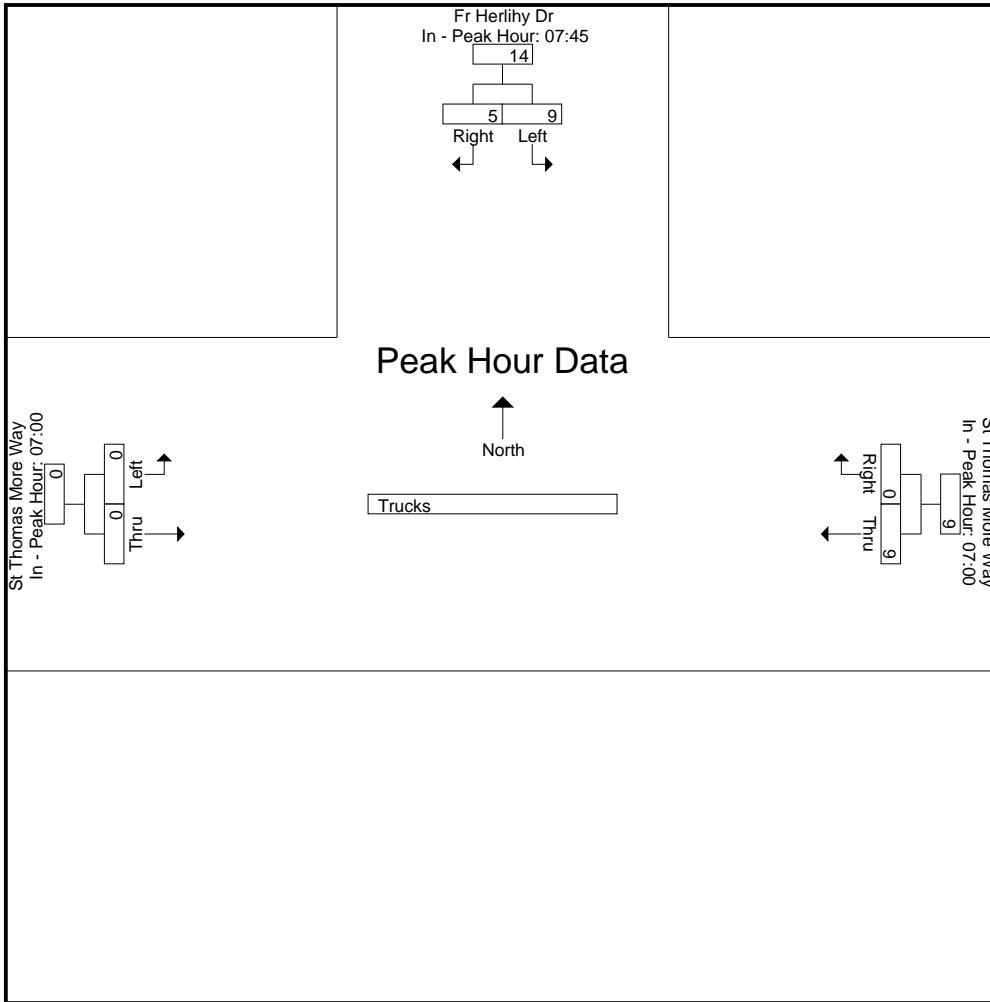
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:45



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45			07:00			07:00		
+0 mins.	0	0	0	5	0	5	0	0	0
+15 mins.	4	1	5	4	0	4	0	0	0
+30 mins.	2	2	4	0	0	0	0	0	0
+45 mins.	3	2	5	0	0	0	0	0	0
Total Volume	9	5	14	9	0	9	0	0	0
% App. Total	64.3	35.7		100	0		0	0	
PHF	.563	.625	.700	.450	.000	.450	.000	.000	.000



N/S Street : Father Herlihy Drive  
 E/W Street: St. Thomas More Way  
 City/State : Brighton, MA  
 Weather : Clear

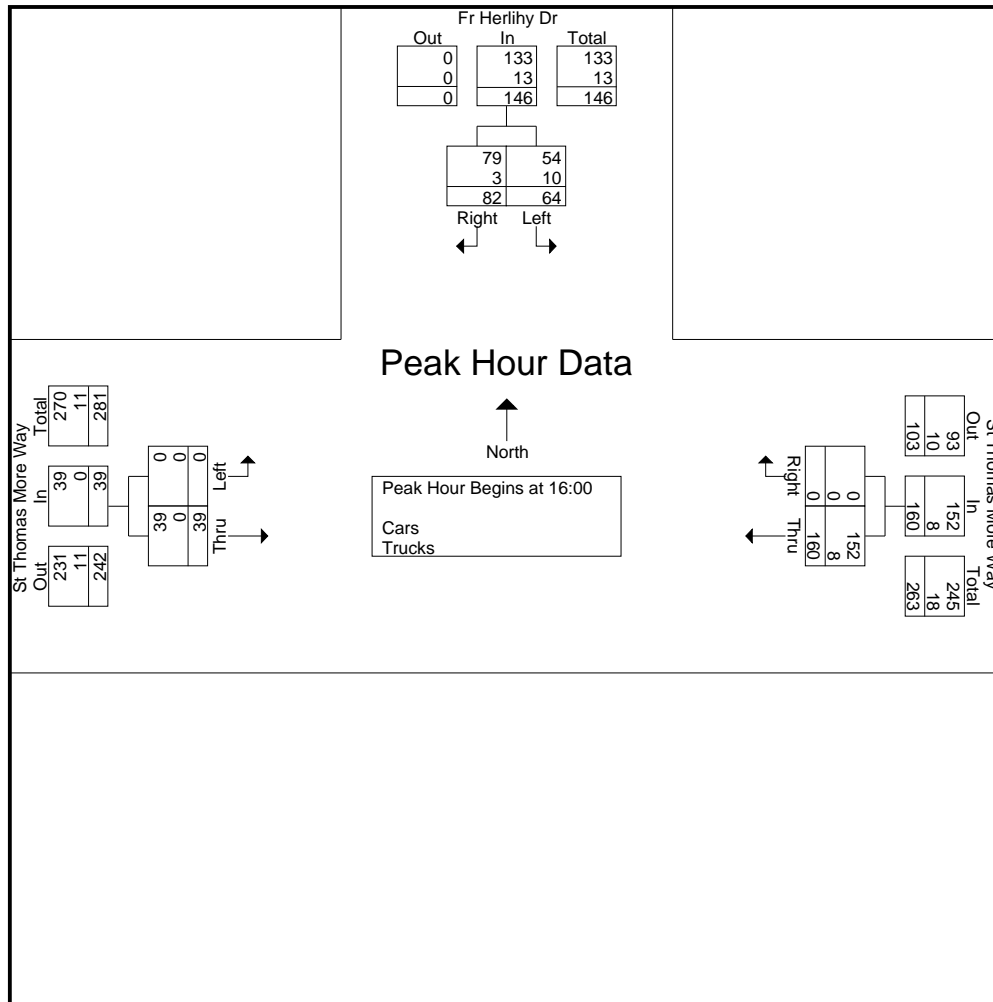
Accurate Counts  
 978-664-2565

File Name : 39000019  
 Site Code : 39000019  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Fr Herlihy Dr From North			St Thomas More Way From East			St Thomas More Way From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	22	25	4	43	0	3	0	16	9	16	106	122
16:15	18	25	6	57	0	0	0	7	14	20	107	127
16:30	9	16	1	23	0	2	0	10	19	22	58	80
16:45	15	16	5	37	0	4	0	6	19	28	74	102
Total	64	82	16	160	0	9	0	39	61	86	345	431
17:00	13	17	0	29	0	5	0	13	10	15	72	87
17:15	14	9	1	32	0	7	0	5	25	33	60	93
17:30	14	23	1	31	0	2	0	5	10	13	73	86
17:45	15	15	0	47	0	1	0	6	7	8	83	91
Total	56	64	2	139	0	15	0	29	52	69	288	357
Grand Total	120	146	18	299	0	24	0	68	113	155	633	788
Apprch %	45.1	54.9		100	0		0	100				
Total %	19	23.1		47.2	0		0	10.7		19.7	80.3	
Cars	103	142		280	0		0	66		0	0	746
% Cars	85.8	97.3	100	93.6	0	100	0	97.1	100	0	0	94.7
Trucks	17	4		19	0		0	2		0	0	42
% Trucks	14.2	2.7	0	6.4	0	0	0	2.9	0	0	0	5.3

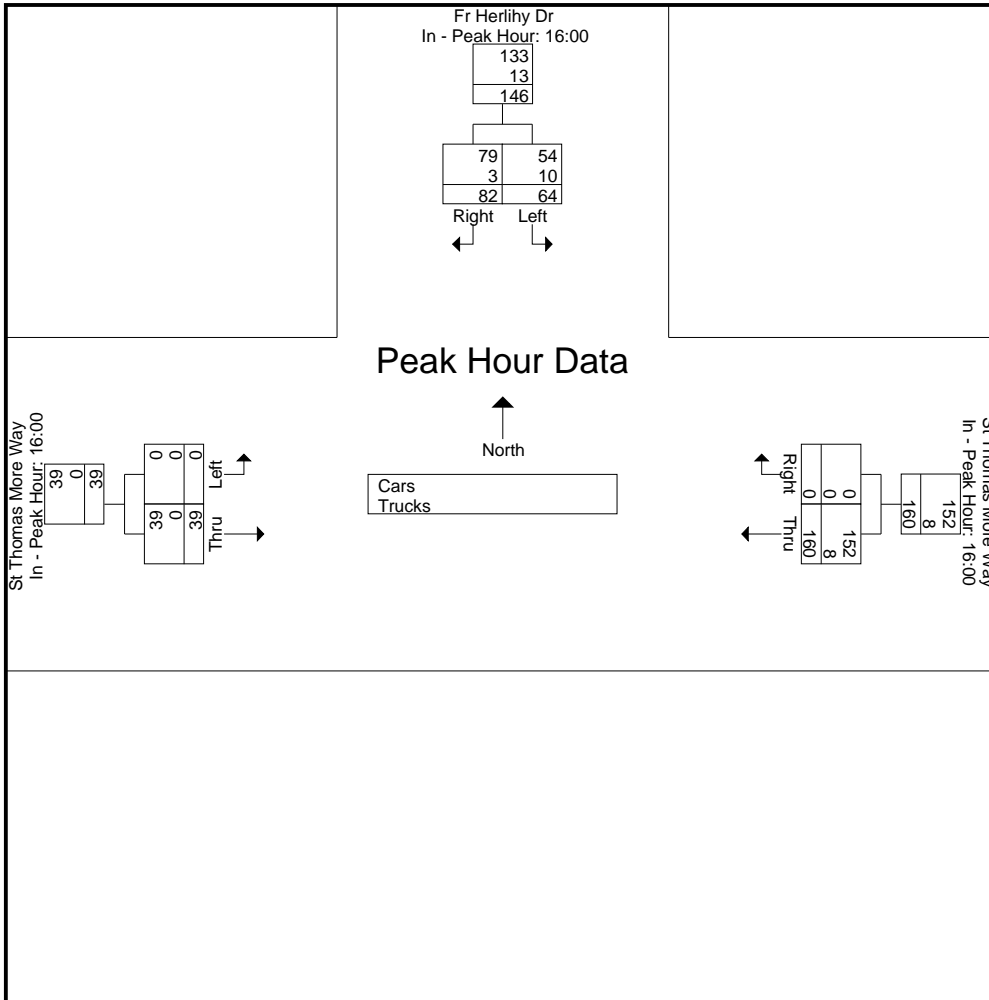
Start Time	Fr Herlihy Dr From North			St Thomas More Way From East			St Thomas More Way From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 16:00										
16:00	22	25	47	43	0	43	0	16	16	106
16:15	18	25	43	57	0	57	0	7	7	107
16:30	9	16	25	23	0	23	0	10	10	58
16:45	15	16	31	37	0	37	0	6	6	74
Total Volume	64	82	146	160	0	160	0	39	39	345
% App. Total	43.8	56.2		100	0		0	100		
PHF	.727	.820	.777	.702	.000	.702	.000	.609	.609	.806
Cars	54	79	133	152	0	152	0	39	39	324
% Cars	84.4	96.3	91.1	95.0	0	95.0	0	100	100	93.9
Trucks	10	3	13	8	0	8	0	0	0	21
% Trucks	15.6	3.7	8.9	5.0	0	5.0	0	0	0	6.1



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00			16:00			16:00		
+0 mins.	22	25	47	43	0	43	0	16	16
+15 mins.	18	25	43	57	0	57	0	7	7
+30 mins.	9	16	25	23	0	23	0	10	10
+45 mins.	15	16	31	37	0	37	0	6	6
Total Volume	64	82	146	160	0	160	0	39	39
% App. Total	43.8	56.2		100	0		0	100	
PHF	.727	.820	.777	.702	.000	.702	.000	.609	.609
Cars	54	79	133	152	0	152	0	39	39
% Cars	84.4	96.3	91.1	95	0	95	0	100	100
Trucks	10	3	13	8	0	8	0	0	0
% Trucks	15.6	3.7	8.9	5	0	5	0	0	0



N/S Street : Father Herlihy Drive  
 E/W Street: St. Thomas More Way  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000019  
 Site Code : 39000019  
 Start Date : 3/25/2008  
 Page No : 1

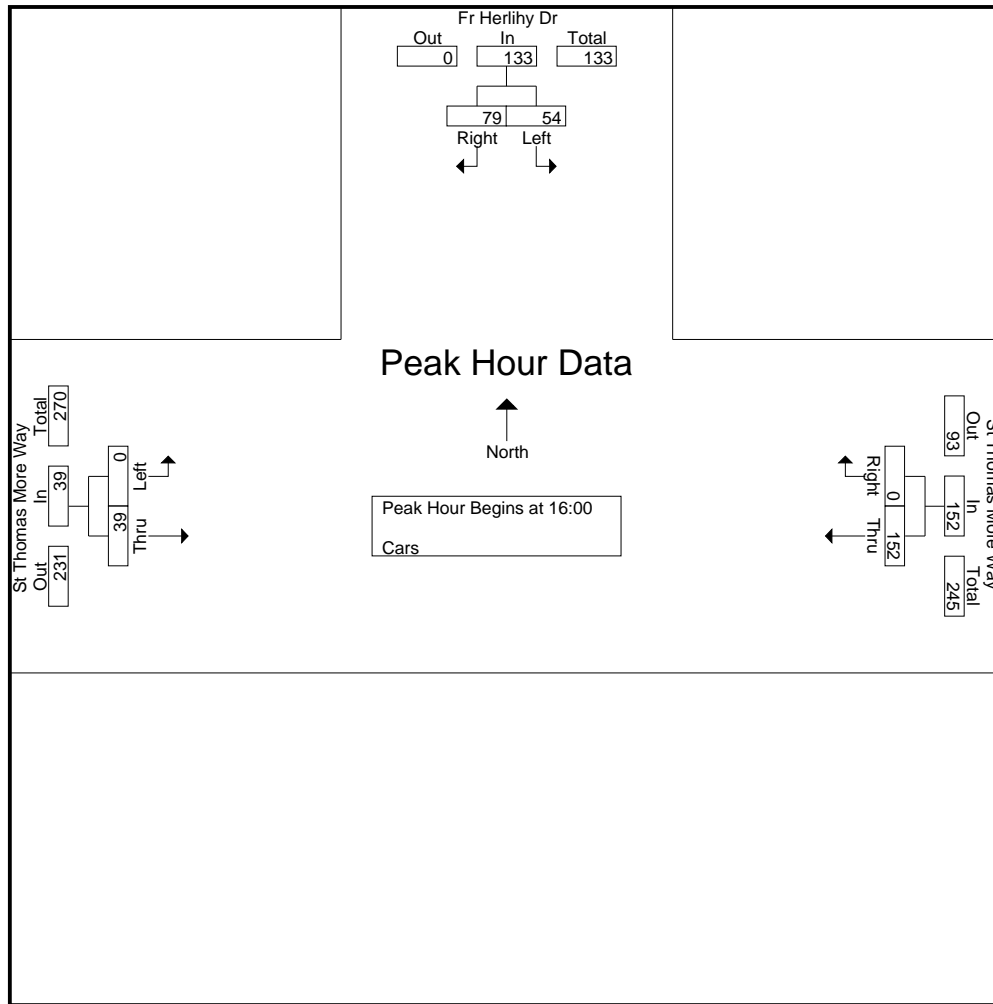
Groups Printed- Cars

Start Time	Fr Herlihy Dr From North			St Thomas More Way From East			St Thomas More Way From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	19	23	4	41	0	3	0	16	9	16	99	115
16:15	15	24	6	56	0	0	0	7	14	20	102	122
16:30	7	16	1	22	0	2	0	10	19	22	55	77
16:45	13	16	5	33	0	4	0	6	19	28	68	96
Total	54	79	16	152	0	9	0	39	61	86	324	410
17:00	11	16	0	24	0	5	0	12	10	15	63	78
17:15	12	9	1	30	0	7	0	5	25	33	56	89
17:30	12	23	1	28	0	2	0	4	10	13	67	80
17:45	14	15	0	46	0	1	0	6	7	8	81	89
Total	49	63	2	128	0	15	0	27	52	69	267	336
Grand Total	103	142	18	280	0	24	0	66	113	155	591	746
Apprch %	42	58		100	0		0	100				
Total %	17.4	24		47.4	0		0	11.2		20.8	79.2	

Start Time	Fr Herlihy Dr From North			St Thomas More Way From East			St Thomas More Way From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
16:00	19	23	42	41	0	41	0	16	16	99
16:15	15	24	39	56	0	56	0	7	7	102
16:30	7	16	23	22	0	22	0	10	10	55
16:45	13	16	29	33	0	33	0	6	6	68
Total Volume	54	79	133	152	0	152	0	39	39	324
% App. Total	40.6	59.4		100	0		0	100		
PHF	.711	.823	.792	.679	.000	.679	.000	.609	.609	.794

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 16:00

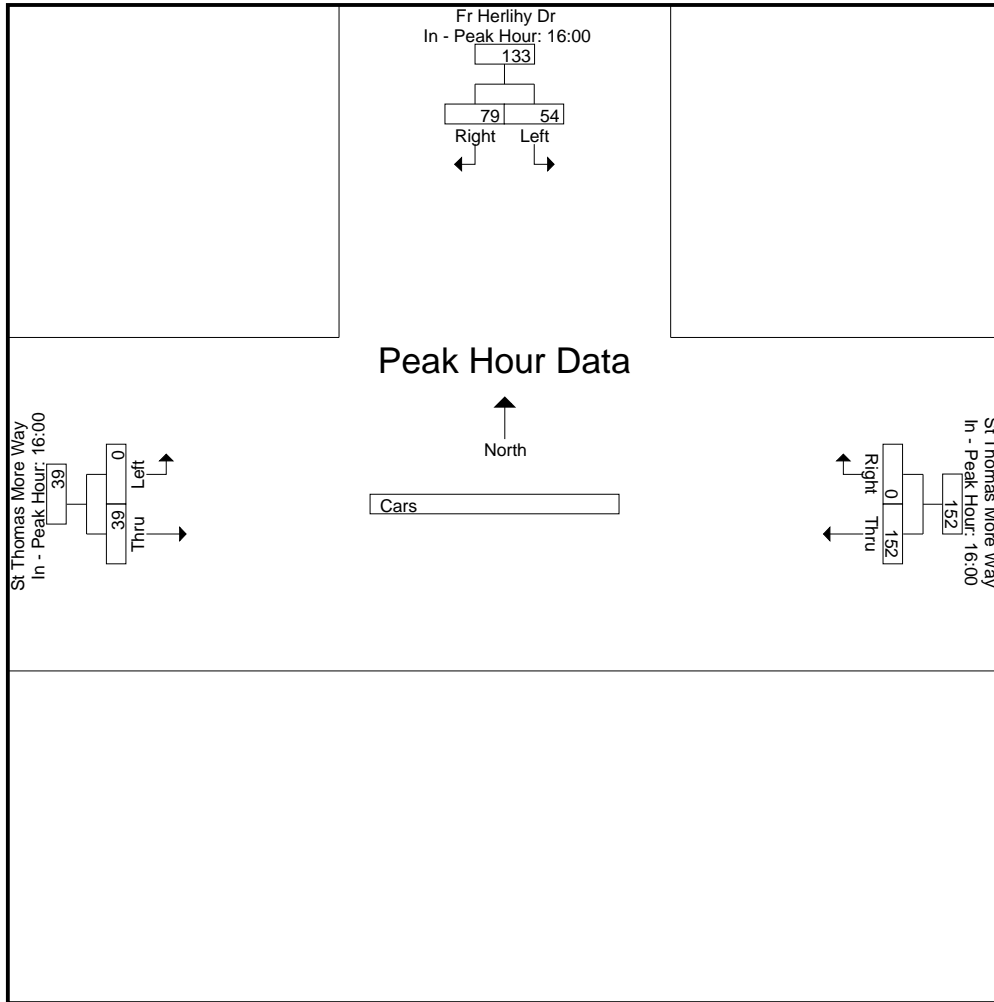




Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00			16:00			16:00		
+0 mins.	19	23	42	41	0	41	0	16	16
+15 mins.	15	24	39	56	0	56	0	7	7
+30 mins.	7	16	23	22	0	22	0	10	10
+45 mins.	13	16	29	33	0	33	0	6	6
Total Volume	54	79	133	152	0	152	0	39	39
% App. Total	40.6	59.4		100	0		0	100	
PHF	.711	.823	.792	.679	.000	.679	.000	.609	.609



N/S Street : Father Herlihy Drive  
 E/W Street: St. Thomas More Way  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

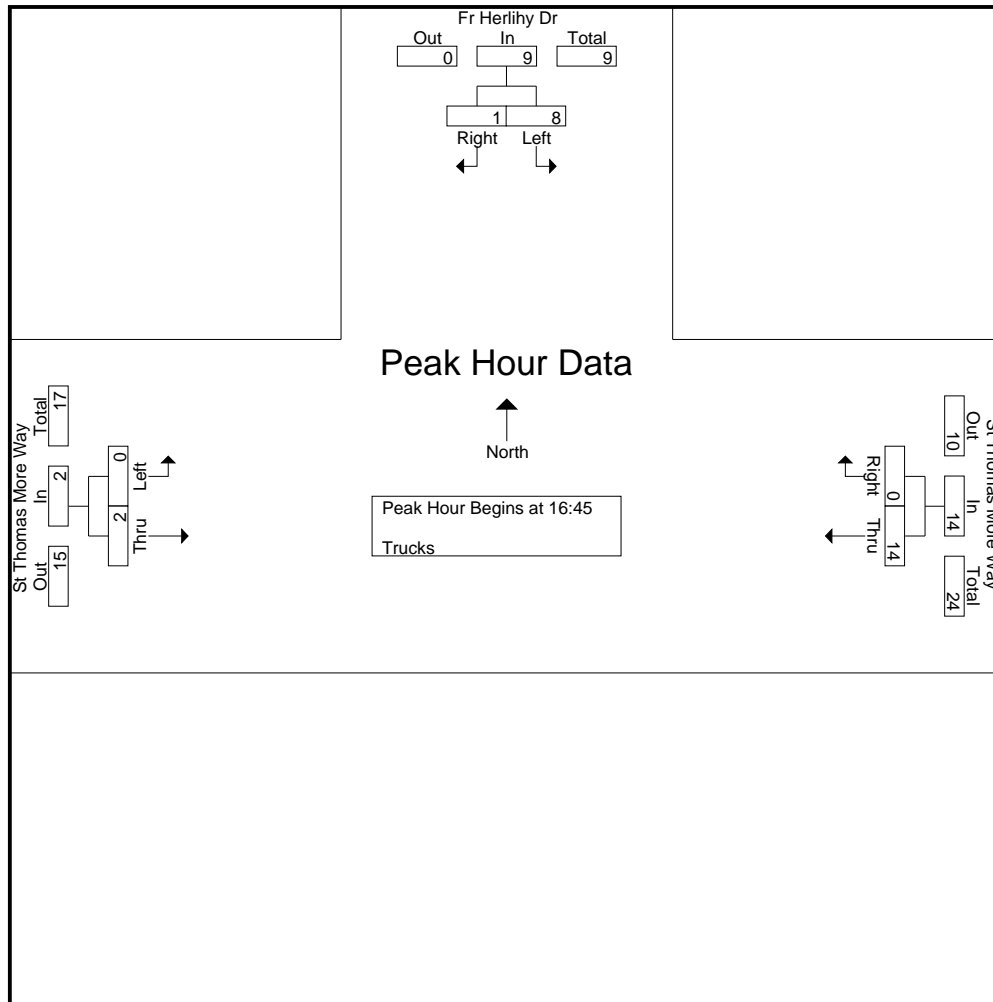
File Name : 39000019  
 Site Code : 39000019  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Fr Herlihy Dr From North			St Thomas More Way From East			St Thomas More Way From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	3	2	0	2	0	0	0	0	0	0	7	7
16:15	3	1	0	1	0	0	0	0	0	0	5	5
16:30	2	0	0	1	0	0	0	0	0	0	3	3
16:45	2	0	0	4	0	0	0	0	0	0	6	6
Total	10	3	0	8	0	0	0	0	0	0	21	21
17:00	2	1	0	5	0	0	0	1	0	0	9	9
17:15	2	0	0	2	0	0	0	0	0	0	4	4
17:30	2	0	0	3	0	0	0	1	0	0	6	6
17:45	1	0	0	1	0	0	0	0	0	0	2	2
Total	7	1	0	11	0	0	0	2	0	0	21	21
Grand Total	17	4	0	19	0	0	0	2	0	0	42	42
Apprch %	81	19		100	0		0	100				
Total %	40.5	9.5		45.2	0		0	4.8		0	100	

Start Time	Fr Herlihy Dr From North			St Thomas More Way From East			St Thomas More Way From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
16:45	2	0	2	4	0	4	0	0	0	6
17:00	2	1	3	5	0	5	0	1	1	9
17:15	2	0	2	2	0	2	0	0	0	4
17:30	2	0	2	3	0	3	0	1	1	6
Total Volume	8	1	9	14	0	14	0	2	2	25
% App. Total	88.9	11.1		100	0		0	100		
PHF	1.000	.250	.750	.700	.000	.700	.000	.500	.500	.694

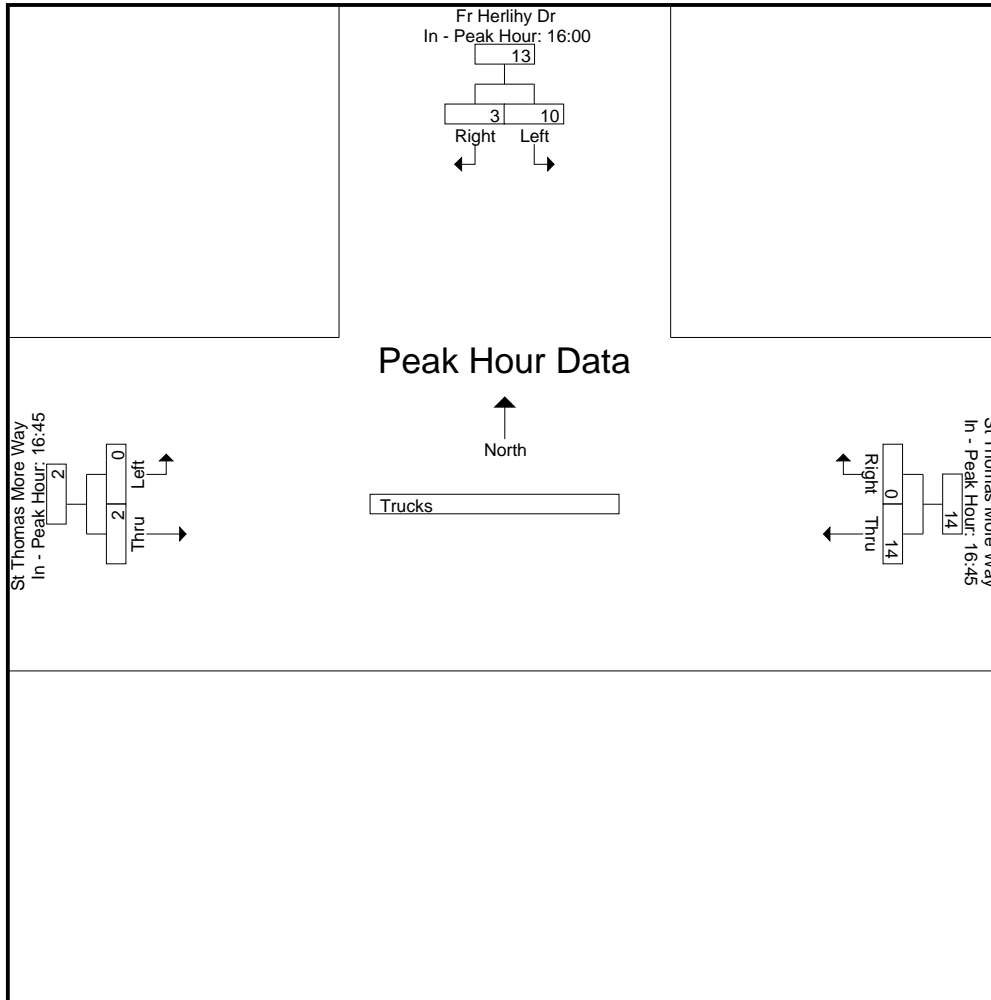
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 16:45



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00			16:45			16:45		
+0 mins.	3	2	5	4	0	4	0	0	0
+15 mins.	3	1	4	5	0	5	0	1	1
+30 mins.	2	0	2	2	0	2	0	0	0
+45 mins.	2	0	2	3	0	3	0	1	1
Total Volume	10	3	13	14	0	14	0	2	2
% App. Total	76.9	23.1		100	0		0	100	
PHF	.833	.375	.650	.700	.000	.700	.000	.500	.500



N/S Street : Lake Street  
 E/W Street: Knowles Street  
 City/State : Brighton, MA  
 Weather : Clear

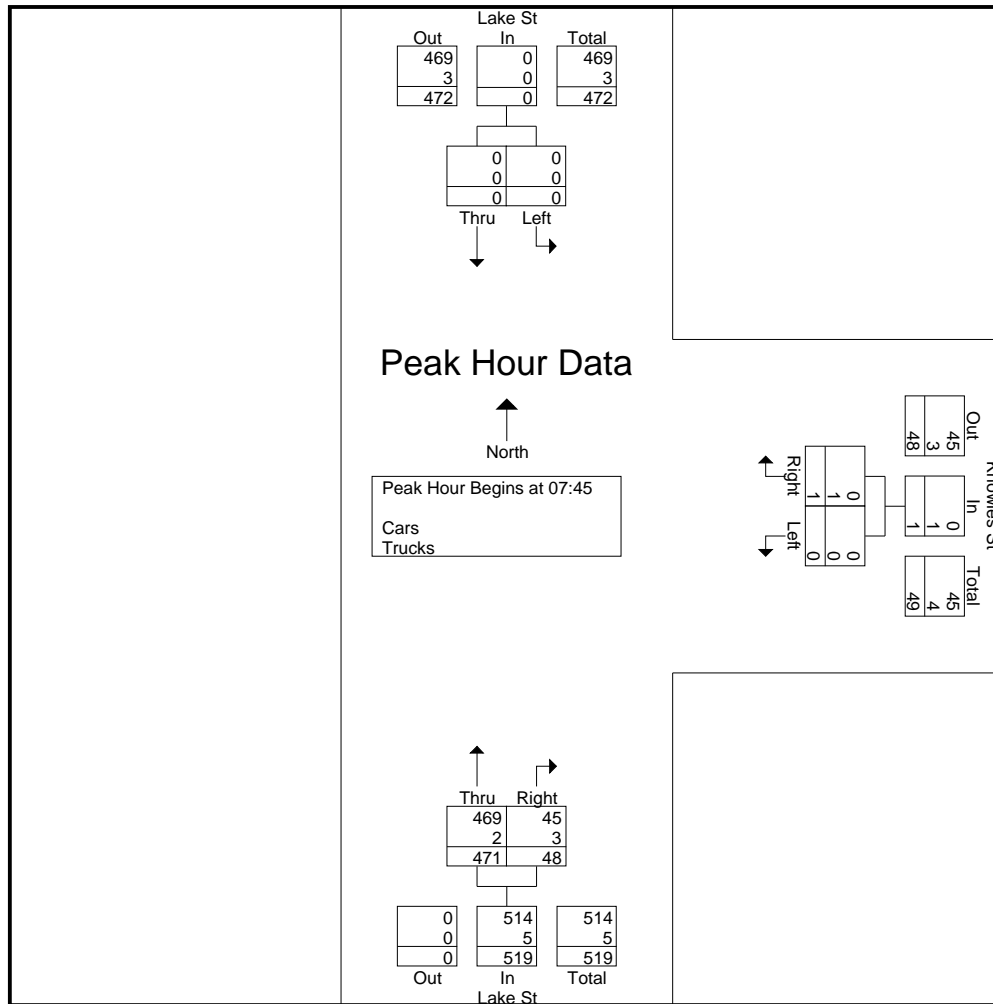
Accurate Counts  
 978-664-2565

File Name : 39000020  
 Site Code : 39000020  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Lake St From North			Knowles St From East			Lake St From South			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
07:00	0	0	0	0	0	4	72	5	0	4	77	81
07:15	0	0	0	0	0	4	101	13	0	4	114	118
07:30	0	0	0	0	0	5	83	7	0	5	90	95
07:45	0	0	0	0	0	6	120	11	0	6	131	137
Total	0	0	0	0	0	19	376	36	0	19	412	431
08:00	0	0	0	0	0	8	115	12	0	8	127	135
08:15	0	0	0	0	0	18	113	15	0	18	128	146
08:30	0	0	0	0	1	14	123	10	0	14	134	148
08:45	0	0	0	0	0	8	99	13	0	8	112	120
Total	0	0	0	0	1	48	450	50	0	48	501	549
Grand Total	0	0	0	0	1	67	826	86	0	67	913	980
Apprch %	0	0		0	100		90.6	9.4				
Total %	0	0		0	0.1		90.5	9.4		6.8	93.2	
Cars	0	0		0	0		820	81		0	0	968
% Cars	0	0	0	0	0	100	99.3	94.2	0	0	0	98.8
Trucks	0	0		0	1		6	5		0	0	12
% Trucks	0	0	0	0	100	0	0.7	5.8	0	0	0	1.2

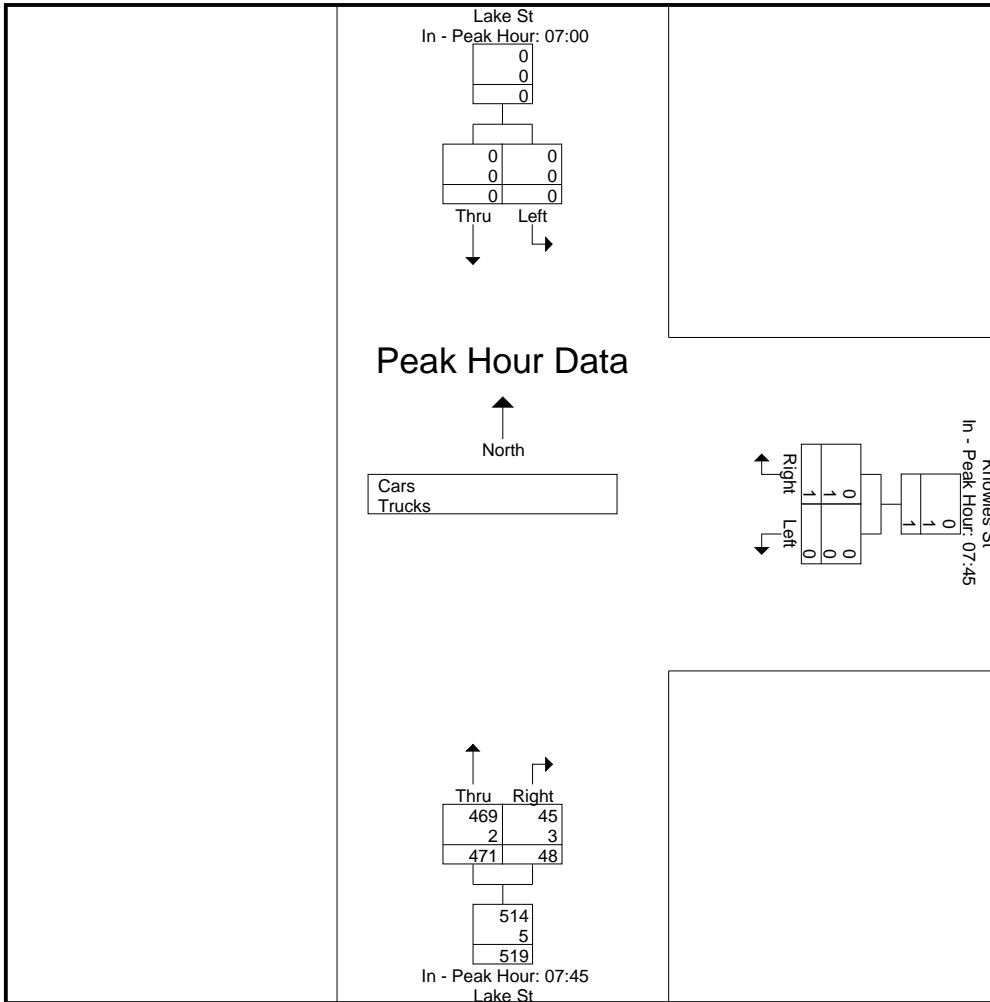
Start Time	Lake St From North			Knowles St From East			Lake St From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45										
07:45	0	0	0	0	0	0	120	11	131	131
08:00	0	0	0	0	0	0	115	12	127	127
08:15	0	0	0	0	0	0	113	15	128	128
08:30	0	0	0	0	1	1	123	10	133	134
Total Volume	0	0	0	0	1	1	471	48	519	520
% App. Total	0	0		0	100		90.8	9.2		
PHF	.000	.000	.000	.000	.250	.250	.957	.800	.976	.970
Cars	0	0	0	0	0	0	469	45	514	514
% Cars	0	0	0	0	0	0	99.6	93.8	99.0	98.8
Trucks	0	0	0	0	1	1	2	3	5	6
% Trucks	0	0	0	0	100	100	0.4	6.3	1.0	1.2



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00			07:45			07:45		
+0 mins.	0	0	0	0	0	0	120	11	131
+15 mins.	0	0	0	0	0	0	115	12	127
+30 mins.	0	0	0	0	0	0	113	15	128
+45 mins.	0	0	0	0	1	1	123	10	133
Total Volume	0	0	0	0	1	1	471	48	519
% App. Total	0	0		0	100		90.8	9.2	
PHF	.000	.000	.000	.000	.250	.250	.957	.800	.976
Cars	0	0	0	0	0	0	469	45	514
% Cars	0	0	0	0	0	0	99.6	93.8	99
Trucks	0	0	0	0	1	1	2	3	5
% Trucks	0	0	0	0	100	100	0.4	6.2	1





N/S Street : Lake Street  
 E/W Street: Knowles Street  
 City/State : Brighton, MA  
 Weather : Clear

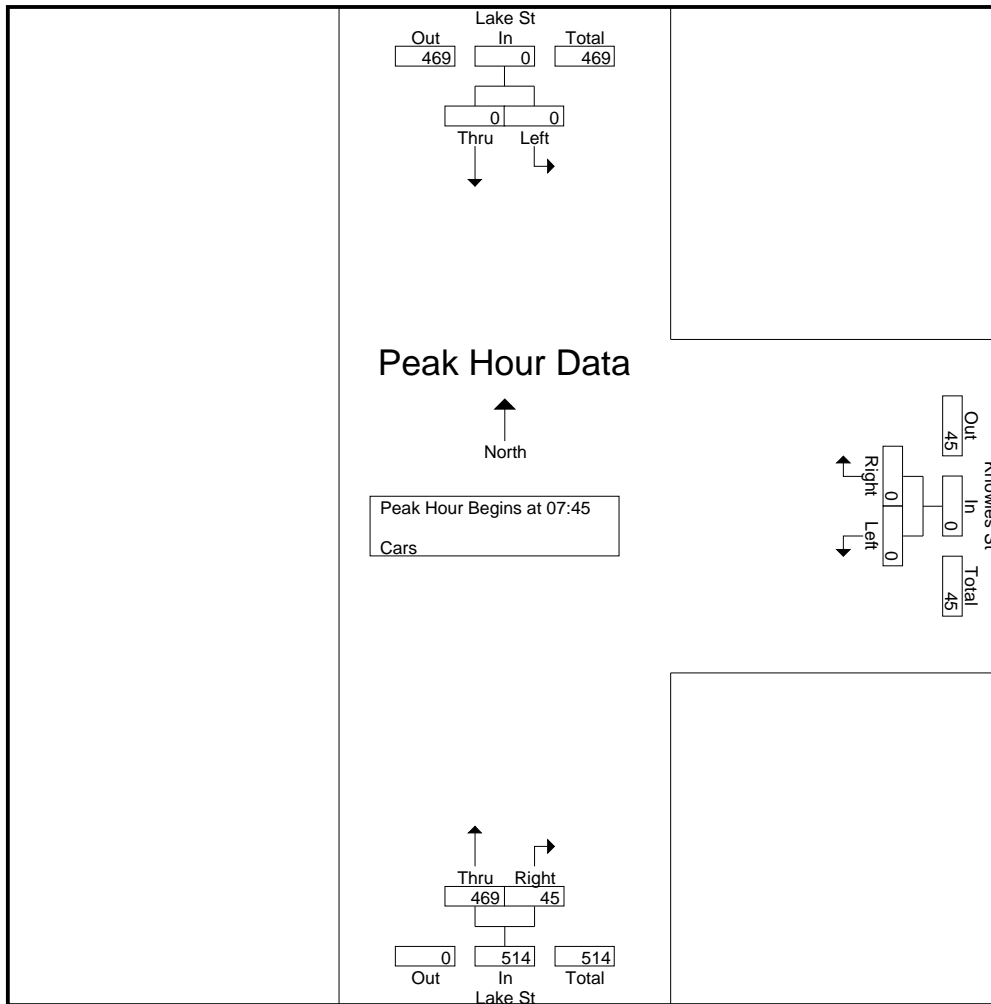
Accurate Counts  
 978-664-2565

File Name : 39000020  
 Site Code : 39000020  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Lake St From North			Knowles St From East			Lake St From South			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
07:00	0	0	0	0	0	4	70	5	0	4	75	79
07:15	0	0	0	0	0	4	99	13	0	4	112	116
07:30	0	0	0	0	0	5	83	6	0	5	89	94
07:45	0	0	0	0	0	6	120	10	0	6	130	136
Total	0	0	0	0	0	19	372	34	0	19	406	425
08:00	0	0	0	0	0	8	114	11	0	8	125	133
08:15	0	0	0	0	0	18	112	15	0	18	127	145
08:30	0	0	0	0	0	14	123	9	0	14	132	146
08:45	0	0	0	0	0	8	99	12	0	8	111	119
Total	0	0	0	0	0	48	448	47	0	48	495	543
Grand Total	0	0	0	0	0	67	820	81	0	67	901	968
Apprch %	0	0		0	0		91	9				
Total %	0	0		0	0		91	9		6.9	93.1	

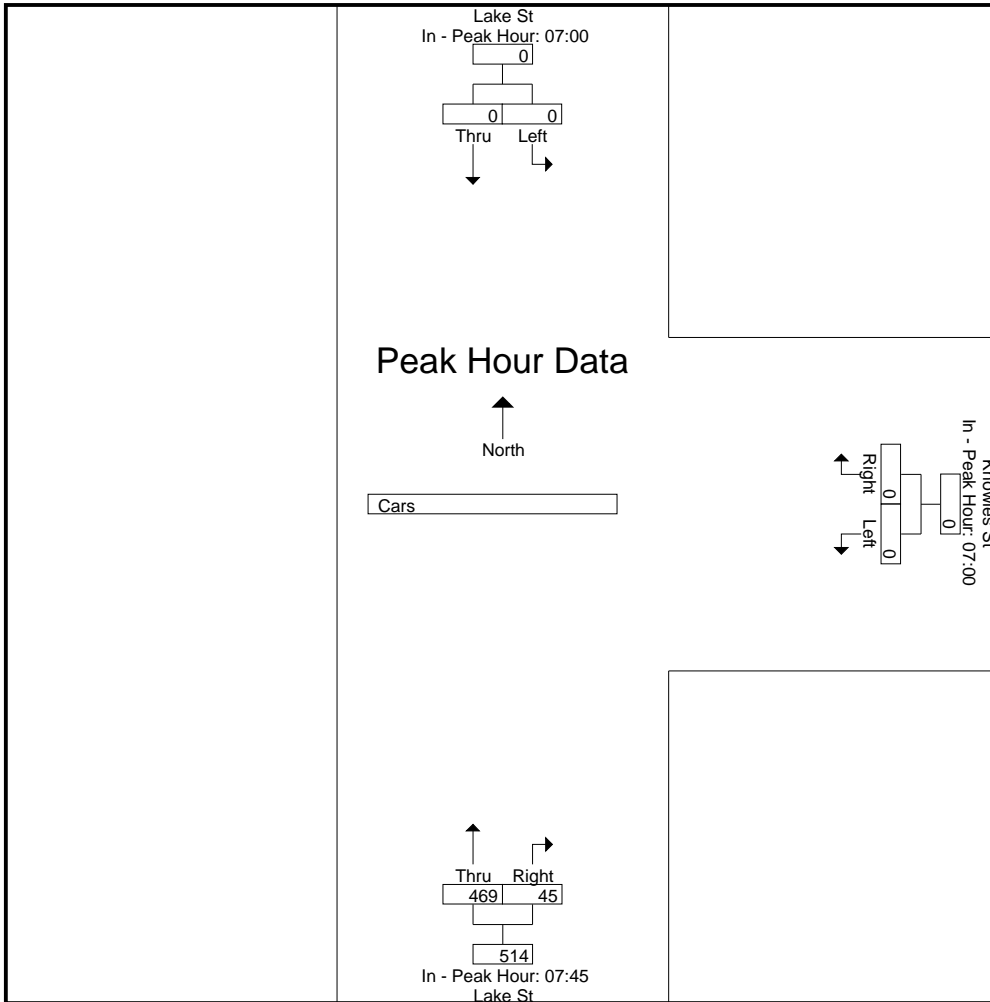
Start Time	Lake St From North			Knowles St From East			Lake St From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45										
07:45	0	0	0	0	0	0	120	10	130	130
08:00	0	0	0	0	0	0	114	11	125	125
08:15	0	0	0	0	0	0	112	15	127	127
08:30	0	0	0	0	0	0	123	9	132	132
Total Volume	0	0	0	0	0	0	469	45	514	514
% App. Total	0	0		0	0		91.2	8.8		
PHF	.000	.000	.000	.000	.000	.000	.953	.750	.973	.973



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00			07:00			07:45		
+0 mins.	0	0	0	0	0	0	120	10	130
+15 mins.	0	0	0	0	0	0	114	11	125
+30 mins.	0	0	0	0	0	0	112	15	127
+45 mins.	0	0	0	0	0	0	123	9	132
Total Volume	0	0	0	0	0	0	469	45	514
% App. Total	0	0	0	0	0	0	91.2	8.8	
PHF	.000	.000	.000	.000	.000	.000	.953	.750	.973



N/S Street : Lake Street  
 E/W Street: Knowles Street  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

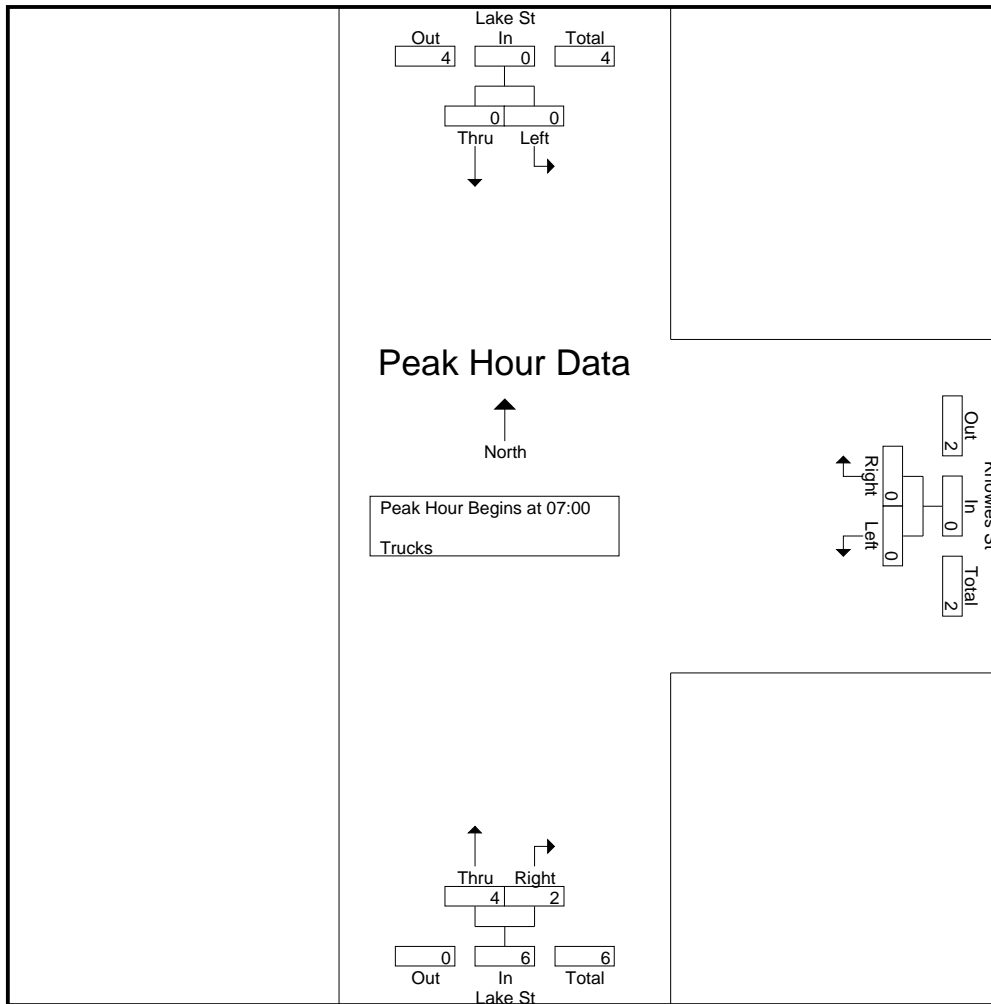
File Name : 39000020  
 Site Code : 39000020  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Lake St From North			Knowles St From East			Lake St From South			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
07:00	0	0	0	0	0	0	2	0	0	0	2	2
07:15	0	0	0	0	0	0	2	0	0	0	2	2
07:30	0	0	0	0	0	0	0	1	0	0	1	1
07:45	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	4	2	0	0	6	6
08:00	0	0	0	0	0	0	1	1	0	0	2	2
08:15	0	0	0	0	0	0	1	0	0	0	1	1
08:30	0	0	0	0	1	0	0	1	0	0	2	2
08:45	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	1	0	2	3	0	0	6	6
Grand Total	0	0	0	0	1	0	6	5	0	0	12	12
Apprch %	0	0		0	100		54.5	45.5				
Total %	0	0		0	8.3		50	41.7		0	100	

Start Time	Lake St From North			Knowles St From East			Lake St From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00	0	0	0	0	0	0	2	0	2	2
07:15	0	0	0	0	0	0	2	0	2	2
07:30	0	0	0	0	0	0	0	1	1	1
07:45	0	0	0	0	0	0	0	1	1	1
Total Volume	0	0	0	0	0	0	4	2	6	6
% App. Total	0	0		0	0		66.7	33.3		
PHF	.000	.000	.000	.000	.000	.000	.500	.500	.750	.750

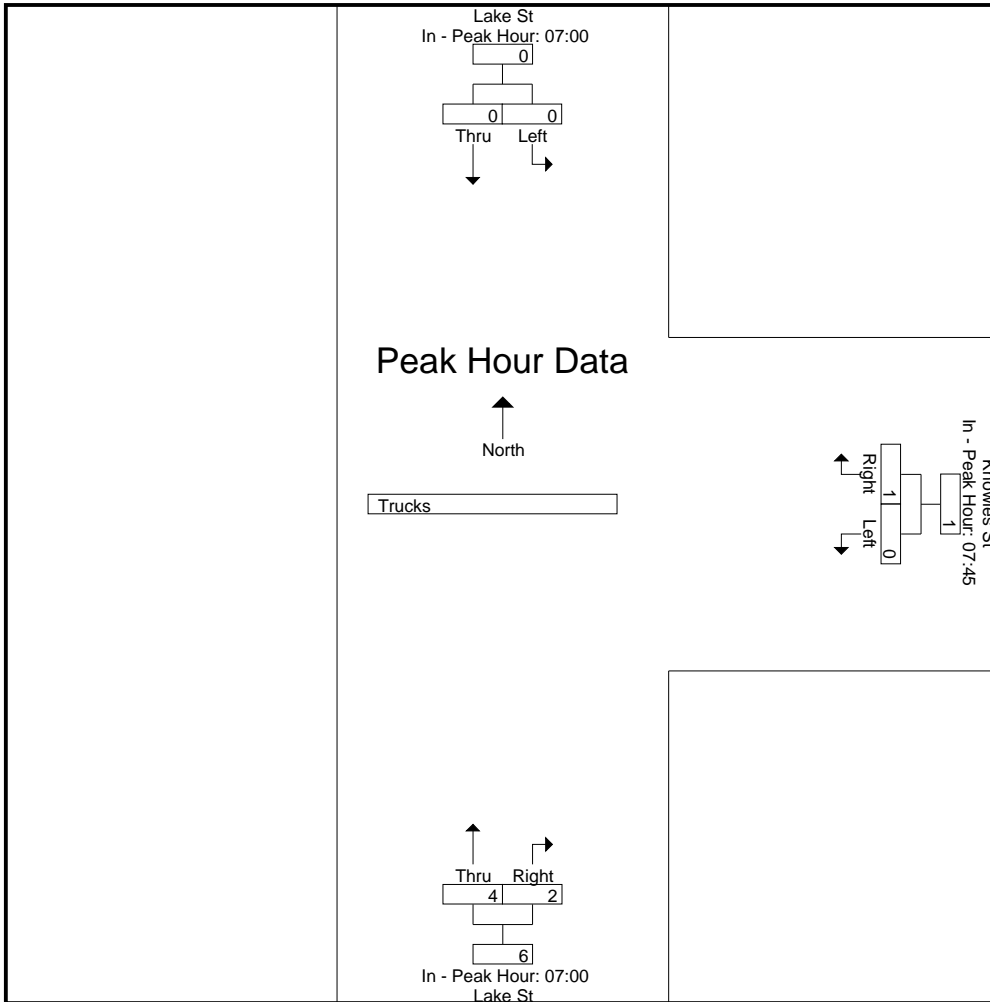
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:00



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00			07:45			07:00		
+0 mins.	0	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	0	0	0	1	1
+45 mins.	0	0	0	0	1	1	0	1	1
Total Volume	0	0	0	0	1	1	4	2	6
% App. Total	0	0		0	100		66.7	33.3	
PHF	.000	.000	.000	.000	.250	.250	.500	.500	.750



N/S Street : Lake Street  
 E/W Street: Knowles Street  
 City/State : Brighton, MA  
 Weather : Clear

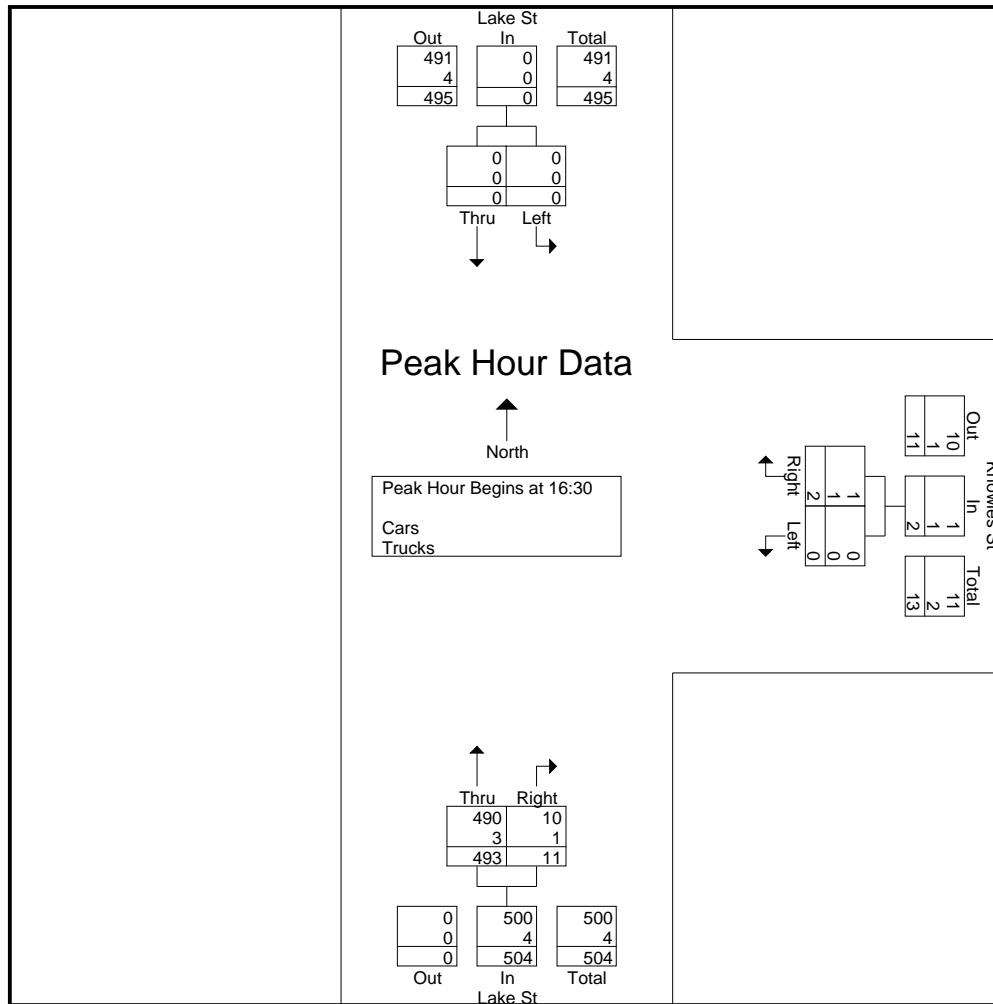
Accurate Counts  
 978-664-2565

File Name : 39000020  
 Site Code : 39000020  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Lake St From North			Knowles St From East			Lake St From South			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
16:00	0	0	0	0	2	15	114	4	0	15	120	135
16:15	0	0	0	0	1	18	116	7	0	18	124	142
16:30	0	0	0	0	2	13	119	4	0	13	125	138
16:45	0	0	0	0	0	20	116	3	0	20	119	139
Total	0	0	0	0	5	66	465	18	0	66	488	554
17:00	0	0	0	0	0	13	108	1	0	13	109	122
17:15	0	0	0	0	0	22	150	3	0	22	153	175
17:30	0	0	0	0	0	39	110	2	0	39	112	151
17:45	0	0	0	0	0	13	109	0	0	13	109	122
Total	0	0	0	0	0	87	477	6	0	87	483	570
Grand Total	0	0	0	0	5	153	942	24	0	153	971	1124
Apprch %	0	0		0	100		97.5	2.5				
Total %	0	0		0	0.5		97	2.5		13.6	86.4	
Cars	0	0		0	4		936	23		0	0	1116
% Cars	0	0	0	0	80	100	99.4	95.8	0	0	0	99.3
Trucks	0	0		0	1		6	1		0	0	8
% Trucks	0	0	0	0	20	0	0.6	4.2	0	0	0	0.7

Start Time	Lake St From North			Knowles St From East			Lake St From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 16:30										
16:30	0	0	0	0	2	2	119	4	123	125
16:45	0	0	0	0	0	0	116	3	119	119
17:00	0	0	0	0	0	0	108	1	109	109
17:15	0	0	0	0	0	0	150	3	153	153
Total Volume	0	0	0	0	2	2	493	11	504	506
% App. Total	0	0		0	100		97.8	2.2		
PHF	.000	.000	.000	.000	.250	.250	.822	.688	.824	.827
Cars	0	0	0	0	1	1	490	10	500	501
% Cars	0	0	0	0	50.0	50.0	99.4	90.9	99.2	99.0
Trucks	0	0	0	0	1	1	3	1	4	5
% Trucks	0	0	0	0	50.0	50.0	0.6	9.1	0.8	1.0

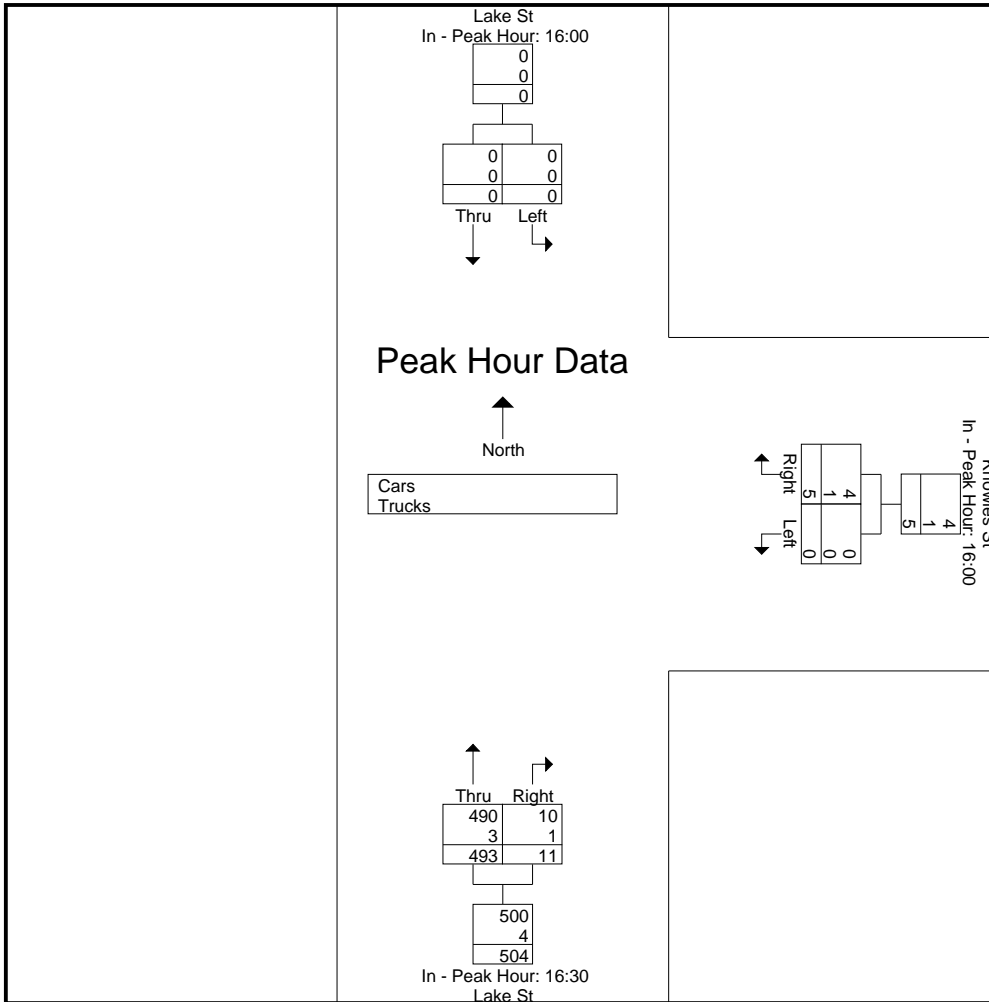


Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00			16:00			16:30		
+0 mins.	0	0	0	0	2	2	119	4	123
+15 mins.	0	0	0	0	1	1	116	3	119
+30 mins.	0	0	0	0	2	2	108	1	109
+45 mins.	0	0	0	0	0	0	150	3	153
Total Volume	0	0	0	0	5	5	493	11	504
% App. Total	0	0	0	0	100		97.8	2.2	
PHF	.000	.000	.000	.000	.625	.625	.822	.688	.824
Cars	0	0	0	0	4	4	490	10	500
% Cars	0	0	0	0	80	80	99.4	90.9	99.2
Trucks	0	0	0	0	1	1	3	1	4
% Trucks	0	0	0	0	20	20	0.6	9.1	0.8





N/S Street : Lake Street  
 E/W Street: Knowles Street  
 City/State : Brighton, MA  
 Weather : Clear

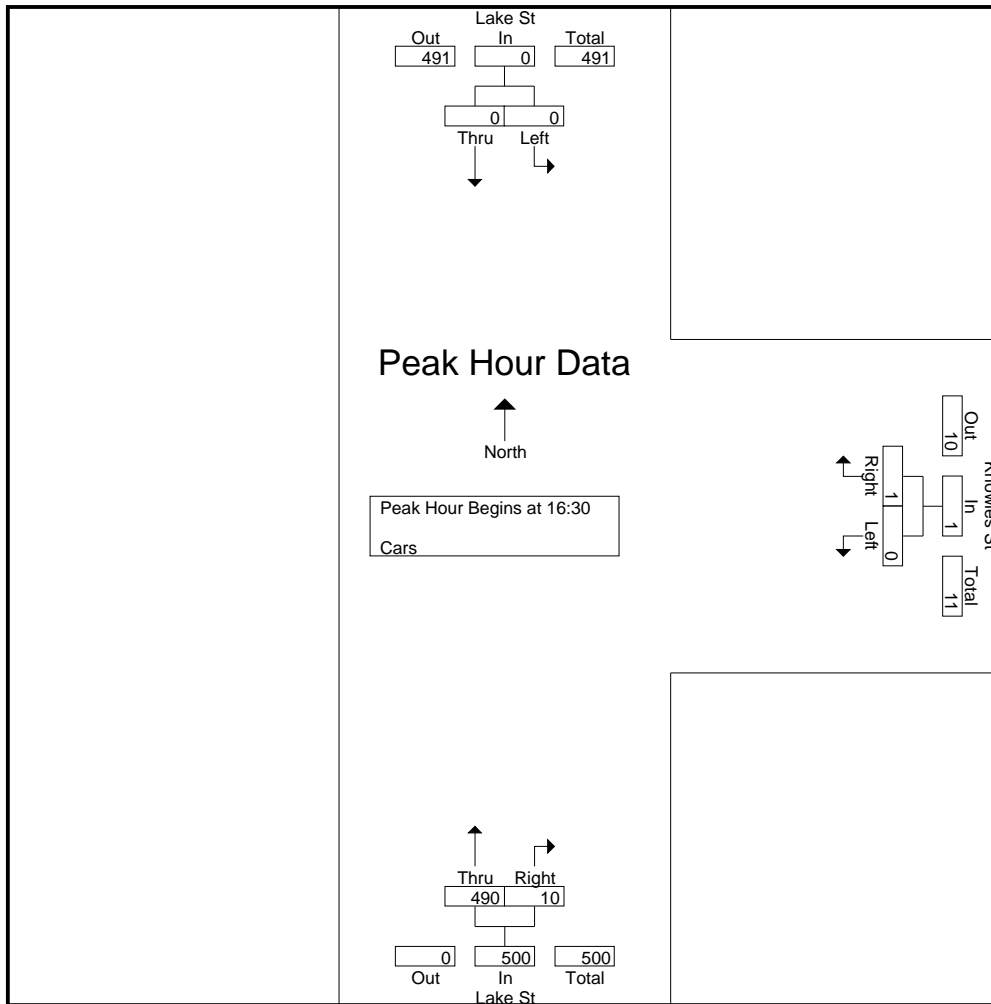
Accurate Counts  
 978-664-2565

File Name : 39000020  
 Site Code : 39000020  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Lake St From North			Knowles St From East			Lake St From South			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
16:00	0	0	0	0	2	15	113	4	0	15	119	134
16:15	0	0	0	0	1	18	114	7	0	18	122	140
16:30	0	0	0	0	1	13	117	3	0	13	121	134
16:45	0	0	0	0	0	20	116	3	0	20	119	139
Total	0	0	0	0	4	66	460	17	0	66	481	547
17:00	0	0	0	0	0	13	107	1	0	13	108	121
17:15	0	0	0	0	0	22	150	3	0	22	153	175
17:30	0	0	0	0	0	39	110	2	0	39	112	151
17:45	0	0	0	0	0	13	109	0	0	13	109	122
Total	0	0	0	0	0	87	476	6	0	87	482	569
Grand Total	0	0	0	0	4	153	936	23	0	153	963	1116
Apprch %	0	0		0	100		97.6	2.4				
Total %	0	0		0	0.4		97.2	2.4		13.7	86.3	

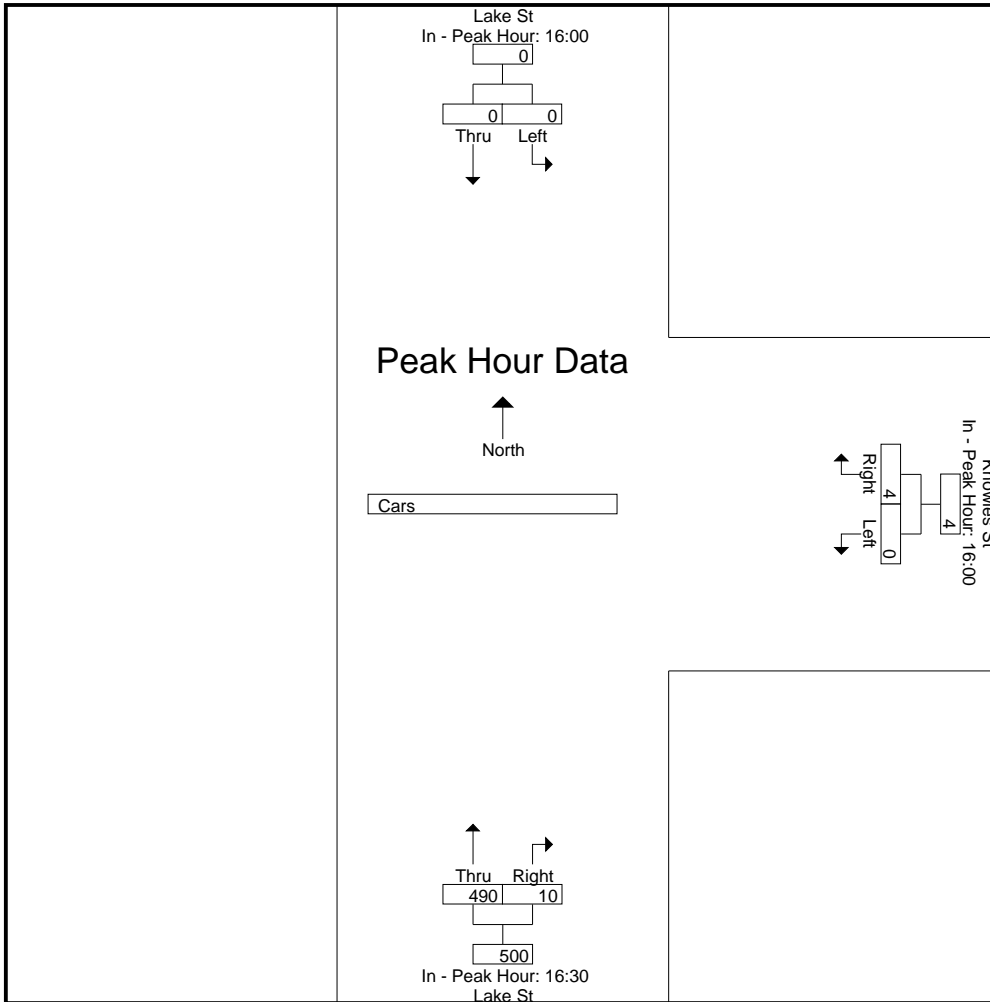
Start Time	Lake St From North			Knowles St From East			Lake St From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 16:30										
16:30	0	0	0	0	1	1	117	3	120	121
16:45	0	0	0	0	0	0	116	3	119	119
17:00	0	0	0	0	0	0	107	1	108	108
17:15	0	0	0	0	0	0	150	3	153	153
Total Volume	0	0	0	0	1	1	490	10	500	501
% App. Total	0	0		0	100		98	2		
PHF	.000	.000	.000	.000	.250	.250	.817	.833	.817	.819



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00			16:00			16:30		
+0 mins.	0	0	0	0	2	2	117	3	120
+15 mins.	0	0	0	0	1	1	116	3	119
+30 mins.	0	0	0	0	1	1	107	1	108
+45 mins.	0	0	0	0	0	0	150	3	153
Total Volume	0	0	0	0	4	4	490	10	500
% App. Total	0	0	0	0	100		98	2	
PHF	.000	.000	.000	.000	.500	.500	.817	.833	.817



N/S Street : Lake Street  
 E/W Street: Knowles Street  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

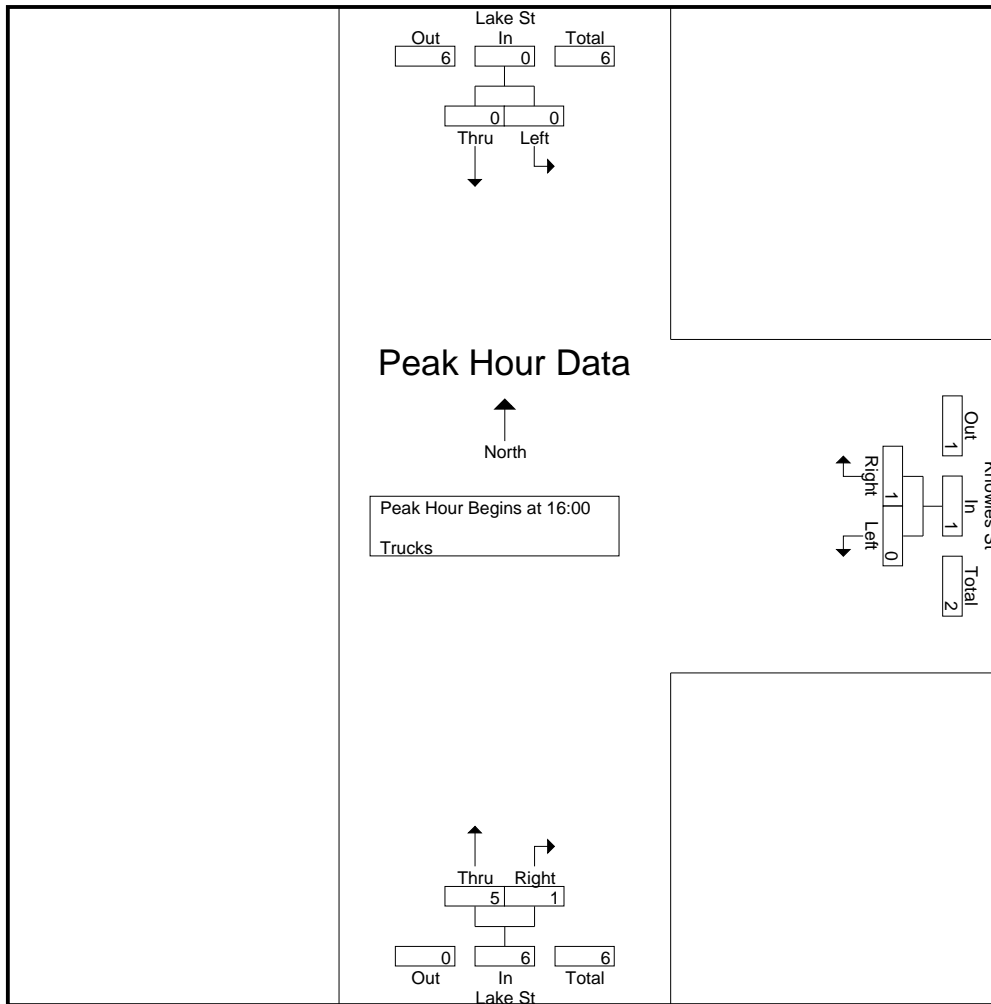
File Name : 39000020  
 Site Code : 39000020  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Lake St From North			Knowles St From East			Lake St From South			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
16:00	0	0	0	0	0	0	1	0	0	0	1	1
16:15	0	0	0	0	0	0	2	0	0	0	2	2
16:30	0	0	0	0	1	0	2	1	0	0	4	4
16:45	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	5	1	0	0	7	7
17:00	0	0	0	0	0	0	1	0	0	0	1	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	0	1	1
Grand Total	0	0	0	0	1	0	6	1	0	0	8	8
Apprch %	0	0		0	100		85.7	14.3				
Total %	0	0		0	12.5		75	12.5		0	100	

Start Time	Lake St From North			Knowles St From East			Lake St From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
16:00	0	0	0	0	0	0	1	0	1	1
16:15	0	0	0	0	0	0	2	0	2	2
16:30	0	0	0	0	1	1	2	1	3	4
16:45	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	1	5	1	6	7
% App. Total	0	0		0	100		83.3	16.7		
PHF	.000	.000	.000	.000	.250	.250	.625	.250	.500	.438

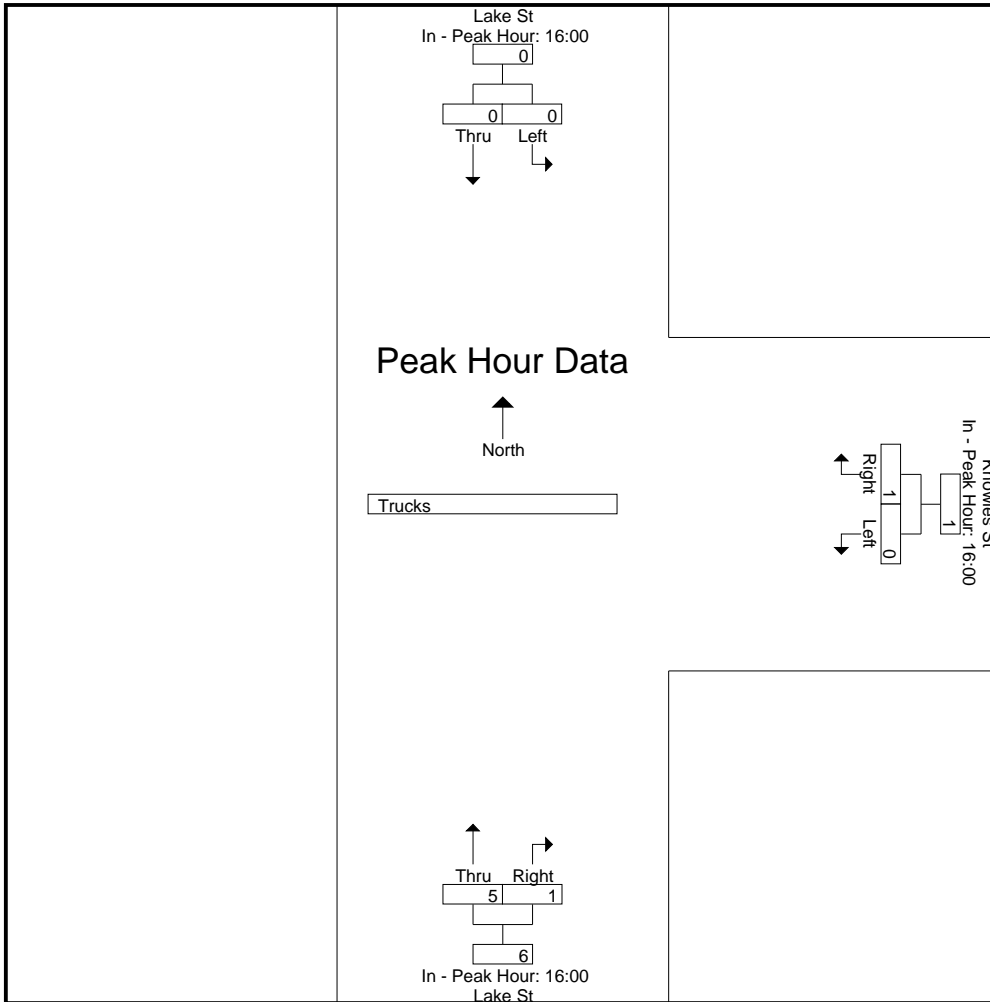
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 16:00



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00			16:00			16:00		
+0 mins.	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	1	1	2	1	3
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	1	5	1	6
% App. Total	0	0	0	0	100		83.3	16.7	
PHF	.000	.000	.000	.000	.250	.250	.625	.250	.500



N/S Street : BC Main Drive  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

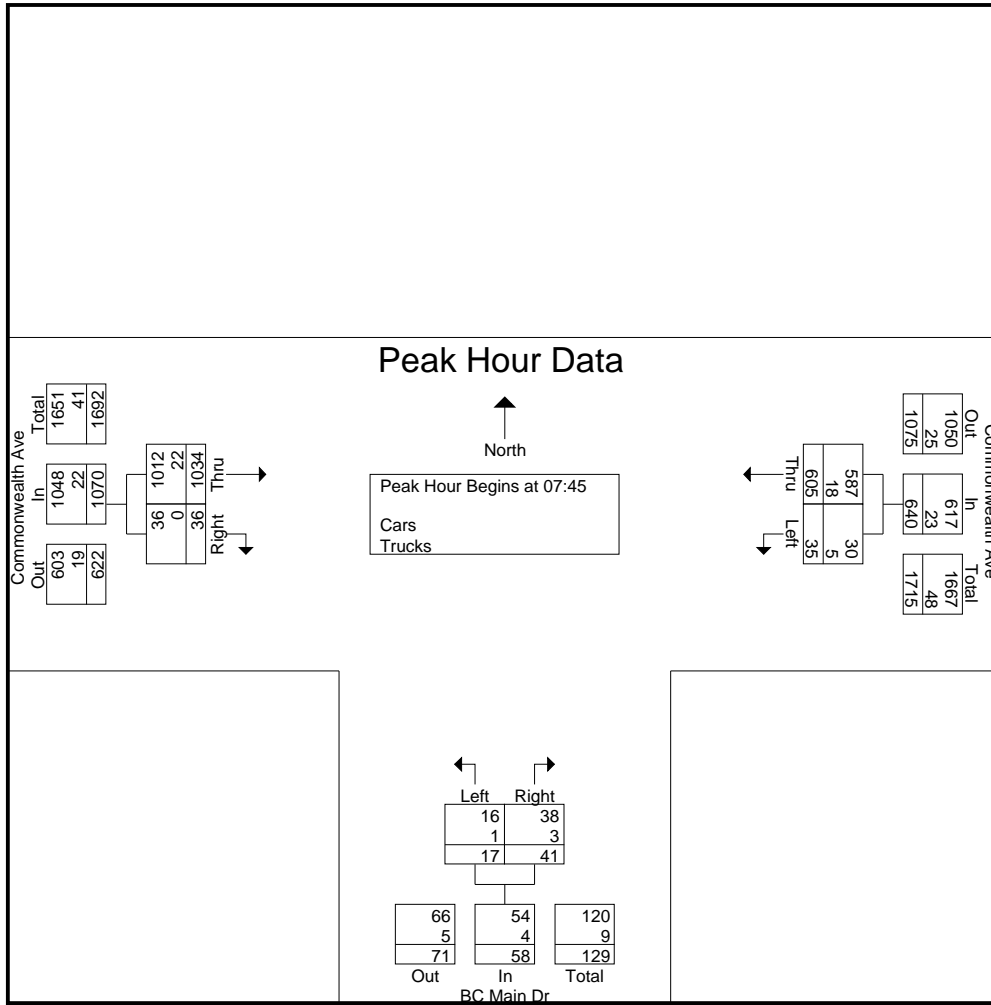
File Name : 39000021  
 Site Code : 39000021  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Commonwealth Ave From East			BC Main Dr From South			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
07:00	3	65	0	2	2	1	133	9	0	1	214	215
07:15	2	102	0	5	22	4	177	5	1	5	313	318
07:30	7	120	0	2	11	2	231	10	0	2	381	383
07:45	9	143	0	1	7	4	256	14	0	4	430	434
Total	21	430	0	10	42	11	797	38	1	12	1338	1350
08:00	8	163	0	1	5	3	260	7	0	3	444	447
08:15	7	155	0	2	8	4	267	8	0	4	447	451
08:30	11	144	0	13	21	9	251	7	0	9	447	456
08:45	8	143	0	2	14	5	252	10	1	6	429	435
Total	34	605	0	18	48	21	1030	32	1	22	1767	1789
Grand Total	55	1035	0	28	90	32	1827	70	2	34	3105	3139
Apprch %	5	95		23.7	76.3		96.3	3.7				
Total %	1.8	33.3		0.9	2.9		58.8	2.3		1.1	98.9	
Cars	50	1002		26	85		1785	69		0	0	3051
% Cars	90.9	96.8	0	92.9	94.4	100	97.7	98.6	100	0	0	97.2
Trucks	5	33		2	5		42	1		0	0	88
% Trucks	9.1	3.2	0	7.1	5.6	0	2.3	1.4	0	0	0	2.8

Start Time	Commonwealth Ave From East			BC Main Dr From South			Commonwealth Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45										
07:45	9	143	152	1	7	8	256	14	270	430
08:00	8	163	171	1	5	6	260	7	267	444
08:15	7	155	162	2	8	10	267	8	275	447
08:30	11	144	155	13	21	34	251	7	258	447
Total Volume	35	605	640	17	41	58	1034	36	1070	1768
% App. Total	5.5	94.5		29.3	70.7		96.6	3.4		
PHF	.795	.928	.936	.327	.488	.426	.968	.643	.973	.989
Cars	30	587	617	16	38	54	1012	36	1048	1719
% Cars	85.7	97.0	96.4	94.1	92.7	93.1	97.9	100	97.9	97.2
Trucks	5	18	23	1	3	4	22	0	22	49
% Trucks	14.3	3.0	3.6	5.9	7.3	6.9	2.1	0	2.1	2.8

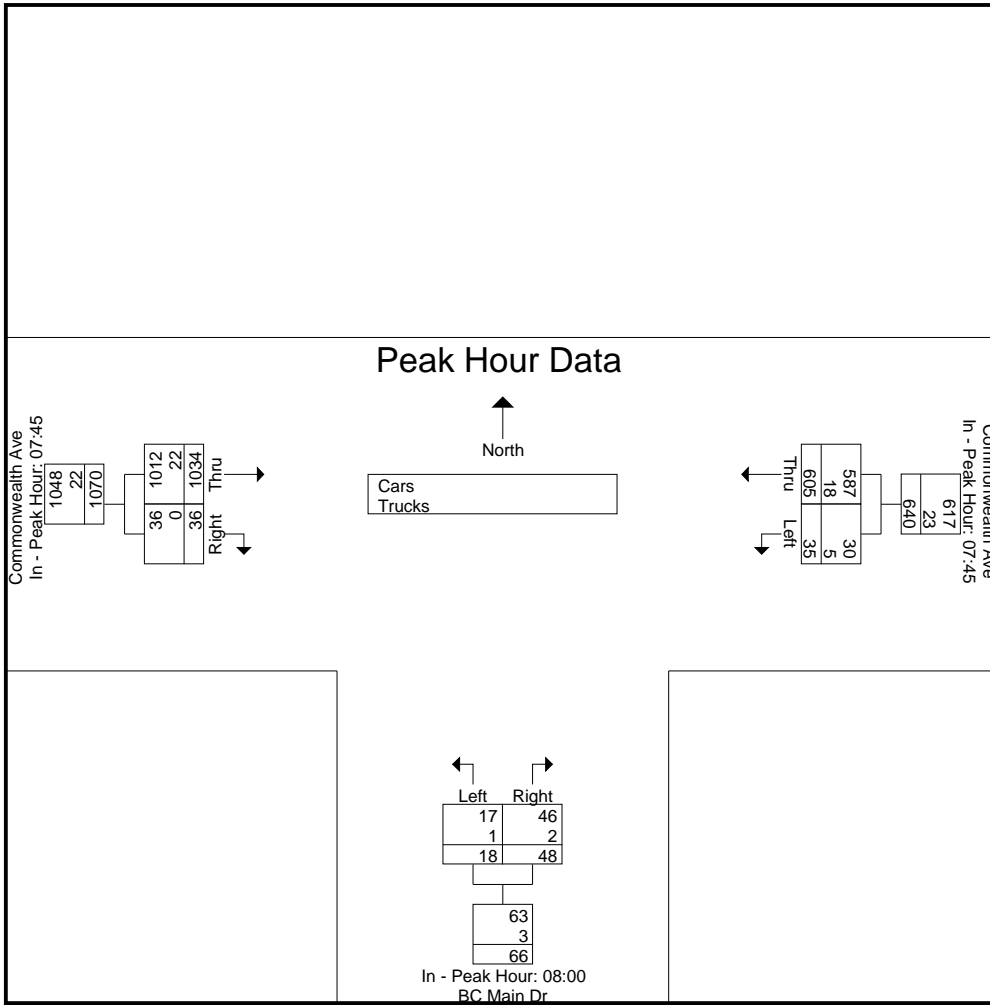




Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45			08:00			07:45		
+0 mins.	9	143	152	1	5	6	256	14	270
+15 mins.	8	163	171	2	8	10	260	7	267
+30 mins.	7	155	162	13	21	34	267	8	275
+45 mins.	11	144	155	2	14	16	251	7	258
Total Volume	35	605	640	18	48	66	1034	36	1070
% App. Total	5.5	94.5		27.3	72.7		96.6	3.4	
PHF	.795	.928	.936	.346	.571	.485	.968	.643	.973
Cars	30	587	617	17	46	63	1012	36	1048
% Cars	85.7	97	96.4	94.4	95.8	95.5	97.9	100	97.9
Trucks	5	18	23	1	2	3	22	0	22
% Trucks	14.3	3	3.6	5.6	4.2	4.5	2.1	0	2.1



N/S Street : BC Main Drive  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

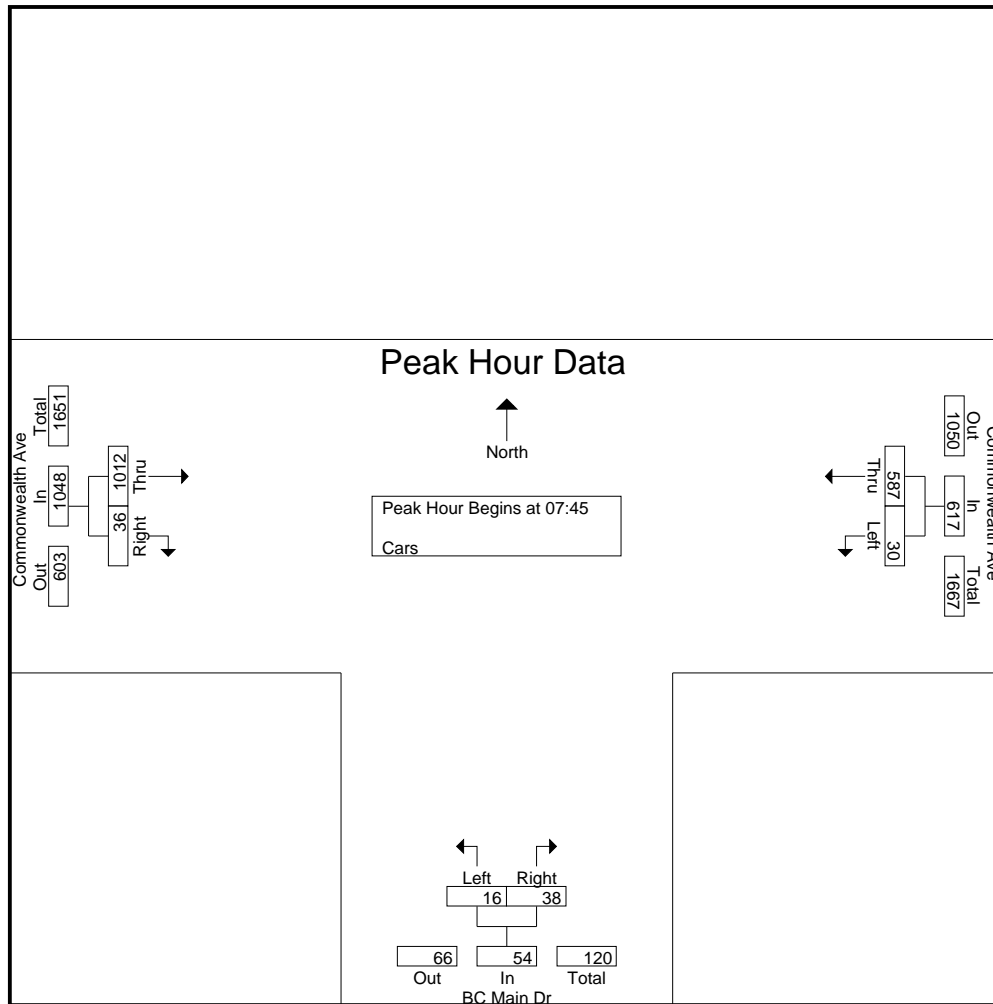
Accurate Counts  
 978-664-2565

File Name : 39000021  
 Site Code : 39000021  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Commonwealth Ave From East			BC Main Dr From South			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
07:00	3	61	0	1	2	1	129	8	0	1	204	205
07:15	2	99	0	5	21	4	174	5	1	5	306	311
07:30	7	115	0	2	10	2	225	10	0	2	369	371
07:45	7	139	0	1	6	4	253	14	0	4	420	424
Total	19	414	0	9	39	11	781	37	1	12	1299	1311
08:00	7	159	0	1	4	3	252	7	0	3	430	433
08:15	7	149	0	2	8	4	262	8	0	4	436	440
08:30	9	140	0	12	20	9	245	7	0	9	433	442
08:45	8	140	0	2	14	5	245	10	1	6	419	425
Total	31	588	0	17	46	21	1004	32	1	22	1718	1740
Grand Total	50	1002	0	26	85	32	1785	69	2	34	3017	3051
Apprch %	4.8	95.2		23.4	76.6		96.3	3.7				
Total %	1.7	33.2		0.9	2.8		59.2	2.3		1.1	98.9	

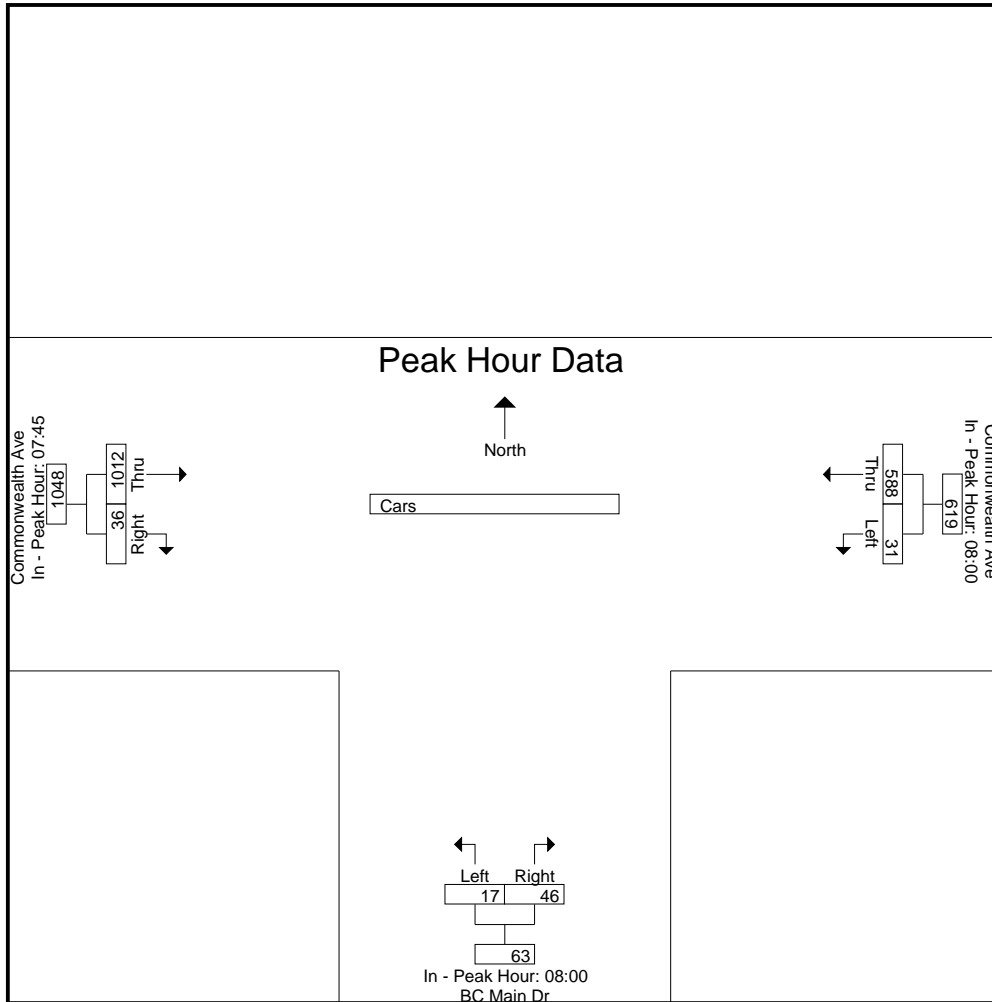
Start Time	Commonwealth Ave From East			BC Main Dr From South			Commonwealth Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45										
07:45	7	139	146	1	6	7	253	14	267	420
08:00	7	159	166	1	4	5	252	7	259	430
08:15	7	149	156	2	8	10	262	8	270	436
08:30	9	140	149	12	20	32	245	7	252	433
Total Volume	30	587	617	16	38	54	1012	36	1048	1719
% App. Total	4.9	95.1		29.6	70.4		96.6	3.4		
PHF	.833	.923	.929	.333	.475	.422	.966	.643	.970	.986



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00			08:00			07:45		
+0 mins.	7	159	166	1	4	5	253	14	267
+15 mins.	7	149	156	2	8	10	252	7	259
+30 mins.	9	140	149	12	20	32	262	8	270
+45 mins.	8	140	148	2	14	16	245	7	252
Total Volume	31	588	619	17	46	63	1012	36	1048
% App. Total	5	95		27	73		96.6	3.4	
PHF	.861	.925	.932	.354	.575	.492	.966	.643	.970



N/S Street : BC Main Drive  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

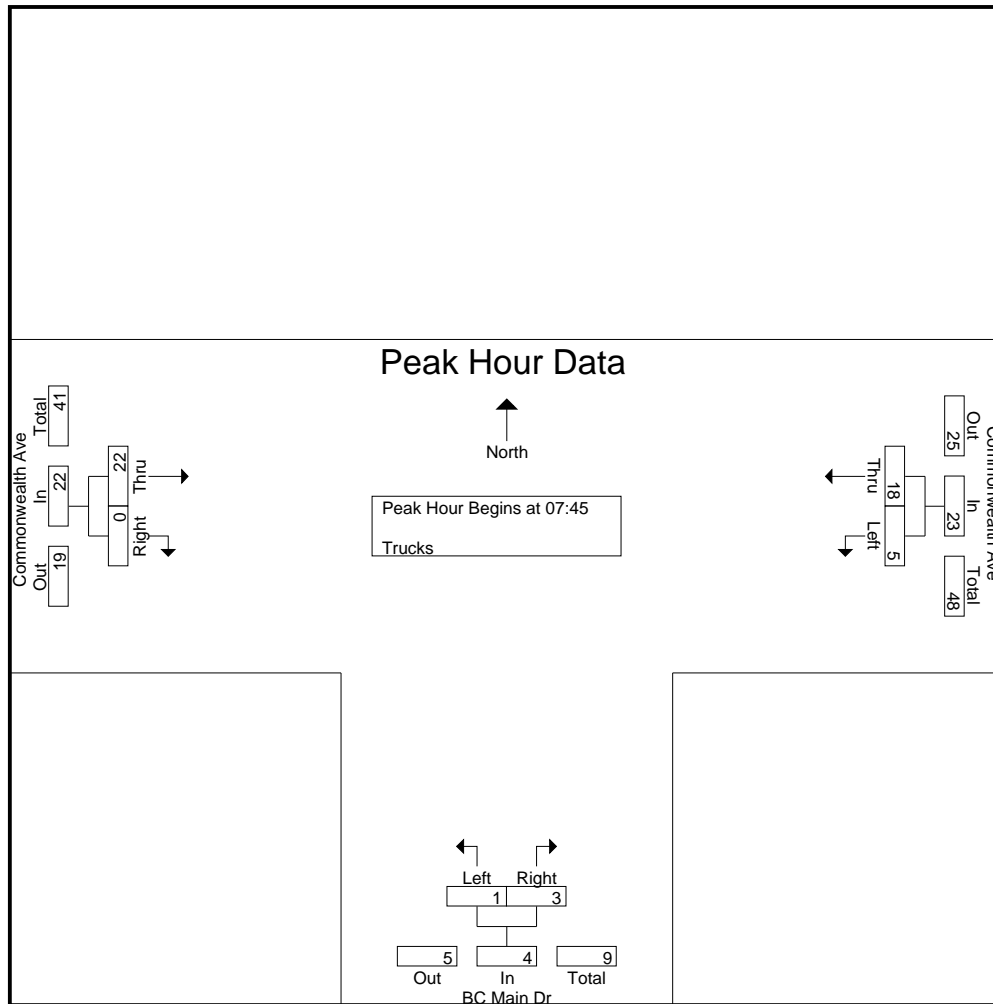
Accurate Counts  
 978-664-2565

File Name : 39000021  
 Site Code : 39000021  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Commonwealth Ave From East			BC Main Dr From South			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
07:00	0	4	0	1	0	0	4	1	0	0	10	10
07:15	0	3	0	0	1	0	3	0	0	0	7	7
07:30	0	5	0	0	1	0	6	0	0	0	12	12
07:45	2	4	0	0	1	0	3	0	0	0	10	10
Total	2	16	0	1	3	0	16	1	0	0	39	39
08:00	1	4	0	0	1	0	8	0	0	0	14	14
08:15	0	6	0	0	0	0	5	0	0	0	11	11
08:30	2	4	0	1	1	0	6	0	0	0	14	14
08:45	0	3	0	0	0	0	7	0	0	0	10	10
Total	3	17	0	1	2	0	26	0	0	0	49	49
Grand Total	5	33	0	2	5	0	42	1	0	0	88	88
Apprch %	13.2	86.8		28.6	71.4		97.7	2.3				
Total %	5.7	37.5		2.3	5.7		47.7	1.1		0	100	

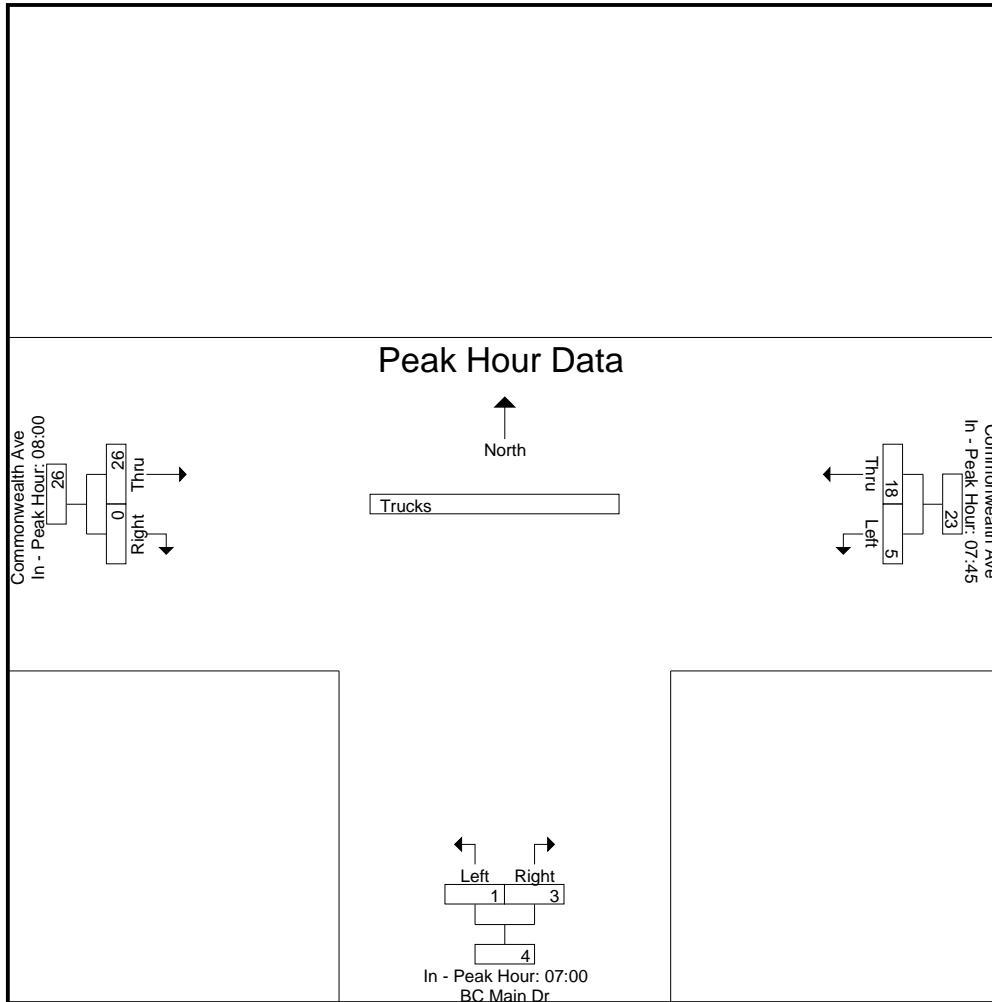
Start Time	Commonwealth Ave From East			BC Main Dr From South			Commonwealth Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45										
07:45	2	4	6	0	1	1	3	0	3	10
08:00	1	4	5	0	1	1	8	0	8	14
08:15	0	6	6	0	0	0	5	0	5	11
08:30	2	4	6	1	1	2	6	0	6	14
Total Volume	5	18	23	1	3	4	22	0	22	49
% App. Total	21.7	78.3		25	75		100	0		
PHF	.625	.750	.958	.250	.750	.500	.688	.000	.688	.875



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45			07:00			08:00		
+0 mins.	2	4	6	1	0	1	8	0	8
+15 mins.	1	4	5	0	1	1	5	0	5
+30 mins.	0	6	6	0	1	1	6	0	6
+45 mins.	2	4	6	0	1	1	7	0	7
Total Volume	5	18	23	1	3	4	26	0	26
% App. Total	21.7	78.3		25	75		100	0	
PHF	.625	.750	.958	.250	.750	1.000	.813	.000	.813





N/S Street : BC Main Drive  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

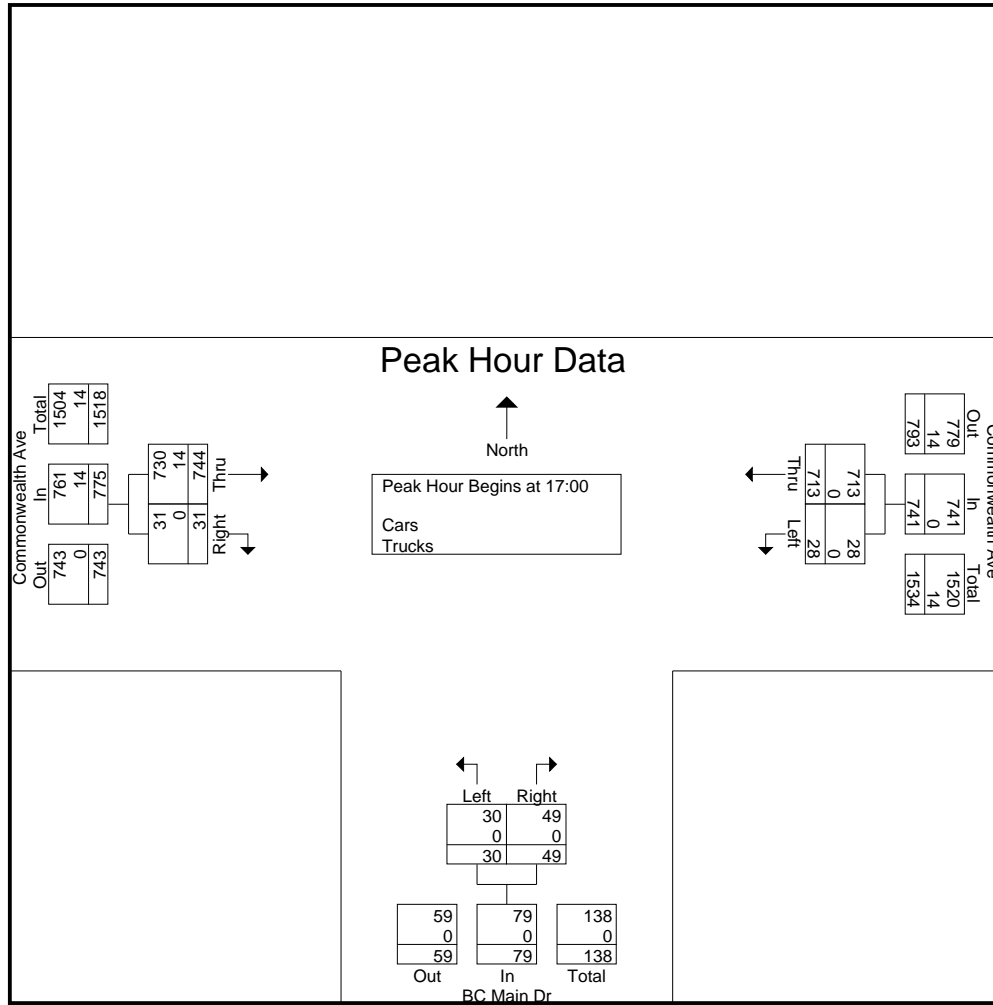
Accurate Counts  
 978-664-2565

File Name : 39000021  
 Site Code : 39000021  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Commonwealth Ave From East			BC Main Dr From South			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
16:00	8	148	0	7	9	16	154	10	1	17	336	353
16:15	12	155	2	4	16	10	165	9	1	13	361	374
16:30	9	166	0	3	4	15	168	10	2	17	360	377
16:45	5	142	0	4	10	10	152	9	3	13	322	335
Total	34	611	2	18	39	51	639	38	7	60	1379	1439
17:00	10	173	0	10	13	32	204	15	0	32	425	457
17:15	7	170	2	7	11	16	170	8	2	20	373	393
17:30	6	198	1	6	8	18	208	1	0	19	427	446
17:45	5	172	0	7	17	9	162	7	3	12	370	382
Total	28	713	3	30	49	75	744	31	5	83	1595	1678
Grand Total	62	1324	5	48	88	126	1383	69	12	143	2974	3117
Apprch %	4.5	95.5		35.3	64.7		95.2	4.8				
Total %	2.1	44.5		1.6	3		46.5	2.3		4.6	95.4	
Cars	62	1319		48	88		1353	68		0	0	3081
% Cars	100	99.6	100	100	100	100	97.8	98.6	100	0	0	98.8
Trucks	0	5		0	0		30	1		0	0	36
% Trucks	0	0.4	0	0	0	0	2.2	1.4	0	0	0	1.2

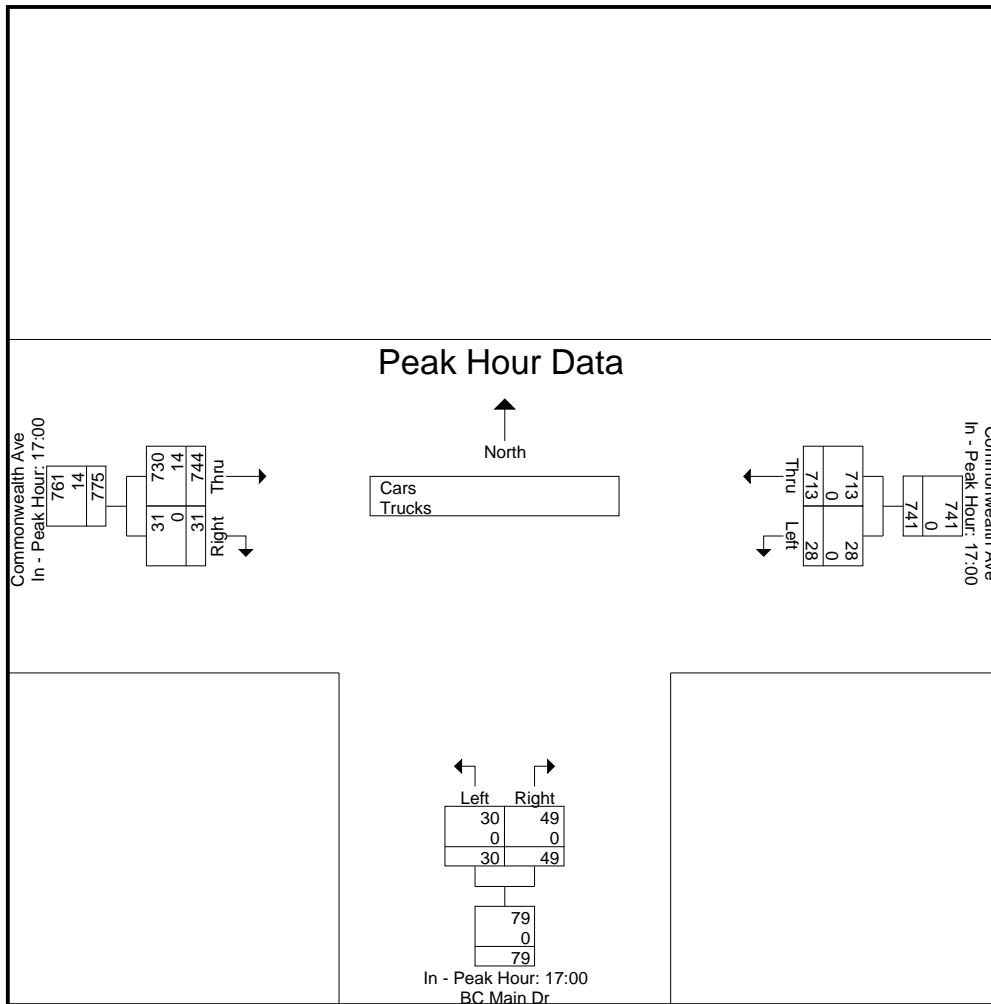
Start Time	Commonwealth Ave From East			BC Main Dr From South			Commonwealth Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 17:00										
17:00	10	173	183	10	13	23	204	15	219	425
17:15	7	170	177	7	11	18	170	8	178	373
17:30	6	198	204	6	8	14	208	1	209	427
17:45	5	172	177	7	17	24	162	7	169	370
Total Volume	28	713	741	30	49	79	744	31	775	1595
% App. Total	3.8	96.2		38	62		96	4		
PHF	.700	.900	.908	.750	.721	.823	.894	.517	.885	.934
Cars	28	713	741	30	49	79	730	31	761	1581
% Cars	100	100	100	100	100	100	98.1	100	98.2	99.1
Trucks	0	0	0	0	0	0	14	0	14	14
% Trucks	0	0	0	0	0	0	1.9	0	1.8	0.9



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00			17:00			17:00		
+0 mins.	10	173	183	10	13	23	204	15	219
+15 mins.	7	170	177	7	11	18	170	8	178
+30 mins.	6	198	204	6	8	14	208	1	209
+45 mins.	5	172	177	7	17	24	162	7	169
Total Volume	28	713	741	30	49	79	744	31	775
% App. Total	3.8	96.2		38	62		96	4	
PHF	.700	.900	.908	.750	.721	.823	.894	.517	.885
Cars	28	713	741	30	49	79	730	31	761
% Cars	100	100	100	100	100	100	98.1	100	98.2
Trucks	0	0	0	0	0	0	14	0	14
% Trucks	0	0	0	0	0	0	1.9	0	1.8



N/S Street : BC Main Drive  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

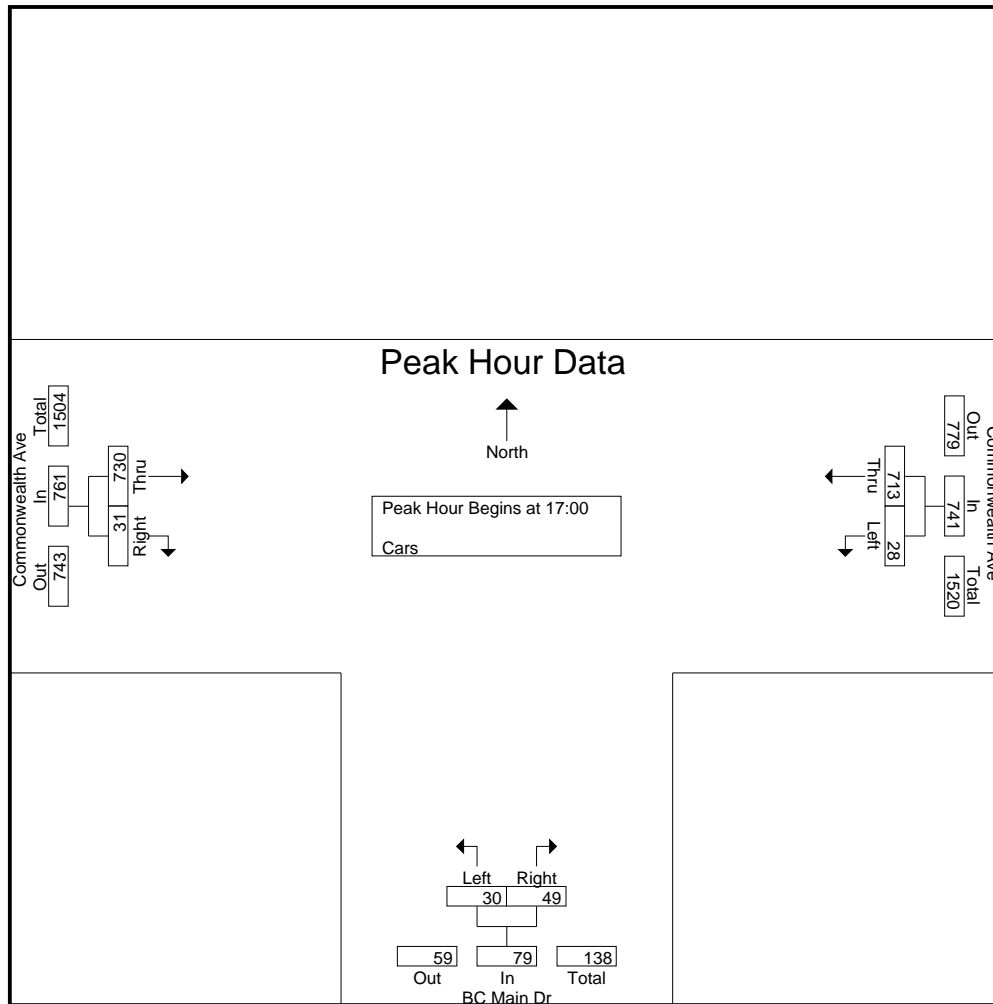
File Name : 39000021  
 Site Code : 39000021  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Commonwealth Ave From East			BC Main Dr From South			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
16:00	8	145	0	7	9	16	151	10	1	17	330	347
16:15	12	155	2	4	16	10	159	9	1	13	355	368
16:30	9	165	0	3	4	15	165	9	2	17	355	372
16:45	5	141	0	4	10	10	148	9	3	13	317	330
Total	34	606	2	18	39	51	623	37	7	60	1357	1417
17:00	10	173	0	10	13	32	200	15	0	32	421	453
17:15	7	170	2	7	11	16	167	8	2	20	370	390
17:30	6	198	1	6	8	18	204	1	0	19	423	442
17:45	5	172	0	7	17	9	159	7	3	12	367	379
Total	28	713	3	30	49	75	730	31	5	83	1581	1664
Grand Total	62	1319	5	48	88	126	1353	68	12	143	2938	3081
Apprch %	4.5	95.5		35.3	64.7		95.2	4.8				
Total %	2.1	44.9		1.6	3		46.1	2.3		4.6	95.4	

Start Time	Commonwealth Ave From East			BC Main Dr From South			Commonwealth Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
17:00	10	173	183	10	13	23	200	15	215	421
17:15	7	170	177	7	11	18	167	8	175	370
17:30	6	198	204	6	8	14	204	1	205	423
17:45	5	172	177	7	17	24	159	7	166	367
Total Volume	28	713	741	30	49	79	730	31	761	1581
% App. Total	3.8	96.2		38	62		95.9	4.1		
PHF	.700	.900	.908	.750	.721	.823	.895	.517	.885	.934

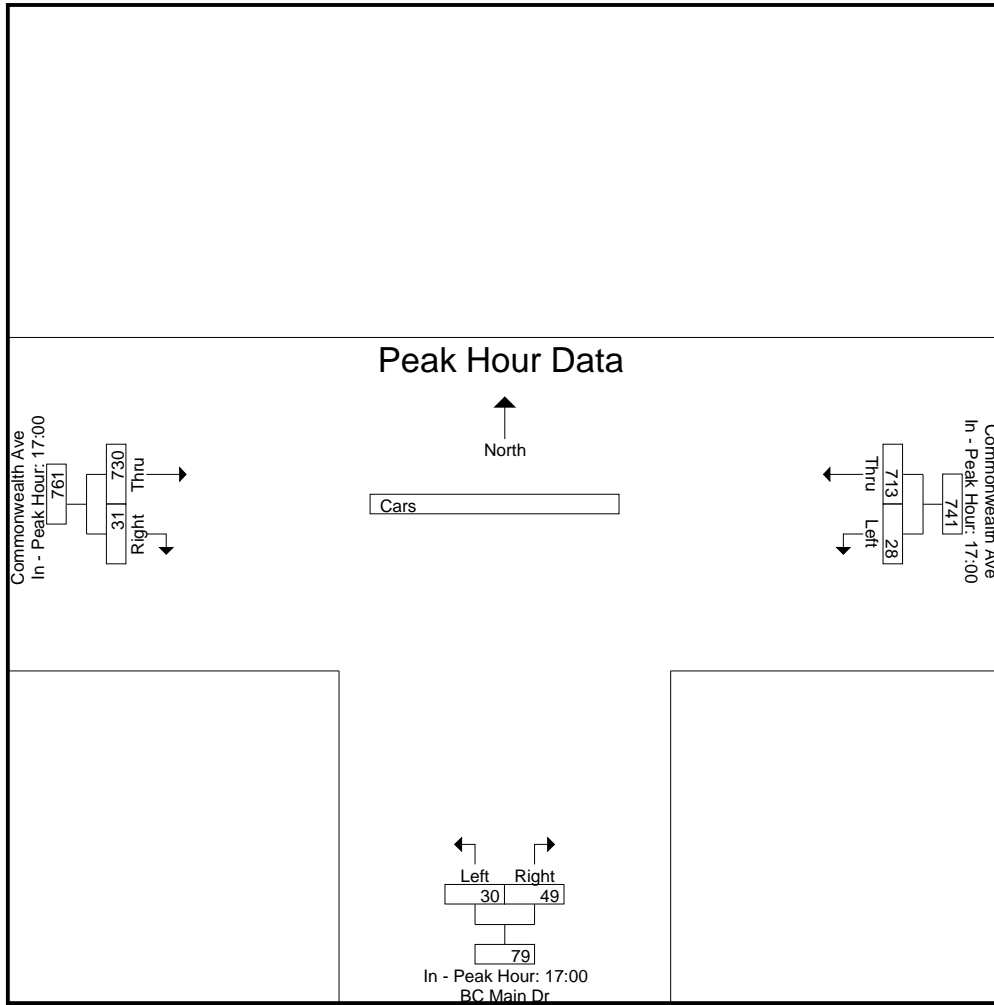
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 17:00



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00			17:00			17:00		
+0 mins.	10	173	183	10	13	23	200	15	215
+15 mins.	7	170	177	7	11	18	167	8	175
+30 mins.	6	198	204	6	8	14	204	1	205
+45 mins.	5	172	177	7	17	24	159	7	166
Total Volume	28	713	741	30	49	79	730	31	761
% App. Total	3.8	96.2		38	62		95.9	4.1	
PHF	.700	.900	.908	.750	.721	.823	.895	.517	.885



N/S Street : BC Main Drive  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

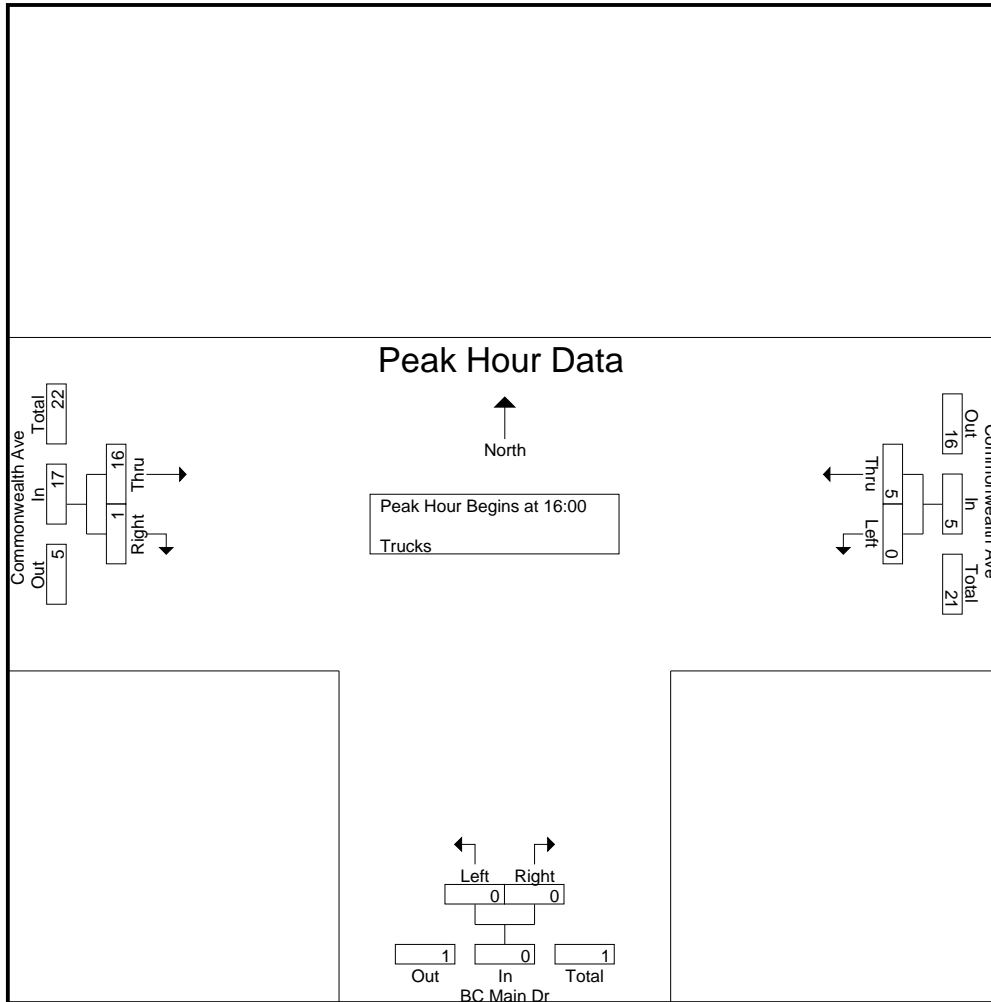
File Name : 39000021  
 Site Code : 39000021  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	Commonwealth Ave From East			BC Main Dr From South			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
16:00	0	3	0	0	0	0	3	0	0	0	6	6
16:15	0	0	0	0	0	0	6	0	0	0	6	6
16:30	0	1	0	0	0	0	3	1	0	0	5	5
16:45	0	1	0	0	0	0	4	0	0	0	5	5
Total	0	5	0	0	0	0	16	1	0	0	22	22
17:00	0	0	0	0	0	0	4	0	0	0	4	4
17:15	0	0	0	0	0	0	3	0	0	0	3	3
17:30	0	0	0	0	0	0	4	0	0	0	4	4
17:45	0	0	0	0	0	0	3	0	0	0	3	3
Total	0	0	0	0	0	0	14	0	0	0	14	14
Grand Total	0	5	0	0	0	0	30	1	0	0	36	36
Apprch %	0	100		0	0		96.8	3.2				
Total %	0	13.9		0	0		83.3	2.8		0	100	

Start Time	Commonwealth Ave From East			BC Main Dr From South			Commonwealth Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
16:00	0	3	3	0	0	0	3	0	3	6
16:15	0	0	0	0	0	0	6	0	6	6
16:30	0	1	1	0	0	0	3	1	4	5
16:45	0	1	1	0	0	0	4	0	4	5
Total Volume	0	5	5	0	0	0	16	1	17	22
% App. Total	0	100		0	0		94.1	5.9		
PHF	.000	.417	.417	.000	.000	.000	.667	.250	.708	.917

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 16:00

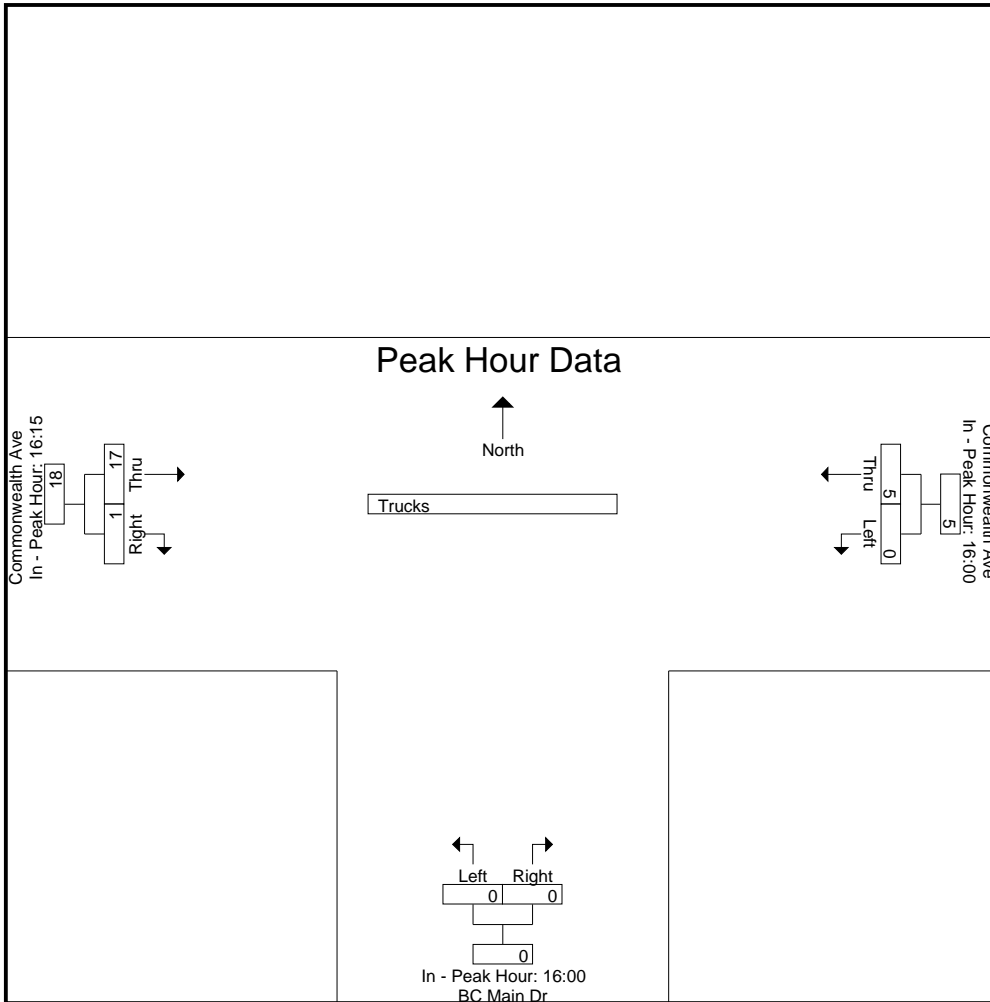


Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00			16:00			16:15		
+0 mins.	0	3	3	0	0	0	6	0	6
+15 mins.	0	0	0	0	0	0	3	1	4
+30 mins.	0	1	1	0	0	0	4	0	4
+45 mins.	0	1	1	0	0	0	4	0	4
Total Volume	0	5	5	0	0	0	17	1	18
% App. Total	0	100		0	0		94.4	5.6	
PHF	.000	.417	.417	.000	.000	.000	.708	.250	.750





N/S Street : St. Jude Gate  
 E/W Street: Beacon Street  
 City/State : Brookline, MA  
 Weather : Clear

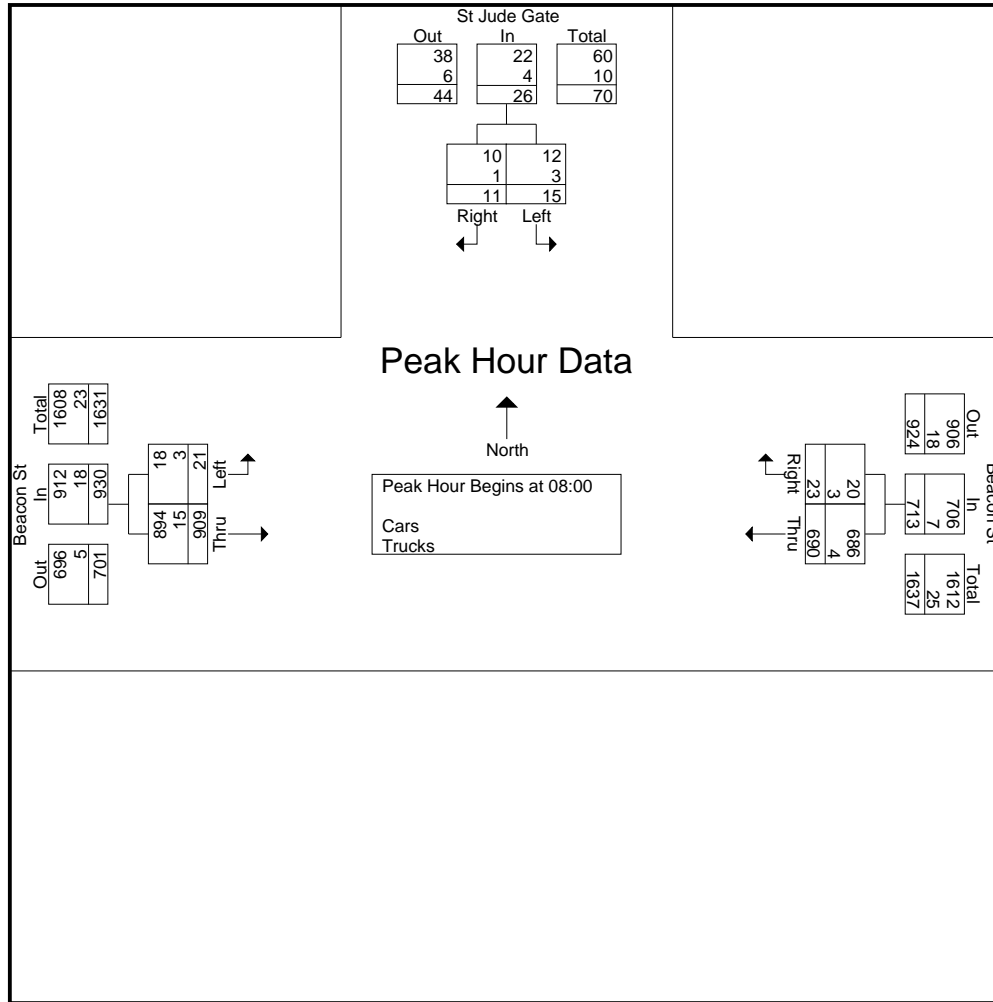
Accurate Counts  
 978-664-2565

File Name : 39000022  
 Site Code : 39000022  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	St Jude Gate From North			Beacon St From East			Beacon St From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	2	1	5	81	22	0	4	124	0	5	234	239
07:15	19	7	8	116	9	0	2	137	0	8	290	298
07:30	5	1	10	141	6	0	5	194	1	11	352	363
07:45	4	1	8	169	6	1	2	218	1	10	400	410
Total	30	10	31	507	43	1	13	673	2	34	1276	1310
08:00	2	2	7	171	6	2	3	229	1	10	413	423
08:15	5	3	10	164	4	2	4	208	0	12	388	400
08:30	4	4	7	177	7	3	7	242	0	10	441	451
08:45	4	2	27	178	6	7	7	230	0	34	427	461
Total	15	11	51	690	23	14	21	909	1	66	1669	1735
Grand Total	45	21	82	1197	66	15	34	1582	3	100	2945	3045
Apprch %	68.2	31.8		94.8	5.2		2.1	97.9				
Total %	1.5	0.7		40.6	2.2		1.2	53.7		3.3	96.7	
Cars	39	19		1185	59		30	1555		0	0	2987
% Cars	86.7	90.5	100	99	89.4	100	88.2	98.3	100	0	0	98.1
Trucks	6	2		12	7		4	27		0	0	58
% Trucks	13.3	9.5	0	1	10.6	0	11.8	1.7	0	0	0	1.9

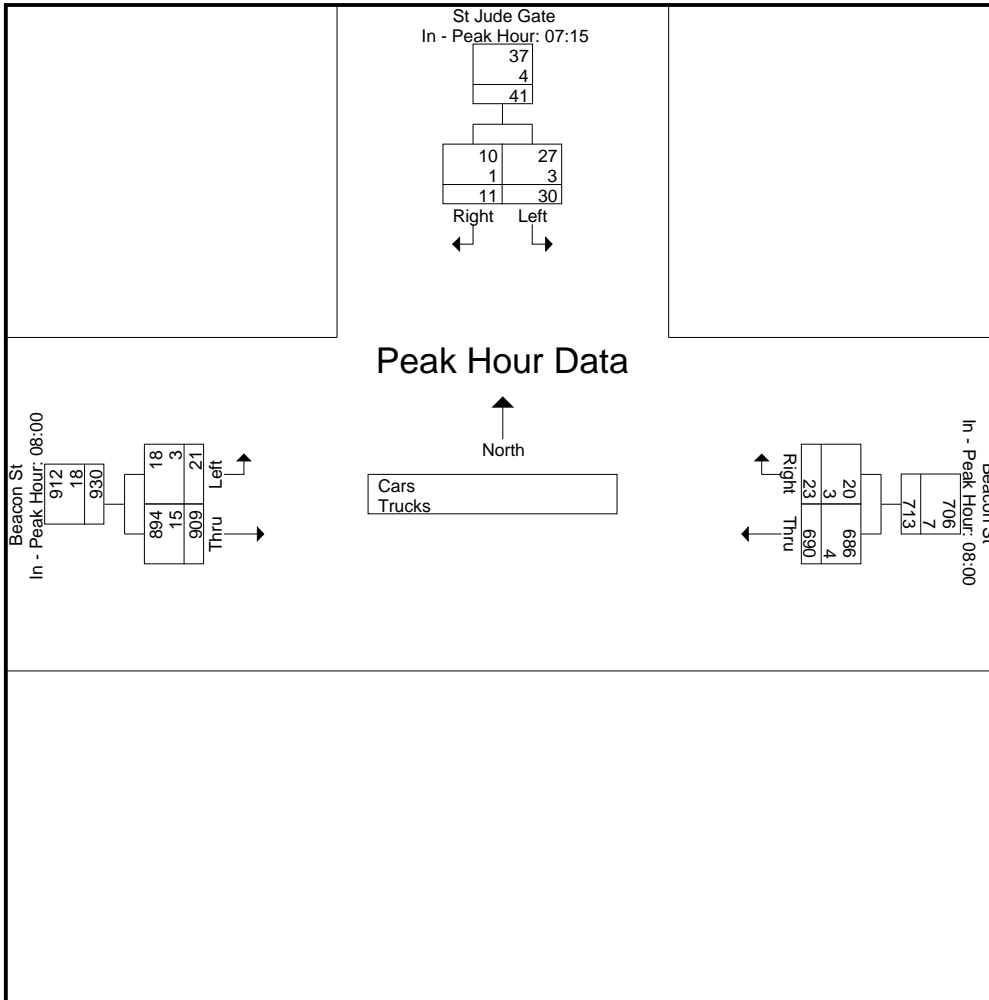
Start Time	St Jude Gate From North			Beacon St From East			Beacon St From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00										
08:00	2	2	4	171	6	177	3	229	232	413
08:15	5	3	8	164	4	168	4	208	212	388
08:30	4	4	8	177	7	184	7	242	249	441
08:45	4	2	6	178	6	184	7	230	237	427
Total Volume	15	11	26	690	23	713	21	909	930	1669
% App. Total	57.7	42.3		96.8	3.2		2.3	97.7		
PHF	.750	.688	.813	.969	.821	.969	.750	.939	.934	.946
Cars	12	10	22	686	20	706	18	894	912	1640
% Cars	80.0	90.9	84.6	99.4	87.0	99.0	85.7	98.3	98.1	98.3
Trucks	3	1	4	4	3	7	3	15	18	29
% Trucks	20.0	9.1	15.4	0.6	13.0	1.0	14.3	1.7	1.9	1.7



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15			08:00			08:00		
+0 mins.	19	7	26	171	6	177	3	229	232
+15 mins.	5	1	6	164	4	168	4	208	212
+30 mins.	4	1	5	177	7	184	7	242	249
+45 mins.	2	2	4	178	6	184	7	230	237
Total Volume	30	11	41	690	23	713	21	909	930
% App. Total	73.2	26.8		96.8	3.2		2.3	97.7	
PHF	.395	.393	.394	.969	.821	.969	.750	.939	.934
Cars	27	10	37	686	20	706	18	894	912
% Cars	90	90.9	90.2	99.4	87	99	85.7	98.3	98.1
Trucks	3	1	4	4	3	7	3	15	18
% Trucks	10	9.1	9.8	0.6	13	1	14.3	1.7	1.9



N/S Street : St. Jude Gate  
 E/W Street: Beacon Street  
 City/State : Brookline, MA  
 Weather : Clear

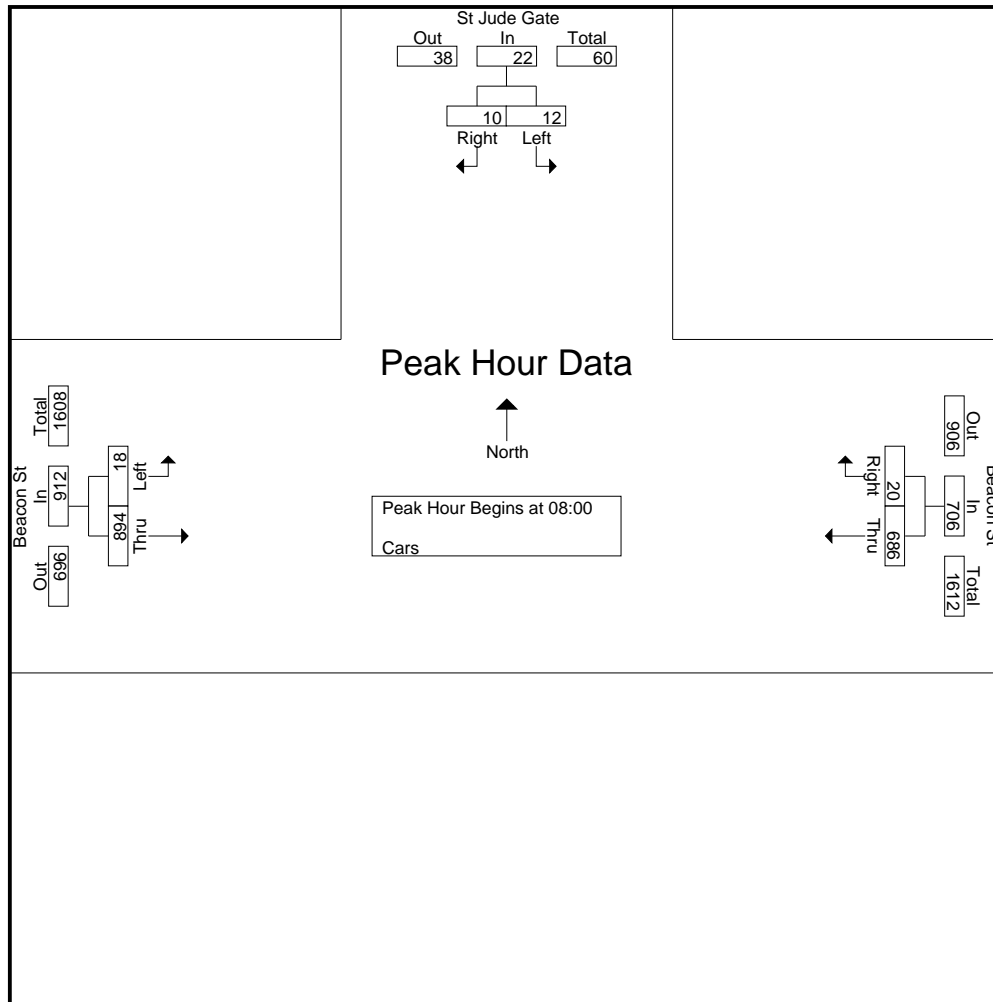
Accurate Counts  
 978-664-2565

File Name : 39000022  
 Site Code : 39000022  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars

Start Time	St Jude Gate From North			Beacon St From East			Beacon St From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	1	1	5	80	22	0	4	121	0	5	229	234
07:15	19	7	8	114	8	0	2	136	0	8	286	294
07:30	3	1	10	139	5	0	4	189	1	11	341	352
07:45	4	0	8	166	4	1	2	215	1	10	391	401
Total	27	9	31	499	39	1	12	661	2	34	1247	1281
08:00	1	2	7	171	5	2	2	227	1	10	408	418
08:15	5	2	10	164	4	2	4	206	0	12	385	397
08:30	3	4	7	175	5	3	5	238	0	10	430	440
08:45	3	2	27	176	6	7	7	223	0	34	417	451
Total	12	10	51	686	20	14	18	894	1	66	1640	1706
Grand Total	39	19	82	1185	59	15	30	1555	3	100	2887	2987
Apprch %	67.2	32.8		95.3	4.7		1.9	98.1				
Total %	1.4	0.7		41	2		1	53.9		3.3	96.7	

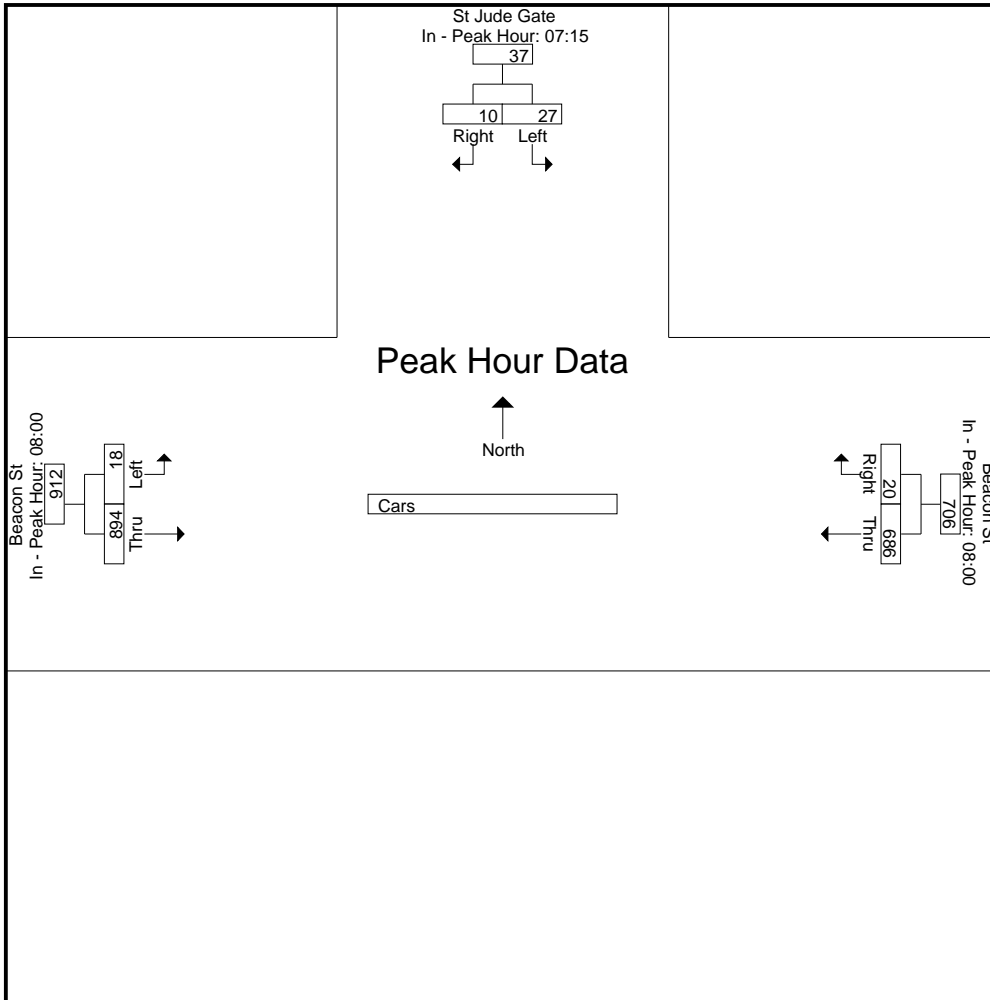
Start Time	St Jude Gate From North			Beacon St From East			Beacon St From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00										
08:00	1	2	3	171	5	176	2	227	229	408
08:15	5	2	7	164	4	168	4	206	210	385
08:30	3	4	7	175	5	180	5	238	243	430
08:45	3	2	5	176	6	182	7	223	230	417
Total Volume	12	10	22	686	20	706	18	894	912	1640
% App. Total	54.5	45.5		97.2	2.8		2	98		
PHF	.600	.625	.786	.974	.833	.970	.643	.939	.938	.953



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15			08:00			08:00		
+0 mins.	19	7	26	171	5	176	2	227	229
+15 mins.	3	1	4	164	4	168	4	206	210
+30 mins.	4	0	4	175	5	180	5	238	243
+45 mins.	1	2	3	176	6	182	7	223	230
Total Volume	27	10	37	686	20	706	18	894	912
% App. Total	73	27		97.2	2.8		2	98	
PHF	.355	.357	.356	.974	.833	.970	.643	.939	.938



N/S Street : St. Jude Gate  
 E/W Street: Beacon Street  
 City/State : Brookline, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000022  
 Site Code : 39000022  
 Start Date : 3/25/2008  
 Page No : 1

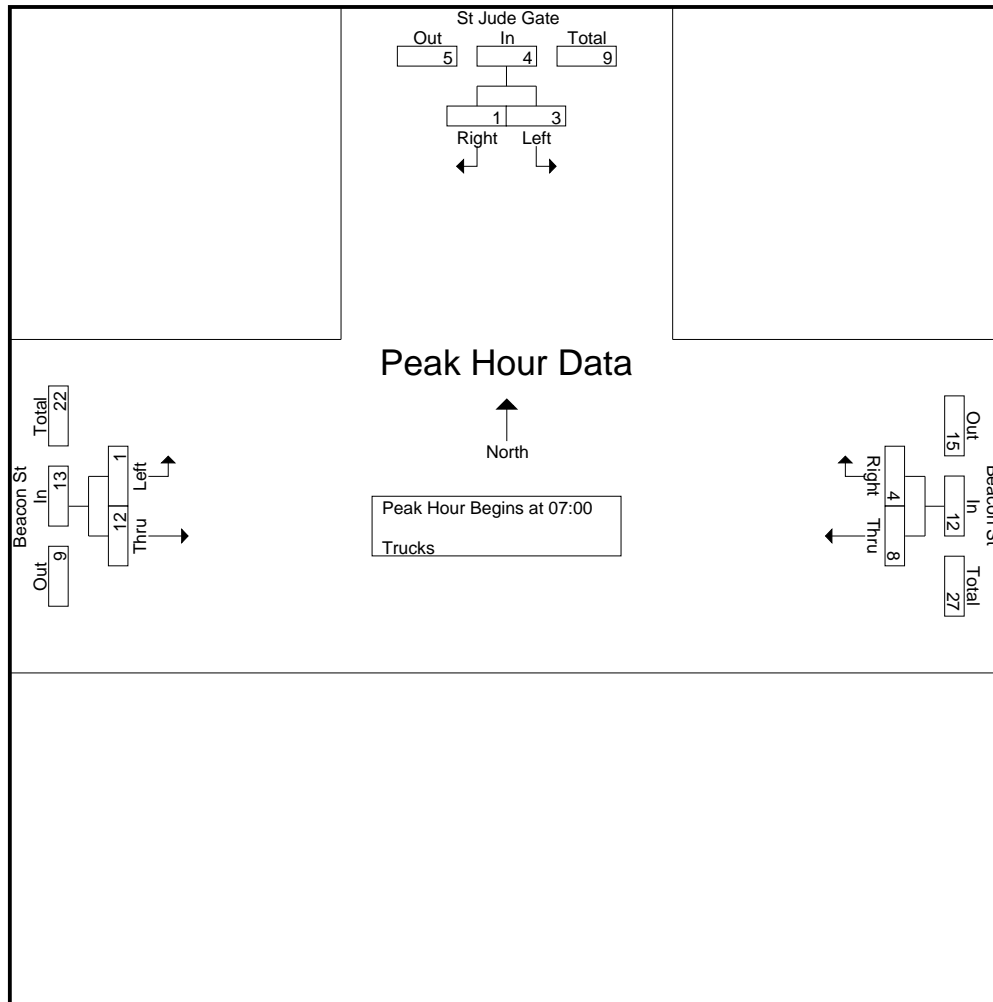
Groups Printed- Trucks

Start Time	St Jude Gate From North			Beacon St From East			Beacon St From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	1	0	0	1	0	0	0	3	0	0	5	5
07:15	0	0	0	2	1	0	0	1	0	0	4	4
07:30	2	0	0	2	1	0	1	5	0	0	11	11
07:45	0	1	0	3	2	0	0	3	0	0	9	9
Total	3	1	0	8	4	0	1	12	0	0	29	29
08:00	1	0	0	0	1	0	1	2	0	0	5	5
08:15	0	1	0	0	0	0	0	2	0	0	3	3
08:30	1	0	0	2	2	0	2	4	0	0	11	11
08:45	1	0	0	2	0	0	0	7	0	0	10	10
Total	3	1	0	4	3	0	3	15	0	0	29	29
Grand Total	6	2	0	12	7	0	4	27	0	0	58	58
Apprch %	75	25		63.2	36.8		12.9	87.1				
Total %	10.3	3.4		20.7	12.1		6.9	46.6		0	100	

Start Time	St Jude Gate From North			Beacon St From East			Beacon St From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00	1	0	1	1	0	1	0	3	3	5
07:15	0	0	0	2	1	3	0	1	1	4
07:30	2	0	2	2	1	3	1	5	6	11
07:45	0	1	1	3	2	5	0	3	3	9
Total Volume	3	1	4	8	4	12	1	12	13	29
% App. Total	75	25		66.7	33.3		7.7	92.3		
PHF	.375	.250	.500	.667	.500	.600	.250	.600	.542	.659

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:00

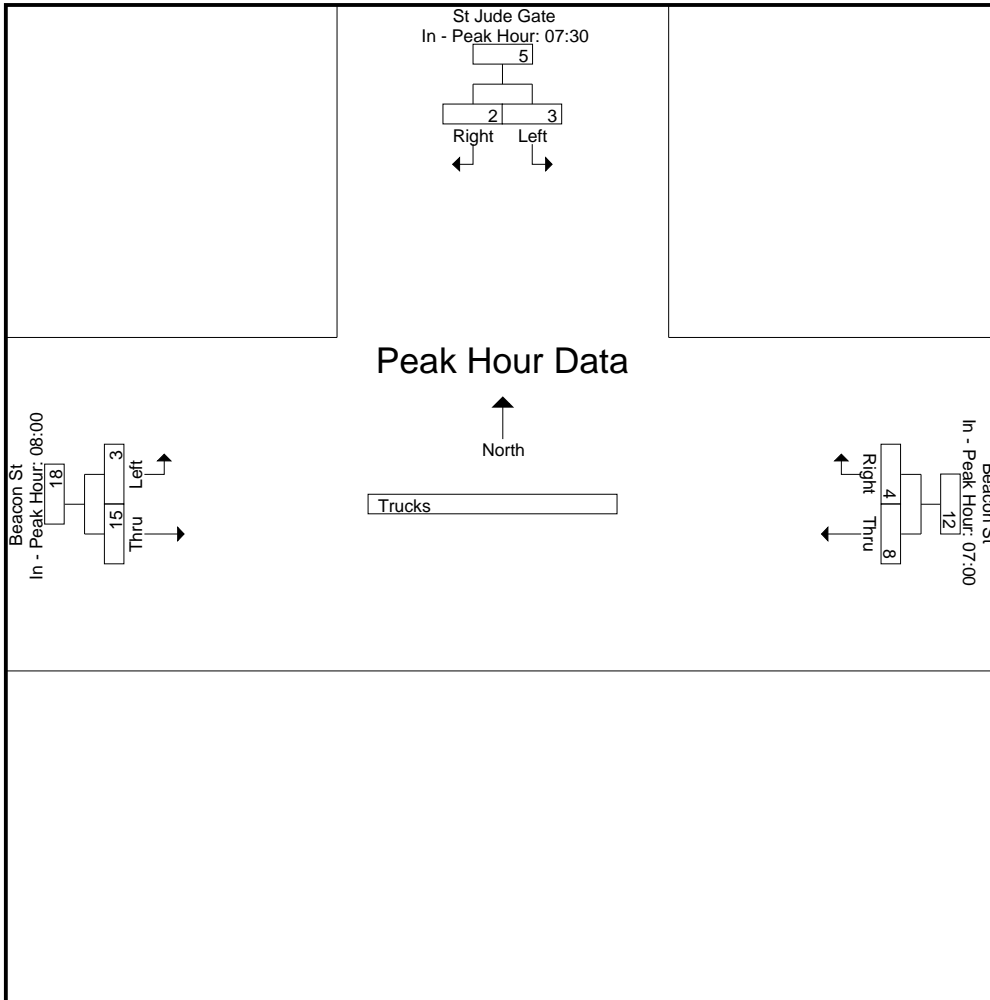




Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30			07:00			08:00		
+0 mins.	2	0	2	1	0	1	1	2	3
+15 mins.	0	1	1	2	1	3	0	2	2
+30 mins.	1	0	1	2	1	3	2	4	6
+45 mins.	0	1	1	3	2	5	0	7	7
Total Volume	3	2	5	8	4	12	3	15	18
% App. Total	60	40		66.7	33.3		16.7	83.3	
PHF	.375	.500	.625	.667	.500	.600	.375	.536	.643



N/S Street : St. Jude Gate  
 E/W Street: Beacon Street  
 City/State : Brookline, MA  
 Weather : Clear

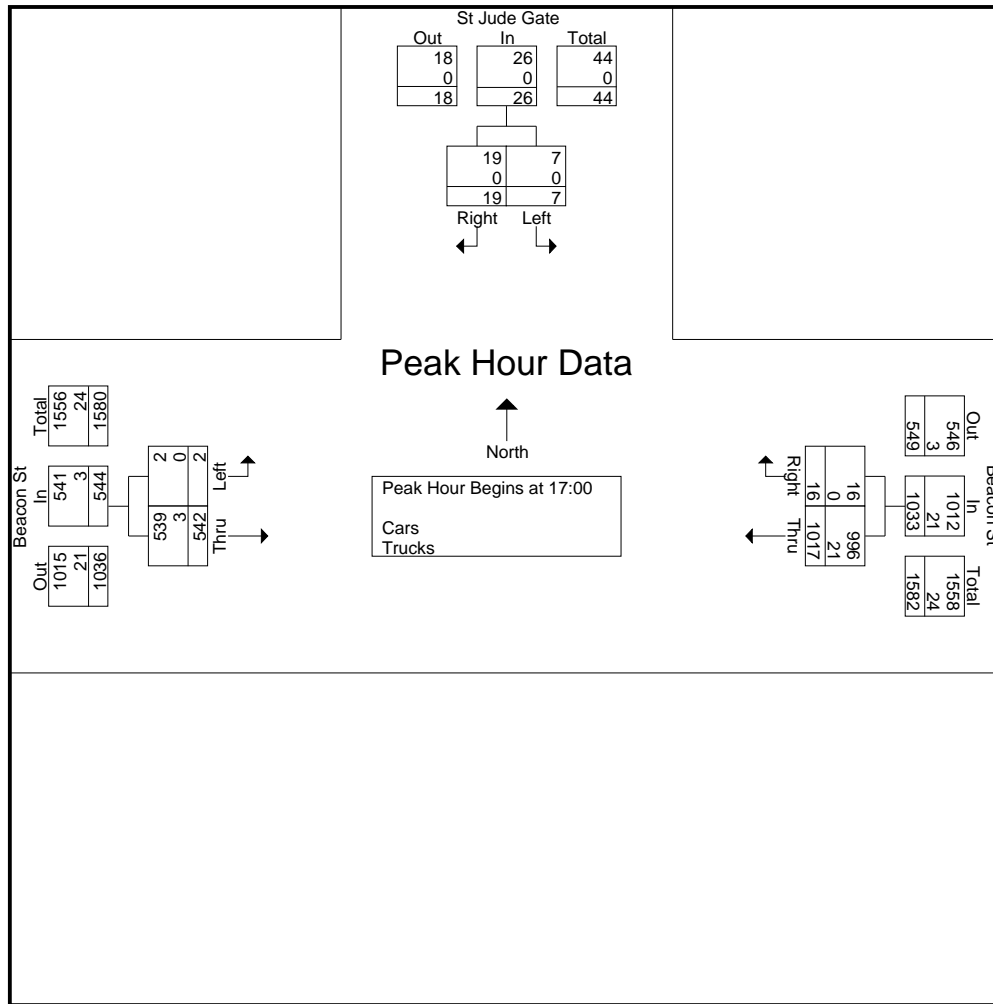
Accurate Counts  
 978-664-2565

File Name : 39000022  
 Site Code : 39000022  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	St Jude Gate From North			Beacon St From East			Beacon St From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	6	6	63	234	8	10	4	90	0	73	348	421
16:15	8	6	85	231	9	9	0	108	0	94	362	456
16:30	9	8	31	203	2	5	0	118	1	37	340	377
16:45	1	3	37	224	3	24	2	94	2	63	327	390
Total	24	23	216	892	22	48	6	410	3	267	1377	1644
17:00	1	7	34	244	3	5	0	127	0	39	382	421
17:15	2	4	34	248	5	7	0	155	0	41	414	455
17:30	2	7	29	248	6	6	1	127	1	36	391	427
17:45	2	1	48	277	2	3	1	133	1	52	416	468
Total	7	19	145	1017	16	21	2	542	2	168	1603	1771
Grand Total	31	42	361	1909	38	69	8	952	5	435	2980	3415
Apprch %	42.5	57.5		98	2		0.8	99.2				
Total %	1	1.4		64.1	1.3		0.3	31.9		12.7	87.3	
Cars	29	40		1857	37		7	947		0	0	3352
% Cars	93.5	95.2	100	97.3	97.4	100	87.5	99.5	100	0	0	98.2
Trucks	2	2		52	1		1	5		0	0	63
% Trucks	6.5	4.8	0	2.7	2.6	0	12.5	0.5	0	0	0	1.8

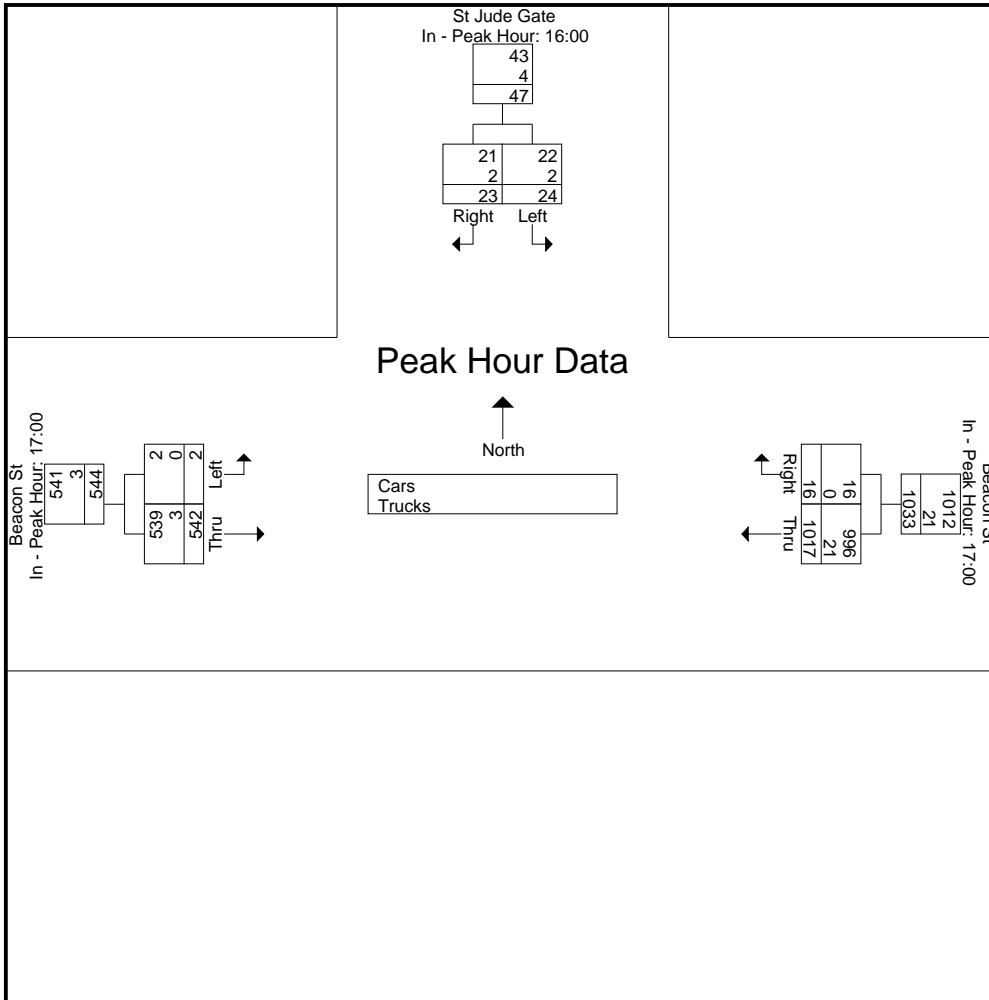
Start Time	St Jude Gate From North			Beacon St From East			Beacon St From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 17:00										
17:00	1	7	8	244	3	247	0	127	127	382
17:15	2	4	6	248	5	253	0	155	155	414
17:30	2	7	9	248	6	254	1	127	128	391
17:45	2	1	3	277	2	279	1	133	134	416
Total Volume	7	19	26	1017	16	1033	2	542	544	1603
% App. Total	26.9	73.1		98.5	1.5		0.4	99.6		
PHF	.875	.679	.722	.918	.667	.926	.500	.874	.877	.963
Cars	7	19	26	996	16	1012	2	539	541	1579
% Cars	100	100	100	97.9	100	98.0	100	99.4	99.4	98.5
Trucks	0	0	0	21	0	21	0	3	3	24
% Trucks	0	0	0	2.1	0	2.0	0	0.6	0.6	1.5



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00			17:00			17:00		
+0 mins.	6	6	12	244	3	247	0	127	127
+15 mins.	8	6	14	248	5	253	0	155	155
+30 mins.	9	8	17	248	6	254	1	127	128
+45 mins.	1	3	4	277	2	279	1	133	134
Total Volume	24	23	47	1017	16	1033	2	542	544
% App. Total	51.1	48.9		98.5	1.5		0.4	99.6	
PHF	.667	.719	.691	.918	.667	.926	.500	.874	.877
Cars	22	21	43	996	16	1012	2	539	541
% Cars	91.7	91.3	91.5	97.9	100	98	100	99.4	99.4
Trucks	2	2	4	21	0	21	0	3	3
% Trucks	8.3	8.7	8.5	2.1	0	2	0	0.6	0.6



N/S Street : St. Jude Gate  
 E/W Street: Beacon Street  
 City/State : Brookline, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

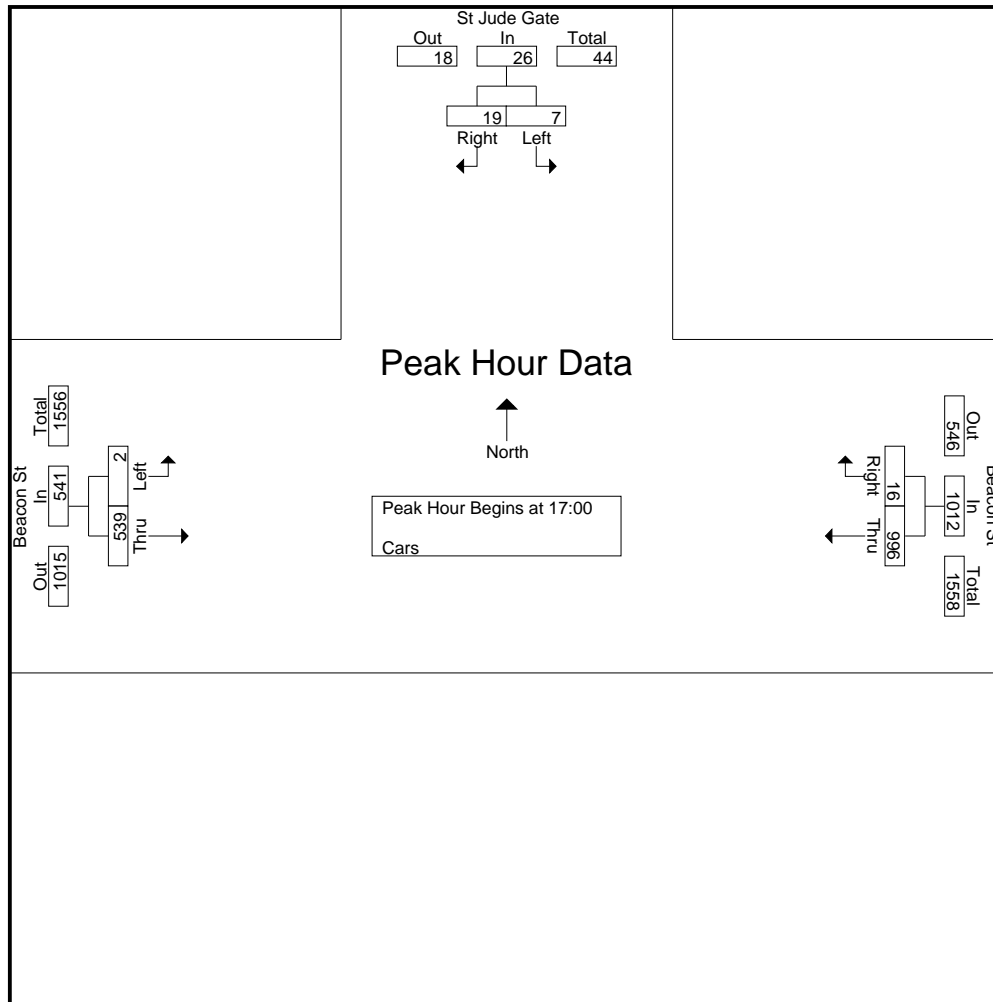
File Name : 39000022  
 Site Code : 39000022  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Cars

Start Time	St Jude Gate From North			Beacon St From East			Beacon St From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	6	5	63	223	7	10	4	89	0	73	334	407
16:15	7	6	85	224	9	9	0	107	0	94	353	447
16:30	8	7	31	196	2	5	0	118	1	37	331	368
16:45	1	3	37	218	3	24	1	94	2	63	320	383
Total	22	21	216	861	21	48	5	408	3	267	1338	1605
17:00	1	7	34	238	3	5	0	127	0	39	376	415
17:15	2	4	34	245	5	7	0	154	0	41	410	451
17:30	2	7	29	241	6	6	1	125	1	36	382	418
17:45	2	1	48	272	2	3	1	133	1	52	411	463
Total	7	19	145	996	16	21	2	539	2	168	1579	1747
Grand Total	29	40	361	1857	37	69	7	947	5	435	2917	3352
Apprch %	42	58		98	2		0.7	99.3				
Total %	1	1.4		63.7	1.3		0.2	32.5		13	87	

Start Time	St Jude Gate From North			Beacon St From East			Beacon St From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
17:00	1	7	8	238	3	241	0	127	127	376
17:15	2	4	6	245	5	250	0	154	154	410
17:30	2	7	9	241	6	247	1	125	126	382
17:45	2	1	3	272	2	274	1	133	134	411
Total Volume	7	19	26	996	16	1012	2	539	541	1579
% App. Total	26.9	73.1		98.4	1.6		0.4	99.6		
PHF	.875	.679	.722	.915	.667	.923	.500	.875	.878	.960

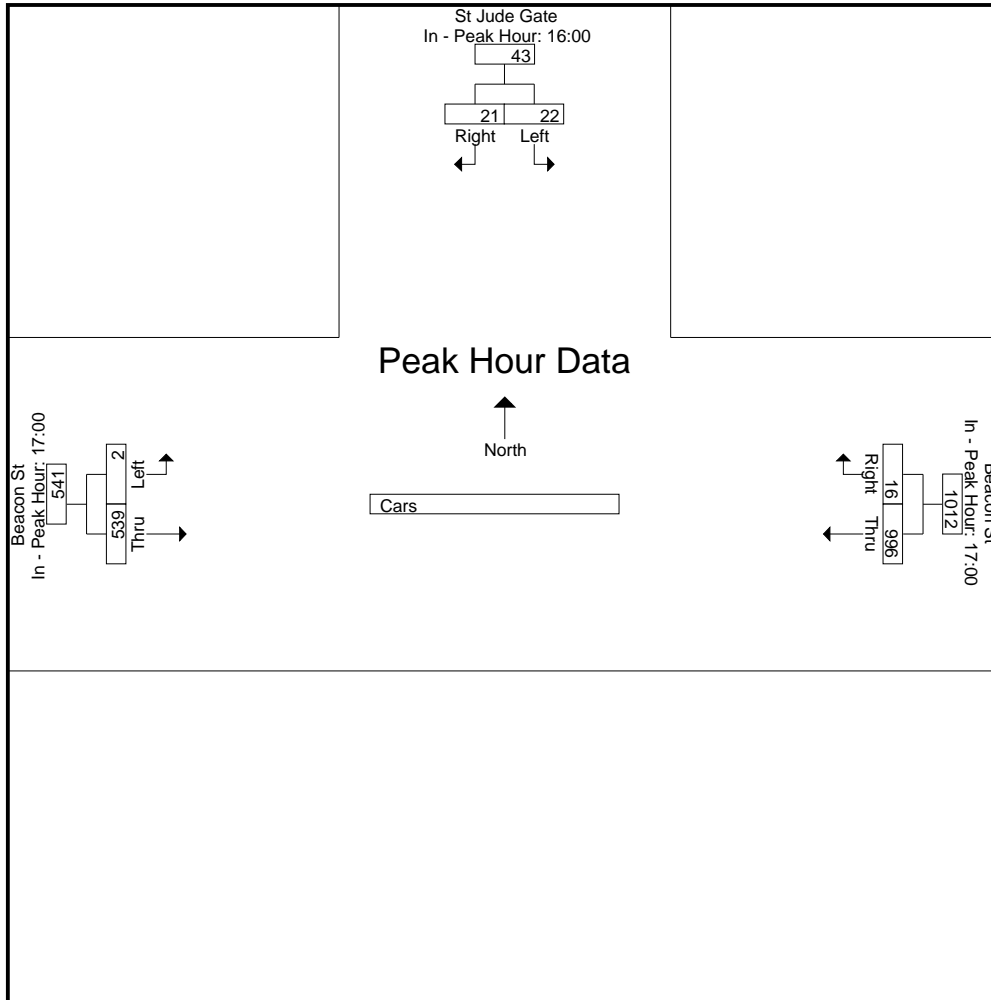
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 17:00



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00			17:00			17:00		
+0 mins.	6	5	11	238	3	241	0	127	127
+15 mins.	7	6	13	245	5	250	0	154	154
+30 mins.	8	7	15	241	6	247	1	125	126
+45 mins.	1	3	4	272	2	274	1	133	134
Total Volume	22	21	43	996	16	1012	2	539	541
% App. Total	51.2	48.8		98.4	1.6		0.4	99.6	
PHF	.688	.750	.717	.915	.667	.923	.500	.875	.878





N/S Street : St. Jude Gate  
 E/W Street: Beacon Street  
 City/State : Brookline, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

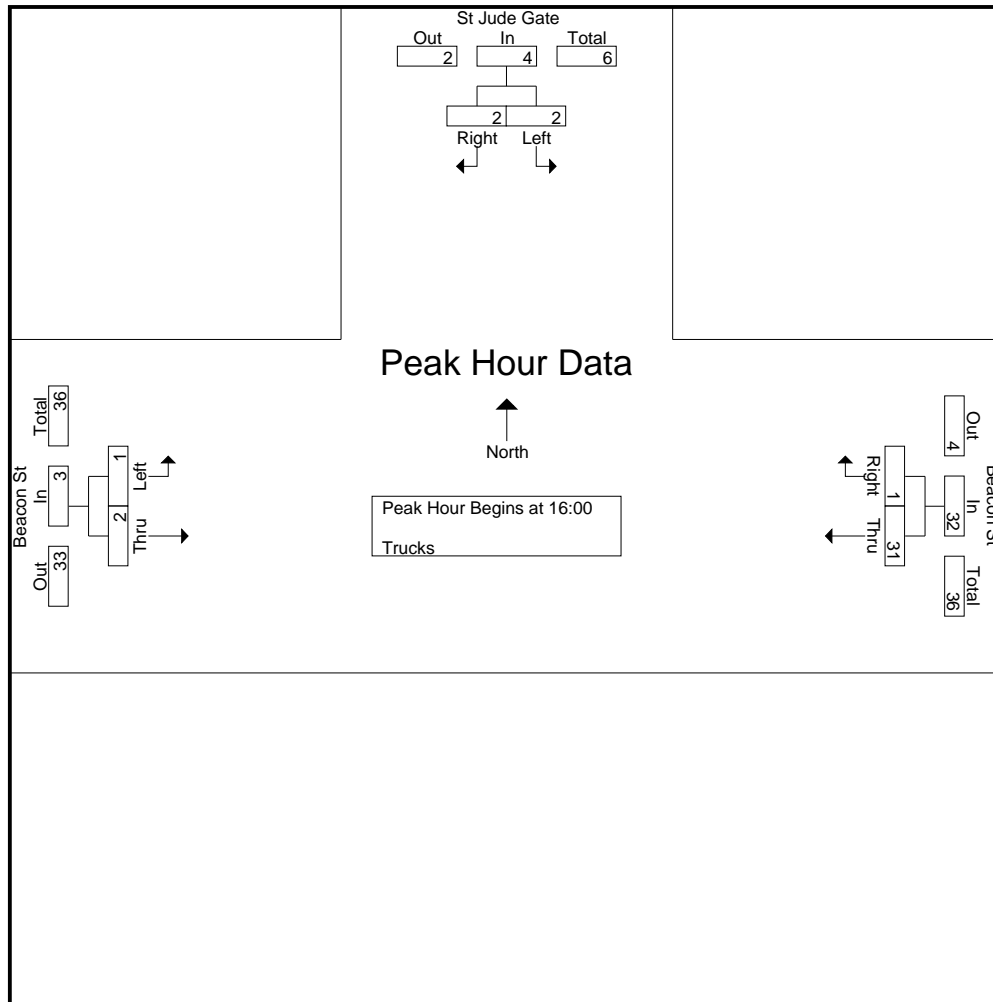
File Name : 39000022  
 Site Code : 39000022  
 Start Date : 3/25/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	St Jude Gate From North			Beacon St From East			Beacon St From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	0	1	0	11	1	0	0	1	0	0	14	14
16:15	1	0	0	7	0	0	0	1	0	0	9	9
16:30	1	1	0	7	0	0	0	0	0	0	9	9
16:45	0	0	0	6	0	0	1	0	0	0	7	7
Total	2	2	0	31	1	0	1	2	0	0	39	39
17:00	0	0	0	6	0	0	0	0	0	0	6	6
17:15	0	0	0	3	0	0	0	1	0	0	4	4
17:30	0	0	0	7	0	0	0	2	0	0	9	9
17:45	0	0	0	5	0	0	0	0	0	0	5	5
Total	0	0	0	21	0	0	0	3	0	0	24	24
Grand Total	2	2	0	52	1	0	1	5	0	0	63	63
Apprch %	50	50		98.1	1.9		16.7	83.3				
Total %	3.2	3.2		82.5	1.6		1.6	7.9		0	100	

Start Time	St Jude Gate From North			Beacon St From East			Beacon St From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
16:00	0	1	1	11	1	12	0	1	1	14
16:15	1	0	1	7	0	7	0	1	1	9
16:30	1	1	2	7	0	7	0	0	0	9
16:45	0	0	0	6	0	6	1	0	1	7
Total Volume	2	2	4	31	1	32	1	2	3	39
% App. Total	50	50		96.9	3.1		33.3	66.7		
PHF	.500	.500	.500	.705	.250	.667	.250	.500	.750	.696

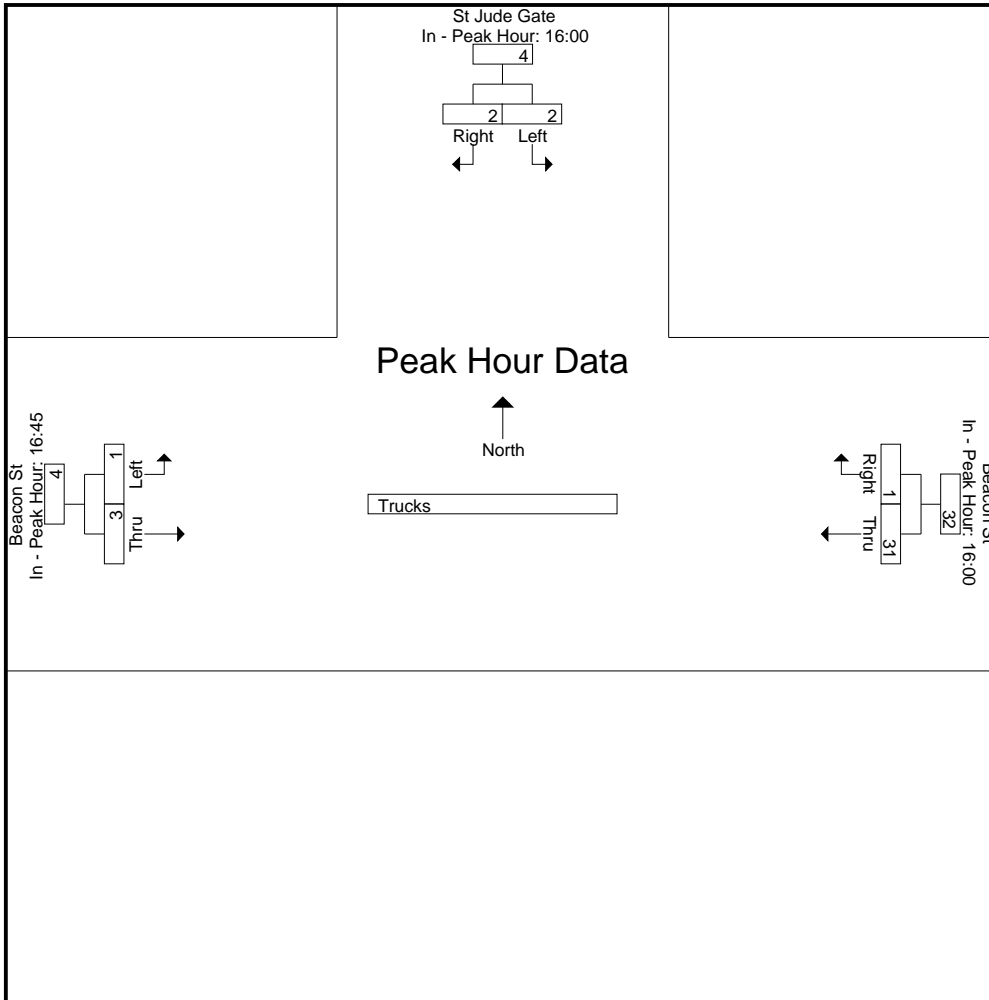
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 16:00



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00			16:00			16:45		
+0 mins.	0	1	1	11	1	12	1	0	1
+15 mins.	1	0	1	7	0	7	0	0	0
+30 mins.	1	1	2	7	0	7	0	1	1
+45 mins.	0	0	0	6	0	6	0	2	2
Total Volume	2	2	4	31	1	32	1	3	4
% App. Total	50	50		96.9	3.1		25	75	
PHF	.500	.500	.500	.705	.250	.667	.250	.375	.500



N/S Street : St. Thomas More Road  
 E/W Street: Chestnut Hill Driveway  
 City/State : Brighton, MA  
 Weather : Clear

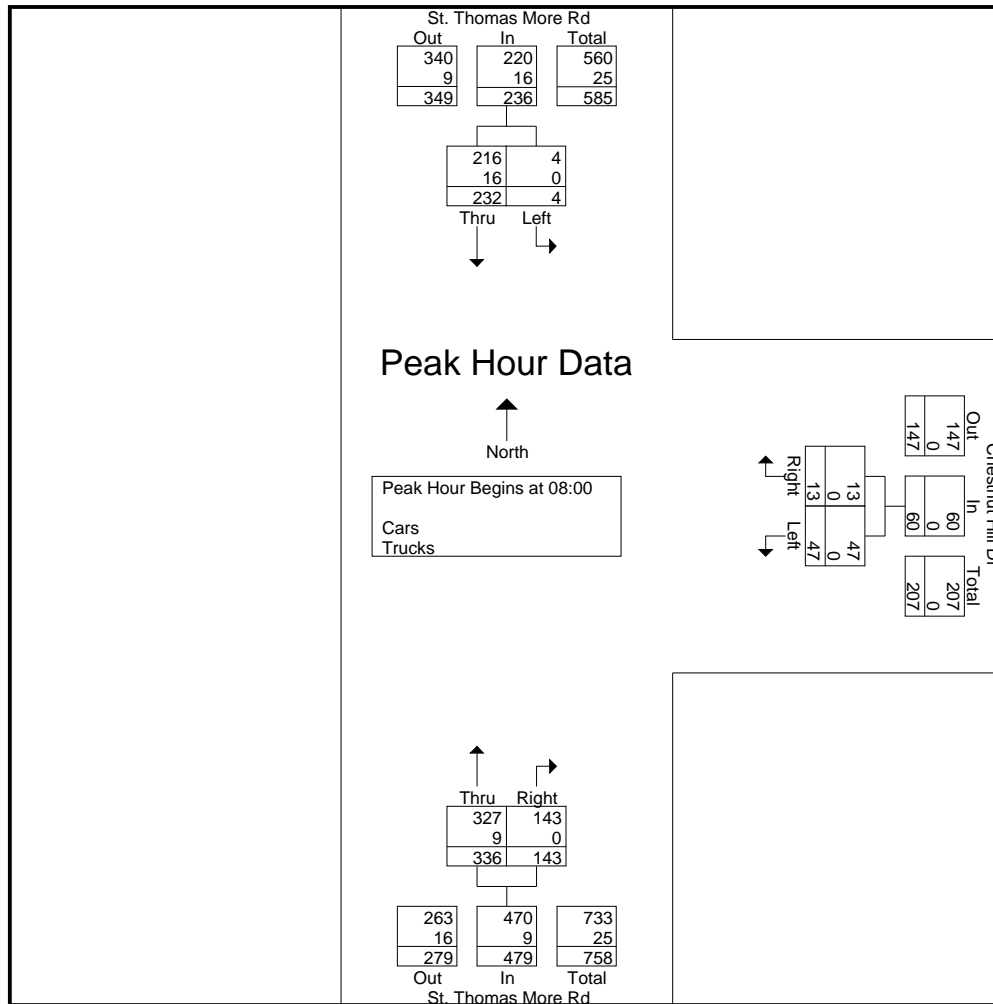
Accurate Counts  
 978-664-2565

File Name : 39000023  
 Site Code : 39000023  
 Start Date : 4/9/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	St. Thomas More Rd From North			Chestnut Hill Dr From East			St. Thomas More Rd From South			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
07:00	0	32	0	8	2	0	54	26	0	0	122	122
07:15	0	62	0	10	0	0	60	21	0	0	153	153
07:30	1	57	0	18	4	0	64	15	0	0	159	159
07:45	1	54	0	17	0	1	76	34	0	1	182	183
Total	2	205	0	53	6	1	254	96	0	1	616	617
08:00	1	57	0	10	3	0	62	35	0	0	168	168
08:15	0	59	0	11	2	0	89	39	0	0	200	200
08:30	2	47	0	17	3	3	85	40	0	3	194	197
08:45	1	69	0	9	5	1	100	29	0	1	213	214
Total	4	232	0	47	13	4	336	143	0	4	775	779
Grand Total	6	437	0	100	19	5	590	239	0	5	1391	1396
Apprch %	1.4	98.6		84	16		71.2	28.8				
Total %	0.4	31.4		7.2	1.4		42.4	17.2		0.4	99.6	
Cars	6	418		100	19		574	239		0	0	1361
% Cars	100	95.7	0	100	100	100	97.3	100	0	0	0	97.5
Trucks	0	19		0	0		16	0		0	0	35
% Trucks	0	4.3	0	0	0	0	2.7	0	0	0	0	2.5

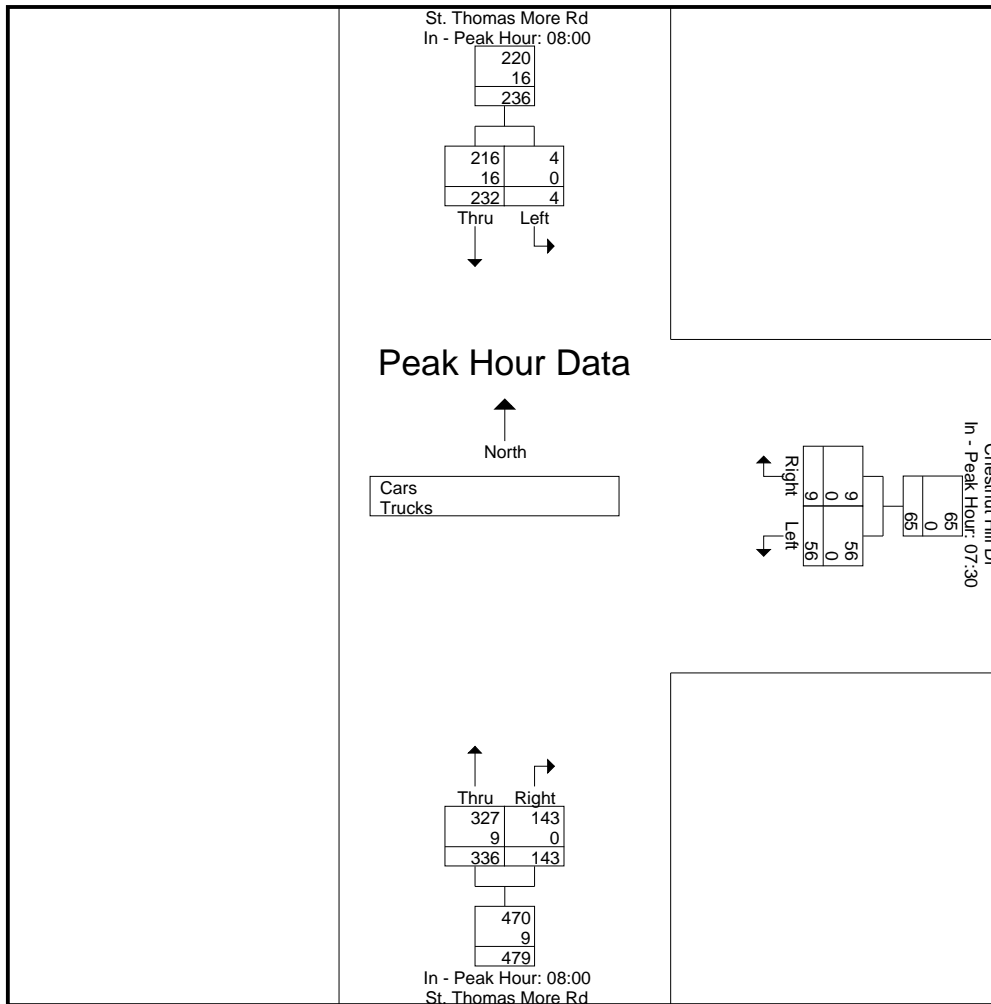
Start Time	St. Thomas More Rd From North			Chestnut Hill Dr From East			St. Thomas More Rd From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00										
08:00	1	57	58	10	3	13	62	35	97	168
08:15	0	59	59	11	2	13	89	39	128	200
08:30	2	47	49	17	3	20	85	40	125	194
08:45	1	69	70	9	5	14	100	29	129	213
Total Volume	4	232	236	47	13	60	336	143	479	775
% App. Total	1.7	98.3		78.3	21.7		70.1	29.9		
PHF	.500	.841	.843	.691	.650	.750	.840	.894	.928	.910
Cars	4	216	220	47	13	60	327	143	470	750
% Cars	100	93.1	93.2	100	100	100	97.3	100	98.1	96.8
Trucks	0	16	16	0	0	0	9	0	9	25
% Trucks	0	6.9	6.8	0	0	0	2.7	0	1.9	3.2



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00			07:30			08:00		
+0 mins.	1	57	58	18	4	22	62	35	97
+15 mins.	0	59	59	17	0	17	89	39	128
+30 mins.	2	47	49	10	3	13	85	40	125
+45 mins.	1	69	70	11	2	13	100	29	129
Total Volume	4	232	236	56	9	65	336	143	479
% App. Total	1.7	98.3		86.2	13.8		70.1	29.9	
PHF	.500	.841	.843	.778	.563	.739	.840	.894	.928
Cars	4	216	220	56	9	65	327	143	470
% Cars	100	93.1	93.2	100	100	100	97.3	100	98.1
Trucks	0	16	16	0	0	0	9	0	9
% Trucks	0	6.9	6.8	0	0	0	2.7	0	1.9



N/S Street : St. Thomas More Road  
 E/W Street: Chestnut Hill Driveway  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

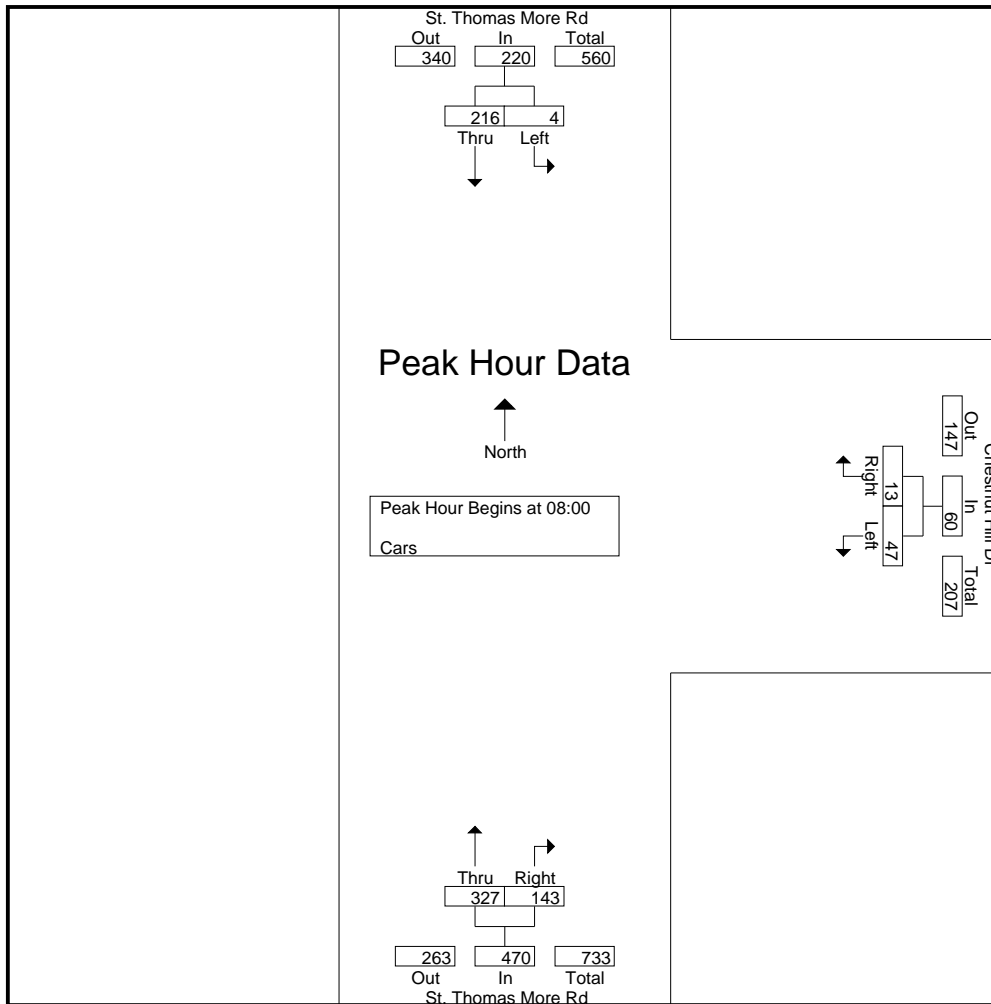
File Name : 39000023  
 Site Code : 39000023  
 Start Date : 4/9/2008  
 Page No : 1

Groups Printed- Cars

Start Time	St. Thomas More Rd From North			Chestnut Hill Dr From East			St. Thomas More Rd From South			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
07:00	0	32	0	8	2	0	54	26	0	0	122	122
07:15	0	59	0	10	0	0	57	21	0	0	147	147
07:30	1	57	0	18	4	0	62	15	0	0	157	157
07:45	1	54	0	17	0	1	74	34	0	1	180	181
Total	2	202	0	53	6	1	247	96	0	1	606	607
08:00	1	53	0	10	3	0	60	35	0	0	162	162
08:15	0	57	0	11	2	0	86	39	0	0	195	195
08:30	2	41	0	17	3	3	82	40	0	3	185	188
08:45	1	65	0	9	5	1	99	29	0	1	208	209
Total	4	216	0	47	13	4	327	143	0	4	750	754
Grand Total	6	418	0	100	19	5	574	239	0	5	1356	1361
Apprch %	1.4	98.6		84	16		70.6	29.4				
Total %	0.4	30.8		7.4	1.4		42.3	17.6		0.4	99.6	

Start Time	St. Thomas More Rd From North			Chestnut Hill Dr From East			St. Thomas More Rd From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
08:00	1	53	54	10	3	13	60	35	95	162
08:15	0	57	57	11	2	13	86	39	125	195
08:30	2	41	43	17	3	20	82	40	122	185
08:45	1	65	66	9	5	14	99	29	128	208
Total Volume	4	216	220	47	13	60	327	143	470	750
% App. Total	1.8	98.2		78.3	21.7		69.6	30.4		
PHF	.500	.831	.833	.691	.650	.750	.826	.894	.918	.901

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 08:00

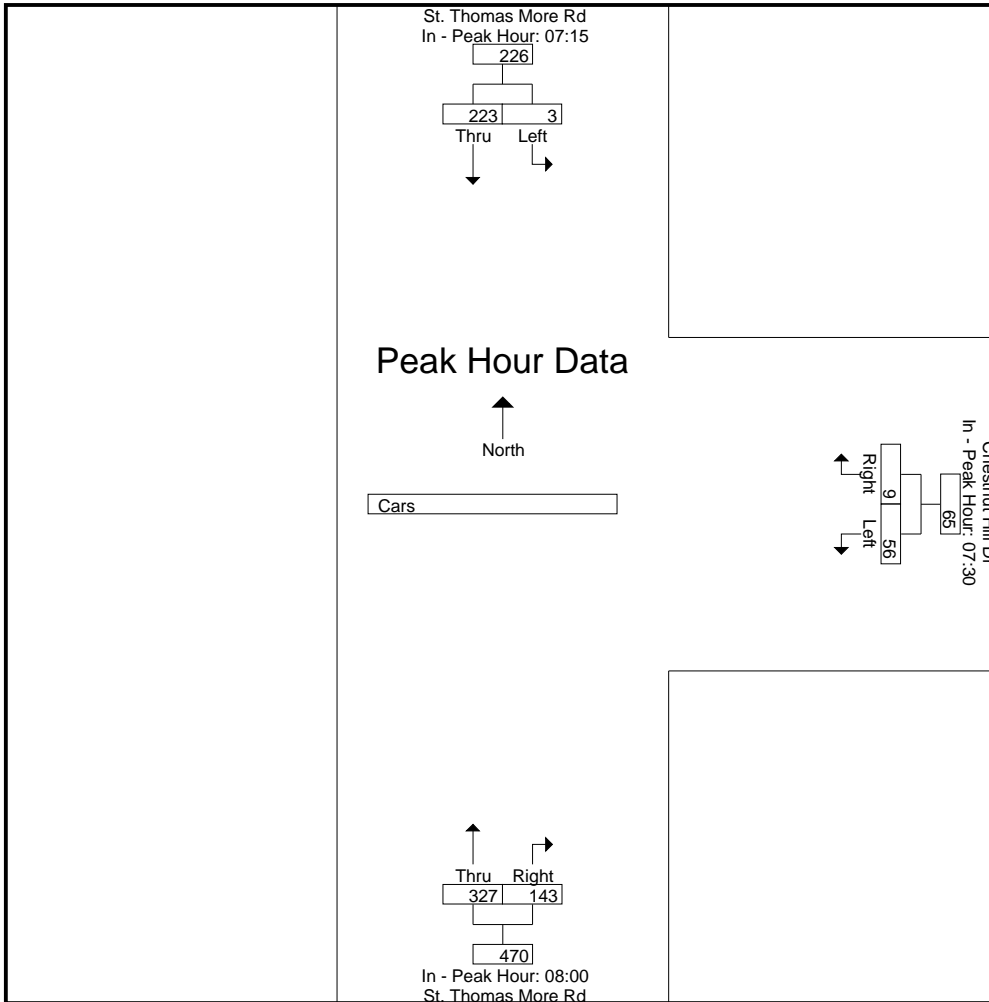


Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15			07:30			08:00		
+0 mins.	0	59	59	18	4	22	60	35	95
+15 mins.	1	57	58	17	0	17	86	39	125
+30 mins.	1	54	55	10	3	13	82	40	122
+45 mins.	1	53	54	11	2	13	99	29	128
Total Volume	3	223	226	56	9	65	327	143	470
% App. Total	1.3	98.7		86.2	13.8		69.6	30.4	
PHF	.750	.945	.958	.778	.563	.739	.826	.894	.918





N/S Street : St. Thomas More Road  
 E/W Street: Chestnut Hill Driveway  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

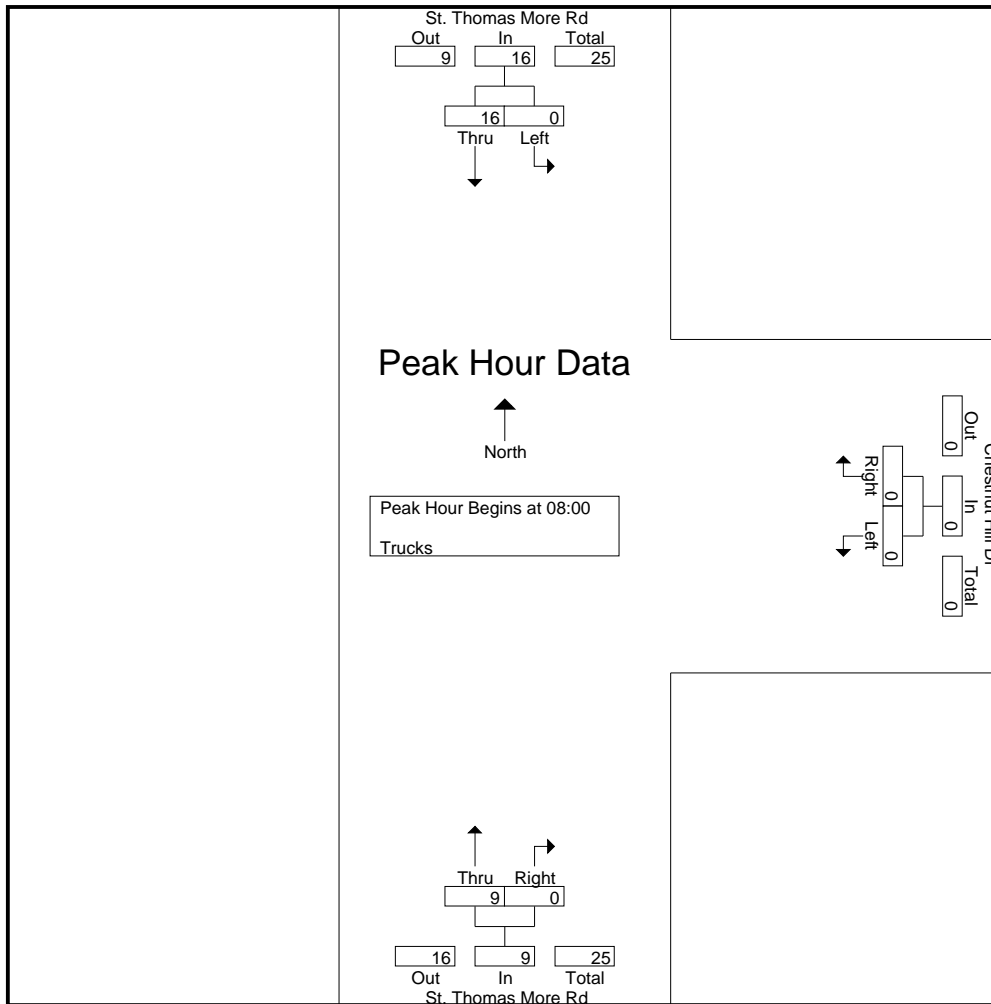
File Name : 39000023  
 Site Code : 39000023  
 Start Date : 4/9/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	St. Thomas More Rd From North			Chestnut Hill Dr From East			St. Thomas More Rd From South			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
07:00	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	3	0	0	0	0	3	0	0	0	6	6
07:30	0	0	0	0	0	0	2	0	0	0	2	2
07:45	0	0	0	0	0	0	2	0	0	0	2	2
Total	0	3	0	0	0	0	7	0	0	0	10	10
08:00	0	4	0	0	0	0	2	0	0	0	6	6
08:15	0	2	0	0	0	0	3	0	0	0	5	5
08:30	0	6	0	0	0	0	3	0	0	0	9	9
08:45	0	4	0	0	0	0	1	0	0	0	5	5
Total	0	16	0	0	0	0	9	0	0	0	25	25
Grand Total	0	19	0	0	0	0	16	0	0	0	35	35
Apprch %	0	100		0	0		100	0				
Total %	0	54.3		0	0		45.7	0		0	100	

Start Time	St. Thomas More Rd From North			Chestnut Hill Dr From East			St. Thomas More Rd From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
08:00	0	4	4	0	0	0	2	0	2	6
08:15	0	2	2	0	0	0	3	0	3	5
08:30	0	6	6	0	0	0	3	0	3	9
08:45	0	4	4	0	0	0	1	0	1	5
Total Volume	0	16	16	0	0	0	9	0	9	25
% App. Total	0	100		0	0		100	0		
PHF	.000	.667	.667	.000	.000	.000	.750	.000	.750	.694

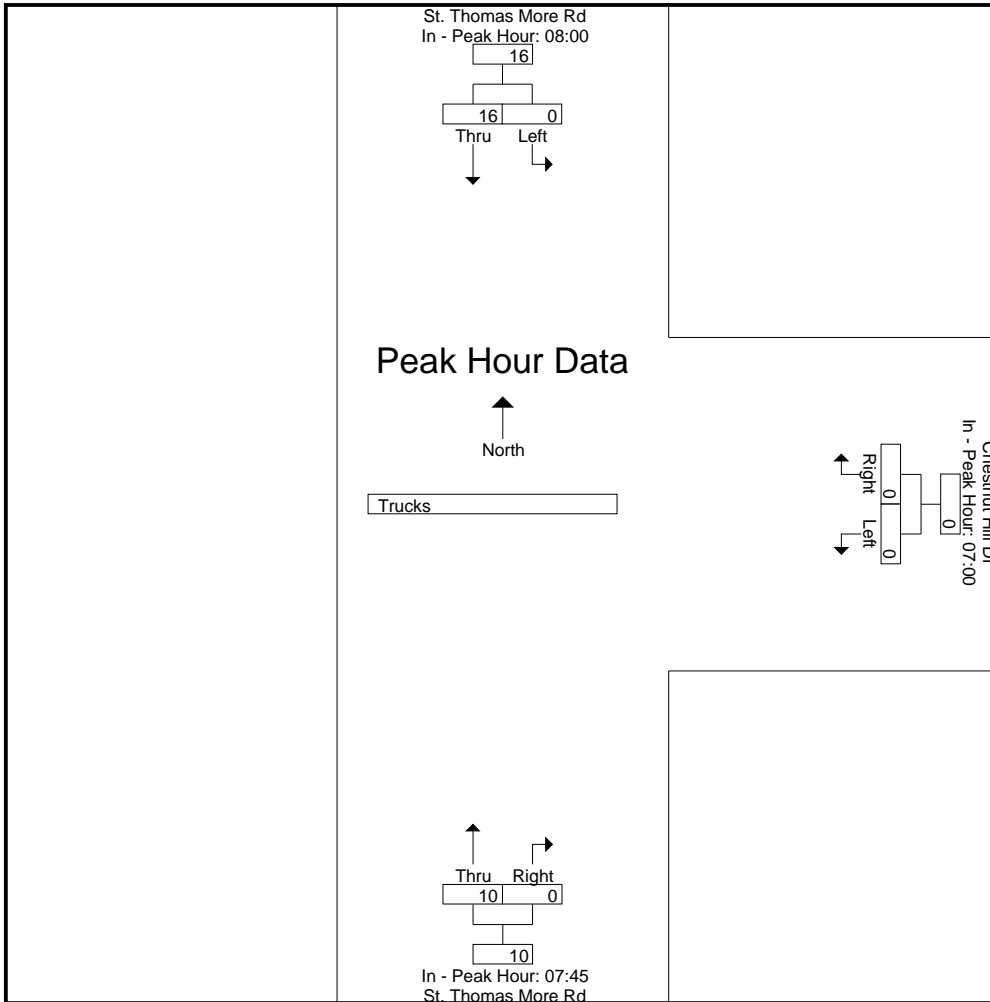
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 08:00



Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00			07:00			07:45		
+0 mins.	0	4	4	0	0	0	2	0	2
+15 mins.	0	2	2	0	0	0	2	0	2
+30 mins.	0	6	6	0	0	0	3	0	3
+45 mins.	0	4	4	0	0	0	3	0	3
Total Volume	0	16	16	0	0	0	10	0	10
% App. Total	0	100		0	0		100	0	
PHF	.000	.667	.667	.000	.000	.000	.833	.000	.833



N/S Street : St. Thomas More Road  
 E/W Street: Chestnut Hill Driveway  
 City/State : Brighton, MA  
 Weather : Clear

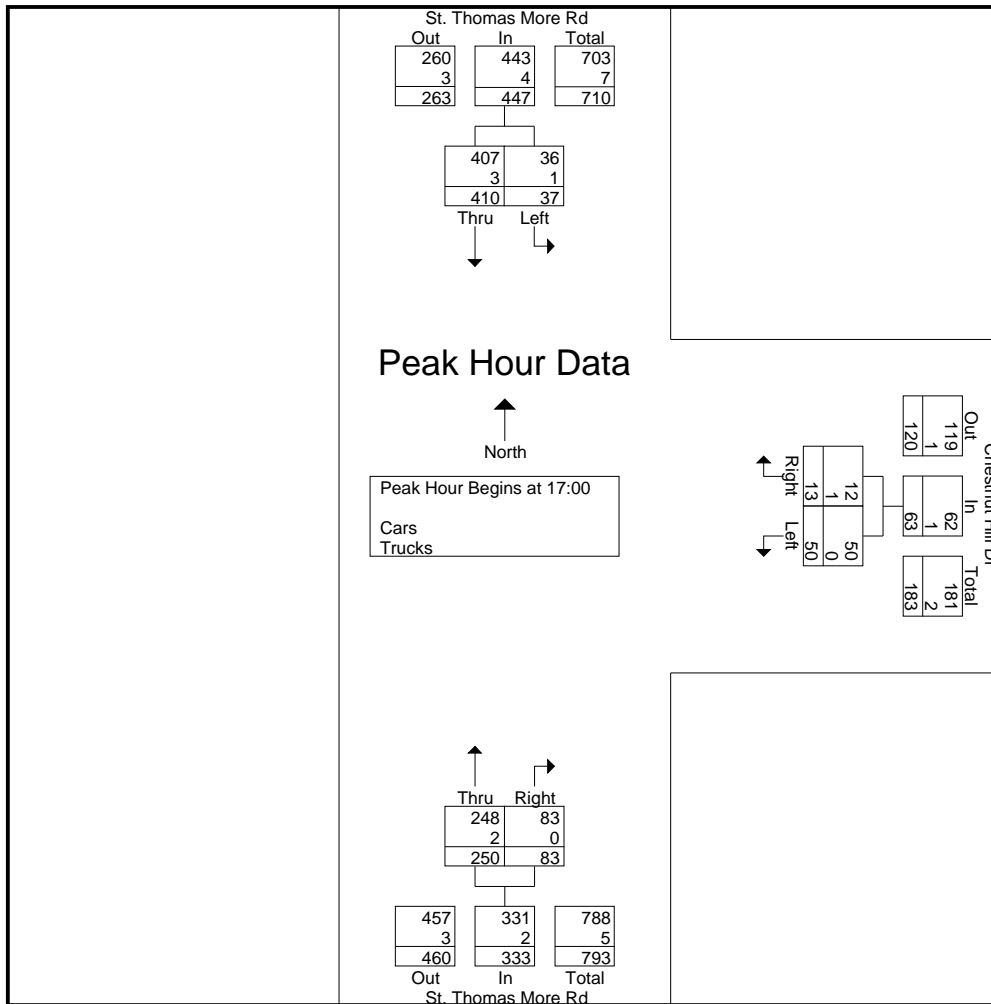
Accurate Counts  
 978-664-2565

File Name : 39000023  
 Site Code : 39000023  
 Start Date : 4/9/2008  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	St. Thomas More Rd From North			Chestnut Hill Dr From East			St. Thomas More Rd From South			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
16:00	9	98	0	15	2	3	59	19	0	3	202	205
16:15	6	117	0	16	1	4	58	22	1	5	220	225
16:30	9	92	0	23	2	3	60	15	2	5	201	206
16:45	8	96	0	14	3	5	46	12	0	5	179	184
Total	32	403	0	68	8	15	223	68	3	18	802	820
17:00	11	96	1	13	1	7	55	15	0	8	191	199
17:15	8	108	0	16	4	8	75	20	0	8	231	239
17:30	5	102	0	10	3	15	56	27	0	15	203	218
17:45	13	104	0	11	5	6	64	21	0	6	218	224
Total	37	410	1	50	13	36	250	83	0	37	843	880
Grand Total	69	813	1	118	21	51	473	151	3	55	1645	1700
Apprch %	7.8	92.2		84.9	15.1		75.8	24.2				
Total %	4.2	49.4		7.2	1.3		28.8	9.2		3.2	96.8	
Cars	68	808		118	20		471	151		0	0	1691
% Cars	98.6	99.4	100	100	95.2	100	99.6	100	100	0	0	99.5
Trucks	1	5		0	1		2	0		0	0	9
% Trucks	1.4	0.6	0	0	4.8	0	0.4	0	0	0	0	0.5

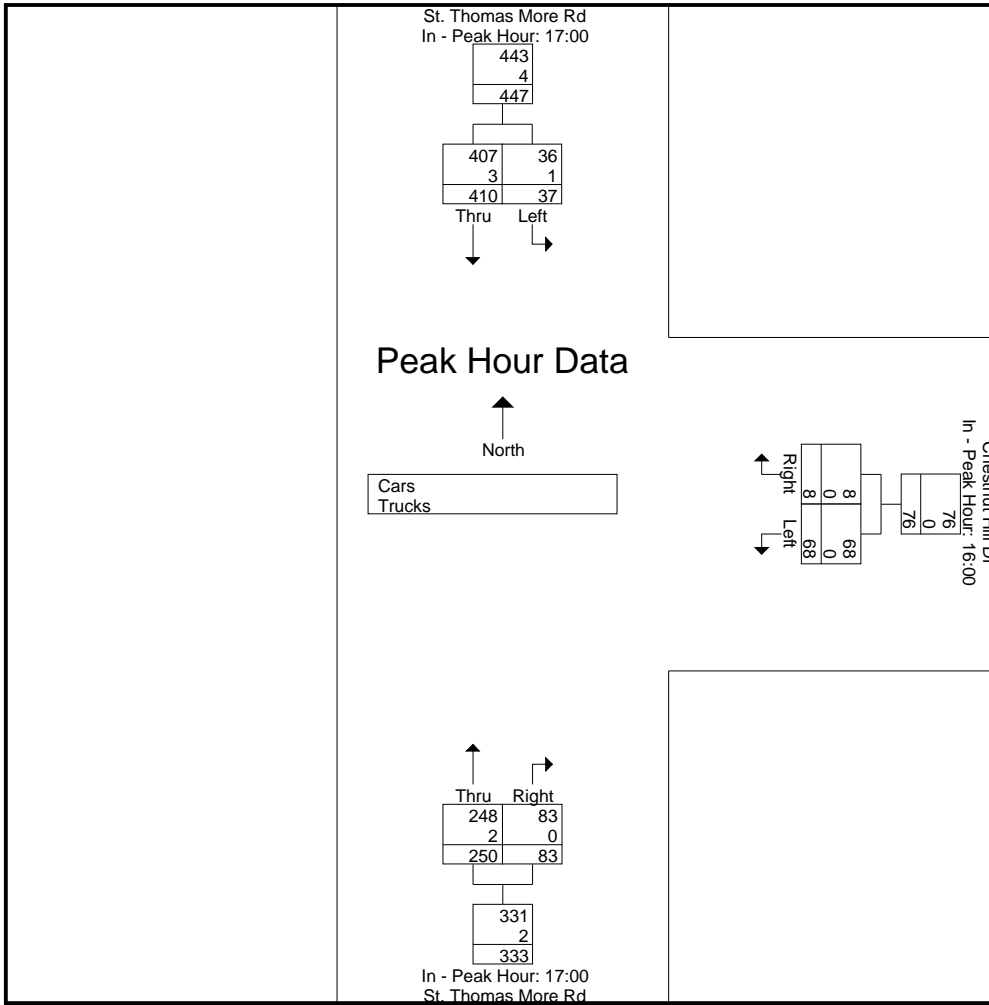
Start Time	St. Thomas More Rd From North			Chestnut Hill Dr From East			St. Thomas More Rd From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 17:00										
17:00	11	96	107	13	1	14	55	15	70	191
17:15	8	108	116	16	4	20	75	20	95	231
17:30	5	102	107	10	3	13	56	27	83	203
17:45	13	104	117	11	5	16	64	21	85	218
Total Volume	37	410	447	50	13	63	250	83	333	843
% App. Total	8.3	91.7		79.4	20.6		75.1	24.9		
PHF	.712	.949	.955	.781	.650	.788	.833	.769	.876	.912
Cars	36	407	443	50	12	62	248	83	331	836
% Cars	97.3	99.3	99.1	100	92.3	98.4	99.2	100	99.4	99.2
Trucks	1	3	4	0	1	1	2	0	2	7
% Trucks	2.7	0.7	0.9	0	7.7	1.6	0.8	0	0.6	0.8



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00			16:00			17:00		
+0 mins.	11	96	107	15	2	17	55	15	70
+15 mins.	8	108	116	16	1	17	75	20	95
+30 mins.	5	102	107	23	2	25	56	27	83
+45 mins.	13	104	117	14	3	17	64	21	85
Total Volume	37	410	447	68	8	76	250	83	333
% App. Total	8.3	91.7		89.5	10.5		75.1	24.9	
PHF	.712	.949	.955	.739	.667	.760	.833	.769	.876
Cars	36	407	443	68	8	76	248	83	331
% Cars	97.3	99.3	99.1	100	100	100	99.2	100	99.4
Trucks	1	3	4	0	0	0	2	0	2
% Trucks	2.7	0.7	0.9	0	0	0	0.8	0	0.6



N/S Street : St. Thomas More Road  
 E/W Street: Chestnut Hill Driveway  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

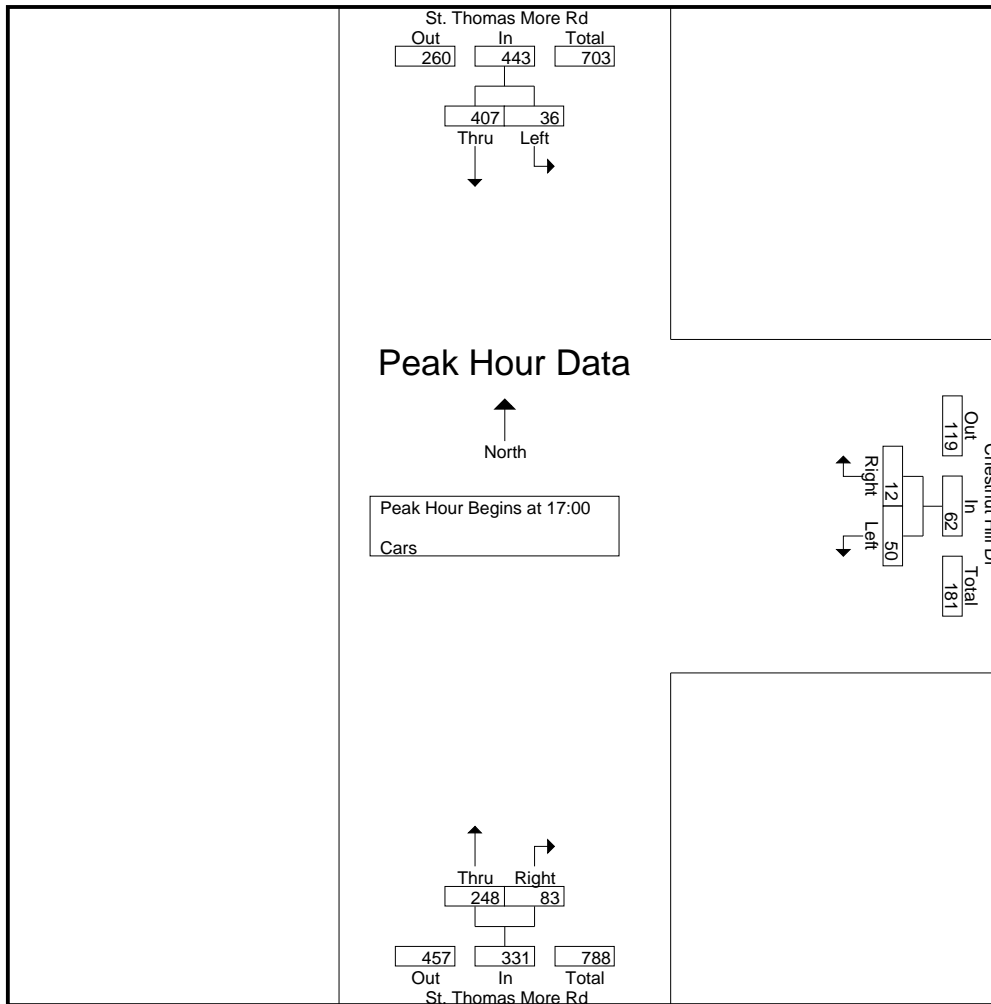
File Name : 39000023  
 Site Code : 39000023  
 Start Date : 4/9/2008  
 Page No : 1

Groups Printed- Cars

Start Time	St. Thomas More Rd From North			Chestnut Hill Dr From East			St. Thomas More Rd From South			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
16:00	9	98	0	15	2	3	59	19	0	3	202	205
16:15	6	117	0	16	1	4	58	22	1	5	220	225
16:30	9	91	0	23	2	3	60	15	2	5	200	205
16:45	8	95	0	14	3	5	46	12	0	5	178	183
Total	32	401	0	68	8	15	223	68	3	18	800	818
17:00	11	96	1	13	1	7	55	15	0	8	191	199
17:15	8	108	0	16	4	8	75	20	0	8	231	239
17:30	5	101	0	10	3	15	55	27	0	15	201	216
17:45	12	102	0	11	4	6	63	21	0	6	213	219
Total	36	407	1	50	12	36	248	83	0	37	836	873
Grand Total	68	808	1	118	20	51	471	151	3	55	1636	1691
Apprch %	7.8	92.2		85.5	14.5		75.7	24.3				
Total %	4.2	49.4		7.2	1.2		28.8	9.2		3.3	96.7	

Start Time	St. Thomas More Rd From North			Chestnut Hill Dr From East			St. Thomas More Rd From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 17:00										
17:00	11	96	107	13	1	14	55	15	70	191
17:15	8	108	116	16	4	20	75	20	95	231
17:30	5	101	106	10	3	13	55	27	82	201
17:45	12	102	114	11	4	15	63	21	84	213
Total Volume	36	407	443	50	12	62	248	83	331	836
% App. Total	8.1	91.9		80.6	19.4		74.9	25.1		
PHF	.750	.942	.955	.781	.750	.775	.827	.769	.871	.905

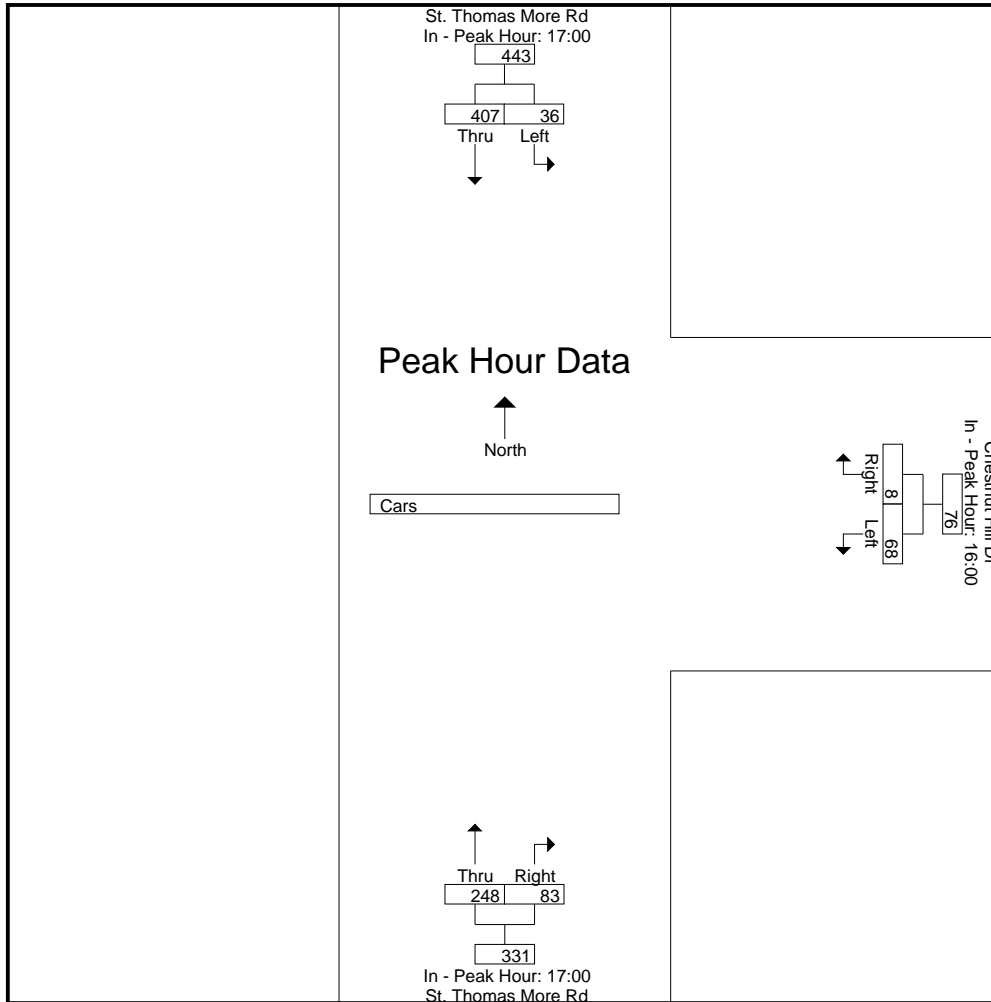




Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00			16:00			17:00		
+0 mins.	11	96	107	15	2	17	55	15	70
+15 mins.	8	108	116	16	1	17	75	20	95
+30 mins.	5	101	106	23	2	25	55	27	82
+45 mins.	12	102	114	14	3	17	63	21	84
Total Volume	36	407	443	68	8	76	248	83	331
% App. Total	8.1	91.9		89.5	10.5		74.9	25.1	
PHF	.750	.942	.955	.739	.667	.760	.827	.769	.871



N/S Street : St. Thomas More Road  
 E/W Street: Chestnut Hill Driveway  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

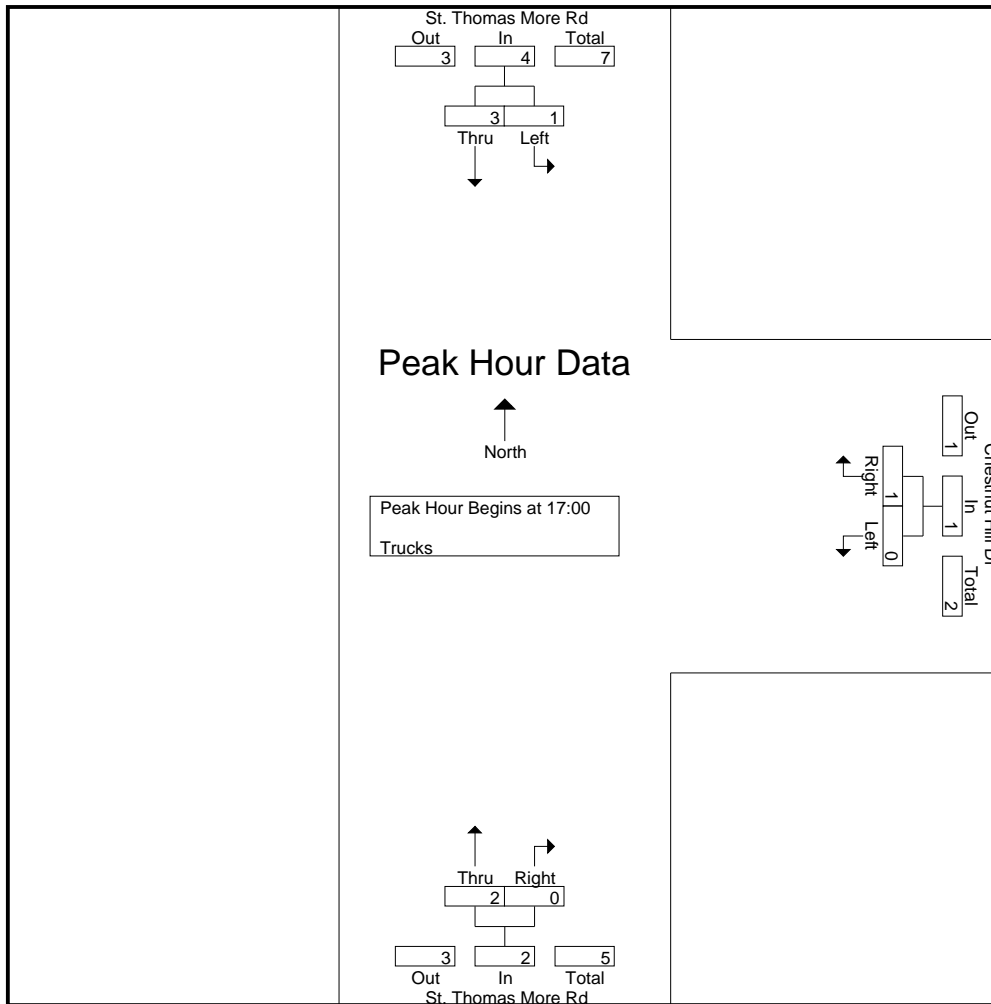
File Name : 39000023  
 Site Code : 39000023  
 Start Date : 4/9/2008  
 Page No : 1

Groups Printed- Trucks

Start Time	St. Thomas More Rd From North			Chestnut Hill Dr From East			St. Thomas More Rd From South			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
16:00	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	1	0	0	0	0	0	0	0	0	1	1
16:45	0	1	0	0	0	0	0	0	0	0	1	1
Total	0	2	0	0	0	0	0	0	0	0	2	2
17:00	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	1	0	0	0	0	1	0	0	0	2	2
17:45	1	2	0	0	1	0	1	0	0	0	5	5
Total	1	3	0	0	1	0	2	0	0	0	7	7
Grand Total	1	5	0	0	1	0	2	0	0	0	9	9
Apprch %	16.7	83.3		0	100		100	0				
Total %	11.1	55.6		0	11.1		22.2	0		0	100	

Start Time	St. Thomas More Rd From North			Chestnut Hill Dr From East			St. Thomas More Rd From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
17:00	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0
17:30	0	1	1	0	0	0	1	0	1	2
17:45	1	2	3	0	1	1	1	0	1	5
Total Volume	1	3	4	0	1	1	2	0	2	7
% App. Total	25	75		0	100		100	0		
PHF	.250	.375	.333	.000	.250	.250	.500	.000	.500	.350

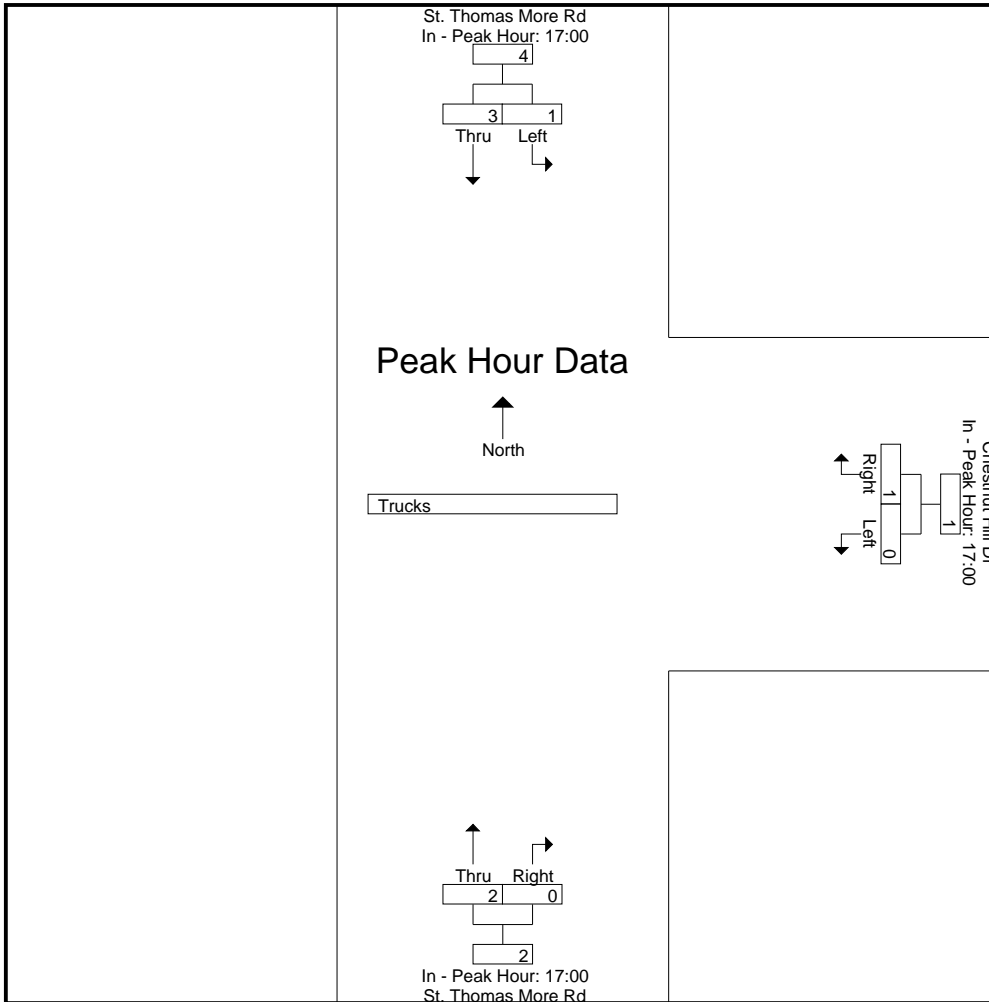
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 17:00



Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00			17:00			17:00		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	1	1	0	0	0	1	0	1
+45 mins.	1	2	3	0	1	1	1	0	1
Total Volume	1	3	4	0	1	1	2	0	2
% App. Total	25	75		0	100		100	0	
PHF	.250	.375	.333	.000	.250	.250	.500	.000	.500



N/S Street : Lake St / St Thomas Moore  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 390000B1  
 Site Code : 39000001  
 Start Date : 5/1/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Lake St From North			Commonwealth Ave From East			St Thomas Moore Rd From South			Commonwealth Ave From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00	0	0	0	0	1	0	0	0	0	0	1	0	2
07:15	0	0	0	0	1	0	0	1	0	0	2	0	4
07:30	0	0	0	0	0	0	0	0	0	0	1	0	1
07:45	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	0	2	0	0	2	0	0	4	0	8
08:00	0	0	0	0	0	0	0	1	0	0	1	0	2
08:15	0	2	0	0	0	0	0	0	0	0	0	0	2
08:30	0	0	0	2	0	0	0	0	0	0	0	0	2
08:45	0	0	0	1	4	0	0	0	0	0	3	0	8
Total	0	2	0	3	4	0	0	1	0	0	4	0	14
Grand Total	0	2	0	3	6	0	0	3	0	0	8	0	22
Apprch %	0	100	0	33.3	66.7	0	0	100	0	0	100	0	
Total %	0	9.1	0	13.6	27.3	0	0	13.6	0	0	36.4	0	

Start Time	Lake St From North				Commonwealth Ave From East				St Thomas Moore Rd From South				Commonwealth Ave From West				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
07:00 to 08:45 - Peak 1 of 1	Peak Hour for Entire Intersection Begins at 08:00																	
08:00	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
08:15	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
08:30	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	2
08:45	0	0	0	0	1	4	0	5	0	0	0	0	0	0	3	0	3	8
Total Volume	0	2	0	2	3	4	0	7	0	1	0	1	0	4	0	4	4	14
% App. Total	0	100	0		42.9	57.1	0		0	100	0		0	100	0			
PHF	.000	.250	.000	.250	.375	.250	.000	.350	.000	.250	.000	.250	.000	.333	.000	.333	.438	

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:30				08:00				07:15				07:00				
+0 mins.	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	
+30 mins.	0	0	0	0	2	0	0	2	0	1	0	1	0	1	0	1	
+45 mins.	0	2	0	2	1	4	0	5	0	1	0	1	0	0	0	0	
Total Volume	0	2	0	2	3	4	0	7	0	3	0	3	0	4	0	4	
% App. Total	0	100	0		42.9	57.1	0		0	100	0		0	100	0		
PHF	.000	.250	.000	.250	.375	.250	.000	.350	.000	.750	.000	.750	.000	.500	.000	.500	

N/S Street : Lake St / St Thomas Moore  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 390000B1  
 Site Code : 39000001  
 Start Date : 5/1/2008  
 Page No : 1

Groups Printed- Cars

Start Time	Lake St From North			Commonwealth Ave From East			St Thomas Moore Rd From South			Commonwealth Ave From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
16:00	0	0	0	1	2	0	0	0	0	0	0	0	3
16:15	0	0	0	1	1	0	0	0	2	0	2	0	6
16:30	0	0	0	0	2	0	0	0	0	0	0	0	2
16:45	0	0	0	0	1	0	0	0	0	0	0	0	1
Total	0	0	0	2	6	0	0	0	2	0	2	0	12
17:00	0	0	0	2	0	0	0	0	0	0	3	0	5
17:15	0	0	1	2	0	0	0	0	0	0	7	0	10
17:30	0	1	0	0	1	1	0	0	1	0	0	0	4
17:45	0	1	0	1	0	0	0	0	1	1	3	1	8
Total	0	2	1	5	1	1	0	0	2	1	13	1	27
Grand Total	0	2	1	7	7	1	0	0	4	1	15	1	39
Apprch %	0	66.7	33.3	46.7	46.7	6.7	0	0	100	5.9	88.2	5.9	
Total %	0	5.1	2.6	17.9	17.9	2.6	0	0	10.3	2.6	38.5	2.6	

Start Time	Lake St From North				Commonwealth Ave From East				St Thomas Moore Rd From South				Commonwealth Ave From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
16:00	0	0	0	0	2	0	0	2	0	0	0	0	0	3	0	3	5
17:15	0	0	1	1	2	0	0	2	0	0	0	0	0	7	0	7	10
17:30	0	1	0	1	0	1	1	2	0	0	1	1	0	0	0	0	4
17:45	0	1	0	1	1	0	0	1	0	0	1	1	1	3	1	5	8
Total Volume	0	2	1	3	5	1	1	7	0	0	2	2	1	13	1	15	27
% App. Total	0	66.7	33.3		71.4	14.3	14.3		0	0	100		6.7	86.7	6.7		
PHF	.000	.500	.250	.750	.625	.250	.250	.875	.000	.000	.500	.500	.250	.464	.250	.536	.675

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	17:00				16:00				16:00				17:00			
+0 mins.	0	0	0	0	1	2	0	3	0	0	0	0	0	3	0	3
+15 mins.	0	0	1	1	1	1	0	2	0	0	2	2	0	7	0	7
+30 mins.	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0
+45 mins.	0	1	0	1	0	1	0	1	0	0	0	0	1	3	1	5
Total Volume	0	2	1	3	2	6	0	8	0	0	2	2	1	13	1	15
% App. Total	0	66.7	33.3		25	75	0		0	0	100		6.7	86.7	6.7	
PHF	.000	.500	.250	.750	.500	.750	.000	.667	.000	.000	.250	.250	.250	.464	.250	.536

N/S Street : Foster Street  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 390000B2  
 Site Code : 39000002  
 Start Date : 5/1/2008  
 Page No : 1

Groups Printed- Bikes

Start Time	Foster St From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00	0	0	0	0	1	0	0	0	0	0	1	1
07:15	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	1	0	0	0	0	0	0	1	1
Total	0	0	0	1	1	0	0	0	0	0	2	2
08:00	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	1	0	0	0	0	0	0	1	1
08:30	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	2	0	0	0	0	0	0	2	2
Total	0	0	0	3	0	0	0	0	0	0	3	3
Grand Total	0	0	0	4	1	0	0	0	0	0	5	5
Apprch %	0	0		80	20		0	0				
Total %	0	0		80	20		0	0		0	100	

Start Time	Foster St From North			Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
08:00	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	1	0	1	0	0	0	1
08:30	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	2	0	2	0	0	0	2
Total Volume	0	0	0	3	0	3	0	0	0	3
% App. Total	0	0		100	0		0	0		
PHF	.000	.000	.000	.375	.000	.375	.000	.000	.000	.375

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 08:00

	07:00			08:00			07:00		
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	1	0	1	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	2	0	2	0	0	0
Total Volume	0	0	0	3	0	3	0	0	0
% App. Total	0	0		100	0		0	0	
PHF	.000	.000	.000	.375	.000	.375	.000	.000	.000



N/S Street : Foster Street  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 390000B2  
 Site Code : 39000002  
 Start Date : 5/1/2008  
 Page No : 1

Groups Printed- Bikes

Start Time	Foster St From North			Commonwealth Ave From East			Commonwealth Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
16:00	0	0	0	0	2	0	0	0	0	0	2	2
16:15	0	0	0	0	1	0	0	0	0	0	1	1
16:30	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	3	0	0	0	0	0	3	3
17:00	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	1	0	0	1	1
17:30	0	1	0	0	0	0	0	0	0	0	1	1
17:45	1	0	0	0	0	0	0	0	0	0	1	1
Total	1	1	0	0	0	0	0	1	0	0	3	3
Grand Total	1	1	0	0	3	0	0	1	0	0	6	6
Apprch %	50	50		0	100		0	100				
Total %	16.7	16.7		0	50		0	16.7		0	100	

Start Time	Foster St From North			Commonwealth Ave From East			Commonwealth Ave From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
16:00	0	0	0	0	2	2	0	0	0	2
16:15	0	0	0	0	1	1	0	0	0	1
16:30	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	3	3	0	0	0	3
% App. Total	0	0		0	100		0	0		
PHF	.000	.000	.000	.000	.375	.375	.000	.000	.000	.375

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	17:00			16:00			16:30		
+0 mins.	0	0	0	0	2	2	0	0	0
+15 mins.	0	0	0	0	1	1	0	0	0
+30 mins.	0	1	1	0	0	0	0	0	0
+45 mins.	1	0	1	0	0	0	0	1	1
Total Volume	1	1	2	0	3	3	0	1	1
% App. Total	50	50		0	100		0	100	
PHF	.250	.250	.500	.000	.375	.375	.000	.250	.250

N/S Street : St. Thomas Moore Road  
 E/W Street: Chestnut Hill Drive  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 390000b6  
 Site Code : 39000006  
 Start Date : 5/1/2008  
 Page No : 1

Groups Printed- Bikes

Start Time	St Thomas Moore Rd From North		Chestnut Hill Dr From East		St Thomas Moore Rd From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
07:00	0	0	0	0	0	0	0
07:15	0	0	0	0	1	0	1
07:30	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	1
08:00	0	0	0	0	1	0	1
08:15	0	1	0	0	0	0	1
08:30	0	1	0	0	0	0	1
08:45	0	1	0	0	0	0	1
Total	0	3	0	0	1	0	4
Grand Total	0	3	0	0	2	0	5
Apprch %	0	100	0	0	100	0	
Total %	0	60	0	0	40	0	

Start Time	St Thomas Moore Rd From North			Chestnut Hill Dr From East			St Thomas Moore Rd From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
08:00	0	0	0	0	0	0	1	0	1	1
08:15	0	1	1	0	0	0	0	0	0	1
08:30	0	1	1	0	0	0	0	0	0	1
08:45	0	1	1	0	0	0	0	0	0	1
Total Volume	0	3	3	0	0	0	1	0	1	4
% App. Total	0	100		0	0		100	0		
PHF	.000	.750	.750	.000	.000	.000	.250	.000	.250	1.000

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 08:00

	08:00			07:00			07:15		
+0 mins.	0	0	0	0	0	0	1	0	1
+15 mins.	0	1	1	0	0	0	0	0	0
+30 mins.	0	1	1	0	0	0	0	0	0
+45 mins.	0	1	1	0	0	0	1	0	1
Total Volume	0	3	3	0	0	0	2	0	2
% App. Total	0	100		0	0		100	0	
PHF	.000	.750	.750	.000	.000	.000	.500	.000	.500



N/S Street : Hammond Street  
 E/W Street: Beacon Street  
 City/State : Newton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 390000B7  
 Site Code : 39000007  
 Start Date : 5/1/2008  
 Page No : 1

Groups Printed- Bikes

Start Time	Hammond St From North				College Rd From Northeast				Beacon St From East				Hammond St From South				Beacon St From West				Int. Total
	Hard Left	Left	Thru	Right	Hard Left	Bear Left	Bear Right	Hard Right	Left	Thru	Right	Hard Right	Left	Thru	Bear Right	Right	Left	Bear Left	Thru	Right	
07:00	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	2	0	0	0	0	5
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3
07:45	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	4
Total	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	2	0	0	4	1	12
08:00	0	0	1	0	0	0	0	0	0	3	0	0	0	0	2	1	0	0	1	0	8
08:15	0	0	0	0	0	0	0	0	0	3	1	0	1	0	0	0	0	0	1	0	6
08:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	3
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
Total	0	0	1	0	0	0	0	0	0	7	1	0	1	0	2	1	0	0	8	0	21
Grand Total	0	0	1	0	0	0	0	0	0	12	1	0	1	0	2	3	0	0	12	1	33
Apprch %	0	0	100	0	0	0	0	0	0	92.3	7.7	0	16.7	0	33.3	50	0	0	92.3	7.7	
Total %	0	0	3	0	0	0	0	0	0	36.4	3	0	3	0	6.1	9.1	0	0	36.4	3	

Start Time	Hammond St From North					College Rd From Northeast					Beacon St From East					Hammond St From South					Beacon St From West					Int. Total
	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 07:30																										
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	3
07:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	2	0	2	4
08:00	0	0	1	0	1	0	0	0	0	0	0	3	0	0	3	0	0	2	1	3	0	0	1	0	1	8
08:15	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	1	0	0	0	1	0	0	1	0	1	6
Total Volume	0	0	1	0	1	0	0	0	0	0	0	8	1	0	9	1	0	2	1	4	0	0	6	1	7	21
% App. Total	0	0	100	0		0	0	0	0		0	88.9	11.1	0		25	0	50	25		0	0	85.7	14.3		
PHF	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.667	.250	.000	.563	.250	.000	.250	.250	.333	.000	.000	.750	.250	.583	.656

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:15					07:00					07:45					07:30					08:00				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	0	0	2	1	3	0	0	2	0	2
+45 mins.	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	4	0	4
Total Volume	0	0	1	0	1	0	0	0	0	0	0	9	1	0	10	1	0	2	1	4	0	0	8	0	8
% App. Total	0	0	100	0		0	0	0	0		0	90	10	0		25	0	50	25		0	0	100	0	
PHF	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.750	.250	.000	.625	.250	.000	.250	.250	.333	.000	.000	.500	.000	.500

N/S Street : Hammond Street  
 E/W Street: Beacon Street  
 City/State : Newton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 390000B7  
 Site Code : 39000007  
 Start Date : 5/1/2008  
 Page No : 1

Groups Printed- Bikes

Start Time	Hammond St From North				College Rd From Northeast				Beacon St From East				Hammond St From South				Beacon St From West				Int. Total
	Hard Left	Left	Thru	Right	Hard Left	Bear Left	Bear Right	Hard Right	Left	Thru	Right	Hard Right	Left	Thru	Bear Right	Right	Left	Bear Left	Thru	Right	
16:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	3
16:15	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
16:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	5
16:45	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	2	0	0	0	0	0	1	4	0	0	0	0	0	1	0	0	2	2	12
17:00	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	3	0	7
17:15	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	2	0	5
17:30	0	0	1	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	1	0	8
17:45	0	0	1	0	0	0	0	0	1	3	1	1	0	0	0	0	0	0	3	0	10
Total	0	0	2	0	0	0	0	0	1	15	1	2	0	0	0	0	0	0	9	0	30
Grand Total	0	0	4	0	0	0	0	0	2	19	1	2	0	0	0	1	0	0	11	2	42
Apprch %	0	0	100	0	0	0	0	0	8.3	79.2	4.2	8.3	0	0	0	100	0	0	84.6	15.4	
Total %	0	0	9.5	0	0	0	0	0	4.8	45.2	2.4	4.8	0	0	0	2.4	0	0	26.2	4.8	

Start Time	Hammond St From North					College Rd From Northeast					Beacon St From East					Hammond St From South					Beacon St From West					Int. Total
	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 17:00																										
17:00	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	3	0	3	7
17:15	0	0	0	0	0	0	0	0	0	0	0	2	0	1	3	0	0	0	0	0	0	0	2	0	2	5
17:30	0	0	1	0	1	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	1	0	1	8
17:45	0	0	1	0	1	0	0	0	0	0	1	3	1	1	6	0	0	0	0	0	0	0	3	0	3	10
Total Volume	0	0	2	0	2	0	0	0	0	0	1	15	1	2	19	0	0	0	0	0	0	0	9	0	9	30
% App. Total	0	0	100	0		0	0	0	0		5.3	78.9	5.3	10.5		0	0	0	0		0	0	100	0		
PHF	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.625	.250	.500	.792	.000	.000	.000	.000	.000	.000	.000	.750	.000	.750	.750

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	16:00					16:00					17:00					16:00					16:30				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	1	1	0	0	2	2	4
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	2	0	1	3	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	1	0	1	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	3	0	3
+45 mins.	0	0	1	0	1	0	0	0	0	0	1	3	1	1	6	0	0	0	0	0	0	0	2	0	2
Total Volume	0	0	2	0	2	0	0	0	0	0	1	15	1	2	19	0	0	0	1	1	0	0	7	2	9
% App. Total	0	0	100	0		0	0	0	0		5.3	78.9	5.3	10.5		0	0	0	100		0	0	77.8	22.2	
PHF	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.625	.250	.500	.792	.000	.000	.000	.250	.250	.000	.000	.583	.250	.563

N/S Street : St Thomas Moore Road  
 E/W Street: Beacon Street  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000B15  
 Site Code : 39000015  
 Start Date : 5/1/2008  
 Page No : 1

Groups Printed- Bikes

Start Time	St Thomas Moore Rd From North			Beacon St From East			Gate House Rd From South			Beacon St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00	0	0	1	0	2	1	0	0	0	0	1	0	5
07:15	0	0	0	0	1	0	0	0	0	0	1	0	2
07:30	0	0	0	0	1	0	0	0	0	0	2	0	3
07:45	0	0	0	0	2	0	0	0	0	1	0	0	3
Total	0	0	1	0	6	1	0	0	0	1	4	0	13
08:00	0	0	0	0	0	0	0	0	0	0	1	0	1
08:15	0	0	0	0	3	0	0	0	0	0	1	0	4
08:30	0	0	0	0	1	0	0	0	0	0	0	0	1
08:45	1	0	0	0	1	1	0	0	0	0	3	0	6
Total	1	0	0	0	5	1	0	0	0	0	5	0	12
Grand Total	1	0	1	0	11	2	0	0	0	1	9	0	25
Apprch %	50	0	50	0	84.6	15.4	0	0	0	10	90	0	
Total %	4	0	4	0	44	8	0	0	0	4	36	0	

Start Time	St Thomas Moore Rd From North				Beacon St From East				Gate House Rd From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00	0	0	1	1	0	2	1	3	0	0	0	0	0	1	0	1	5
07:15	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:30	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:45	0	0	0	0	0	2	0	2	0	0	0	0	1	0	0	1	3
Total Volume	0	0	1	1	0	6	1	7	0	0	0	0	1	4	0	5	13
% App. Total	0	0	100		0	85.7	14.3		0	0	0		20	80	0		
PHF	.000	.000	.250	.250	.000	.750	.250	.583	.000	.000	.000	.000	.250	.500	.000	.625	.650

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at:

	07:00				07:00				07:00				07:00				
+0 mins.	0	0	1	1	0	2	1	3	0	0	0	0	0	1	0	1	1
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	1
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	2
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	1	0	0	1	1
Total Volume	0	0	1	1	0	6	1	7	0	0	0	0	1	4	0	5	5
% App. Total	0	0	100		0	85.7	14.3		0	0	0		20	80	0		
PHF	.000	.000	.250	.250	.000	.750	.250	.583	.000	.000	.000	.000	.250	.500	.000	.625	.625

N/S Street : St Thomas Moore Road  
 E/W Street: Beacon Street  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000B15  
 Site Code : 39000015  
 Start Date : 5/1/2008  
 Page No : 1

Groups Printed- Bikes

Start Time	St Thomas Moore Rd From North			Beacon St From East			Gate House Rd From South			Beacon St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	2	0	0	0	2	0	0	0	0	0	0	0	4
16:30	1	0	0	0	3	0	0	0	0	1	2	0	7
16:45	0	0	0	0	0	0	0	0	0	0	1	0	1
Total	3	0	0	0	5	0	0	0	0	1	3	0	12
17:00	0	0	0	0	0	0	0	0	0	0	4	0	4
17:15	0	0	0	0	1	0	0	0	0	0	2	0	3
17:30	3	0	0	0	6	0	0	0	0	0	1	0	10
17:45	1	0	0	0	6	0	0	0	0	3	2	0	12
Total	4	0	0	0	13	0	0	0	0	3	9	0	29
Grand Total	7	0	0	0	18	0	0	0	0	4	12	0	41
Apprch %	100	0	0	0	100	0	0	0	0	25	75	0	
Total %	17.1	0	0	0	43.9	0	0	0	0	9.8	29.3	0	

Start Time	St Thomas Moore Rd From North				Beacon St From East				Gate House Rd From South				Beacon St From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	
16:15	2	0	0	2	0	1	0	1	0	0	0	0	0	2	0	2	
16:30	1	0	0	1	0	6	0	6	0	0	0	0	0	1	0	1	
16:45	0	0	0	0	0	6	0	6	0	0	0	0	3	2	0	5	
Total Volume	4	0	0	4	0	13	0	13	0	0	0	0	3	9	0	12	
% App. Total	100	0	0		0	100	0		0	0	0		25	75	0		
PHF	.333	.000	.000	.333	.000	.542	.000	.542	.000	.000	.000	.000	.250	.563	.000	.604	

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 17:00

	17:00				17:00				16:00				17:00			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2
+30 mins.	3	0	0	3	0	6	0	6	0	0	0	0	0	1	0	1
+45 mins.	1	0	0	1	0	6	0	6	0	0	0	0	3	2	0	5
Total Volume	4	0	0	4	0	13	0	13	0	0	0	0	3	9	0	12
% App. Total	100	0	0		0	100	0		0	0	0		25	75	0	
PHF	.333	.000	.000	.333	.000	.542	.000	.542	.000	.000	.000	.000	.250	.563	.000	.604

N/S Street : Father Herlihy Drive  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000B19  
 Site Code : 39000019  
 Start Date : 5/1/2008  
 Page No : 1

Groups Printed- Bikes

Start Time	Fr Herlihy Dr From North			Commonwealth Ave From East			Fr Herlihy Dr From South				Commonwealth Ave From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Peds	Left	Thru	Right	
07:00	0	0	0	0	1	0	0	0	0	0	0	1	0	2
07:15	0	0	0	0	1	0	0	0	0	0	1	2	0	4
07:30	0	1	0	0	0	0	0	0	0	0	0	1	0	2
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	2	0	0	0	0	0	1	4	0	8
08:00	0	0	0	0	0	0	0	0	0	0	0	1	1	2
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	1	0	0	1	0	0	0	1	0	0	3
08:45	0	0	0	0	3	0	0	0	0	0	0	3	0	6
Total	0	0	0	1	3	0	1	0	0	0	1	4	1	11
Grand Total	0	1	0	1	5	0	1	0	0	0	2	8	1	19
Apprch %	0	100	0	16.7	83.3	0	100	0	0	0	18.2	72.7	9.1	
Total %	0	5.3	0	5.3	26.3	0	5.3	0	0	0	10.5	42.1	5.3	

Start Time	Fr Herlihy Dr From North				Commonwealth Ave From East				Fr Herlihy Dr From South					Commonwealth Ave From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 08:00																		
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	1	0	0	1	1	0	0	0	1	1	0	0	1	3
08:45	0	0	0	0	0	3	0	3	0	0	0	0	0	0	3	0	3	6
Total Volume	0	0	0	0	1	3	0	4	1	0	0	0	1	1	4	1	6	11
% App. Total	0	0	0	0	25	75	0	100	100	0	0	0	100	16.7	66.7	16.7		
PHF	.000	.000	.000	.000	.250	.250	.000	.333	.250	.000	.000	.000	.250	.250	.333	.250	.500	.458

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00				08:00				07:45				07:15				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+30 mins.	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	3	0	3	1	0	0	0	1	0	1	1	2
Total Volume	0	1	0	1	1	3	0	4	1	0	0	0	1	1	4	1	6
% App. Total	0	100	0	0	25	75	0	100	100	0	0	0	100	16.7	66.7	16.7	
PHF	.000	.250	.000	.250	.250	.250	.000	.333	.250	.000	.000	.000	.250	.250	.500	.250	.500



N/S Street : Father Herlihy Drive  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000B19  
 Site Code : 39000019  
 Start Date : 5/1/2008  
 Page No : 1

Groups Printed- Bikes

Start Time	Fr Herlihy Dr From North			Commonwealth Ave From East			Fr Herlihy Dr From South				Commonwealth Ave From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Peds	Left	Thru	Right	
16:00	0	1	0	0	2	0	0	0	0	0	0	0	2	5
16:15	0	0	0	0	1	0	0	0	0	0	0	2	0	3
16:30	0	0	0	0	2	0	0	0	0	0	0	0	0	2
16:45	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	1	0	0	6	0	0	0	0	0	0	2	2	11
17:00	0	0	0	0	0	0	0	0	0	0	0	3	0	3
17:15	0	0	0	0	1	0	0	0	0	0	0	7	0	8
17:30	0	0	0	0	1	0	0	0	0	0	0	0	1	2
17:45	0	0	0	0	0	0	0	0	0	0	0	5	0	5
Total	0	0	0	0	2	0	0	0	0	0	0	15	1	18
Grand Total	0	1	0	0	8	0	0	0	0	0	0	17	3	29
Apprch %	0	100	0	0	100	0	0	0	0	0	0	85	15	
Total %	0	3.4	0	0	27.6	0	0	0	0	0	0	58.6	10.3	

Start Time	Fr Herlihy Dr From North				Commonwealth Ave From East				Fr Herlihy Dr From South					Commonwealth Ave From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 17:00																		
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
17:15	0	0	0	0	0	1	0	1	0	0	0	0	0	0	7	0	7	8
17:30	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	1	2
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	5
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	0	15	1	16	18
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	0	93.8	6.2		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.000	.536	.250	.571	.563

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	16:00				16:00				16:00				17:00				
+0 mins.	0	1	0	1	0	2	0	2	0	0	0	0	0	0	3	0	3
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	7	0	7
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	1	1
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	5	0	5
Total Volume	0	1	0	1	0	6	0	6	0	0	0	0	0	0	15	1	16
% App. Total	0	100	0	0	0	100	0	0	0	0	0	0	0	0	93.8	6.2	
PHF	.000	.250	.000	.250	.000	.750	.000	.750	.000	.000	.000	.000	.000	.000	.536	.250	.571

N/S Street : BC Main Drive  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000B21  
 Site Code : 39000021  
 Start Date : 5/1/2008  
 Page No : 1

Groups Printed- Bikes

Start Time	Commonwealth Ave From East		BC Main Dr From South		Commonwealth Ave From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00	0	1	0	1	1	0	3
07:15	0	0	0	0	0	2	2
07:30	0	2	0	0	0	0	2
07:45	0	1	0	0	0	0	1
Total	0	4	0	1	1	2	8
08:00	0	0	0	0	0	0	0
08:15	0	2	0	0	0	0	2
08:30	0	0	0	0	1	0	1
08:45	0	1	0	0	3	0	4
Total	0	3	0	0	4	0	7
Grand Total	0	7	0	1	5	2	15
Apprch %	0	100	0	100	71.4	28.6	
Total %	0	46.7	0	6.7	33.3	13.3	

Start Time	Commonwealth Ave From East			BC Main Dr From South			Commonwealth Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00	0	1	1	0	1	1	1	0	1	3
07:15	0	0	0	0	0	0	0	2	2	2
07:30	0	2	2	0	0	0	0	0	0	2
07:45	0	1	1	0	0	0	0	0	0	1
Total Volume	0	4	4	0	1	1	1	2	3	8
% App. Total	0	100		0	100		33.3	66.7		
PHF	.000	.500	.500	.000	.250	.250	.250	.250	.375	.667

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:00

	07:30			07:00			08:00		
+0 mins.	0	2	2	0	1	1	0	0	0
+15 mins.	0	1	1	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	1	0	1
+45 mins.	0	2	2	0	0	0	3	0	3
Total Volume	0	5	5	0	1	1	4	0	4
% App. Total	0	100		0	100		100	0	
PHF	.000	.625	.625	.000	.250	.250	.333	.000	.333

N/S Street : BC Main Drive  
 E/W Street: Commonwealth Avenue  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000B21  
 Site Code : 39000021  
 Start Date : 5/1/2008  
 Page No : 1

Groups Printed- Bikes

Start Time	Commonwealth Ave From East		BC Main Dr From South		Commonwealth Ave From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
16:00	0	1	0	0	1	0	2
16:15	0	1	0	0	1	0	2
16:30	0	1	0	1	0	0	2
16:45	0	0	0	0	0	0	0
Total	0	3	0	1	2	0	6
17:00	0	1	0	1	0	0	2
17:15	0	0	0	0	3	0	3
17:30	0	0	0	0	0	0	0
17:45	0	1	0	2	1	0	4
Total	0	2	0	3	4	0	9
Grand Total	0	5	0	4	6	0	15
Apprch %	0	100	0	100	100	0	
Total %	0	33.3	0	26.7	40	0	

Start Time	Commonwealth Ave From East			BC Main Dr From South			Commonwealth Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
16:00	0	1	1	0	1	1	0	0	0	2
17:15	0	0	0	0	0	0	3	0	3	3
17:30	0	0	0	0	0	0	0	0	0	0
17:45	0	1	1	0	2	2	1	0	1	4
Total Volume	0	2	2	0	3	3	4	0	4	9
% App. Total	0	100		0	100		100	0		
PHF	.000	.500	.500	.000	.375	.375	.333	.000	.333	.563

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 17:00

	16:00			17:00			17:00		
+0 mins.	0	1	1	0	1	1	0	0	0
+15 mins.	0	1	1	0	0	0	3	0	3
+30 mins.	0	1	1	0	0	0	0	0	0
+45 mins.	0	0	0	0	2	2	1	0	1
Total Volume	0	3	3	0	3	3	4	0	4
% App. Total	0	100		0	100		100	0	
PHF	.000	.750	.750	.000	.375	.375	.333	.000	.333

N/S Street : St Thomas More Road  
 E/W Street: BC Gate  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000B24  
 Site Code : 39000B24  
 Start Date : 5/1/2008  
 Page No : 1

Groups Printed- Bikes

Start Time	St Thomas More Rd From North		St Thomas More Rd From South			BC Gate From West		Int. Total
	Thru	Right	Left	Thru	Peds	Left	Right	
07:00	0	0	1	1	0	0	0	2
07:15	0	0	0	0	0	0	0	0
07:30	0	0	1	1	0	1	0	3
07:45	0	0	0	1	0	0	0	1
Total	0	0	2	3	0	1	0	6
08:00	0	1	0	0	0	0	1	2
08:15	0	1	0	0	0	0	0	1
08:30	0	1	1	0	0	0	1	3
08:45	0	1	0	1	0	0	0	2
Total	0	4	1	1	0	0	2	8
Grand Total	0	4	3	4	0	1	2	14
Apprch %	0	100	42.9	57.1	0	33.3	66.7	
Total %	0	28.6	21.4	28.6	0	7.1	14.3	

Start Time	St Thomas More Rd From North			St Thomas More Rd From South				BC Gate From West			Int. Total
	Thru	Right	App. Total	Left	Thru	Peds	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 08:00											
08:00	0	1	1	0	0	0	0	0	1	1	2
08:15	0	1	1	0	0	0	0	0	0	0	1
08:30	0	1	1	1	0	0	1	0	1	1	3
08:45	0	1	1	0	1	0	1	0	0	0	2
Total Volume	0	4	4	1	1	0	2	0	2	2	8
% App. Total	0	100		50	50	0		0	100		
PHF	.000	1.000	1.000	.250	.250	.000	.500	.000	.500	.500	.667

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	08:00			07:00				07:15		
+0 mins.	0	1	1	1	1	0	2	0	0	0
+15 mins.	0	1	1	0	0	0	0	1	0	1
+30 mins.	0	1	1	1	1	0	2	0	0	0
+45 mins.	0	1	1	0	1	0	1	0	1	1
Total Volume	0	4	4	2	3	0	5	1	1	2
% App. Total	0	100		40	60	0		50	50	
PHF	.000	1.000	1.000	.500	.750	.000	.625	.250	.250	.500

N/S Street : St Thomas More Road  
 E/W Street: BC Gate  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000B24  
 Site Code : 39000B24  
 Start Date : 5/1/2008  
 Page No : 1

Groups Printed- Bikes

Start Time	St Thomas More Rd From North		St Thomas More Rd From South			BC Gate From West		Int. Total
	Thru	Right	Left	Thru	Peds	Left	Right	
16:00	0	1	0	0	0	1	2	4
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	1	0	0	0	0	0	1
Total	0	2	0	0	0	1	2	5
17:00	0	1	0	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	1	1
17:45	0	0	0	0	0	0	0	0
Total	0	1	0	0	0	0	1	2
Grand Total	0	3	0	0	0	1	3	7
Apprch %	0	100	0	0	0	25	75	
Total %	0	42.9	0	0	0	14.3	42.9	

Start Time	St Thomas More Rd From North			St Thomas More Rd From South				BC Gate From West			Int. Total
	Thru	Right	App. Total	Left	Thru	Peds	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 16:00											
16:00	0	1	1	0	0	0	0	1	2	3	4
16:15	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0
16:45	0	1	1	0	0	0	0	0	0	0	1
Total Volume	0	2	2	0	0	0	0	1	2	3	5
% App. Total	0	100		0	0	0		33.3	66.7		
PHF	.000	.500	.500	.000	.000	.000	.000	.250	.250	.250	.313

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	16:00			16:00				16:00		
+0 mins.	0	1	1	0	0	0	0	1	2	3
+15 mins.	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	1	1	0	0	0	0	0	0	0
Total Volume	0	2	2	0	0	0	0	1	2	3
% App. Total	0	100		0	0	0		33.3	66.7	
PHF	.000	.500	.500	.000	.000	.000	.000	.250	.250	.250

N/S Street : Father Herlihy Way  
 E/W Street: BC Gate  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000B25  
 Site Code : 39000B25  
 Start Date : 5/1/2008  
 Page No : 1

Groups Printed- Bikes

Start Time	Fr Herlihy Way From North		BC Gate From East		BC Gate From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
07:00	0	0	0	0	0	0	0
07:15	0	0	1	0	0	0	1
07:30	0	0	0	0	0	0	0
07:45	0	0	1	0	0	0	1
Total	0	0	2	0	0	0	2
08:00	0	0	0	0	0	0	0
08:15	1	0	0	0	0	0	1
08:30	0	0	0	0	0	0	0
08:45	0	1	0	0	0	1	2
Total	1	1	0	0	0	1	3
Grand Total	1	1	2	0	0	1	5
Apprch %	50	50	100	0	0	100	
Total %	20	20	40	0	0	20	

Start Time	Fr Herlihy Way From North			BC Gate From East			BC Gate From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
08:00	0	0	0	0	0	0	0	0	0	0
08:15	1	0	1	0	0	0	0	0	0	1
08:30	0	0	0	0	0	0	0	0	0	0
08:45	0	1	1	0	0	0	0	1	1	2
Total Volume	1	1	2	0	0	0	0	1	1	3
% App. Total	50	50		0	0		0	100		
PHF	.250	.250	.500	.000	.000	.000	.000	.250	.250	.375

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 08:00

	08:00			07:00			08:00		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	1	0	1	1	0	1	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	1	1	1	0	1	0	1	1
Total Volume	1	1	2	2	0	2	0	1	1
% App. Total	50	50		100	0		0	100	
PHF	.250	.250	.500	.500	.000	.500	.000	.250	.250

N/S Street : Father Herlihy Way  
 E/W Street: BC Gate  
 City/State : Brighton, MA  
 Weather : Clear

Accurate Counts  
 978-664-2565

File Name : 39000B25  
 Site Code : 39000B25  
 Start Date : 5/1/2008  
 Page No : 1

Groups Printed- Bikes

Start Time	Fr Herlihy Way From North		BC Gate From East		BC Gate From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
16:00	0	0	0	0	0	0	0
16:15	1	0	0	0	0	1	2
16:30	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0
Total	1	0	0	0	0	1	2
17:00	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0
17:45	0	1	0	0	0	1	2
Total	0	1	0	0	0	1	2
Grand Total	1	1	0	0	0	2	4
Apprch %	50	50	0	0	0	100	
Total %	25	25	0	0	0	50	

Start Time	Fr Herlihy Way From North			BC Gate From East			BC Gate From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
16:00	0	0	0	0	0	0	0	0	0	0
16:15	1	0	1	0	0	0	0	1	1	2
16:30	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	0	0	0	0	1	1	2
% App. Total	100	0		0	0		0	100		
PHF	.250	.000	.250	.000	.000	.000	.000	.250	.250	.250

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 16:00

	16:00			16:00			16:00		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	1	0	1	0	0	0	0	1	1
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	0	0	0	0	1	1
% App. Total	100	0		0	0		0	100	
PHF	.250	.000	.250	.000	.000	.000	.000	.250	.250

# Automatic Traffic Recorder (ATR) Counts



Accurate Counts  
978-664-2565

Location : Commonwealth Avenue  
Location : West of Lake Street  
City/State: Brighton, MA  
Counter : 116193

39000001  
Site Code: 39000001

Start Time	11-Mar-0 Tue	WB		Hour Totals		EB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		22	90			24	169				
12:15		19	74			26	106				
12:30		21	72			21	111				
12:45		6	91	68	327	23	131	94	517	162	844
01:00		10	77			12	132				
01:15		6	84			10	131				
01:30		6	106			12	115				
01:45		9	100	31	367	7	151	41	529	72	896
02:00		4	81			13	112				
02:15		1	110			6	119				
02:30		12	83			8	165				
02:45		2	85	19	359	5	174	32	570	51	929
03:00		4	96			3	153				
03:15		1	93			5	153				
03:30		11	87			4	194				
03:45		1	88	17	364	2	164	14	664	31	1028
04:00		5	118			3	147				
04:15		1	158			5	145				
04:30		4	122			6	160				
04:45		3	126	13	524	12	164	26	616	39	1140
05:00		1	161			6	149				
05:15		6	143			12	153				
05:30		11	122			30	180				
05:45		25	134	43	560	28	177	76	659	119	1219
06:00		18	113			35	185				
06:15		21	104			55	193				
06:30		45	98			97	169				
06:45		69	91	153	406	98	197	285	744	438	1150
07:00		67	99			98	164				
07:15		83	67			137	158				
07:30		110	74			173	128				
07:45		84	86	344	326	179	99	587	549	931	875
08:00		52	55			196	93				
08:15		120	80			212	107				
08:30		93	59			222	102				
08:45		95	68	360	262	203	90	833	392	1193	654
09:00		87	70			208	119				
09:15		93	56			165	118				
09:30		87	81			144	78				
09:45		90	50	357	257	172	88	689	403	1046	660
10:00		74	55			119	85				
10:15		68	46			122	50				
10:30		74	32			142	49				
10:45		66	38	282	171	148	62	531	246	813	417
11:00		72	28			113	45				
11:15		78	20			111	41				
11:30		67	22			129	24				
11:45		95	24	312	94	127	33	480	143	792	237
Total		1999	4017			3688	6032			5687	10049
Percent		33.2%	66.8%			37.9%	62.1%			36.1%	63.9%

Accurate Counts  
978-664-2565

Location : Commonwealth Avenue  
Location : West of Lake Street  
City/State: Brighton, MA  
Counter : 116193

39000001  
Site Code: 39000001

Start Time	12-Mar-0 Wed	WB		Hour Totals		EB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		24	61			36	135				
12:15		22	86			30	117				
12:30		13	86			19	136				
12:45		11	109	70	342	9	126	94	514	164	856
01:00		5	79			19	132				
01:15		10	73			15	138				
01:30		13	75			13	114				
01:45		9	74	37	301	21	129	68	513	105	814
02:00		3	96			10	129				
02:15		5	93			10	116				
02:30		10	107			5	143				
02:45		6	80	24	376	6	170	31	558	55	934
03:00		3	98			10	148				
03:15		3	79			6	172				
03:30		5	77			4	161				
03:45		1	109	12	363	5	150	25	631	37	994
04:00		1	129			1	137				
04:15		1	113			6	180				
04:30		1	107			6	143				
04:45		9	121	12	470	14	153	27	613	39	1083
05:00		7	124			10	163				
05:15		6	135			17	159				
05:30		10	123			25	174				
05:45		16	117	39	499	29	165	81	661	120	1160
06:00		16	117			30	172				
06:15		26	93			54	189				
06:30		33	78			69	190				
06:45		53	86	128	374	98	156	251	707	379	1081
07:00		65	85			110	151				
07:15		70	85			150	140				
07:30		97	71			188	114				
07:45		79	63	311	304	205	110	653	515	964	819
08:00		93	73			189	116				
08:15		121	59			198	89				
08:30		97	62			237	100				
08:45		88	73	399	267	234	90	858	395	1257	662
09:00		48	78			210	118				
09:15		82	63			157	86				
09:30		89	55			156	97				
09:45		78	58	297	254	148	67	671	368	968	622
10:00		66	57			143	59				
10:15		66	37			106	66				
10:30		67	35			98	52				
10:45		69	35	268	164	126	60	473	237	741	401
11:00		77	40			127	62				
11:15		85	27			128	53				
11:30		76	33			108	37				
11:45		84	14	322	114	125	27	488	179	810	293
Total		1919	3828			3720	5891			5639	9719
Percent		33.4%	66.6%			38.7%	61.3%			36.7%	63.3%
Grand Total		3918	7845			7408	11923			11326	19768
Percent		33.3%	66.7%			38.3%	61.7%			36.4%	63.6%

ADT Not Calculated

Accurate Counts  
978-664-2565

Location : Commonwealth Avenue  
Location : West of Lake Street  
City/State: Brighton, MA  
Counter : 116193

39000001  
Site Code: 39000001

Start Time	10-Mar-08		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 AM	*	*	68	94	70	94	*	*	*	*	*	*	*	*	69	94
01:00	*	*	31	41	37	68	*	*	*	*	*	*	*	*	34	54
02:00	*	*	19	32	24	31	*	*	*	*	*	*	*	*	22	32
03:00	*	*	17	14	12	25	*	*	*	*	*	*	*	*	14	20
04:00	*	*	13	26	12	27	*	*	*	*	*	*	*	*	12	26
05:00	*	*	43	76	39	81	*	*	*	*	*	*	*	*	41	78
06:00	*	*	153	285	128	251	*	*	*	*	*	*	*	*	140	268
07:00	*	*	344	587	311	653	*	*	*	*	*	*	*	*	328	620
08:00	*	*	360	833	399	858	*	*	*	*	*	*	*	*	380	846
09:00	*	*	357	689	297	671	*	*	*	*	*	*	*	*	327	680
10:00	*	*	282	531	268	473	*	*	*	*	*	*	*	*	275	502
11:00	*	*	312	480	322	488	*	*	*	*	*	*	*	*	317	484
12:00 PM	*	*	327	517	342	514	*	*	*	*	*	*	*	*	334	516
01:00	*	*	367	529	301	513	*	*	*	*	*	*	*	*	334	521
02:00	*	*	359	570	376	558	*	*	*	*	*	*	*	*	368	564
03:00	*	*	364	664	363	631	*	*	*	*	*	*	*	*	364	648
04:00	*	*	524	616	470	613	*	*	*	*	*	*	*	*	497	614
05:00	*	*	560	659	499	661	*	*	*	*	*	*	*	*	530	660
06:00	*	*	406	744	374	707	*	*	*	*	*	*	*	*	390	726
07:00	*	*	326	549	304	515	*	*	*	*	*	*	*	*	315	532
08:00	*	*	262	392	267	395	*	*	*	*	*	*	*	*	264	394
09:00	*	*	257	403	254	368	*	*	*	*	*	*	*	*	256	386
10:00	*	*	171	246	164	237	*	*	*	*	*	*	*	*	168	242
11:00	*	*	94	143	114	179	*	*	*	*	*	*	*	*	104	161
Lane Day	0	0	6016	9720	5747	9611	0	0	0	0	0	0	0	0	5883	9668
AM	0		15736		15358		0		0		0		0		15551	
Peak			08:00	08:00	08:00	08:00									08:00	08:00
Vol.			360	833	399	858									380	846
PM			17:00	18:00	17:00	18:00									17:00	18:00
Peak																
Vol.			560	744	499	707									530	726

Comb. Total      0                      15736                      15358                      0                      0                      0                      0                      15551

ADT              Not Calculated

Accurate Counts  
978-664-2565

Location : Lake Street NB North of  
Location : Undine Street  
City/State: Brighton, MA  
Counter : 16427

























39000002  
Site Code: 39000002

Start Time	11-Mar-08		12-Mar-08		13-Mar-08		Daily Average	
	Tue A.M.	P.M.	Wed A.M.	P.M.	Thu A.M.	P.M.	A.M.	P.M.
12:00	17	72	16	82	*	*	16	77
12:15	10	52	15	62	*	*	12	57
12:30	10	70	6	79	*	*	8	74
12:45	3	79	4	73	*	*	4	76
01:00	8	67	8	67	*	*	8	67
01:15	6	81	3	77	*	*	4	79
01:30	6	59	7	72	*	*	6	66
01:45	3	87	8	81	*	*	6	84
02:00	2	66	4	77	*	*	3	72
02:15	3	65	5	69	*	*	4	67
02:30	1	96	4	91	*	*	2	94
02:45	2	104	1	90	*	*	2	97
03:00	1	101	7	101	*	*	4	101
03:15	0	108	2	121	*	*	1	114
03:30	0	107	2	93	*	*	1	100
03:45	1	92	5	127	*	*	3	110
04:00	2	134	3	116	*	*	2	125
04:15	5	111	2	110	*	*	4	110
04:30	2	93	5	97	*	*	4	95
04:45	3	116	3	114	*	*	3	115
05:00	4	127	7	148	*	*	6	138
05:15	9	124	12	141	*	*	10	132
05:30	16	126	12	120	*	*	14	123
05:45	12	116	17	108	*	*	14	112
06:00	21	118	22	109	*	*	22	114
06:15	38	129	32	128	*	*	35	128
06:30	58	119	43	118	*	*	50	118
06:45	58	104	57	115	*	*	58	110
07:00	83	108	59	106	*	*	71	107
07:15	118	92	112	93	*	*	115	92
07:30	104	78	103	77	*	*	104	78
07:45	143	77	125	75	*	*	134	76
08:00	135	73	125	79	*	*	130	76
08:15	130	70	121	63	*	*	126	66
08:30	122	79	132	83	*	*	127	81
08:45	103	67	108	87	*	*	106	77
09:00	103	81	105	76	*	*	104	78
09:15	82	68	78	78	*	*	80	73
09:30	50	84	69	55	*	*	60	70
09:45	87	52	65	54	*	*	76	53
10:00	51	35	50	50	*	*	50	42
10:15	52	32	49	37	*	*	50	34
10:30	69	21	46	33	*	*	58	27
10:45	63	32	60	41	*	*	62	36
11:00	54	19	59	31	*	*	56	25
11:15	52	28	49	20	*	*	50	24
11:30	58	14	53	20	*	*	56	17
11:45	63	15	65	18	*	*	64	16
Total	2023	3848	1945	3962	0	0	1985	3903
Combined Total	5871		5907		0		5888	
Peak	07:45	04:45	07:45	04:45			07:45	04:45
Vol.	530	493	503	523			517	508
P.H.F.	0.927	0.920	0.953	0.883			0.965	0.920
ADT	Not Calculated							

Accurate Counts  
978-664-2565

Location : Lake Street NB North of  
Location : Undine Street  
City/State: Brighton, MA  
Counter : 16427

3900002  
Site Code: 3900002

Start Time	Mon 10-Mar-08	Tue 11-Mar-08	Wed 12-Mar-08	Thu 13-Mar-08	Fri 14-Mar-08	Average Day	Sat 15-Mar-08	Sun 16-Mar-08	Week Average
12:00 AM	*	40	41	*	*	40	*	*	40 
01:00	*	23	26	*	*	24	*	*	24 
02:00	*	8	14	*	*	11	*	*	11 
03:00	*	2	16	*	*	9	*	*	9 
04:00	*	12	13	*	*	12	*	*	12 
05:00	*	41	48	*	*	44	*	*	44 
06:00	*	175	154	*	*	164	*	*	164 
07:00	*	448	399	*	*	424	*	*	424 
08:00	*	<b>490</b>	<b>486</b>	*	*	<b>488</b>	*	*	<b>488</b> 
09:00	*	322	317	*	*	320	*	*	320 
10:00	*	235	205	*	*	220	*	*	220 
11:00	*	227	226	*	*	226	*	*	226 
12:00 PM	*	273	296	*	*	284	*	*	284 
01:00	*	294	297	*	*	296	*	*	296 
02:00	*	331	327	*	*	329	*	*	329 
03:00	*	408	442	*	*	425	*	*	425 
04:00	*	454	437	*	*	446	*	*	446 
05:00	*	<b>493</b>	<b>517</b>	*	*	<b>505</b>	*	*	<b>505</b> 
06:00	*	470	470	*	*	470	*	*	470 
07:00	*	355	351	*	*	353	*	*	353 
08:00	*	289	312	*	*	300	*	*	300 
09:00	*	285	263	*	*	274	*	*	274 
10:00	*	120	161	*	*	140	*	*	140 
11:00	*	76	89	*	*	82	*	*	82 
Day Total	0	5871	5907	0	0	5886	0	0	5886
% Avg. WkDay	0.0%	99.7%	100.4%	0.0%	0.0%				
% Avg. Week	0.0%	99.7%	100.4%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak		08:00	08:00			08:00			08:00
Vol.		490	486			488			488
PM Peak		17:00	17:00			17:00			17:00
Vol.		493	517			505			505
Grand Total	0	5871	5907	0	0	5886	0	0	5886
ADT	Not Calculated								

Accurate Counts  
978-664-2565

Location : Foster Street North of  
Location : Rose Garden  
City/State: Brighton, MA  
Counter : 11660

39000004  
Site Code: 39000004

Start Time	11-Mar-0 Tue	SB		Hour Totals		NB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		10	86			2	16				
12:15		13	75			2	19				
12:30		12	66			0	22				
12:45		3	62	38	289	2	24	6	81	44	370
01:00		5	64			0	23				
01:15		1	60			2	22				
01:30		6	78			1	17				
01:45		3	81	15	283	0	14	3	76	18	359
02:00		2	95			0	20				
02:15		2	86			2	19				
02:30		1	83			1	10				
02:45		4	82	9	346	1	29	4	78	13	424
03:00		3	69			0	20				
03:15		0	88			1	24				
03:30		3	106			1	21				
03:45		2	95	8	358	0	27	2	92	10	450
04:00		0	120			1	21				
04:15		6	105			2	26				
04:30		1	110			3	25				
04:45		3	134	10	469	3	24	9	96	19	565
05:00		2	113			1	21				
05:15		6	158			3	28				
05:30		10	160			2	29				
05:45		22	132	40	563	7	27	13	105	53	668
06:00		18	130			4	31				
06:15		27	129			7	19				
06:30		41	132			21	35				
06:45		64	127	150	518	29	25	61	110	211	628
07:00		53	109			39	21				
07:15		82	80			28	17				
07:30		122	89			39	23				
07:45		109	75	366	353	51	29	157	90	523	443
08:00		108	66			54	15				
08:15		107	79			46	15				
08:30		136	57			50	18				
08:45		132	58	483	260	40	10	190	58	673	318
09:00		89	47			42	10				
09:15		87	56			35	12				
09:30		87	38			17	5				
09:45		95	47	358	188	21	11	115	38	473	226
10:00		58	45			18	9				
10:15		64	29			20	9				
10:30		67	30			13	12				
10:45		69	29	258	133	16	13	67	43	325	176
11:00		66	17			14	8				
11:15		50	22			17	7				
11:30		67	10			20	10				
11:45		70	8	253	57	22	8	73	33	326	90
Total		1988	3817			700	900			2688	4717
Percent		34.2%	65.8%			43.8%	56.3%			36.3%	63.7%

Accurate Counts  
978-664-2565

Location : Foster Street North of  
Location : Rose Garden  
City/State: Brighton, MA  
Counter : 11660

39000004  
Site Code: 39000004

Start Time	12-Mar-0 Wed	SB		Hour Totals		NB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		17	68			4	17				
12:15		11	60			4	16				
12:30		11	78			4	25				
12:45		8	79	47	285	4	19	16	77	63	362
01:00		7	57			4	16				
01:15		6	58			0	25				
01:30		6	92			4	22				
01:45		3	80	22	287	0	14	8	77	30	364
02:00		5	74			4	27				
02:15		7	87			4	22				
02:30		4	94			2	22				
02:45		6	84	22	339	0	29	10	100	32	439
03:00		1	88			0	17				
03:15		1	95			1	18				
03:30		3	123			1	18				
03:45		0	106	5	412	0	28	2	81	7	493
04:00		2	107			1	22				
04:15		1	119			2	15				
04:30		3	123			2	21				
04:45		6	124	12	473	2	28	7	86	19	559
05:00		6	147			2	29				
05:15		2	135			2	33				
05:30		14	130			3	15				
05:45		11	149	33	561	6	16	13	93	46	654
06:00		17	130			5	27				
06:15		34	127			9	30				
06:30		39	108			13	37				
06:45		48	97	138	462	22	24	49	118	187	580
07:00		63	100			39	21				
07:15		76	90			30	27				
07:30		114	72			32	21				
07:45		101	69	354	331	47	19	148	88	502	419
08:00		102	77			47	16				
08:15		131	54			41	19				
08:30		130	50			36	17				
08:45		142	64	505	245	41	15	165	67	670	312
09:00		104	56			43	22				
09:15		80	48			31	11				
09:30		95	51			21	15				
09:45		69	65	348	220	20	7	115	55	463	275
10:00		60	43			17	4				
10:15		47	29			14	11				
10:30		64	33			16	10				
10:45		64	37	235	142	12	14	59	39	294	181
11:00		59	26			13	3				
11:15		66	29			14	8				
11:30		75	20			18	11				
11:45		77	15	277	90	22	11	67	33	344	123
Total		1998	3847			659	914			2657	4761
Percent		34.2%	65.8%			41.9%	58.1%			35.8%	64.2%
Grand Total		3986	7664			1359	1814			5345	9478
Percent		34.2%	65.8%			42.8%	57.2%			36.1%	63.9%

ADT Not Calculated

Accurate Counts  
978-664-2565

Location : Foster Street North of  
Location : Rose Garden  
City/State: Brighton, MA  
Counter : 11660

39000004  
Site Code: 39000004

Start Time	10-Mar-08		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
12:00 AM	*	*	38	6	47	16	*	*	*	*	*	*	*	*	42	11
01:00	*	*	15	3	22	8	*	*	*	*	*	*	*	*	18	6
02:00	*	*	9	4	22	10	*	*	*	*	*	*	*	*	16	7
03:00	*	*	8	2	5	2	*	*	*	*	*	*	*	*	6	2
04:00	*	*	10	9	12	7	*	*	*	*	*	*	*	*	11	8
05:00	*	*	40	13	33	13	*	*	*	*	*	*	*	*	36	13
06:00	*	*	150	61	138	49	*	*	*	*	*	*	*	*	144	55
07:00	*	*	366	157	354	148	*	*	*	*	*	*	*	*	360	152
08:00	*	*	483	190	505	165	*	*	*	*	*	*	*	*	494	178
09:00	*	*	358	115	348	115	*	*	*	*	*	*	*	*	353	115
10:00	*	*	258	67	235	59	*	*	*	*	*	*	*	*	246	63
11:00	*	*	253	73	277	67	*	*	*	*	*	*	*	*	265	70
12:00 PM	*	*	289	81	285	77	*	*	*	*	*	*	*	*	287	79
01:00	*	*	283	76	287	77	*	*	*	*	*	*	*	*	285	76
02:00	*	*	346	78	339	100	*	*	*	*	*	*	*	*	342	89
03:00	*	*	358	92	412	81	*	*	*	*	*	*	*	*	385	86
04:00	*	*	469	96	473	86	*	*	*	*	*	*	*	*	471	91
05:00	*	*	563	105	561	93	*	*	*	*	*	*	*	*	562	99
06:00	*	*	518	110	462	118	*	*	*	*	*	*	*	*	490	114
07:00	*	*	353	90	331	88	*	*	*	*	*	*	*	*	342	89
08:00	*	*	260	58	245	67	*	*	*	*	*	*	*	*	252	62
09:00	*	*	188	38	220	55	*	*	*	*	*	*	*	*	204	46
10:00	*	*	133	43	142	39	*	*	*	*	*	*	*	*	138	41
11:00	*	*	57	33	90	33	*	*	*	*	*	*	*	*	74	33
Lane Day	0	0	5805	1600	5845	1573	0	0	0	0	0	0	0	0	5823	1585
AM Peak Vol.			7405		7418										7408	
PM Peak Vol.			483	190	505	165									494	178
Comb. Total	0		7405		7418		0		0		0		0		7408	
ADT	Not Calculated															



Accurate Counts  
978-664-2565

Location : St Thomas Moore Way South  
Location : of Commonwealth Avenue  
City/State: Brighton, MA  
Counter : 10110

39000005  
Site Code: 39000005

Start Time	11-Mar-0 Tue	NB		Hour Totals		SB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		8	72			4	25				
12:15		3	93			2	52				
12:30		3	77			3	34				
12:45		3	82	17	324	2	33	11	144	28	468
01:00		1	82			3	40				
01:15		11	67			2	28				
01:30		5	80			1	34				
01:45		4	100	21	329	2	50	8	152	29	481
02:00		2	110			1	34				
02:15		2	96			1	38				
02:30		4	97			3	45				
02:45		1	98	9	401	0	49	5	166	14	567
03:00		3	145			0	58				
03:15		3	115			3	55				
03:30		2	84			3	50				
03:45		2	101	10	445	2	44	8	207	18	652
04:00		3	131			1	49				
04:15		8	113			5	51				
04:30		11	113			4	57				
04:45		12	112	34	469	6	73	16	230	50	699
05:00		26	112			8	59				
05:15		25	112			9	54				
05:30		39	105			9	51				
05:45		50	113	140	442	30	43	56	207	196	649
06:00		69	105			18	36				
06:15		86	79			23	21				
06:30		77	62			39	24				
06:45		101	64	333	310	45	40	125	121	458	431
07:00		68	75			46	22				
07:15		104	83			34	24				
07:30		105	81			41	28				
07:45		125	72	402	311	57	36	178	110	580	421
08:00		95	68			57	39				
08:15		79	69			37	16				
08:30		74	124			37	19				
08:45		71	69	319	330	42	10	173	84	492	414
09:00		50	50			32	20				
09:15		55	40			27	14				
09:30		53	32			20	11				
09:45		40	44	198	166	32	25	111	70	309	236
10:00		51	36			21	25				
10:15		50	32			36	6				
10:30		70	30			30	13				
10:45		53	26	224	124	29	11	116	55	340	179
11:00		73	16			33	10				
11:15		65	17			41	8				
11:30		85	13			33	10				
11:45		74	15	297	61	47	8	154	36	451	97
Total		2004	3712			961	1582			2965	5294
Percent		35.1%	64.9%			37.8%	62.2%			35.9%	64.1%

Accurate Counts  
978-664-2565

Location : St Thomas Moore Way South  
Location : of Commonwealth Avenue  
City/State: Brighton, MA  
Counter : 10110

39000005  
Site Code: 39000005

Start Time	12-Mar-0 Wed	NB		Hour Totals		SB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		17	87			5	52				
12:15		7	71			4	42				
12:30		12	66			5	43				
12:45		10	88	46	312	5	36	19	173	65	485
01:00		21	98			8	52				
01:15		9	86			4	33				
01:30		4	82			1	24				
01:45		7	81	41	347	3	37	16	146	57	493
02:00		4	105			0	38				
02:15		5	85			2	40				
02:30		5	91			0	48				
02:45		3	127	17	408	1	46	3	172	20	580
03:00		3	136			0	48				
03:15		1	104			3	55				
03:30		3	119			2	45				
03:45		9	98	16	457	3	49	8	197	24	654
04:00		8	125			2	53				
04:15		10	125			4	46				
04:30		11	115			3	47				
04:45		19	89	48	454	4	57	13	203	61	657
05:00		23	103			5	46				
05:15		25	130			16	60				
05:30		36	114			10	51				
05:45		46	108	130	455	15	39	46	196	176	651
06:00		59	102			25	33				
06:15		74	99			33	37				
06:30		75	71			40	32				
06:45		90	73	298	345	44	33	142	135	440	480
07:00		90	79			36	23				
07:15		93	68			54	20				
07:30		131	90			41	16				
07:45		116	79	430	316	53	30	184	89	614	405
08:00		104	98			55	37				
08:15		66	73			29	19				
08:30		77	70			38	22				
08:45		79	50	326	291	39	20	161	98	487	389
09:00		77	56			39	18				
09:15		51	57			26	20				
09:30		43	19			29	7				
09:45		63	29	234	161	34	14	128	59	362	220
10:00		63	28			25	16				
10:15		57	25			28	10				
10:30		48	18			35	5				
10:45		75	17	243	88	41	4	129	35	372	123
11:00		100	17			43	3				
11:15		73	13			31	4				
11:30		85	15			41	8				
11:45		68	1	326	46	49	5	164	20	490	66
Total		2155	3680			1013	1523			3168	5203
Percent		36.9%	63.1%			39.9%	60.1%			37.8%	62.2%
Grand Total		4159	7392			1974	3105			6133	10497
Percent		36.0%	64.0%			38.9%	61.1%			36.9%	63.1%

ADT Not Calculated



Accurate Counts  
978-664-2565

Location : Beacon Street West of  
Location : St. Thomas Moore Way  
City/State: Brighton, MA  
Counter : 192

3900006  
Site Code: 39000006

Start Time	12-Mar-0 Wed	EB		Hour Totals		WB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		15	118			26	153				
12:15		9	122			28	130				
12:30		10	106			24	147				
12:45		12	109	46	455	13	162	91	592	137	1047
01:00		9	118			30	156				
01:15		8	125			17	158				
01:30		8	111			22	178				
01:45		5	105	30	459	11	154	80	646	110	1105
02:00		10	124			6	158				
02:15		3	123			8	161				
02:30		5	130			10	166				
02:45		4	139	22	516	11	197	35	682	57	1198
03:00		1	146			9	178				
03:15		4	149			3	191				
03:30		2	141			6	188				
03:45		2	166	9	602	1	206	19	763	28	1365
04:00		1	150			5	222				
04:15		3	154			4	205				
04:30		4	164			9	213				
04:45		6	132	14	600	5	195	23	835	37	1435
05:00		15	155			8	240				
05:15		16	199			20	201				
05:30		28	170			15	207				
05:45		19	165	78	689	23	245	66	893	144	1582
06:00		40	191			36	226				
06:15		51	175			35	236				
06:30		78	167			70	219				
06:45		112	157	281	690	71	187	212	868	493	1558
07:00		132	139			96	136				
07:15		127	117			127	159				
07:30		208	115			168	121				
07:45		235	100	702	471	199	137	590	553	1292	1024
08:00		223	65			194	107				
08:15		230	84			190	104				
08:30		225	141			200	108				
08:45		223	112	901	402	186	113	770	432	1671	834
09:00		184	122			161	122				
09:15		146	71			163	83				
09:30		130	72			162	70				
09:45		119	66	579	331	148	89	634	364	1213	695
10:00		135	46			119	65				
10:15		108	50			83	73				
10:30		104	33			109	67				
10:45		136	30	483	159	126	53	437	258	920	417
11:00		108	31			130	50				
11:15		107	24			111	28				
11:30		103	18			160	28				
11:45		125	10	443	83	161	20	562	126	1005	209
Total		3588	5457			3519	7012			7107	12469
Percent		39.7%	60.3%			33.4%	66.6%			36.3%	63.7%

Accurate Counts  
978-664-2565

Location : Beacon Street West of  
Location : St. Thomas Moore Way  
City/State: Brighton, MA  
Counter : 192

3900006  
Site Code: 39000006

Start Time	13-Mar-0 Thu	EB		Hour Totals		WB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		12	137			21	168				
12:15		11	137			20	171				
12:30		10	148			28	168				
12:45		12	126	45	548	24	173	93	680	138	1228
01:00		7	128			18	156				
01:15		9	134			15	152				
01:30		7	115			6	171				
01:45		3	131	26	508	10	177	49	656	75	1164
02:00		5	122			11	177				
02:15		4	102			4	162				
02:30		5	116			4	161				
02:45		2	146	16	486	4	172	23	672	39	1158
03:00		4	153			4	181				
03:15		0	165			7	178				
03:30		0	151			3	183				
03:45		3	157	7	626	5	213	19	755	26	1381
04:00		1	161			2	222				
04:15		3	168			10	232				
04:30		5	148			2	221				
04:45		10	171	19	648	11	216	25	891	44	1539
05:00		11	169			5	231				
05:15		12	186			10	212				
05:30		23	185			17	222				
05:45		22	187	68	727	20	268	52	933	120	1660
06:00		34	184			31	253				
06:15		42	216			39	228				
06:30		82	187			58	214				
06:45		103	176	261	763	72	154	200	849	461	1612
07:00		131	169			99	138				
07:15		190	151			140	133				
07:30		199	109			174	111				
07:45		258	90	778	519	202	125	615	507	1393	1026
08:00		237	110			201	131				
08:15		229	97			210	106				
08:30		245	91			200	99				
08:45		203	106	914	404	206	109	817	445	1731	849
09:00		201	108			141	84				
09:15		184	84			134	85				
09:30		154	79			154	95				
09:45		144	65	683	336	107	82	536	346	1219	682
10:00		111	48			141	78				
10:15		111	42			92	73				
10:30		112	53			134	63				
10:45		98	42	432	185	101	58	468	272	900	457
11:00		121	33			120	58				
11:15		102	26			119	35				
11:30		118	15			136	35				
11:45		117	14	458	88	167	30	542	158	1000	246
Total		3707	5838			3439	7164			7146	13002
Percent		38.8%	61.2%			32.4%	67.6%			35.5%	64.5%
Grand Total		7295	11295			6958	14176			14253	25471
Percent		39.2%	60.8%			32.9%	67.1%			35.9%	64.1%

ADT Not Calculated

Accurate Counts  
978-664-2565

Location : Beacon Street West of  
Location : St. Thomas Moore Way  
City/State: Brighton, MA  
Counter : 192

3900006  
Site Code: 39000006

Start Time	10-Mar-08		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	*	*	46	91	45	93	*	*	*	*	*	*	46	92
01:00	*	*	*	*	30	80	26	49	*	*	*	*	*	*	28	64
02:00	*	*	*	*	22	35	16	23	*	*	*	*	*	*	19	29
03:00	*	*	*	*	9	19	7	19	*	*	*	*	*	*	8	19
04:00	*	*	*	*	14	23	19	25	*	*	*	*	*	*	16	24
05:00	*	*	*	*	78	66	68	52	*	*	*	*	*	*	73	59
06:00	*	*	*	*	281	212	261	200	*	*	*	*	*	*	271	206
07:00	*	*	*	*	702	590	778	615	*	*	*	*	*	*	740	602
08:00	*	*	*	*	<b>901</b>	<b>770</b>	<b>914</b>	<b>817</b>	*	*	*	*	*	*	<b>908</b>	<b>794</b>
09:00	*	*	*	*	579	634	683	536	*	*	*	*	*	*	631	585
10:00	*	*	*	*	483	437	432	468	*	*	*	*	*	*	458	452
11:00	*	*	*	*	443	562	458	542	*	*	*	*	*	*	450	552
12:00 PM	*	*	*	*	455	592	548	680	*	*	*	*	*	*	502	636
01:00	*	*	*	*	459	646	508	656	*	*	*	*	*	*	484	651
02:00	*	*	*	*	516	682	486	672	*	*	*	*	*	*	501	677
03:00	*	*	*	*	602	763	626	755	*	*	*	*	*	*	614	759
04:00	*	*	*	*	600	835	648	891	*	*	*	*	*	*	624	863
05:00	*	*	*	*	689	<b>893</b>	727	<b>933</b>	*	*	*	*	*	*	708	<b>913</b>
06:00	*	*	*	*	<b>690</b>	868	<b>763</b>	849	*	*	*	*	*	*	<b>726</b>	858
07:00	*	*	*	*	471	553	519	507	*	*	*	*	*	*	495	530
08:00	*	*	*	*	402	432	404	445	*	*	*	*	*	*	403	438
09:00	*	*	*	*	331	364	336	346	*	*	*	*	*	*	334	355
10:00	*	*	*	*	159	258	185	272	*	*	*	*	*	*	172	265
11:00	*	*	*	*	83	126	88	158	*	*	*	*	*	*	86	142
Lane Day	0	0	0	0	9045	10531	9545	10603	0	0	0	0	0	0	9297	10565
AM	0		0		19576		20148		0		0		0		19862	
Peak Vol.					08:00	08:00	08:00	08:00							08:00	08:00
PM Peak Vol.					901	770	914	817							908	794
Peak Vol.					18:00	17:00	18:00	17:00							18:00	17:00
Vol.					690	893	763	933							726	913

Comb. Total            0                    0                    19576                    20148                    0                    0                    0                    19862

ADT            Not Calculated

Accurate Counts  
978-664-2565

Location : College Road North of  
Location : Beacon Street  
City/State: Newton, MA  
Counter : 5864














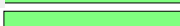
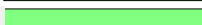

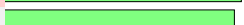







39000007  
Site Code: 39000007

Start Time	11-Mar-08		12-Mar-08		13-Mar-08		Daily Average	
	Tue A.M.	P.M.	Wed A.M.	P.M.	Thu A.M.	P.M.	A.M.	P.M.
12:00	9	55	16	35	*	*	12	45
12:15	5	52	6	53	*	*	6	52
12:30	8	46	8	38	*	*	8	42
12:45	8	54	6	58	*	*	7	56
01:00	10	47	13	39	*	*	12	43
01:15	8	49	5	60	*	*	6	54
01:30	10	58	10	52	*	*	10	55
01:45	5	57	8	42	*	*	6	50
02:00	4	56	4	53	*	*	4	54
02:15	2	56	3	55	*	*	2	56
02:30	3	67	0	47	*	*	2	57
02:45	1	72	2	49	*	*	2	60
03:00	1	64	2	56	*	*	2	60
03:15	2	68	5	53	*	*	4	60
03:30	4	70	4	57	*	*	4	64
03:45	4	61	0	63	*	*	2	62
04:00	8	58	2	64	*	*	5	61
04:15	3	69	2	78	*	*	2	74
04:30	6	65	4	54	*	*	5	60
04:45	10	64	5	84	*	*	8	74
05:00	12	69	7	63	*	*	10	66
05:15	15	69	6	72	*	*	10	70
05:30	23	67	9	62	*	*	16	64
05:45	32	63	12	54	*	*	22	58
06:00	35	64	17	76	*	*	26	70
06:15	41	77	29	70	*	*	35	74
06:30	46	62	24	72	*	*	35	67
06:45	33	52	39	55	*	*	36	54
07:00	49	54	41	55	*	*	45	54
07:15	62	56	62	42	*	*	62	49
07:30	49	51	65	43	*	*	57	47
07:45	70	40	61	42	*	*	66	41
08:00	68	39	75	45	*	*	72	42
08:15	65	38	69	44	*	*	67	41
08:30	76	32	63	41	*	*	70	36
08:45	80	46	78	39	*	*	79	42
09:00	59	41	62	35	*	*	60	38
09:15	45	29	50	42	*	*	48	36
09:30	57	33	45	33	*	*	51	33
09:45	60	42	54	30	*	*	57	36
10:00	35	16	44	30	*	*	40	23
10:15	35	18	44	20	*	*	40	19
10:30	39	28	32	32	*	*	36	30
10:45	53	32	56	29	*	*	54	30
11:00	37	17	32	23	*	*	34	20
11:15	47	10	40	12	*	*	44	11
11:30	46	8	36	18	*	*	41	13
11:45	57	10	48	9	*	*	52	10
Total	1437	2351	1305	2278	0	0	1374	2313
Combined Total	3788		3583		0		3687	
Peak	08:00	02:45	08:00	04:45			08:00	04:15
Vol.	289	274	285	281			288	274
P.H.F.	0.903	0.890	0.913	0.836			0.911	0.926
ADT	Not Calculated							

Accurate Counts  
978-664-2565

Location : College Road North of  
Location : Beacon Street  
City/State: Newton, MA  
Counter : 5864

3900007  
Site Code: 39000007

Start Time	Mon 10-Mar-08	Tue 11-Mar-08	Wed 12-Mar-08	Thu 13-Mar-08	Fri 14-Mar-08	Average Day	Sat 15-Mar-08	Sun 16-Mar-08	Week Average
12:00 AM	*	30	36	*	*	33	*	*	33 
01:00	*	33	36	*	*	34	*	*	34 
02:00	*	10	9	*	*	10	*	*	10 
03:00	*	11	11	*	*	11	*	*	11 
04:00	*	27	13	*	*	20	*	*	20 
05:00	*	82	34	*	*	58	*	*	58 
06:00	*	155	109	*	*	132	*	*	132 
07:00	*	230	229	*	*	230	*	*	230 
08:00	*	<b>289</b>	<b>285</b>	*	*	<b>287</b>	*	*	<b>287</b> 
09:00	*	221	211	*	*	216	*	*	216 
10:00	*	162	176	*	*	169	*	*	169 
11:00	*	187	156	*	*	172	*	*	172 
12:00 PM	*	207	184	*	*	196	*	*	196 
01:00	*	211	193	*	*	202	*	*	202 
02:00	*	251	204	*	*	228	*	*	228 
03:00	*	263	229	*	*	246	*	*	246 
04:00	*	256	<b>280</b>	*	*	<b>268</b>	*	*	<b>268</b> 
05:00	*	<b>268</b>	251	*	*	260	*	*	260 
06:00	*	255	273	*	*	264	*	*	264 
07:00	*	201	182	*	*	192	*	*	192 
08:00	*	155	169	*	*	162	*	*	162 
09:00	*	145	140	*	*	142	*	*	142 
10:00	*	94	111	*	*	102	*	*	102 
11:00	*	45	62	*	*	54	*	*	54 
Day Total	0	3788	3583	0	0	3688	0	0	3688
% Avg. WkDay	0.0%	102.7%	97.2%	0.0%	0.0%				
% Avg. Week	0.0%	102.7%	97.2%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak		08:00	08:00			08:00			08:00
Vol.		289	285			287			287
PM Peak		17:00	16:00			16:00			16:00
Vol.		268	280			268			268
Grand Total	0	3788	3583	0	0	3688	0	0	3688
ADT	Not Calculated								



Accurate Counts  
978-664-2565

Location : Commonwealth Avenue EB  
Location : East of Lake Street  
City/State: Brighton, MA  
Counter : 13865

39000EB3  
Site Code: 39000003

Start Time	Tue	11-Mar-08	Wed	12-Mar-08	Thu	13-Mar-08	Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	18	94	21	96	*	*	20	95
12:15	25	86	26	81	*	*	26	84
12:30	13	78	16	85	*	*	14	82
12:45	21	73	11	87	*	*	16	80
01:00	13	89	21	77	*	*	17	83
01:15	7	91	9	78	*	*	8	84
01:30	10	86	11	64	*	*	10	75
01:45	5	94	12	87	*	*	8	90
02:00	9	68	23	81	*	*	16	74
02:15	5	72	11	74	*	*	8	73
02:30	5	92	5	91	*	*	5	92
02:45	4	103	9	81	*	*	6	92
03:00	1	111	9	110	*	*	5	110
03:15	4	103	4	110	*	*	4	106
03:30	2	132	1	106	*	*	2	119
03:45	1	112	3	124	*	*	2	118
04:00	1	99	3	103	*	*	2	101
04:15	3	106	0	117	*	*	2	112
04:30	5	118	5	113	*	*	5	116
04:45	6	135	5	130	*	*	6	132
05:00	3	134	2	130	*	*	2	132
05:15	9	128	8	114	*	*	8	121
05:30	10	131	7	142	*	*	8	136
05:45	10	163	11	128	*	*	10	146
06:00	15	168	14	139	*	*	14	154
06:15	31	154	30	150	*	*	30	152
06:30	46	131	33	150	*	*	40	140
06:45	48	142	46	104	*	*	47	123
07:00	57	131	64	117	*	*	60	124
07:15	83	103	69	115	*	*	76	109
07:30	95	103	108	90	*	*	102	96
07:45	149	77	154	96	*	*	152	86
08:00	162	72	149	87	*	*	156	80
08:15	133	85	124	83	*	*	128	84
08:30	139	74	167	80	*	*	153	77
08:45	129	66	139	75	*	*	134	70
09:00	147	89	102	87	*	*	124	88
09:15	91	84	104	77	*	*	98	80
09:30	91	96	96	77	*	*	94	86
09:45	90	68	64	52	*	*	77	60
10:00	58	73	80	54	*	*	69	64
10:15	78	40	66	52	*	*	72	46
10:30	86	36	64	44	*	*	75	40
10:45	81	50	67	51	*	*	74	50
11:00	73	25	77	45	*	*	75	35
11:15	78	30	78	41	*	*	78	36
11:30	82	30	61	34	*	*	72	32
11:45	85	23	66	17	*	*	76	20
Total	2317	4448	2255	4326	0	0	2286	4385
Combined Total	6765		6581		0		6671	
Peak	07:45	05:30	07:45	05:45			07:45	05:45
Vol.	583	616	594	567			589	592
P.H.F.	0.900	0.917	0.889	0.945			0.944	0.961
ADT	Not Calculated							

Accurate Counts  
978-664-2565

Location : Commonwealth Avenue EB  
 Location : East of Lake Street  
 City/State: Brighton, MA  
 Counter : 13865

39000EB3  
 Site Code: 39000003

Start Time	Mon 10-Mar-08	Tue 11-Mar-08	Wed 12-Mar-08	Thu 13-Mar-08	Fri 14-Mar-08	Average Day	Sat 15-Mar-08	Sun 16-Mar-08	Week Average
12:00 AM	*	77	74	*	*	76	*	*	76
01:00	*	35	53	*	*	44	*	*	44
02:00	*	23	48	*	*	36	*	*	36
03:00	*	8	17	*	*	12	*	*	12
04:00	*	15	13	*	*	14	*	*	14
05:00	*	32	28	*	*	30	*	*	30
06:00	*	140	123	*	*	132	*	*	132
07:00	*	384	395	*	*	390	*	*	390
08:00	*	<b>563</b>	<b>579</b>	*	*	<b>571</b>	*	*	<b>571</b>
09:00	*	419	366	*	*	392	*	*	392
10:00	*	303	277	*	*	290	*	*	290
11:00	*	318	282	*	*	300	*	*	300
12:00 PM	*	331	349	*	*	340	*	*	340
01:00	*	360	306	*	*	333	*	*	333
02:00	*	335	327	*	*	331	*	*	331
03:00	*	458	450	*	*	454	*	*	454
04:00	*	458	463	*	*	460	*	*	460
05:00	*	556	514	*	*	535	*	*	535
06:00	*	<b>595</b>	<b>543</b>	*	*	<b>569</b>	*	*	<b>569</b>
07:00	*	414	418	*	*	416	*	*	416
08:00	*	297	325	*	*	311	*	*	311
09:00	*	337	293	*	*	315	*	*	315
10:00	*	199	201	*	*	200	*	*	200
11:00	*	108	137	*	*	122	*	*	122
Day Total	0	6765	6581	0	0	6673	0	0	6673
% Avg. WkDay	0.0%	101.4%	98.6%	0.0%	0.0%				
% Avg. Week	0.0%	101.4%	98.6%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak		08:00	08:00			08:00			08:00
Vol.		563	579			571			571
PM Peak		18:00	18:00			18:00			18:00
Vol.		595	543			569			569
Grand Total	0	6765	6581	0	0	6673	0	0	6673
ADT	Not Calculated								

Accurate Counts  
978-664-2565

Location : Commonwealth Avenue WB West  
Location : of Lake Street  
City/State: Brighton, MA  
Counter : 18143















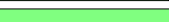


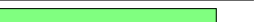






39000WB3  
Site Code: 39000003

Start Time	11-Mar-08		12-Mar-08		13-Mar-08		Daily Average	
	Tue A.M.	P.M.	Wed A.M.	P.M.	Thu A.M.	P.M.	A.M.	P.M.
12:00	23	149	39	155	*	*	31	152
12:15	29	149	21	144	*	*	25	146
12:30	33	128	22	152	*	*	28	140
12:45	17	131	23	146	*	*	20	138
01:00	15	137	14	132	*	*	14	134
01:15	15	180	20	150	*	*	18	165
01:30	22	159	27	164	*	*	24	162
01:45	11	182	16	173	*	*	14	178
02:00	8	163	27	177	*	*	18	170
02:15	10	194	18	173	*	*	14	184
02:30	7	168	12	179	*	*	10	174
02:45	5	189	15	180	*	*	10	184
03:00	4	183	7	185	*	*	6	184
03:15	4	174	5	157	*	*	4	166
03:30	9	197	9	223	*	*	9	210
03:45	3	204	4	222	*	*	4	213
04:00	7	238	3	231	*	*	5	234
04:15	5	252	9	237	*	*	7	244
04:30	4	196	6	224	*	*	5	210
04:45	9	234	16	238	*	*	12	236
05:00	8	<b>265</b>	14	<b>280</b>	*	*	11	<b>272</b>
05:15	24	<b>285</b>	15	<b>261</b>	*	*	20	<b>273</b>
05:30	21	<b>258</b>	23	<b>264</b>	*	*	22	<b>261</b>
05:45	44	<b>259</b>	31	<b>254</b>	*	*	38	<b>256</b>
06:00	36	261	39	230	*	*	38	246
06:15	60	257	65	219	*	*	62	238
06:30	83	259	70	179	*	*	76	219
06:45	134	213	99	198	*	*	116	206
07:00	116	195	115	165	*	*	116	180
07:15	184	130	162	170	*	*	173	150
07:30	231	181	229	144	*	*	230	162
07:45	232	161	232	127	*	*	232	144
08:00	<b>257</b>	120	<b>267</b>	129	*	*	<b>262</b>	124
08:15	<b>262</b>	125	<b>285</b>	116	*	*	<b>274</b>	120
08:30	<b>278</b>	119	<b>256</b>	122	*	*	<b>267</b>	120
08:45	<b>255</b>	101	<b>260</b>	138	*	*	<b>258</b>	120
09:00	191	116	149	110	*	*	170	113
09:15	164	105	164	103	*	*	164	104
09:30	192	145	191	105	*	*	192	125
09:45	191	92	164	117	*	*	178	104
10:00	125	80	110	100	*	*	118	90
10:15	143	62	108	70	*	*	126	66
10:30	147	69	135	73	*	*	141	71
10:45	130	59	145	82	*	*	138	70
11:00	142	42	131	58	*	*	136	50
11:15	131	49	145	52	*	*	138	50
11:30	143	31	146	40	*	*	144	36
11:45	166	38	173	30	*	*	170	34
Total	4330	7684	4236	7578	0	0	4288	7628
Combined Total	12014		11814		0		11916	
Peak	08:00	05:00	08:00	05:00			08:00	05:00
Vol.	1052	1067	1068	1059			1061	1062
P.H.F.	0.946	0.936	0.937	0.946			0.968	0.973
ADT	Not Calculated							

Accurate Counts  
978-664-2565

Location : Commonwealth Avenue WB West  
 Location : of Lake Street  
 City/State: Brighton, MA  
 Counter : 18143

3900WB3  
 Site Code: 39000003

Start Time	Mon 10-Mar-08	Tue 11-Mar-08	Wed 12-Mar-08	Thu 13-Mar-08	Fri 14-Mar-08	Average Day	Sat 15-Mar-08	Sun 16-Mar-08	Week Average
12:00 AM	*	102	105	*	*	104	*	*	104 
01:00	*	63	77	*	*	70	*	*	70 
02:00	*	30	72	*	*	51	*	*	51 
03:00	*	20	25	*	*	22	*	*	22 
04:00	*	25	34	*	*	30	*	*	30 
05:00	*	97	83	*	*	90	*	*	90 
06:00	*	313	273	*	*	293	*	*	293 
07:00	*	763	738	*	*	750	*	*	750 
08:00	*	<b>1052</b>	<b>1068</b>	*	*	<b>1060</b>	*	*	<b>1060</b> 
09:00	*	738	668	*	*	703	*	*	703 
10:00	*	545	498	*	*	522	*	*	522 
11:00	*	582	595	*	*	588	*	*	588 
12:00 PM	*	557	597	*	*	577	*	*	577 
01:00	*	658	619	*	*	638	*	*	638 
02:00	*	714	709	*	*	712	*	*	712 
03:00	*	758	787	*	*	772	*	*	772 
04:00	*	920	930	*	*	925	*	*	925 
05:00	*	<b>1067</b>	<b>1059</b>	*	*	<b>1063</b>	*	*	<b>1063</b> 
06:00	*	990	826	*	*	908	*	*	908 
07:00	*	667	606	*	*	636	*	*	636 
08:00	*	465	505	*	*	485	*	*	485 
09:00	*	458	435	*	*	446	*	*	446 
10:00	*	270	325	*	*	298	*	*	298 
11:00	*	160	180	*	*	170	*	*	170 
Day Total	0	12014	11814	0	0	11913	0	0	11913
% Avg. WkDay	0.0%	100.8%	99.2%	0.0%	0.0%				
% Avg. Week	0.0%	100.8%	99.2%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak		08:00	08:00			08:00			08:00
Vol.		1052	1068			1060			1060
PM Peak		17:00	17:00			17:00			17:00
Vol.		1067	1059			1063			1063
Grand Total	0	12014	11814	0	0	11913	0	0	11913
ADT	Not Calculated								

# Trip Generation

4/21/2008

**BC - IMP Trip Generation DRAFT**

**Net-New Trips**

	Size	Trip Rate	Less Capture	Unadjusted Vehicle Trips	VOR	Person Trips	Transit Share	Walk/Bike/Other Share	Bike Share	Vehicle Share	Local VOR	Transit Trips	Walk Trips	Bike Trips	Adjusted Vehicle Trips
AM Grad Residents		0.51										12	22	1	0
In	75	0.10		8	1.2	9	26%	48%	2%	0%	1.25	2	4	0	0
Out	beds	0.41		31	1.2	37	26%	48%	2%	0%	1.25	10	18	1	0
AM Staff/Faculty												7	16	1	93
In	350	0.29				102	6%	13%	1%	80%	1.05	6	13	1	77
Out	persons	0.06				21	6%	13%	1%	80%	1.05	1	3	0	16
AM Undergrad Beds		0.51												7	0
In	610	0.10		62	1.2	75	26%	48%	2%	0%	1.05		36	1	0
Out	beds	0.41		249	1.2	299	26%	48%	2%	0%	1.05		143	6	0
AM Graduate Commuters												24	45	2	21
In	267	0.29				77	26%	48%	2%	24%	1.05	20	37	2	18
Out	persons	0.06				16	26%	48%	2%	24%	1.05	4	8	0	4
<b>Total AM Peak Hour</b>												<b>44</b>	<b>262</b>	<b>11</b>	<b>115</b>
<b>In</b>												<b>29</b>	<b>91</b>	<b>4</b>	<b>95</b>
<b>Out</b>												<b>15</b>	<b>171</b>	<b>7</b>	<b>20</b>
PM Grad Residents		0.62										15	27	1	0
In	75	0.40		30	1.2	36	26%	48%	2%	0%	1.25	9	17	1	0
Out	beds	0.22		16	1.2	20	26%	48%	2%	0%	1.25	5	9	0	0
PM Staff/Faculty												9	20	2	120
In	350	0.17				60	6%	13%	1%	80%	1.05	4	8	1	45
Out	persons	0.28				98	6%	13%	1%	80%	1.05	6	13	1	75
PM Undergrad Beds		0.62											218	9	0
In	610	0.40		246	1.2	295	26%	48%	2%	0%	1.05		142	6	0
Out	beds	0.22		132	1.2	159	26%	48%	2%	0%	1.05		76	3	0
PM Graduate Commuters												31	58	2	27
In	267	0.17				45	26%	48%	2%	24%	1.05	12	22	1	10
Out	persons	0.28				75	26%	48%	2%	24%	1.05	19	36	1	17
<b>Total PM Peak Hour</b>												<b>55</b>	<b>323</b>	<b>14</b>	<b>147</b>
<b>In</b>												<b>25</b>	<b>189</b>	<b>8</b>	<b>56</b>
<b>Out</b>												<b>30</b>	<b>134</b>	<b>6</b>	<b>92</b>

Student Residents - ITE Apartments

# Synchro (LOS) Analysis

# LOS Analysis Summary Tables



**Table 9-37 A.M. Peak Hour LOS Summary**

Signalized Intersections	Existing A.M. Peak Hour				No Build A.M. Peak Hour				Build A.M. Peak Hour			
	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*
Commonwealth Ave at Lake St/ St. Thomas More Rd	E	68.0	0.83		F	>80.0			F	>80.0	0.94	
EB Commonwealth Ave	C	22.6	0.67	248	C	23.2	0.71	#271	C	25.7	0.80	#340
WB Commonwealth Ave	F	>80.0	>1.0	#316	F	>80.0	>1.0	#339	F	>80.0	>1.0	#387
NB St. T More Rd	F	>80.0	>1.0	#162	F	>80.0	>1.0	#176	F	>80.0	>1.0	#213
Commonwealth Ave at Chestnut Hill Ave	F	>80.0	>1.0		F	>80.0			F	>80.0	>1.0	
EB Commonwealth Ave	E	60.8	0.94	#346	F	>80.0	>1.0	#395	F	>80.0	>1.0	#401
WB Commonwealth Ave	D	47.0	0.85	#211	D	48.6	0.86	#227	D	48.9	0.86	#227
NB Chestnut Hill Ave	F	>80.0	>1.0	m478	F	>80.0	>1.0	m472	F	>80.0	>1.0	m498
SB Chestnut Hill Ave	F	>80.0	>1.0	#409	F	>80.0	>1.0	#433	F	>80.0	>1.0	#433
Commonwealth Ave at South St	B	13.3	0.35		B	13.5			B	13.6	0.38	
EB Commonwealth Ave	B	12.7	0.45	197	B	13.1	0.49	215	B	13.1	0.49	216
WB Commonwealth Ave	B	11.6	0.34	140	B	11.8	0.36	149	B	11.9	0.38	157
SB South Street	B	19.3	0.20	36	B	19.3	0.20	35	B	19.5	0.21	36
Beacon St at College Rd / Hammond St	F	>80.0	0.99		F	>80.0			F	>80.0	>1.0	
EB Beacon St	E	59.8	>1.0	#831	E	75.1	>1.0	#888	E	75.0	>1.0	#888
WB Beacon St	D	41.8	>1.0	310	D	46.8	>1.0	337	D	49.0	>1.0	341
NB Hammond St	F	>80.0	>1.0	#386	F	>80.0	>1.0	#407	F	>80.0	>1.0	#435
SB Hammond St	C	31.9	0.63	137	C	32.4	0.66	143	C	32.4	0.66	143
Beacon St at Chestnut Hill Ave (Cleveland Circle)	F	>80.0	>1.0		F	>80.0			F	>80.0	>1.0	
EB Beacon St	F	>80.0	>1.0	#570	F	>80.0	>1.0	#606	F	>80.0	>1.0	#610
WB Beacon St	D	38.9	0.94	#225	D	41.8	0.98	#243	D	41.8	0.98	#243
NB Chestnut Hill	F	>80.0	>1.0	#667	F	>80.0	>1.0	#706	F	>80.0	>1.0	#712
SB Chestnut Hill	E	56.3	>1.0	m154	E	65.8	>1.0	m#255	E	65.7	>1.0	m#232
Washington St at Lake St/Brock St	C	25.5	0.84		D	49.8			F	>80.0	0.94	
EB Washington St	C	22.3	0.79	#337	E	74.9	>1.02	#506	F	>80.0	>1.0	#571
WB Washington St	C	24.9	0.82	#377	D	53.1	0.92	#504	E	77.2	0.97	#504
NB Lake St	C	29.1	0.86	#516	C	22.9	0.72	#531	C	21.3	0.71	#546

**Table 9-37 A.M. Peak Hour LOS Summary (Continued)**

Signalized Intersections	Existing A.M. Peak Hour				No Build A.M. Peak Hour				Build A.M. Peak Hour			
	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*
Foster St at Washington St	B	19.2	0.68		C	28.7			E	61.4	0.85	
EB Washington St	B	15.5	0.70	370	C	24.8	0.91	#473	F	>80.0	>1.0	#452
WB Washington St	A	9.8	0.52	206	B	19.5	0.59	m157	C	25.6	0.71	m161
NB Foster Street	D	37.2	0.71	#125	D	48.3	0.77	#123	D	48.5	0.77	#126
SB Foster St	C	29.4	0.58	141	D	36.1	0.58	129	D	36.2	0.59	132
Washington St/Chestnut Hill Avenue /Market St	F	>80.0	>1.0		F	>80.0			F	>80.0	>1.0	
EB Washington St	F	>80.0	>1.0	#740	F	>80.0	>1.0	#682	F	>80.0	>1.0	#580
WB Washington St	F	>80.0	>1.0	#526	F	>80.0	>1.0	#564	F	>80.0	>1.0	#588
NB Chestnut Hill Ave	B	15.3	0.44	#341	B	15.5	0.46	#367	B	15.5	0.47	#370
SB Market St	B	15.6	0.48	#327	B	15.9	0.50	#348	B	15.9	0.50	#347
Unsignalized Intersections												
Commonwealth Ave at Foster St												
SB Foster St	D	30.2	0.75	163	E	35.4	0.81	193	E	36.9	0.82	198
Commonwealth Ave at Old Colony/College Rd												
NB College Rd	F	>50.0	>1.0	365	F	>50.0	>1.0	687	F	>50.0	>1.0	774
SB Old Colony	F	>50.0	>1.0	n/a	F	>50.0	>1.0	n/a	F	>50.0	>1.0	
Beacon St at St. Thomas More Rd/Gate House Rd												
NB Gate House Rd	F	>50.0	n/a	n/a	F	>50.0	>1.0	n/a	F	>50.0	>1.0	n/a
SB St. Thomas More Rd	F	>50.0	n/a	n/a	F	>50.0	>1.0	n/a	F	>50.0	>1.0	n/a
Beacon St at Reservoir Ave												
NB Reservoir Ave	F	>50.0	0.99	269	F	>50.0	>1.0	352	F	>50.0	>1.0	354
St. Thomas More Rd at Campanella Way												
EB Fr. Herlihy Dr	C	16.3	0.28	28	C	17.2	0.31	32	C	17.7	0.36	41

**Table 9-37 A.M. Peak Hour LOS Summary (Continued)**

Signalized Intersections	Existing A.M. Peak Hour				No Build A.M. Peak Hour				Build A.M. Peak Hour			
	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*
Fr Herilihy Dr at Campanella Way												
EB Campanella Way	A	8.2	0.03	n/a	A	8.2	0.03	n/a	A	7.9	0.00	n/a
WB Campanella Way	B	11.0	0.42	n/a	B	11.0	0.42	n/a	A	9.9	0.33	n/a
SB Fr Herilihy Dr	A	8.4	0.27	n/a	A	8.4	0.27	n/a	A	8.1	0.21	n/a
St. Thomas More Rd at Chestnut Hill Driveway												
WB Chestnut Hill Driveway	D	29.2	0.38	43	D	34.4	0.46	55	E	44.2	0.54	69
Lake St at Kenrick St												
EB Kenrick St	D	32.4	0.54	75	E	38.3	0.61	90	E	39.3	0.62	92
Lake St at Glenmont Rd												
WB Glenmont Rd	B	14.2	0.24	23	B	14.9	0.26	26	C	15.1	0.26	26
Foster St at Rogers Park Ave												
EB Rogers Park Ave	C	20.5	0.49	67	C	23.0	0.55	80	D	33.5	0.67	114
Beacon St/Beacon Garage												
SB Driveway	D	32.7	0.11	8	F	>50.0	0.32	25	F	>50.0	0.36	28
Commonwealth Ave/Brighton Campus Driveway												
SB Brighton Driveway	C	15.9	0.07	5	C	16.4	0.07	5	C	19.1	0.21	20

\* Max v/c and Max 95 percentile queue represents the worst lane group for each approach.

# 95th percentile volume exceeds capacity, queue may be longer.

m Volume for 95th percentile queue is metered by upstream signal.

**Table 9-38 P.M. Peak Hour LOS Summary**

Signalized Intersections	Existing P.M. Peak Hour				No Build P.M. Peak Hour				Build P.M. Peak Hour			
	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*
Commonwealth Ave at Lake St/St. Thomas More Rd	E	77.3	0.91		F	>80.0			F	>80.0	>1.0	
EB Commonwealth Ave	C	31.5	0.60	202	C	32.8	0.63	213	D	36.0	0.73	#255
WB Commonwealth Ave	D	36.1	0.82	312	D	38.1	0.85	#374	D	42.7	0.90	#408
NB St. T More Rd	F	>80.0	>1.0	#354	F	>80.0	>1.0	#384	F	>80.0	>1.0	#413
Commonwealth Ave at Chestnut Hill Ave	F	>80.0	>1.0		F	>80.0			F	>80.0	>1.0	
EB Commonwealth Ave	D	46.8	0.76	#321	D	53.4	0.86	#358	E	56.8	0.89	#382
WB Commonwealth Ave	D	47.9	0.84	217	D	52.3	0.88	#253	D	53.2	0.88	#270
NB Chestnut Hill Ave	E	76.2	>1.0	#734	F	>80.0	>1.0	#797	F	>80.0	>1.0	#797
SB Chestnut Hill Ave	F	>80.0	>1.0	#429	F	>80.0	>1.0	#460	F	>80.0	>1.0	#460
Commonwealth Ave at South St	B	13.5	0.38		B	14.2			B	14.4	0.45	
EB Commonwealth Ave	B	13.0	0.47	187	B	14.1	0.55	#371	B	14.5	0.58	#394
WB Commonwealth Ave	B	12.1	0.40	164	B	12.5	0.43	178	B	12.6	0.45	185
SB South Street	B	19.5	0.22	43	B	19.7	0.23	45	B	19.9	0.24	45
Beacon St at College Rd/ Hammond St	F	n/a	0.82		F	>80.0			F	>80.0	0.94	
EB Beacon St	C	23.4	0.70	386	C	28.0	0.78	413	C	27.7	0.77	414
WB Beacon St	C	31.1	0.97	#731	D	46.7	>1.0	#787	D	53.3	>1.0	#768
NB Hammond St	F	>80.0	>1.00	#454	F	>80.0	>1.0	#470	F	>80.0	>1.0	#493
SB Hammond St	C	27.0	0.35	100	C	26.6	0.35	103	C	26.6	0.35	103
Beacon St at Chestnut Hill Ave (Cleveland Circle)	F	>80.0	>1.0		F	>80.0			F	>80.0	>1.0	
EB Beacon St	F	>80.0	>1.00	#494	D	53.4	0.86	#358	F	>80.0	>1.0	#543
WB Beacon St	E	75.8	>1.00	#255	D	52.3	0.88	#253	F	>80.0	>1.0	#280
NB Chestnut Hill	D	39.6	0.92	#427	F	>80.0	>1.0	#460	D	53.8	0.99	#477
SB Chestnut Hill	C	26.3	0.59	229	F	>80.0	>1.0	#797	C	27.0	0.62	244

**Table 9-38 P.M. Peak Hour LOS Summary (Continued)**

Signalized Intersections	Existing P.M. Peak Hour				No Build P.M. Peak Hour				Build P.M. Peak Hour			
	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*
Washington St at Lake St/ Brock St	D	40.7	0.92		F	>80.0			F	>80.0	>1.0	
EB Washington St	C	27.3	0.85	#681	F	>80.0	>1.0	#837	F	>80.0	>1.0	#889
WB Washington St	B	15.6	0.62	389	D	53.8	0.89	m#435	E	61.9	0.92	m#402
NB Lake St	F	>80.0	>1.00	#590	C	25.4	0.72	#569	C	27.2	0.78	#659
Foster St at Washington St	C	26.0	0.89		E	69.9			F	>80.0	0.93	
EB Washington St	B	19.7	0.83	#419	F	>80.0	>1.0	m144	F	>80.0	>1.0	m137
WB Washington St	C	32.7	>1.00	212	C	28.6	0.80	m214	D	36.6	0.83	m220
NB Foster Street	C	26.3	0.39	#97	D	39.2	0.56	#119	D	47.1	0.55	#136
SB Foster St	C	24.5	0.67	140	D	50.0	0.79	220	D	47.9	0.79	222
Washington St/Chestnut Hill Avenue /Market St	F	>80.0	>1.0		F	>80.00			F	>80.0	>1.0	
EB Washington St	F	>80.0	>1.0	#1094	F	>80.0	>1.0	#827	F	>80.0	>1.0	#875
WB Washington St	F	>80.0	>1.0	#817	F	>80.0	>1.0	#873	F	>80.0	>1.0	#898
NB Chestnut Hill Ave	C	27.5	0.59	244	C	25.4	0.56	255	C	24.5	0.55	251
SB Market St	D	38.1	0.84	#419	C	34.8	0.70	#453	C	32.8	0.82	#460
Unsignalized Intersections Commonwealth Ave at Foster St												
SB Foster St	C	22.2	0.67	125	D	25.1	0.72	148	D	27.6	0.75	165
Commonwealth Ave at Old Colony/College Rd												
NB College Rd	F	>50.0	>1.0	696	F	>50.0	>1.0	n/a	F	>50.0	>1.0	n/a
SB Old Colony	F	>50.0	>1.0	175	F	>50.0	>1.0	188	F	>50.0	>1.0	n/a
Beacon St at St. Thomas More Rd/Gate House Rd												
NB Gate House Rd	F	>50.0	>1.0	n/a	F	>50.0	>1.0	n/a	F	>50.0	>1.0	n/a
SB St. Thomas More Rd	F	>50.0	>1.0	n/a	F	>50.0	>1.0	n/a	F	>50.0	>1.0	n/a
Beacon St at Reservoir Ave												
NB Reservoir Ave	D	33.4	0.67	115	E	37.5	0.71	130	E	39.8	0.73	138

**Table 9-38 P.M. Peak Hour LOS Summary (Continued)**

Signalized Intersections	Existing P.M. Peak Hour				No Build P.M. Peak Hour				Build P.M. Peak Hour			
	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*	LOS	Delay (sec/veh)	Max V/C Ratio*	Max 95 <sup>th</sup> % Queue (ft)*
St. Thomas More Rd at Campanella Way EB Fr. Herlihy Dr	B	14.3	0.24	23	B	15.0	0.26	26	C	17.2	0.30	32
Fr Herilihy Dr at Campanella Way SB Fr Herilihy Dr	A	7.7	0.13	n/a	A	8.9	0.24	n/a	A	9.7	0.32	n/a
St. Thomas More Rd at Chestnut Hill Driveway WB Chestnut Hill Driveway	E	36.6	0.45	53	E	44.6	0.54	70	F	>50.0	0.58	78
Lake St at Kenrick St EB Kenrick St	E	43.6	0.62	91	F	>50.0	0.70	112	F	>50.0	0.75	125
Lake St at Glenmont Rd WB Glenmont Rd	C	18.7	0.34	37	C	19.8	0.37	41	C	21.5	0.40	46
Foster St at Rogers Park Ave EB Rogers Park Ave	C	19.7	0.42	51	C	22.7	0.48	62	D	33.1	0.60	91
Beacon St/Beacon Garage SB Driveway	F	>50.0	>1.0	604	F	>50.0	>1.0	692	F	>50.0	>1.0	1078
Commonwealth Ave/Brighton Campus Driveway SB Brighton Driveway	C	19.3	0.20	19	C	20.2	0.21	19	E	37.6	0.63	99

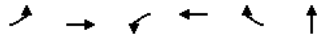
\* Max v/c and Max 95 percentile queue represents the worst lane group for each approach.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 m Volume for 95th percentile queue is metered by upstream signal.

# Existing 2008

Queues

2: Commonwealth Ave & Lake Street

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT
Lane Group Flow (vph)	320	631	284	622	108	379
v/c Ratio	0.68	0.45	1.09	1.11	0.34	1.04
Control Delay	34.5	17.9	117.8	106.7	10.1	90.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.5	17.9	117.8	106.7	10.1	90.4
Queue Length 50th (ft)	149	120	~174	~203	0	~110
Queue Length 95th (ft)	248	158	#310	#316	38	#162
Internal Link Dist (ft)		1877		667		286
Turn Bay Length (ft)	200		300		200	
Base Capacity (vph)	474	1486	261	560	314	363
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.42	1.09	1.11	0.34	1.04

Intersection Summary

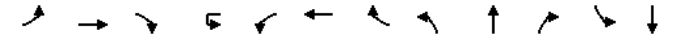
~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2: Commonwealth Ave & Lake Street

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔↔		↔	↔↔	↔	↔	↔↔	↔↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1000	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	10	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		0.95			
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.93		1.00			
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			
Flt	1.00	1.00		1.00	1.00	0.85		0.97			
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99			
Satd. Flow (prot)	1555	3185		1482	3185	1281		1377			
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99			
Satd. Flow (perm)	1555	3185		1482	3185	1281		1377			
Volume (vph)	291	549	0	4	241	578	92	56	174	48	0
Peak-hour factor, PHF	0.91	0.87	0.25	0.92	0.86	0.93	0.85	0.70	0.78	0.63	0.25
Adj. Flow (vph)	320	631	0	4	280	622	108	80	223	76	0
RTOR Reduction (vph)	0	0	0	0	0	0	89	0	24	0	0
Lane Group Flow (vph)	320	631	0	0	284	622	19	0	355	0	0
Confl. Peds. (#/hr)							21				
Heavy Vehicles (%)	1%	2%	0%	2%	6%	2%	5%	25%	3%	21%	0%
Turn Type	Prot			Split	Split	Perm	Split				
Protected Phases	1	2		3	3	3		4	4		
Permitted Phases							3				
Actuated Green, G (s)	26.0	37.2			15.0	15.0	15.0		21.0		
Effective Green, g (s)	26.0	37.2			15.0	15.0	15.0		21.0		
Actuated g/C Ratio	0.31	0.44			0.18	0.18	0.18		0.25		
Clearance Time (s)	4.0				4.0	4.0	4.0		4.0		
Vehicle Extension (s)	3.0				3.0	3.0	3.0		3.0		
Lane Grp Cap (vph)	475	1391			261	561	226		339		
v/s Ratio Prot	c0.21	c0.20			0.19	c0.20			c0.26		
v/s Ratio Perm							0.01				
v/c Ratio	0.67	0.45			1.09	1.11	0.08		1.05		
Uniform Delay, d1	25.9	16.9			35.1	35.1	29.4		32.1		
Progression Factor	1.00	1.00			1.00	1.00	1.00		1.00		
Incremental Delay, d2	7.4	0.2			81.2	71.4	0.2		61.7		
Delay (s)	33.3	17.1			116.3	106.5	29.5		93.8		
Level of Service	C	B			F	F	C		F		
Approach Delay (s)		22.6				101.0			93.8		0.0
Approach LOS		C				F			F		A

Intersection Summary

HCM Average Control Delay	68.0	HCM Level of Service	E
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	85.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



HCM Signalized Intersection Capacity Analysis  
2: Commonwealth Ave & Lake Street

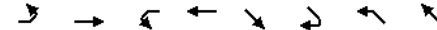
6/3/2008



Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Frpb, ped/bikes	
Flpb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	0
Peak-hour factor, PHF	0.25
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	
Heavy Vehicles (%)	0%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Queues  
3: Commonwealth Ave & Chestnut Hill

6/3/2008



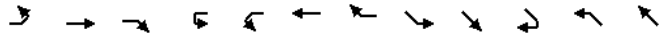
Lane Group	EBL	EBT	WBL	WBT	SET	SER	NWL	NWT
Lane Group Flow (vph)	163	717	215	341	540	57	172	850
v/c Ratio	0.47	0.95	0.82	0.52	1.41	0.16	0.60	1.36
Control Delay	28.5	62.2	40.8	43.4	234.7	24.4	68.3	208.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.5	62.2	40.8	43.4	234.7	24.4	68.3	208.3
Queue Length 50th (ft)	85	257	116	119	-295	20	137	-864
Queue Length 95th (ft)	100	#346	#211	175	#409	38	m106	m478
Internal Link Dist (ft)		1348		1135	4158			919
Turn Bay Length (ft)	200		100			50		
Base Capacity (vph)	394	757	311	658	383	356	288	627
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.95	0.69	0.52	1.41	0.16	0.60	1.36

Intersection Summary
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

3: Commonwealth Ave & Chestnut Hill

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT
Lane Configurations	↔	↕	↔	↔	↕	↕	↔	↔	↕	↕	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	10	10	12	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95			1.00	0.95			0.95	1.00	1.00	1.00
Fr't	1.00	0.94			1.00	0.99			1.00	0.85	1.00	0.96
Flt Protected	0.95	1.00			0.95	1.00			0.99	1.00	0.95	1.00
Satd. Flow (prot)	1577	2934			1578	2790			3057	1398	1533	1541
Flt Permitted	0.43	1.00			0.14	1.00			0.51	1.00	0.25	1.00
Satd. Flow (perm)	707	2934			237	2790			1584	1398	400	1541
Volume (vph)	111	363	218	5	197	283	15	34	429	39	129	513
Peak-hour factor, PHF	0.68	0.81	0.81	0.92	0.94	0.92	0.46	0.49	0.91	0.69	0.75	0.82
Adj. Flow (vph)	163	448	269	5	210	308	33	69	471	57	172	626
RTOR Reduction (vph)	0	71	0	0	0	6	0	0	0	18	0	11
Lane Group Flow (vph)	163	646	0	0	215	335	0	0	540	39	172	839
Heavy Vehicles (%)	3%	3%	7%	2%	3%	4%	36%	3%	6%	4%	6%	5%
Turn Type	pm+pt			pm+pt			Perm		Perm	D.P+P		
Protected Phases	9	1			9	1			3		4	3 4
Permitted Phases	1				1		3		3		3	
Actuated Green, G (s)	45.0	28.0			45.0	28.0			29.0	29.0	44.0	48.0
Effective Green, g (s)	43.0	28.0			43.0	28.0			29.0	29.0	44.0	48.0
Actuated g/C Ratio	0.36	0.23			0.36	0.23			0.24	0.24	0.37	0.40
Clearance Time (s)	2.0	4.0			2.0	4.0			4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0	3.0	3.0	
Lane Grp Cap (vph)	362	685			253	651			383	338	288	616
v/s Ratio Prot	0.06	c0.22			c0.11	0.12					0.07	c0.54
v/s Ratio Perm	0.11				0.20				0.34	0.03	0.14	
v/c Ratio	0.45	0.94			0.85	0.51			1.41	0.11	0.60	1.36
Uniform Delay, d1	27.7	45.2			30.9	40.1			45.5	35.5	39.8	36.0
Progression Factor	1.00	1.00			1.00	1.00			1.00	1.00	1.80	1.87
Incremental Delay, d2	0.9	22.9			22.5	2.9			199.4	0.7	0.3	164.0
Delay (s)	28.6	68.1			53.4	43.0			244.9	36.2	72.0	231.5
Level of Service	C	E			D	D			F	D	E	F
Approach Delay (s)		60.8				47.0			225.0			204.6
Approach LOS		E				D			F			F

Intersection Summary

HCM Average Control Delay	138.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	100.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

3: Commonwealth Ave & Chestnut Hill

6/3/2008



Movement	NWR
Lane Configurations	↔
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Fr't	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	166
Peak-hour factor, PHF	0.74
Adj. Flow (vph)	224
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	11%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

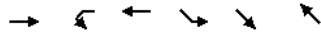
Intersection Summary

HCM Average Control Delay		HCM Level of Service	
HCM Volume to Capacity ratio			
Actuated Cycle Length (s)		Sum of lost time (s)	
Intersection Capacity Utilization		ICU Level of Service	
Analysis Period (min)			
c Critical Lane Group			

## Queues

7: Beacon St &amp; Chestnut Hill Ave

6/3/2008



Lane Group	EBT	WBL	WBT	SEL	SET	NWT
Lane Group Flow (vph)	726	168	698	276	770	955
v/c Ratio	1.82	0.93	0.42	1.24	0.62	1.54
Control Delay	408.8	81.0	28.8	147.1	20.1	270.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	408.8	81.0	28.8	147.1	20.1	270.5
Queue Length 50th (ft)	~446	91	145	~270	172	~551
Queue Length 95th (ft)	#570	#225	163 m#228	m154	#667	
Internal Link Dist (ft)	3431		1419		919	239
Turn Bay Length (ft)		100				
Base Capacity (vph)	398	181	1649	223	1238	620
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.82	0.93	0.42	1.24	0.62	1.54

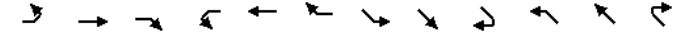
## Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

## HCM Signalized Intersection Capacity Analysis

7: Beacon St &amp; Chestnut Hill Ave

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↑↑		↑	↑↑↑		↑	↑↑			↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	12	12	10	11	10	14	16	16
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				4.0
Lane Util. Factor		0.95		1.00	0.91		1.00	0.95				0.95
Frt		0.98		1.00	0.96		1.00	0.98				0.98
Flt Protected		1.00		0.95	1.00		0.95	1.00				0.99
Satd. Flow (prot)		3039		1510	4398		1472	2914				3421
Flt Permitted		0.51		0.13	1.00		0.12	1.00				0.72
Satd. Flow (perm)		1546		211	4398		188	2914				2494
Volume (vph)	61	521	52	158	408	164	193	526	106	73	668	75
Peak-hour factor, PHF	0.88	0.90	0.67	0.94	0.82	0.82	0.70	0.80	0.95	0.61	0.92	0.69
Adj. Flow (vph)	69	579	78	168	498	200	276	658	112	120	726	109
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	726	0	168	698	0	276	770	0	0	955	0
Heavy Vehicles (%)	2%	1%	2%	4%	1%	3%	3%	6%	2%	1%	6%	4%
Turn Type	Perm		D.P+P		D.P+P		Perm				Perm	
Protected Phases		1		11		8		8		9		9
Permitted Phases	1			1			9				9	
Actuated Green, G (s)		30.2		40.2		49.0		51.0				33.0
Effective Green, g (s)		30.2		40.2		47.0		51.0				33.0
Actuated g/C Ratio		0.25		0.34		0.39		0.42				0.28
Clearance Time (s)		4.0		4.0		2.0		4.0				4.0
Vehicle Extension (s)		3.0		3.0		3.0		3.0				3.0
Lane Grp Cap (vph)		389		179		1620		223		1238		686
v/s Ratio Prot				c0.08		0.16		c0.14		0.26		
v/s Ratio Perm		c0.47		0.24				0.34				c0.38
v/c Ratio		1.87		0.94		0.43		1.24		0.62		1.39
Uniform Delay, d1		44.9		32.2		28.5		34.1		27.0		43.5
Progression Factor		1.00		1.00		1.00		1.47		0.69		0.40
Incremental Delay, d2		399.6		49.1		0.2		110.6		0.2		183.6
Delay (s)		444.5		81.3		28.6		160.8		18.9		200.9
Level of Service		F		F		C		F		B		F
Approach Delay (s)		444.5				38.9				56.3		200.9
Approach LOS		F				D				E		F

## Intersection Summary

HCM Average Control Delay	169.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	32.8
Intersection Capacity Utilization	91.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

8: Beacon St & Gate House Road

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR					
Lane Configurations	↔	↕	↔	↔	↕	↔	↔	↕	↔	↔	↕	↔					
Sign Control	Free			Free			Stop			Stop							
Grade	0%			0%			0%			0%							
Volume (veh/h)	371	668	8	3	595	72	5	5	4	23	2	212					
Peak Hour Factor	0.99	0.93	0.67	0.50	0.89	0.71	0.42	0.33	0.50	0.84	0.38	0.90					
Hourly flow rate (vph)	375	718	12	6	669	101	12	15	8	27	5	236					
Pedestrians	8			10			5			8							
Lane Width (ft)	12.0			12.0			12.0			12.0							
Walking Speed (ft/s)	4.0			4.0			4.0			4.0							
Percent Blockage	1			1			0			1							
Right turn flare (veh)																	
Median type							None			None							
Median storage (veh)																	
Upstream signal (ft)																	
pX, platoon unblocked																	
vC, conflicting volume	778		735			2456		2269		739		2233		2224		735	
vC1, stage 1 conf vol																	
vC2, stage 2 conf vol																	
vCu, unblocked vol	778		735			2456		2269		739		2233		2224		735	
tC, single (s)	4.1		4.4			7.1		6.5		6.2		7.2		6.5		6.3	
tC, 2 stage (s)																	
tF (s)	2.2		2.4			3.5		4.0		3.3		3.6		4.0		3.4	
p0 queue free %	54		99			0		31		98		0		77		41	
cM capacity (veh/h)	820		771			5		22		415		8		23		399	

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	375	730	776	35	268
Volume Left	375	0	6	12	27
Volume Right	0	12	101	8	236
cSH	820	1700	771	11	66
Volume to Capacity	0.46	0.43	0.01	3.30	4.06
Queue Length 95th (ft)	60	0	1	Err	Err
Control Delay (s)	13.0	0.0	0.2	Err	Err
Lane LOS	B		A	F	F
Approach Delay (s)	4.4		0.2	Err	Err
Approach LOS				F	F

Intersection Summary				
Average Delay	1390.6			
Intersection Capacity Utilization	107.1%	ICU Level of Service		G
Analysis Period (min)	15			

Queues

13: Washington St & Chestnut Hill

6/3/2008



Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	602	52	523	78	397	113	340	111
v/c Ratio	1.98	0.40	1.14	0.27	0.44	0.73	0.48	0.20
Control Delay	474.9	31.7	114.1	21.4	20.1	53.4	21.8	17.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	474.9	31.7	114.1	21.4	20.1	53.4	21.8	17.8
Queue Length 50th (ft)	~538	21	~350	22	126	44	110	31
Queue Length 95th (ft)	#740	34	#526	70	#341	#126	#327	81
Internal Link Dist (ft)	985		930		4158		1061	
Turn Bay Length (ft)		50		50		75		50
Base Capacity (vph)	304	131	460	288	899	154	714	551
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.98	0.40	1.14	0.27	0.44	0.73	0.48	0.20

Intersection Summary	
~	Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

13: Washington St & Chestnut Hill

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	16	10	11	16	16	16	16	12	12	10
Total Lost time (s)	4.0			4.0			4.0			4.0		
Lane Util. Factor	1.00			1.00			1.00			1.00		
Frt	0.98			1.00			0.98			1.00		
Flt Protected	0.99			0.95			1.00			0.95		
Satd. Flow (prot)	1369			1189			1218			1841		
Flt Permitted	0.25			0.16			1.00			0.42		
Satd. Flow (perm)	342			205			1218			908		
Volume (vph)	55	412	97	32	322	127	61	335	42	76	320	84
Peak-hour factor, PHF	0.86	0.96	0.89	0.61	0.88	0.81	0.78	0.99	0.71	0.67	0.94	0.76
Adj. Flow (vph)	64	429	109	52	366	157	78	338	59	113	340	111
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	602	0	52	523	0	78	397	0	113	340	111
Heavy Vehicles (%)	2%	3%	1%	0%	1%	3%	0%	2%	0%	5%	1%	4%
Bus Blockages (#/hr)	0	0	0	26	26	26	0	0	0	0	0	0
Parking (#/hr)	5	5	5	5	5	5				5	5	5
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases	1			1			3			3		
Permitted Phases	1			1			3			3		
Actuated Green, G (s)	25.2			25.2			43.4			43.4		
Effective Green, g (s)	25.2			25.2			43.4			43.4		
Actuated g/C Ratio	0.28			0.28			0.48			0.48		
Clearance Time (s)	4.0			4.0			4.0			4.0		
Vehicle Extension (s)	3.0			3.0			3.0			3.0		
Lane Grp Cap (vph)	96			57			341			438		
v/s Ratio Prot				0.43			0.21			c0.23		
v/s Ratio Perm	c1.76			0.25			0.09			0.19		
v/c Ratio	6.27			0.91			1.53			0.18		
Uniform Delay, d1	32.4			31.3			32.4			13.2		
Progression Factor	1.00			1.00			1.00			1.00		
Incremental Delay, d2	2394.0			95.8			254.5			0.2		
Delay (s)	2426.4			127.2			286.9			13.4		
Level of Service	F			F			B			B		
Approach Delay (s)	2426.4			272.4			15.3			15.6		
Approach LOS	F			F			B			B		
<b>Intersection Summary</b>												
HCM Average Control Delay	737.1			HCM Level of Service			F					
HCM Volume to Capacity ratio	2.61											
Actuated Cycle Length (s)	90.0			Sum of lost time (s)			21.4					
Intersection Capacity Utilization	101.9%			ICU Level of Service			G					
Analysis Period (min)	15											
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

15: Campanella Way & St. T Moore

6/3/2008

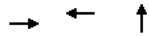


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Yield		Free		Free	
Grade	0%		0%		0%	
Volume (veh/h)	23	63	105	255	120	121
Peak Hour Factor	0.69	0.70	0.51	0.88	0.72	0.81
Hourly flow rate (vph)	33	90	206	290	167	149
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	366					
pX, platoon unblocked						
vC, conflicting volume	943	241	316			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	943	241	316			
tC, single (s)	6.9	6.2	4.2			
tC, 2 stage (s)						
tF (s)	3.9	3.3	2.3			
p0 queue free %	83	89	82			
cM capacity (veh/h)	200	800	1174			
<b>Direction, Lane #</b>						
	EB 1	NB 1	SB 1			
Volume Total	123	496	316			
Volume Left	33	206	0			
Volume Right	90	0	149			
cSH	441	1174	1700			
Volume to Capacity	0.28	0.18	0.19			
Queue Length 95th (ft)	28	16	0			
Control Delay (s)	16.3	4.7	0.0			
Lane LOS	C	A				
Approach Delay (s)	16.3	4.7	0.0			
Approach LOS	C					
<b>Intersection Summary</b>						
Average Delay	4.6					
Intersection Capacity Utilization	52.3%		ICU Level of Service		A	
Analysis Period (min)	15					

Queues

16: Washington St & Brock St

6/3/2008



Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	482	501	521
v/c Ratio	0.75	0.78	0.82
Control Delay	18.7	19.5	33.1
Queue Delay	0.0	0.0	0.0
Total Delay	18.7	19.5	33.1
Queue Length 50th (ft)	106	111	127
Queue Length 95th (ft)	#337	#377	#516
Internal Link Dist (ft)	966	802	965
Turn Bay Length (ft)			
Base Capacity (vph)	805	797	633
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.60	0.63	0.82

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

16: Washington St & Brock St

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑			↑				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frbp, ped/bikes		1.00			1.00			0.99				
Flpb, ped/bikes		1.00			1.00			1.00				
Frt		1.00			0.99			0.97				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1624			1569			1602				
Flt Permitted		0.98			1.00			0.99				
Satd. Flow (perm)		1589			1569			1602				
Volume (vph)	14	422	0	0	421	27	58	298	97	0	0	0
Peak-hour factor, PHF	0.80	0.91	0.25	0.25	0.91	0.72	0.90	0.90	0.77	0.25	0.25	0.25
Adj. Flow (vph)	18	464	0	0	463	38	64	331	126	0	0	0
RTOR Reduction (vph)	0	0	0	0	4	0	0	12	0	0	0	0
Lane Group Flow (vph)	0	482	0	0	497	0	0	509	0	0	0	0
Confl. Peds. (#/hr)	23					23			9			
Heavy Vehicles (%)	6%	5%	0%	0%	8%	0%	4%	1%	3%	0%	0%	0%
Turn Type	Perm						Perm					
Protected Phases		1			1			4				
Permitted Phases	1						4					
Actuated Green, G (s)		22.1			22.1			21.2				
Effective Green, g (s)		22.1			22.1			21.2				
Actuated g/C Ratio		0.38			0.38			0.37				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		611			603			591				
v/s Ratio Prot					0.32							
v/s Ratio Perm		0.30						0.32				
v/c Ratio		0.79			0.82			0.86				
Uniform Delay, d1		15.6			16.0			16.8				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.7			9.0			12.3				
Delay (s)		22.3			24.9			29.1				
Level of Service		C			C			C				
Approach Delay (s)		22.3			24.9			29.1			0.0	
Approach LOS		C			C			C			A	

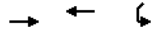
Intersection Summary

HCM Average Control Delay	25.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	57.5	Sum of lost time (s)	14.2
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

## Queues

18: Commonwealth Ave &amp; South St

6/3/2008



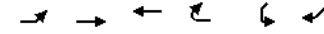
Lane Group	EBT	WBT	SWL
Lane Group Flow (vph)	714	526	212
v/c Ratio	0.43	0.32	0.39
Control Delay	12.5	11.4	7.1
Queue Delay	0.0	0.0	0.0
Total Delay	12.5	11.4	7.1
Queue Length 50th (ft)	77	53	5
Queue Length 95th (ft)	197	140	36
Internal Link Dist (ft)	424	1348	723
Turn Bay Length (ft)			
Base Capacity (vph)	1652	1636	549
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.43	0.32	0.39

## Intersection Summary

## HCM Signalized Intersection Capacity Analysis

18: Commonwealth Ave &amp; South St

6/3/2008



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations		↑↑	↑↑		∩	∩
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	1.00		0.88	
Flt Protected		1.00	1.00		1.00	
Satd. Flow (prot)		3217	3185		1318	
Flt Permitted		1.00	1.00		1.00	
Satd. Flow (perm)		3217	3185		1318	
Volume (vph)	0	657	500	0	15	161
Peak-hour factor, PHF	0.92	0.92	0.95	0.95	0.75	0.84
Adj. Flow (vph)	0	714	526	0	20	192
RTOR Reduction (vph)	0	0	0	0	134	0
Lane Group Flow (vph)	0	714	526	0	78	0
Heavy Vehicles (%)	0%	1%	2%	0%	0%	1%
Parking (#/hr)					2	2
Turn Type						
Protected Phases		1	1		3	
Permitted Phases						
Actuated Green, G (s)		34.4	34.4		21.3	
Effective Green, g (s)		34.4	34.4		21.3	
Actuated g/C Ratio		0.49	0.49		0.30	
Clearance Time (s)		4.0	4.0		4.0	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1574	1559		399	
v/s Ratio Prot		c0.22	0.17		c0.06	
v/s Ratio Perm						
v/c Ratio		0.45	0.34		0.20	
Uniform Delay, d1		11.8	11.0		18.2	
Progression Factor		1.00	1.00		1.00	
Incremental Delay, d2		0.9	0.6		1.1	
Delay (s)		12.7	11.6		19.3	
Level of Service		B	B		B	
Approach Delay (s)		12.7	11.6		19.3	
Approach LOS		B	B		B	

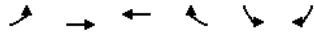
## Intersection Summary

HCM Average Control Delay	13.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	70.3	Sum of lost time (s)	14.6
Intersection Capacity Utilization	38.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

19: Commonwealth Ave & Foster St

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↗
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	616	613	80	0	351
Peak Hour Factor	0.25	0.89	0.96	0.77	0.25	0.90
Hourly flow rate (vph)	0	692	639	104	0	390
Pedestrians		59			59	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		5			5	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)			504			
pX, platoon unblocked	0.94				0.94	0.94
vC, conflicting volume	801				1096	489
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	724				1037	392
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	25
cM capacity (veh/h)	793				206	518

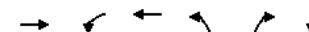
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	346	346	426	317	390
Volume Left	0	0	0	0	0
Volume Right	0	0	0	104	390
cSH	1700	1700	1700	1700	518
Volume to Capacity	0.20	0.20	0.25	0.19	0.75
Queue Length 95th (ft)	0	0	0	0	163
Control Delay (s)	0.0	0.0	0.0	0.0	30.2
Lane LOS					D
Approach Delay (s)	0.0		0.0		30.2
Approach LOS					D

Intersection Summary			
Average Delay		6.4	
Intersection Capacity Utilization	57.4%		ICU Level of Service B
Analysis Period (min)		15	

Queues

20: Washington St & Foster St

6/3/2008



Lane Group	EBT	WBL	WBT	NBL	NBR	SBT
Lane Group Flow (vph)	593	222	357	115	217	159
v/c Ratio	0.70	0.63	0.45	0.68	1.00	0.52
Control Delay	17.8	15.7	14.0	34.0	70.7	28.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.8	15.7	14.0	34.0	70.7	28.3
Queue Length 50th (ft)	187	30	96	43	0	57
Queue Length 95th (ft)	370	#91	206	119	#125	141
Internal Link Dist (ft)	802		985			367
Turn Bay Length (ft)		75			80	
Base Capacity (vph)	995	363	944	265	217	483
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.61	0.38	0.43	1.00	0.33

Intersection Summary	
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.



HCM Signalized Intersection Capacity Analysis

20: Washington St & Foster St

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	10	10	12	12	10	10	10	12	10	10
Total Lost time (s)	4.0		4.0		4.0		4.0		4.0		4.0	
Lane Util. Factor	1.00		1.00		1.00		1.00		1.00		1.00	
Frt	0.97		1.00		1.00		1.00		0.85		0.96	
Flt Protected	1.00		0.95		1.00		0.95		1.00		0.99	
Satd. Flow (prot)	1589		1486		1517		1501		1195		1518	
Flt Permitted	1.00		0.29		1.00		0.56		1.00		0.99	
Satd. Flow (perm)	1589		455		1517		889		1195		1518	
Volume (vph)	0	387	121	191	321	0	101	0	187	24	70	37
Peak-hour factor, PHF	0.25	0.87	0.82	0.86	0.90	0.25	0.88	0.25	0.86	0.72	0.88	0.81
Adj. Flow (vph)	0	445	148	222	357	0	115	0	217	33	80	46
RTOR Reduction (vph)	0	9	0	0	0	0	0	0	217	0	0	0
Lane Group Flow (vph)	0	584	0	222	357	0	115	0	0	0	159	0
Heavy Vehicles (%)	0%	5%	1%	2%	10%	0%	1%	0%	1%	0%	0%	0%
Bus Blockages (#/hr)	0	0	6	0	6	0	0	0	0	0	0	0
Parking (#/hr)							2		2		2	
Turn Type			pm+pt		D.Pm		NA		Perm			
Protected Phases	1		9		1						3	
Permitted Phases			1				3				3	
Actuated Green, G (s)	37.1		48.0		37.1		12.9		0.0		12.9	
Effective Green, g (s)	37.1		46.0		37.1		12.9		0.0		12.9	
Actuated g/C Ratio	0.52		0.65		0.52		0.18		0.00		0.18	
Clearance Time (s)	4.0		2.0		4.0		4.0				4.0	
Vehicle Extension (s)	3.0		3.0		3.0		3.0				3.0	
Lane Grp Cap (vph)	831		425		794		162		0		276	
v/s Ratio Prot	c0.37		c0.07		0.24							
v/s Ratio Perm			0.27				c0.13				0.10	
v/c Ratio	0.70		0.52		0.45		0.71		0.00		0.58	
Uniform Delay, d1	12.7		6.8		10.5		27.2		35.4		26.5	
Progression Factor	1.00		1.00		1.00		1.00		1.00		1.00	
Incremental Delay, d2	2.7		1.2		0.4		13.3		0.0		2.9	
Delay (s)	15.5		8.0		10.9		40.6		35.4		29.4	
Level of Service	B		A		B		D		D		C	
Approach Delay (s)	15.5		9.8				37.2				29.4	
Approach LOS	B		A				D				C	

Intersection Summary			
HCM Average Control Delay	19.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	70.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

24: Glenmont Rd & Lake St

6/3/2008



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↔	↔	↔	↔	↔
Sign Control	Stop		Free			Free
Grade	0%		0%		0%	
Volume (veh/h)	0	81	516	0	0	0
Peak Hour Factor	0.25	0.67	0.91	0.25	0.25	0.25
Hourly flow rate (vph)	0	121	567	0	0	0
Pedestrians	6					
Lane Width (ft)	0.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	1130					
pX, platoon unblocked						
vC, conflicting volume	567	573			567	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	567	573			567	
tC, single (s)	6.4	6.3			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.4			2.2	
p0 queue free %	100	76			100	
cM capacity (veh/h)	488	511			1015	

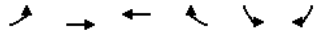
Direction, Lane #	WB 1	NB 1
Volume Total	121	567
Volume Left	0	0
Volume Right	121	0
cSH	511	1700
Volume to Capacity	0.24	0.33
Queue Length 95th (ft)	23	0
Control Delay (s)	14.2	0.0
Lane LOS	B	
Approach Delay (s)	14.2	0.0
Approach LOS	B	

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

26: Commonwealth Ave & Campus Driveway

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Sign Control	Free	Free	Free		Stop	
Grade	0%	0%	0%		0%	
Volume (veh/h)	0	591	904	22	0	21
Peak Hour Factor	0.25	0.89	0.96	0.61	0.25	0.88
Hourly flow rate (vph)	0	664	942	36	0	24
Pedestrians		53			53	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		4			4	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)		747				
pX, platoon unblocked					0.92	
vC, conflicting volume	1031				1345	595
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1031				1286	595
tC, single (s)	4.1				6.8	7.5
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.6
p0 queue free %	100				100	93
cM capacity (veh/h)	652				139	353

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	332	332	628	350	24
Volume Left	0	0	0	0	0
Volume Right	0	0	0	36	24
cSH	1700	1700	1700	1700	353
Volume to Capacity	0.20	0.20	0.37	0.21	0.07
Queue Length 95th (ft)	0	0	0	0	5
Control Delay (s)	0.0	0.0	0.0	0.0	15.9
Lane LOS					C
Approach Delay (s)	0.0		0.0		15.9
Approach LOS					C

Intersection Summary				
Average Delay		0.2		
Intersection Capacity Utilization	47.3%		ICU Level of Service	A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis

30: Kenrick St & Lake St

6/3/2008



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↓				↑	
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	130	0	98	499	0	0
Peak Hour Factor	0.86	0.25	0.73	0.91	0.25	0.25
Hourly flow rate (vph)	151	0	134	548	0	0
Pedestrians	35				37	
Lane Width (ft)	12.0				0.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	3				0	
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)					1045	
pX, platoon unblocked						
vC, conflicting volume	889	35	35			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	889	35	35			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	46	100	91			
cM capacity (veh/h)	278	1013	1530			

Direction, Lane #	EB 1	NB 1
Volume Total	151	683
Volume Left	151	134
Volume Right	0	0
cSH	278	1530
Volume to Capacity	0.54	0.09
Queue Length 95th (ft)	75	7
Control Delay (s)	32.4	2.3
Lane LOS	D	A
Approach Delay (s)	32.4	2.3
Approach LOS	D	

Intersection Summary			
Average Delay		7.7	
Intersection Capacity Utilization	49.9%		ICU Level of Service A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

33: Beacon St & Reservoir Rd

6/3/2008

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↓	↓
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	783	0	0	667	13	252
Peak Hour Factor	0.96	0.25	0.25	0.83	0.70	0.82
Hourly flow rate (vph)	816	0	0	804	19	307
Pedestrians	6			8		
Lane Width (ft)	12.0			12.0		
Walking Speed (ft/s)	4.0			4.0		
Percent Blockage	0			1		
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			816		1625	824
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			816		1625	824
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		84	18
cM capacity (veh/h)			821		113	374
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>			
Volume Total	816	804	326			
Volume Left	0	0	19			
Volume Right	0	0	307			
cSH	1700	1700	330			
Volume to Capacity	0.48	0.47	0.99			
Queue Length 95th (ft)	0	0	269			
Control Delay (s)	0.0	0.0	82.4			
Lane LOS	F					
Approach Delay (s)	0.0	0.0	82.4			
Approach LOS	F					
<b>Intersection Summary</b>						
Average Delay			13.8			
Intersection Capacity Utilization			71.4%	ICU Level of Service	C	
Analysis Period (min)	15					

Queues

35: Beacon St & College Rd

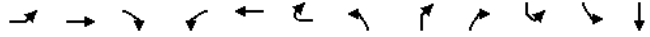
6/3/2008

Lane Group	EBL	EBT	WBL	WBT	NBL	NBR	SBT	SBR
Lane Group Flow (vph)	153	825	237	634	137	239	372	24
v/c Ratio	0.55	1.02	1.09	0.61	1.23	8.54	0.61	0.02
Control Delay	27.9	60.5	109.2	14.9	195.5	3468.6	37.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.9	60.5	109.2	14.9	195.5	3468.6	37.2	0.0
Queue Length 50th (ft)	42	328	65	126	-75	-208	82	0
Queue Length 95th (ft)	#165	#831	#240	310	#195	#386	137	0
Internal Link Dist (ft)	679		1940		600			
Turn Bay Length (ft)	200		200		40		75	
Base Capacity (vph)	277	811	218	1037	111	28	608	1264
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	1.02	1.09	0.61	1.23	8.54	0.61	0.02
<b>Intersection Summary</b>								
~	Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.							
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.							

HCM Signalized Intersection Capacity Analysis

35: Beacon St & College Rd

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR2	NBL	NBR	NBR2	SBL2	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	12	12	10	12	12	12	12	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0				4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00				0.95
Frt	1.00	0.98		1.00	0.99		1.00	0.85				1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00				0.98
Satd. Flow (prot)	1555	1652		1593	1660		1516	1419				3113
Flt Permitted	0.39	1.00		0.10	1.00		0.38	1.00				0.98
Satd. Flow (perm)	638	1652		166	1660		614	1419				3113
Volume (vph)	139	704	77	192	448	31	108	117	71	5	96	190
Peak-hour factor, PHF	0.91	0.96	0.84	0.81	0.78	0.52	0.79	0.84	0.71	0.62	0.80	0.78
Adj. Flow (vph)	153	733	92	237	574	60	137	139	100	8	120	244
RTOR Reduction (vph)	0	5	0	0	4	0	0	28	0	0	0	0
Lane Group Flow (vph)	153	820	0	237	630	0	137	211	0	0	0	372
Heavy Vehicles (%)	1%	2%	0%	2%	1%	7%	0%	2%	3%	0%	2%	3%
Turn Type	Perm		D,P+P				D,Pm	NA			Perm	
Protected Phases		3		2	2 3							1
Permitted Phases	3			3			1				1	
Actuated Green, G (s)	39.5	39.5		47.6	50.6		15.2	0.0				15.2
Effective Green, g (s)	40.5	40.5		47.6	51.6		16.2	0.0				16.2
Actuated g/C Ratio	0.47	0.47		0.56	0.60		0.19	0.00				0.19
Clearance Time (s)	5.0	5.0		3.0			5.0					5.0
Vehicle Extension (s)	3.0	3.0		3.0			3.0					3.0
Lane Grp Cap (vph)	303	783		211	1003		116	0				591
v/s Ratio Prot		0.50		c0.09	0.38							
v/s Ratio Perm	0.24			c0.53			c0.22					0.12
v/c Ratio	0.50	1.05		1.12	0.63		1.18	no cap				0.63
Uniform Delay, d1	15.5	22.5		22.6	10.8		34.6	Error				31.8
Progression Factor	1.00	1.00		1.00	1.00		1.00					1.00
Incremental Delay, d2	1.3	45.3		99.0	1.2		140.3	Error				2.1
Delay (s)	16.8	67.8		121.6	12.0		174.9	Error				33.9
Level of Service	B	E		F	B		F	F				C
Approach Delay (s)		59.8			41.8							31.9
Approach LOS		E			D							C

Intersection Summary

HCM Average Control Delay	Error	HCM Level of Service	F
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	85.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

35: Beacon St & College Rd

6/3/2008



Movement	SBR
Lane Configurations	↔
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1264
Flt Permitted	1.00
Satd. Flow (perm)	1264
Volume (vph)	13
Peak-hour factor, PHF	0.54
Adj. Flow (vph)	24
RTOR Reduction (vph)	0
Lane Group Flow (vph)	24
Heavy Vehicles (%)	15%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	85.4
Effective Green, g (s)	85.4
Actuated g/C Ratio	1.00
Clearance Time (s)	5.0
Vehicle Extension (s)	
Lane Grp Cap (vph)	1264
v/s Ratio Prot	
v/s Ratio Perm	c0.02
v/c Ratio	0.02
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	0.0
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

HCM Average Control Delay	Error	HCM Level of Service	F
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	85.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

38: Commonwealth Ave & Mt Alvernia Road

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕			↕			↕			↕		
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Volume (veh/h)	33	726	7	50	524	8	18	13	235	31	4	19
Peak Hour Factor	0.46	0.83	0.35	0.83	0.91	0.40	0.71	0.69	0.94	0.65	0.25	0.59
Hourly flow rate (vph)	72	875	20	60	576	20	25	19	250	48	16	32
Pedestrians	9			9			10					
Lane Width (ft)	12.0			12.0			14.0					
Walking Speed (ft/s)	4.0			4.0			4.0					
Percent Blockage	1			1			1					
Right turn flare (veh)												
Median type							None					None
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	596			905			1794		1754	904	2003	1754
vC1, stage 1 conf vol												595
vC2, stage 2 conf vol												
vCu, unblocked vol	596			905			1794		1754	904	2003	1754
tC, single (s)	4.1			4.1			7.2		6.5	6.2	7.1	6.5
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6		4.0	3.3	3.5	4.0
p0 queue free %	93			92			36		74	24	0	78
cM capacity (veh/h)	990			736			40		73	330	7	73

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	966	656	294	96
Volume Left	72	60	25	48
Volume Right	20	20	250	32
cSH	990	736	178	14
Volume to Capacity	0.07	0.08	1.66	6.65
Queue Length 95th (ft)	6	7	502	Err
Control Delay (s)	1.9	2.1	364.7	Err
Lane LOS	A	A	F	F
Approach Delay (s)	1.9	2.1	364.7	Err
Approach LOS		F	F	

Intersection Summary			
Average Delay	531.4		
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

41: Rogers Park & Foster St

6/3/2008



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↕			↕	↕	
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	112	82	0	134	467	0
Peak Hour Factor	0.83	0.94	0.25	0.80	0.96	0.25
Hourly flow rate (vph)	135	87	0	168	486	0
Pedestrians				29	30	
Lane Width (ft)				12.0	12.0	
Walking Speed (ft/s)				4.0	4.0	
Percent Blockage				2	2	
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)				946		
pX, platoon unblocked						
vC, conflicting volume	684	515	486			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	684	515	486			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	67	84	100			
cM capacity (veh/h)	405	546	1087			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	222	168	486
Volume Left	135	0	0
Volume Right	87	0	0
cSH	451	1700	1700
Volume to Capacity	0.49	0.10	0.29
Queue Length 95th (ft)	67	0	0
Control Delay (s)	20.5	0.0	0.0
Lane LOS	C		
Approach Delay (s)	20.5	0.0	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	5.2		
Intersection Capacity Utilization	47.6%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

46: Chestnut Hill Driveway & T. Moore

6/3/2008

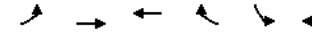


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	55	8	312	148	4	200
Peak Hour Factor	0.69	0.70	0.51	0.88	0.69	0.70
Hourly flow rate (vph)	80	11	612	168	6	286
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	993	696			780	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	993	696			780	
tC, single (s)	6.9	6.2			4.2	
tC, 2 stage (s)						
tF (s)	3.9	3.3			2.3	
p0 queue free %	64	97			99	
cM capacity (veh/h)	223	443			782	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	91	780	292			
Volume Left	80	0	6			
Volume Right	11	168	0			
cSH	238	1700	782			
Volume to Capacity	0.38	0.46	0.01			
Queue Length 95th (ft)	43	0	1			
Control Delay (s)	29.2	0.0	0.3			
Lane LOS	D		A			
Approach Delay (s)	29.2	0.0	0.3			
Approach LOS	D					
<b>Intersection Summary</b>						
Average Delay	2.4					
Intersection Capacity Utilization	38.9%		ICU Level of Service		A	
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis

49: Beacon St Garage &

6/3/2008

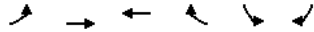


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Sign Control	Free	Free			Stop	↔
Grade	0%	0%			0%	
Volume (veh/h)	51	984	651	164	2	16
Peak Hour Factor	0.88	0.96	0.83	0.71	0.50	0.75
Hourly flow rate (vph)	58	1025	784	231	4	21
Pedestrians			17	21		17
Lane Width (ft)	14.0	14.0			12.0	
Walking Speed (ft/s)	4.0	4.0			4.0	
Percent Blockage	2	2			1	
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1032				2079	934
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1032				2079	934
tC, single (s)	4.2				6.9	6.3
tC, 2 stage (s)						
tF (s)	2.3				4.0	3.4
p0 queue free %	91				89	93
cM capacity (veh/h)	645				38	298
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>	<b>SB 2</b>		
Volume Total	1083	1015	4	21		
Volume Left	58	0	4	0		
Volume Right	0	231	0	21		
cSH	645	1700	38	298		
Volume to Capacity	0.09	0.60	0.11	0.07		
Queue Length 95th (ft)	7	0	8	6		
Control Delay (s)	3.0	0.0	111.0	18.0		
Lane LOS	A		F	C		
Approach Delay (s)	3.0	0.0	32.7			
Approach LOS			D			
<b>Intersection Summary</b>						
Average Delay	1.9					
Intersection Capacity Utilization	118.1%		ICU Level of Service		H	
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis

51: Campanella Way & Fr. Herlihy Drive

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↓
Sign Control		Stop	Yield		Stop	
Volume (vph)	0	15	226	0	71	169
Peak Hour Factor	0.25	0.71	0.70	0.25	0.89	0.83
Hourly flow rate (vph)	0	21	323	0	80	204

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total (vph)	21	323	80	204
Volume Left (vph)	0	0	80	0
Volume Right (vph)	0	0	0	204
Hadj (s)	0.00	0.05	0.72	-0.65
Departure Headway (s)	5.0	4.7	6.1	4.7
Degree Utilization, x	0.03	0.42	0.13	0.27
Capacity (veh/h)	663	739	566	726
Control Delay (s)	8.2	11.0	8.8	8.2
Approach Delay (s)	8.2	11.0	8.4	
Approach LOS	A	B	A	

Intersection Summary			
Delay		9.7	
HCM Level of Service		A	
Intersection Capacity Utilization	31.6%	ICU Level of Service	A
Analysis Period (min)		15	

Queues

2: Commonwealth Ave & Lake Street

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT
Lane Group Flow (vph)	189	630	276	741	132	581
v/c Ratio	0.58	0.60	0.65	0.82	0.32	1.37
Control Delay	44.4	29.3	37.3	38.7	7.0	211.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.4	29.3	37.3	38.7	7.0	211.4
Queue Length 50th (ft)	110	177	148	222	0	~257
Queue Length 95th (ft)	185	202	226	312	40	#354
Internal Link Dist (ft)		1877		667		202
Turn Bay Length (ft)	200		300		200	
Base Capacity (vph)	324	1247	459	976	437	424
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.51	0.60	0.76	0.30	1.37

Intersection Summary

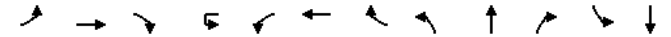
~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2: Commonwealth Ave & Lake Street

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1000	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	10	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		0.95			
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.82		1.00			
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			
Frt	1.00	1.00		1.00	1.00	0.85		0.97			
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98			
Satd. Flow (prot)	1570	3177		1528	3249	1179		1521			
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98			
Satd. Flow (perm)	1570	3177		1528	3249	1179		1521			
Volume (vph)	164	494	7	19	212	674	115	158	243	78	0
Peak-hour factor, PHF	0.87	0.80	0.58	0.92	0.83	0.91	0.87	0.84	0.84	0.75	0.25
Adj. Flow (vph)	189	618	12	21	255	741	132	188	289	104	0
RTOR Reduction (vph)	0	1	0	0	0	0	95	0	16	0	0
Lane Group Flow (vph)	189	629	0	0	276	741	37	0	565	0	0
Confl. Peds. (#/hr)							54				
Heavy Vehicles (%)	0%	2%	0%	0%	3%	0%	1%	1%	0%	1%	0%
Turn Type	Prot			Split	Split	Perm	Split				
Protected Phases	1	1 2		3	3	3		4	4		
Permitted Phases							3				
Actuated Green, G (s)	20.1	32.0		27.1	27.1	27.1		26.1			
Effective Green, g (s)	20.1	32.0		27.1	27.1	27.1		26.1			
Actuated g/C Ratio	0.21	0.33		0.28	0.28	0.28		0.27			
Clearance Time (s)	4.0			4.0	4.0	4.0		4.0			
Vehicle Extension (s)	3.0			3.0	3.0	3.0		3.0			
Lane Grp Cap (vph)	325	1046		426	906	329		408			
v/s Ratio Prot	0.12	c0.20		0.18	c0.23			c0.37			
v/s Ratio Perm							0.03				
v/c Ratio	0.58	0.60		0.65	0.82	0.11		1.38			
Uniform Delay, d1	34.8	27.3		30.9	32.7	26.1		35.6			
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			
Incremental Delay, d2	7.4	1.0		3.4	5.8	0.2		187.7			
Delay (s)	42.2	28.2		34.2	38.5	26.2		223.3			
Level of Service	D	C		C	D	C		F			
Approach Delay (s)		31.5			36.1			223.3			0.0
Approach LOS		C			D			F			A

Intersection Summary

HCM Average Control Delay	77.3	HCM Level of Service	E
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	97.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



HCM Signalized Intersection Capacity Analysis  
2: Commonwealth Ave & Lake Street

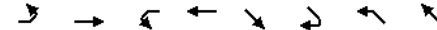
6/3/2008



Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Frb, ped/bikes	
Fipb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	0
Peak-hour factor, PHF	0.25
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	
Heavy Vehicles (%)	0%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Queues  
3: Commonwealth Ave & Chestnut Hill

6/3/2008



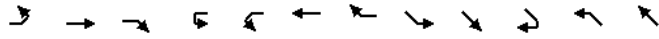
Lane Group	EBL	EBT	WBL	WBT	SET	SER	NWL	NWT
Lane Group Flow (vph)	136	624	228	430	566	40	216	678
v/c Ratio	0.43	0.79	0.82	0.64	1.44	0.11	0.73	1.04
Control Delay	27.3	42.7	37.8	46.8	248.3	25.1	55.0	82.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.3	42.7	37.8	46.8	248.3	25.1	55.0	82.2
Queue Length 50th (ft)	69	190	124	155	~314	14	114	~559
Queue Length 95th (ft)	102	#321	207	217	#429	33	#182	#734
Internal Link Dist (ft)		1348		1135	4158			919
Turn Bay Length (ft)	200		100			50		
Base Capacity (vph)	381	790	345	674	392	364	297	649
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.79	0.66	0.64	1.44	0.11	0.73	1.04

Intersection Summary
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

3: Commonwealth Ave & Chestnut Hill

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT
Lane Configurations	↔	↕	↔	↔	↕	↕	↔	↔	↕	↕	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	10	10	12	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95			1.00	0.95			0.95	1.00	1.00	1.00
Frt	1.00	0.94			1.00	0.98			1.00	0.85	1.00	0.95
Flt Protected	0.95	1.00			0.95	1.00			1.00	1.00	0.95	1.00
Satd. Flow (prot)	1624	2977			1608	2904			3148	1454	1624	1585
Flt Permitted	0.33	1.00			0.16	1.00			0.51	1.00	0.23	1.00
Satd. Flow (perm)	568	2977			278	2904			1619	1454	387	1585
Volume (vph)	109	321	238	1	207	332	24	42	464	29	190	395
Peak-hour factor, PHF	0.80	0.90	0.89	0.92	0.91	0.87	0.50	0.75	0.91	0.72	0.88	0.86
Adj. Flow (vph)	136	357	267	1	227	382	48	56	510	40	216	459
RTOR Reduction (vph)	0	106	0	0	0	8	0	0	0	12	0	14
Lane Group Flow (vph)	136	518	0	0	228	422	0	0	566	28	216	664
Heavy Vehicles (%)	0%	0%	5%	0%	1%	2%	8%	0%	3%	0%	0%	2%
Turn Type	pm+pt			pm+pt			Perm		Perm	D.P+P		
Protected Phases	9	1			9	1			3		4	3 4
Permitted Phases	1				1		3		3		3	
Actuated Green, G (s)	45.0	27.5			45.0	27.5			29.0	29.0	44.0	48.0
Effective Green, g (s)	43.0	27.5			43.0	27.5			29.0	29.0	44.0	48.0
Actuated g/C Ratio	0.36	0.23			0.36	0.23			0.24	0.24	0.37	0.40
Clearance Time (s)	2.0	4.0			2.0	4.0			4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	340	682			271	666			391	351	297	634
v/s Ratio Prot	0.05	0.17			c0.11	0.15					0.09	c0.42
v/s Ratio Perm	0.09				c0.19				c0.35	0.02	0.18	
v/c Ratio	0.40	0.76			0.84	0.63			1.45	0.08	0.73	1.05
Uniform Delay, d1	27.4	43.2			30.5	41.7			45.5	35.2	41.3	36.0
Progression Factor	1.00	1.00			1.00	1.00			1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	7.8			20.4	4.6			215.3	0.4	8.6	48.6
Delay (s)	28.2	50.9			50.9	46.3			260.8	35.6	49.8	84.6
Level of Service	C	D			D	D			F	D	D	F
Approach Delay (s)		46.8				47.9			246.0			76.2
Approach LOS		D				D			F			E

Intersection Summary

HCM Average Control Delay	97.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	96.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

3: Commonwealth Ave & Chestnut Hill

6/3/2008



Movement	NWR
Lane Configurations	↔
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	193
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	219
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	4%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

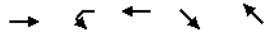
Intersection Summary

HCM Average Control Delay		HCM Level of Service	
HCM Volume to Capacity ratio			
Actuated Cycle Length (s)		Sum of lost time (s)	
Intersection Capacity Utilization		ICU Level of Service	
Analysis Period (min)			
c Critical Lane Group			

## Queues

7: Beacon St &amp; Chestnut Hill Ave

6/3/2008



Lane Group	EBT	WBL	WBT	SET	NWT
Lane Group Flow (vph)	654	192	781	937	719
v/c Ratio	1.89	1.32	0.57	0.59	0.92
Control Delay	440.6	214.6	39.8	23.4	40.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	440.6	214.6	39.8	23.4	40.8
Queue Length 50th (ft)	~443	~162	202	189	307
Queue Length 95th (ft)	#494	#255	248	229	#427
Internal Link Dist (ft)	3431		1419	919	239
Turn Bay Length (ft)		100			
Base Capacity (vph)	346	146	1368	1597	785
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.89	1.32	0.57	0.59	0.92

## Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

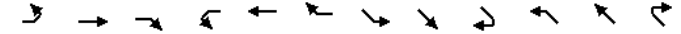
# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

## HCM Signalized Intersection Capacity Analysis

7: Beacon St &amp; Chestnut Hill Ave

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↑↑		↵	↑↑↑			↑↑↑			↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	12	12	10	11	10	14	16	16
Total Lost time (s)		4.0		4.0	4.0			4.0				4.0
Lane Util. Factor		0.95		1.00	0.91			0.91				0.95
Frt		0.98		1.00	0.96			0.98				0.98
Flt Protected		0.99		0.95	1.00			0.99				1.00
Satd. Flow (prot)		3055		1555	4447			4246				3470
Flt Permitted		0.52		0.15	1.00			0.66				0.75
Satd. Flow (perm)		1612		241	4447			2816				2618
Volume (vph)	69	394	76	150	505	213	162	565	98	53	496	88
Peak-hour factor, PHF	0.86	0.81	0.86	0.78	0.92	0.92	0.77	0.92	0.87	0.83	0.90	0.85
Adj. Flow (vph)	80	486	88	192	549	232	210	614	113	64	551	104
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	654	0	192	781	0	0	937	0	0	719	0
Heavy Vehicles (%)	1%	0%	0%	1%	0%	1%	1%	4%	3%	2%	3%	6%
Turn Type	Perm			D,P+P			D,P+P				Perm	
Protected Phases		1		11	1		8	8	9			9
Permitted Phases	1			1			9				9	
Actuated Green, G (s)		27.2		35.2	39.2			64.0				39.0
Effective Green, g (s)		27.2		35.2	39.2			62.0				39.0
Actuated g/C Ratio		0.21		0.27	0.30			0.48				0.30
Clearance Time (s)		4.0		4.0								4.0
Vehicle Extension (s)		3.0		3.0								3.0
Lane Grp Cap (vph)		337		146	1341			1596				785
v/s Ratio Prot				c0.08	0.18			c0.10				
v/s Ratio Perm		c0.41		0.28				0.18				c0.27
v/c Ratio		1.94		1.32	0.58			0.59				0.92
Uniform Delay, d1		51.4		43.4	38.5			24.7				43.9
Progression Factor		1.00		1.00	1.00			1.00				0.53
Incremental Delay, d2		434.0		181.9	0.6			1.6				16.2
Delay (s)		485.4		225.3	39.1			26.3				39.6
Level of Service		F		F	D			C				D
Approach Delay (s)		485.4			75.8			26.3				39.6
Approach LOS		F			E			C				D

## Intersection Summary

HCM Average Control Delay	135.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	32.8
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

8: Beacon St & Gate House Road

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR					
Lane Configurations	↖	↗			↕			↕			↕						
Sign Control	Free			Free			Stop			Stop							
Grade	0%			0%			0%			0%							
Volume (veh/h)	232	479	4	3	649	72	7	3	3	98	6	294					
Peak Hour Factor	0.92	0.85	1.00	0.38	0.90	0.75	0.58	0.38	0.25	0.84	0.50	0.93					
Hourly flow rate (vph)	252	564	4	8	721	96	12	8	12	117	12	316					
Pedestrians	29			26			2			25							
Lane Width (ft)	12.0			12.0			12.0			12.0							
Walking Speed (ft/s)	4.0			4.0			4.0			4.0							
Percent Blockage	2			2			0			2							
Right turn flare (veh)																	
Median type							None			None							
Median storage (veh)																	
Upstream signal (ft)																	
pX, platoon unblocked																	
vC, conflicting volume	842		570			2208		1930		594		1920		1884		823	
vC1, stage 1 conf vol																	
vC2, stage 2 conf vol																	
vCu, unblocked vol	842		570			2208		1930		594		1920		1884		823	
tC, single (s)	4.1		4.1			7.1		6.5		6.2		7.1		6.5		6.3	
tC, 2 stage (s)																	
tF (s)	2.2		2.2			3.5		4.0		3.3		3.5		4.0		3.4	
p0 queue free %	68		99			0		82		98		0		74		10	
cM capacity (veh/h)	781		1011			2		44		497		30		47		350	

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	252	568	825	32	445
Volume Left	252	0	8	12	117
Volume Right	0	4	96	12	316
cSH	781	1700	1011	5	89
Volume to Capacity	0.32	0.33	0.01	6.95	5.00
Queue Length 95th (ft)	35	0	1	Err	Err
Control Delay (s)	11.8	0.0	0.2	Err	Err
Lane LOS	B		A	F	F
Approach Delay (s)	3.6		0.2		Err
Approach LOS			F		F

Intersection Summary				
Average Delay	2248.6			
Intersection Capacity Utilization	111.1%	ICU Level of Service		H
Analysis Period (min)	15			

Queues

13: Washington St & Chestnut Hill

6/3/2008



Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	671	32	653	104	330	148	441	116
v/c Ratio	13.16	0.21	1.02	0.57	0.50	0.70	0.84	0.28
Control Delay	5559.9	24.8	67.8	35.6	27.1	41.6	39.3	23.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5559.9	24.8	67.8	35.6	27.1	41.6	39.3	23.6
Queue Length 50th (ft)	~843	10	386	51	156	77	244	50
Queue Length 95th (ft)	#1094	33	#817	104	244	#167	#419	69
Internal Link Dist (ft)	985		930		4158		1061	
Turn Bay Length (ft)		50		50		75		50
Base Capacity (vph)	51	149	642	200	718	229	575	456
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	13.16	0.21	1.02	0.52	0.46	0.65	0.77	0.25

Intersection Summary	
~	Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

13: Washington St & Chestnut Hill

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	16	10	11	16	16	16	16	12	12	10
Total Lost time (s)	4.0			4.0			4.0			4.0		
Lane Util. Factor	1.00			1.00			1.00			1.00		
Frt	0.96			1.00			0.98			1.00		
Flt Protected	0.99			0.95			1.00			0.95		
Satd. Flow (prot)	1373			1189			1227			1823		
Flt Permitted	0.37			0.30			1.00			0.26		
Satd. Flow (perm)	506			380			1227			500		
Volume (vph)	80	345	169	22	422	134	87	273	20	129	428	78
Peak-hour factor, PHF	0.74	0.92	0.90	0.69	0.91	0.71	0.84	0.94	0.50	0.87	0.97	0.67
Adj. Flow (vph)	108	375	188	32	464	189	104	290	40	148	441	116
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	671	0	32	653	0	104	330	0	148	441	116
Heavy Vehicles (%)	0%	1%	0%	0%	1%	1%	1%	2%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	26	26	26	0	0	0	0	0	0
Parking (#/hr)	5	5	5	5	5	5				5	5	5
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases	1			1			3			3		
Permitted Phases	1			1			3			3		
Actuated Green, G (s)	43.5			43.5			35.1			35.1		
Effective Green, g (s)	43.5			43.5			35.1			35.1		
Actuated g/C Ratio	0.44			0.44			0.35			0.35		
Clearance Time (s)	4.0			4.0			4.0			4.0		
Vehicle Extension (s)	3.0			3.0			3.0			3.0		
Lane Grp Cap (vph)	220			165			534			176		
v/s Ratio Prot				0.53			0.18			c0.29		
v/s Ratio Perm	c1.33			0.08			0.21			0.25		
v/c Ratio	3.05			0.19			1.22			0.59		
Uniform Delay, d1	28.2			17.4			28.2			26.6		
Progression Factor	1.00			1.00			1.00			1.00		
Incremental Delay, d2	934.5			2.6			116.2			5.2		
Delay (s)	962.8			20.0			144.5			31.8		
Level of Service	F			C			F			C		
Approach Delay (s)	962.8			138.7			27.5			38.1		
Approach LOS	F			F			C			D		

Intersection Summary			
HCM Average Control Delay	312.6	HCM Level of Service	F
HCM Volume to Capacity ratio	2.06		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	21.4
Intersection Capacity Utilization	114.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

15: T. Moore &

6/3/2008



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Yield		Free		Free	
Grade	0%		0%		0%	
Volume (veh/h)	28	73	56	451	140	79
Peak Hour Factor	0.72	0.87	0.67	0.88	0.78	0.79
Hourly flow rate (vph)	39	84	84	512	179	100
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	282					
pX, platoon unblocked						
vC, conflicting volume	909	229	279			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	909	229	279			
tC, single (s)	6.4	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	86	89	93			
cM capacity (veh/h)	288	786	1283			

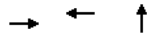
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	123	596	279
Volume Left	39	84	0
Volume Right	84	0	100
cSH	507	1283	1700
Volume to Capacity	0.24	0.07	0.16
Queue Length 95th (ft)	23	5	0
Control Delay (s)	14.3	1.8	0.0
Lane LOS	B	A	
Approach Delay (s)	14.3	1.8	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	60.1%	ICU Level of Service	B
Analysis Period (min)	15		

Queues

16: Washington St & Brock St

6/3/2008



Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	613	530	514
v/c Ratio	0.98	0.60	1.00
Control Delay	53.3	17.4	71.6
Queue Delay	0.0	0.0	0.0
Total Delay	53.3	17.4	71.6
Queue Length 50th (ft)	260	151	244
Queue Length 95th (ft)	#681	389	#590
Internal Link Dist (ft)	966	802	965
Turn Bay Length (ft)			
Base Capacity (vph)	625	889	512
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.98	0.60	1.00

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

16: Washington St & Brock St

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑			↑				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frpb, ped/bikes		1.00			0.98			0.99				
Flpb, ped/bikes		1.00			1.00			1.00				
Frt		1.00			0.98			0.97				
Flt Protected		0.99			1.00			0.99				
Satd. Flow (prot)		1620			1607			1615				
Flt Permitted		0.83			1.00			0.99				
Satd. Flow (perm)		1349			1607			1615				
Volume (vph)	38	498	0	0	438	46	80	273	101	0	0	0
Peak-hour factor, PHF	0.53	0.92	0.25	0.25	0.94	0.72	0.80	0.89	0.94	0.25	0.25	0.25
Adj. Flow (vph)	72	541	0	0	466	64	100	307	107	0	0	0
RTOR Reduction (vph)	0	0	0	0	4	0	0	9	0	0	0	0
Lane Group Flow (vph)	0	613	0	0	526	0	0	505	0	0	0	0
Confl. Peds. (#/hr)	52					52			13			
Heavy Vehicles (%)	0%	5%	0%	0%	3%	0%	0%	1%	2%	0%	0%	0%
Turn Type	Perm							Perm				
Protected Phases		1			1				4			
Permitted Phases	1							4				
Actuated Green, G (s)		46.4			46.4			26.2				
Effective Green, g (s)		46.4			46.4			26.2				
Actuated g/C Ratio		0.53			0.53			0.30				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		717			854			485				
v/s Ratio Prot					0.33							
v/s Ratio Perm		c0.45						0.31				
v/c Ratio		0.85			0.62			1.04				
Uniform Delay, d1		17.6			14.2			30.6				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		9.8			1.3			51.9				
Delay (s)		27.3			15.6			82.5				
Level of Service		C			B			F				
Approach Delay (s)		27.3			15.6			82.5			0.0	
Approach LOS		C			B			F			A	

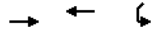
Intersection Summary

HCM Average Control Delay	40.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	87.3	Sum of lost time (s)	14.7
Intersection Capacity Utilization	98.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

## Queues

18: Commonwealth Ave &amp; South St

6/3/2008



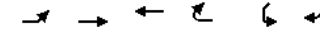
Lane Group	EBT	WBT	SWL
Lane Group Flow (vph)	755	634	208
v/c Ratio	0.45	0.38	0.39
Control Delay	12.7	11.9	8.1
Queue Delay	0.0	0.0	0.0
Total Delay	12.7	11.9	8.1
Queue Length 50th (ft)	82	66	9
Queue Length 95th (ft)	187	164	43
Internal Link Dist (ft)	424	1348	723
Turn Bay Length (ft)			
Base Capacity (vph)	1669	1669	538
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.45	0.38	0.39

## Intersection Summary

## HCM Signalized Intersection Capacity Analysis

18: Commonwealth Ave &amp; South St

6/3/2008



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations		↑↑	↑↑		↑↑	↑↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	1.00		0.89	
Flt Protected		1.00	1.00		0.99	
Satd. Flow (prot)		3249	3249		1329	
Flt Permitted		1.00	1.00		0.99	
Satd. Flow (perm)		3249	3249		1329	
Volume (vph)	0	627	552	0	27	153
Peak-hour factor, PHF	0.25	0.83	0.87	0.25	0.75	0.89
Adj. Flow (vph)	0	755	634	0	36	172
RTOR Reduction (vph)	0	0	0	0	120	0
Lane Group Flow (vph)	0	755	634	0	88	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%
Parking (#/hr)					2	2
Turn Type						
Protected Phases		1	1		3	
Permitted Phases						
Actuated Green, G (s)		34.4	34.4		21.3	
Effective Green, g (s)		34.4	34.4		21.3	
Actuated g/C Ratio		0.49	0.49		0.30	
Clearance Time (s)		4.0	4.0		4.0	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1590	1590		403	
v/s Ratio Prot		c0.23	0.20		c0.07	
v/s Ratio Perm						
v/c Ratio		0.47	0.40		0.22	
Uniform Delay, d1		11.9	11.4		18.3	
Progression Factor		1.00	1.00		1.00	
Incremental Delay, d2		1.0	0.7		1.2	
Delay (s)		13.0	12.1		19.5	
Level of Service		B	B		B	
Approach Delay (s)		13.0	12.1		19.5	
Approach LOS		B	B		B	

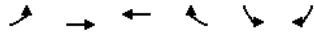
## Intersection Summary

HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	70.3	Sum of lost time (s)	14.6
Intersection Capacity Utilization	38.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

19: Commonwealth Ave & Foster St

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↗
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	618	666	50	0	357
Peak Hour Factor	0.25	0.83	0.94	0.74	0.25	0.89
Hourly flow rate (vph)	0	745	709	68	0	401
Pedestrians					65	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					5	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)			504			
pX, platoon unblocked	0.91				0.91	0.91
vC, conflicting volume	841				1180	453
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	731				1102	306
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	33
cM capacity (veh/h)	762				181	601

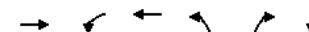
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	372	372	472	304	401
Volume Left	0	0	0	0	0
Volume Right	0	0	0	68	401
cSH	1700	1700	1700	1700	601
Volume to Capacity	0.22	0.22	0.28	0.18	0.67
Queue Length 95th (ft)	0	0	0	0	125
Control Delay (s)	0.0	0.0	0.0	0.0	22.2
Lane LOS					C
Approach Delay (s)	0.0		0.0		22.2
Approach LOS					C

Intersection Summary			
Average Delay		4.6	
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		

Queues

20: Washington St & Foster St

6/3/2008



Lane Group	EBT	WBL	WBT	NBL	NBR	SBT
Lane Group Flow (vph)	665	253	426	76	148	255
v/c Ratio	0.83	1.37	0.53	0.41	1.00	0.67
Control Delay	25.8	215.0	14.5	21.0	87.5	22.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.8	215.0	14.5	21.0	87.5	22.5
Queue Length 50th (ft)	182	-60	96	22	0	81
Queue Length 95th (ft)	#419	#201	212	55	#97	140
Internal Link Dist (ft)	802		985			367
Turn Bay Length (ft)		75			80	
Base Capacity (vph)	803	185	801	271	148	555
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.83	1.37	0.53	0.28	1.00	0.46

Intersection Summary	
~	Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.



HCM Signalized Intersection Capacity Analysis

20: Washington St & Foster St

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	10	10	12	12	10	10	10	12	10	10
Total Lost time (s)	4.0		4.0		4.0		4.0		4.0		4.0	
Lane Util. Factor	1.00		1.00		1.00		1.00		1.00		1.00	
Frt	0.97		1.00		1.00		1.00		0.85		0.98	
Flt Protected	1.00		0.95		1.00		0.95		1.00		0.99	
Satd. Flow (prot)	1590		1501		1605		1486		1184		1541	
Flt Permitted	1.00		0.23		1.00		0.50		1.00		0.99	
Satd. Flow (perm)	1590		356		1605		785		1184		1541	
Volume (vph)	0	432	142	220	400	0	68	0	130	42	133	37
Peak-hour factor, PHF	0.25	0.86	0.87	0.87	0.94	0.25	0.90	0.25	0.88	0.70	0.88	0.84
Adj. Flow (vph)	0	502	163	253	426	0	76	0	148	60	151	44
RTOR Reduction (vph)	0	10	0	0	0	0	0	0	148	0	0	0
Lane Group Flow (vph)	0	655	0	253	426	0	76	0	0	0	255	0
Heavy Vehicles (%)	0%	5%	1%	1%	4%	0%	2%	0%	2%	0%	0%	0%
Bus Blockages (#/hr)	0	0	6	0	6	0	0	0	0	0	0	0
Parking (#/hr)							2		2		2	
Turn Type			pm+pt		D.Pm		NA		Perm			
Protected Phases	1		9		1						3	
Permitted Phases			1				3				3	
Actuated Green, G (s)	29.6		34.6		29.6		14.7		0.0		14.7	
Effective Green, g (s)	29.6		32.6		29.6		14.7		0.0		14.7	
Actuated g/C Ratio	0.50		0.55		0.50		0.25		0.00		0.25	
Clearance Time (s)	4.0		2.0		4.0		4.0				4.0	
Vehicle Extension (s)	3.0		3.0		3.0		3.0				3.0	
Lane Grp Cap (vph)	794		254		801		195		0		382	
v/s Ratio Prot	0.41		c0.05		0.27							
v/s Ratio Perm			c0.50				0.10				0.17	
v/c Ratio	0.83		1.00		0.53		0.39		0.00		0.67	
Uniform Delay, d1	12.7		14.6		10.1		18.6		29.6		20.1	
Progression Factor	1.00		1.00		1.00		1.00		1.00		1.00	
Incremental Delay, d2	7.0		55.0		0.7		1.3		0.0		4.4	
Delay (s)	19.7		69.6		10.8		19.9		29.6		24.5	
Level of Service	B		E		B		B		C		C	
Approach Delay (s)	19.7				32.7		26.3				24.5	
Approach LOS	B				C		C				C	

Intersection Summary			
HCM Average Control Delay	26.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	59.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

24: Glenmont Rd & Lake St

6/3/2008



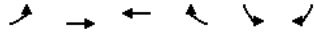
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↔	↔	↔	↔	↔
Sign Control	Stop		Free			Free
Grade	0%		0%		0%	
Volume (veh/h)	0	106	499	0	0	0
Peak Hour Factor	0.25	0.78	0.88	0.25	0.25	0.25
Hourly flow rate (vph)	0	136	567	0	0	0
Pedestrians	76		76		76	
Lane Width (ft)	12.0		12.0		12.0	
Walking Speed (ft/s)	4.0		4.0		4.0	
Percent Blockage	6		6		6	
Right turn flare (veh)						
Median type	None		None		None	
Median storage (veh)						
Upstream signal (ft)					1130	
pX, platoon unblocked						
vC, conflicting volume	643	719			643	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	643	719			643	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	66			100	
cM capacity (veh/h)	413	398			891	

Direction, Lane #	WB 1	NB 1
Volume Total	136	567
Volume Left	0	0
Volume Right	136	0
cSH	398	1700
Volume to Capacity	0.34	0.33
Queue Length 95th (ft)	37	0
Control Delay (s)	18.7	0.0
Lane LOS	C	
Approach Delay (s)	18.7	0.0
Approach LOS	C	

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis  
26: Commonwealth Ave & Campus Driveway

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Sign Control	Free	Free	Free		Stop	
Grade	0%	0%	0%		0%	
Volume (veh/h)	0	601	953	3	0	57
Peak Hour Factor	0.25	0.83	0.93	0.75	0.25	0.89
Hourly flow rate (vph)	0	724	1025	4	0	64
Pedestrians		101			101	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		8			8	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)		747				
pX, platoon unblocked					0.87	
vC, conflicting volume	1130				1490	716
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1130				1416	716
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	80
cM capacity (veh/h)	573				104	316

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	362	362	683	346	64
Volume Left	0	0	0	0	0
Volume Right	0	0	0	4	64
cSH	1700	1700	1700	1700	316
Volume to Capacity	0.21	0.21	0.40	0.20	0.20
Queue Length 95th (ft)	0	0	0	0	19
Control Delay (s)	0.0	0.0	0.0	0.0	19.3
Lane LOS					C
Approach Delay (s)	0.0		0.0		19.3
Approach LOS					C

Intersection Summary			
Average Delay		0.7	
Intersection Capacity Utilization	49.3%		ICU Level of Service A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis  
30: Kenrick St & Lake St

6/3/2008



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↓			↑		
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	109	0	142	463	0	0
Peak Hour Factor	0.78	0.25	0.73	0.88	0.25	0.25
Hourly flow rate (vph)	140	0	195	526	0	0
Pedestrians	42				47	
Lane Width (ft)	12.0				0.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	4				0	
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)					1045	
pX, platoon unblocked						
vC, conflicting volume	1004	42	42			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1004	42	42			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	38	100	87			
cM capacity (veh/h)	226	998	1512			

Direction, Lane #	EB 1	NB 1
Volume Total	140	721
Volume Left	140	195
Volume Right	0	0
cSH	226	1512
Volume to Capacity	0.62	0.13
Queue Length 95th (ft)	91	11
Control Delay (s)	43.6	3.1
Lane LOS	E	A
Approach Delay (s)	43.6	3.1
Approach LOS	E	

Intersection Summary			
Average Delay		9.7	
Intersection Capacity Utilization	49.2%		ICU Level of Service A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

33: Beacon St & Reservoir Rd

6/3/2008

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↓	↓
Sign Control	Free		Free		Stop	
Grade	0%		0%		0%	
Volume (veh/h)	495	0	0	1023	11	186
Peak Hour Factor	0.88	0.25	0.25	0.93	0.39	0.89
Hourly flow rate (vph)	562	0	0	1100	28	209
Pedestrians	10		7			
Lane Width (ft)	12.0		12.0			
Walking Speed (ft/s)	4.0		4.0			
Percent Blockage	1		1			
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			562		1672 570	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			562		1672 570	
tC, single (s)			4.1		6.4 6.2	
tC, 2 stage (s)						
tF (s)			2.2		3.5 3.3	
p0 queue free %			100		73 60	
cM capacity (veh/h)			1019		106 520	
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>			
Volume Total	562	1100	237			
Volume Left	0	0	28			
Volume Right	0	0	209			
cSH	1700	1700	355			
Volume to Capacity	0.33	0.65	0.67			
Queue Length 95th (ft)	0	0	115			
Control Delay (s)	0.0	0.0	33.4			
Lane LOS	D					
Approach Delay (s)	0.0	0.0	33.4			
Approach LOS	D					
<b>Intersection Summary</b>						
Average Delay	4.2					
Intersection Capacity Utilization	80.6%		ICU Level of Service		D	
Analysis Period (min)	15					

Queues

35: Beacon St & College Rd

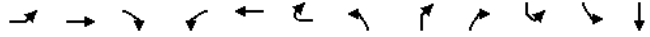
6/3/2008

Lane Group	EBL	EBT	WBL	WBT	NBL	NBR	SBT	SBR
Lane Group Flow (vph)	128	533	361	786	155	256	232	32
v/c Ratio	0.89	0.68	1.07	0.78	0.81	9.14	0.34	0.02
Control Delay	81.3	27.2	87.8	23.7	54.9	3740.9	31.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.3	27.2	87.8	23.7	54.9	3740.9	31.6	0.0
Queue Length 50th (ft)	56	198	-83	250	72	-250	50	0
Queue Length 95th (ft)	#130	386	#316	#731	#174	#454	100	0
Internal Link Dist (ft)	679		1940		600			
Turn Bay Length (ft)	200		200		40		75	
Base Capacity (vph)	144	783	338	1002	217	28	777	1454
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.89	0.68	1.07	0.78	0.71	9.14	0.30	0.02
<b>Intersection Summary</b>								
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.								
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.								

HCM Signalized Intersection Capacity Analysis

35: Beacon St & College Rd

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR2	NBL	NBR	NBR2	SBL2	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	12	12	10	12	12	12	12	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0				4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00				0.95
Frt	1.00	0.99		1.00	0.98		1.00	0.85				1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00				0.98
Satd. Flow (prot)	1570	1687		1608	1629		1501	1439				3177
Flt Permitted	0.27	1.00		0.27	1.00		0.57	1.00				0.98
Satd. Flow (perm)	442	1687		461	1629		899	1439				3177
Volume (vph)	83	398	39	289	649	71	124	125	95	5	45	138
Peak-hour factor, PHF	0.65	0.82	0.81	0.80	0.93	0.81	0.80	0.87	0.85	0.42	0.75	0.86
Adj. Flow (vph)	128	485	48	361	698	88	155	144	112	12	60	160
RTOR Reduction (vph)	0	3	0	0	4	0	0	28	0	0	0	0
Lane Group Flow (vph)	128	530	0	361	782	0	155	228	0	0	0	232
Heavy Vehicles (%)	0%	0%	0%	1%	1%	21%	1%	1%	1%	0%	0%	1%
Turn Type	Perm		D,P+P				D,Pm	NA			Perm	
Protected Phases		3		2	2 3							1
Permitted Phases	3			3			1				1	
Actuated Green, G (s)	39.8	39.8		50.0	53.0		18.1	0.0				18.1
Effective Green, g (s)	40.8	40.8		50.0	54.0		19.1	0.0				19.1
Actuated g/C Ratio	0.45	0.45		0.55	0.60		0.21	0.00				0.21
Clearance Time (s)	5.0	5.0		3.0			5.0					5.0
Vehicle Extension (s)	3.0	3.0		3.0			3.0					3.0
Lane Grp Cap (vph)	199	760		371	971		190	0				670
v/s Ratio Prot		0.31		c0.10	0.48							
v/s Ratio Perm	0.29			c0.44			c0.17					0.07
v/c Ratio	0.64	0.70		0.97	0.81		0.82	no cap				0.35
Uniform Delay, d1	19.3	19.9		17.9	14.2		34.1	Error				30.4
Progression Factor	1.00	1.00		1.00	1.00		1.00					1.00
Incremental Delay, d2	6.9	2.8		39.3	4.9		22.9	Error				0.3
Delay (s)	26.2	22.7		57.2	19.2		57.0	Error				30.7
Level of Service	C	C		E	B		E	F				C
Approach Delay (s)		23.4			31.1							27.0
Approach LOS		C			C							C

Intersection Summary

HCM Average Control Delay	Error	HCM Level of Service	F
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	90.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

35: Beacon St & College Rd

6/3/2008



Movement	SBR
Lane Configurations	↔
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1454
Flt Permitted	1.00
Satd. Flow (perm)	1454
Volume (vph)	23
Peak-hour factor, PHF	0.72
Adj. Flow (vph)	32
RTOR Reduction (vph)	0
Lane Group Flow (vph)	32
Heavy Vehicles (%)	0%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	90.6
Effective Green, g (s)	90.6
Actuated g/C Ratio	1.00
Clearance Time (s)	5.0
Vehicle Extension (s)	
Lane Grp Cap (vph)	1454
v/s Ratio Prot	
v/s Ratio Perm	c0.02
v/c Ratio	0.02
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	0.0
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

HCM Average Control Delay	Error	HCM Level of Service	F
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	90.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

38: Commonwealth Ave & Mt Alvernia Road

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕				↕			↕			↕	
Sign Control	Free				Free			Stop			Stop	
Grade	0%				0%			0%			0%	
Volume (veh/h)	7	515	3	89	661	4	57	11	221	11	6	20
Peak Hour Factor	0.47	0.89	0.40	0.84	0.86	0.62	0.79	0.83	0.92	0.45	0.67	0.62
Hourly flow rate (vph)	15	579	8	106	769	6	72	13	240	24	9	32
Pedestrians	63				51			46			4	
Lane Width (ft)	12.0				12.0			14.0			12.0	
Walking Speed (ft/s)	4.0				4.0			4.0			4.0	
Percent Blockage	5				4			4			0	
Right turn flare (veh)												
Median type	None						None					
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	779				632				1742		1649	
vC1, stage 1 conf vol									679		1898	
vC2, stage 2 conf vol									1650		839	
vCu, unblocked vol	779				632				1742		1649	
tC, single (s)	4.1				4.1				7.1		6.5	
tC, 2 stage (s)												
tF (s)	2.2				2.2				3.5		4.0	
p0 queue free %	98				88				0		84	
cM capacity (veh/h)	844				908				45		83	

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	601	881	326	66
Volume Left	15	106	72	24
Volume Right	8	6	240	32
cSH	844	908	138	38
Volume to Capacity	0.02	0.12	2.36	1.75
Queue Length 95th (ft)	1	10	696	175
Control Delay (s)	0.5	2.9	684.1	590.6
Lane LOS	A	A	F	F
Approach Delay (s)	0.5	2.9	684.1	590.6
Approach LOS		F	F	

Intersection Summary			
Average Delay	141.1		
Intersection Capacity Utilization	111.0%	ICU Level of Service	H
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

41: Rogers Park & Foster St

6/3/2008



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↕				↕	
Sign Control	Stop				Free	
Grade	0%				0%	
Volume (veh/h)	67	83	0	101	517	0
Peak Hour Factor	0.76	0.94	0.25	0.90	0.90	0.25
Hourly flow rate (vph)	88	88	0	112	574	0
Pedestrians				38		46
Lane Width (ft)				12.0		12.0
Walking Speed (ft/s)				4.0		4.0
Percent Blockage				3		4
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	946					
pX, platoon unblocked						
vC, conflicting volume	733		612		574	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	733		612		574	
tC, single (s)	6.4		6.2		4.1	
tC, 2 stage (s)						
tF (s)	3.5		3.3		2.2	
p0 queue free %	76		82		100	
cM capacity (veh/h)	372		479		1009	

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	176	112	574
Volume Left	88	0	0
Volume Right	88	0	0
cSH	419	1700	1700
Volume to Capacity	0.42	0.07	0.34
Queue Length 95th (ft)	51	0	0
Control Delay (s)	19.7	0.0	0.0
Lane LOS	C		
Approach Delay (s)	19.7	0.0	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	4.0		
Intersection Capacity Utilization	49.7%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

46: Chestnut Hill Driveway & T. Moore

6/3/2008

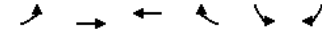


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	50	13	230	83	37	368
Peak Hour Factor	0.69	0.70	0.51	0.88	0.69	0.70
Hourly flow rate (vph)	72	19	451	94	54	526
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1131	498			545	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1131	498			545	
tC, single (s)	6.9	6.2			4.2	
tC, 2 stage (s)						
tF (s)	3.9	3.3			2.3	
p0 queue free %	58	97			94	
cM capacity (veh/h)	173	574			962	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	91	545	579			
Volume Left	72	0	54			
Volume Right	19	94	0			
cSH	202	1700	962			
Volume to Capacity	0.45	0.32	0.06			
Queue Length 95th (ft)	53	0	4			
Control Delay (s)	36.6	0.0	1.5			
Lane LOS	E		A			
Approach Delay (s)	36.6	0.0	1.5			
Approach LOS	E					
<b>Intersection Summary</b>						
Average Delay	3.5					
Intersection Capacity Utilization	56.8%			ICU Level of Service	B	
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis

49: Beacon St Garage &

6/3/2008

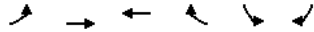


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Sign Control	Free	Free			Stop	
Grade	0%	0%			0%	
Volume (veh/h)	25	656	927	22	49	96
Peak Hour Factor	0.78	0.88	0.93	0.79	0.64	0.25
Hourly flow rate (vph)	32	745	997	28	77	384
Pedestrians		50	47		42	
Lane Width (ft)	14.0	14.0			12.0	
Walking Speed (ft/s)	4.0	4.0			4.0	
Percent Blockage	5	5			4	
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1067				1909	1103
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1067				1909	1103
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				0	0
cM capacity (veh/h)	638				66	238
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>	<b>SB 2</b>		
Volume Total	778	1025	77	384		
Volume Left	32	0	77	0		
Volume Right	0	28	0	384		
cSH	638	1700	66	238		
Volume to Capacity	0.05	0.60	1.15	1.61		
Queue Length 95th (ft)	4	0	151	604		
Control Delay (s)	1.4	0.0	264.6	330.6		
Lane LOS	A		F	F		
Approach Delay (s)	1.4	0.0	319.7			
Approach LOS			F			
<b>Intersection Summary</b>						
Average Delay	65.5					
Intersection Capacity Utilization	79.0%			ICU Level of Service	D	
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis

51: Campanella Way & Fr. Herlihy Drive

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↓
Sign Control		Stop	Yield		Stop	
Volume (vph)	0	45	135	0	56	64
Peak Hour Factor	0.25	0.61	0.70	0.25	0.73	0.82
Hourly flow rate (vph)	0	74	193	0	77	78
Direction, Lane #	EB 1	WB 1	SB 1	SB 2		
Volume Total (vph)	74	193	77	78		
Volume Left (vph)	0	0	77	0		
Volume Right (vph)	0	0	0	78		
Hadj (s)	0.00	0.09	0.77	-0.63		
Departure Headway (s)	4.5	4.5	5.9	4.5		
Degree Utilization, x	0.09	0.24	0.13	0.10		
Capacity (veh/h)	763	772	583	757		
Control Delay (s)	8.0	8.9	8.5	6.8		
Approach Delay (s)	8.0	8.9	7.7			
Approach LOS	A	A	A			
Intersection Summary						
Delay	8.3					
HCM Level of Service	A					
Intersection Capacity Utilization	26.0%		ICU Level of Service	A		
Analysis Period (min)	15					

# No-Build 2018



Queues

2: Commonwealth Ave & Lake Street

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT
Lane Group Flow (vph)	335	678	302	656	112	402
v/c Ratio	0.71	0.49	1.16	1.17	0.35	1.11
Control Delay	36.2	18.4	140.7	128.9	10.0	110.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	18.4	140.7	128.9	10.0	110.9
Queue Length 50th (ft)	159	132	~195	~224	0	~125
Queue Length 95th (ft)	#271	172	#335	#339	38	#176
Internal Link Dist (ft)		1877		667		286
Turn Bay Length (ft)	200		300		200	
Base Capacity (vph)	474	1486	260	560	317	362
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.46	1.16	1.17	0.35	1.11

Intersection Summary

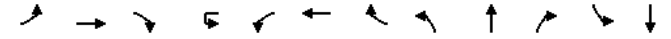
~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2: Commonwealth Ave & Lake Street

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔			↔	↔	↔		↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1000	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	10	10	10	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95			1.00	0.95	1.00		0.95			
Frpb, ped/bikes	1.00	1.00			1.00	1.00	0.93		1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00		1.00			
Frt	1.00	1.00			1.00	1.00	0.85		0.97			
Flt Protected	0.95	1.00			0.95	1.00	1.00		0.99			
Satd. Flow (prot)	1555	3185			1482	3185	1281		1378			
Flt Permitted	0.95	1.00			0.95	1.00	1.00		0.99			
Satd. Flow (perm)	1555	3185			1482	3185	1281		1378			
Volume (vph)	305	590	0	5	255	610	95	60	185	50	0	0
Peak-hour factor, PHF	0.91	0.87	0.25	0.92	0.86	0.93	0.85	0.70	0.78	0.63	0.25	0.25
Adj. Flow (vph)	335	678	0	5	297	656	112	86	237	79	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	92	0	23	0	0	0
Lane Group Flow (vph)	335	678	0	0	302	656	20	0	379	0	0	0
Confl. Peds. (#/hr)							21					
Heavy Vehicles (%)	1%	2%	0%	2%	6%	2%	5%	25%	3%	21%	0%	0%
Turn Type	Prot			Split	Split		Perm	Split				
Protected Phases	1	1 2		3	3	3		4	4			
Permitted Phases							3					
Actuated Green, G (s)	26.0	37.3			15.0	15.0	15.0		21.0			
Effective Green, g (s)	26.0	37.3			15.0	15.0	15.0		21.0			
Actuated g/C Ratio	0.30	0.44			0.18	0.18	0.18		0.25			
Clearance Time (s)	4.0				4.0	4.0	4.0		4.0			
Vehicle Extension (s)	3.0				3.0	3.0	3.0		3.0			
Lane Grp Cap (vph)	474	1393			261	560	225		339			
v/s Ratio Prot	c0.22	c0.21			0.20	c0.21			c0.27			
v/s Ratio Perm							0.02					
v/c Ratio	0.71	0.49			1.16	1.17	0.09		1.12			
Uniform Delay, d1	26.3	17.2			35.2	35.2	29.4		32.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00		1.00			
Incremental Delay, d2	8.6	0.3			104.9	95.0	0.2		84.3			
Delay (s)	34.9	17.4			140.1	130.1	29.6		116.4			
Level of Service	C	B			F	F	C		F			
Approach Delay (s)		23.2				122.4			116.4			0.0
Approach LOS		C				F			F			A

Intersection Summary

HCM Average Control Delay	81.0	HCM Level of Service	F
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	85.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
2: Commonwealth Ave & Lake Street

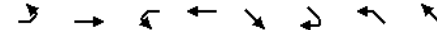
6/3/2008



Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Frpb, ped/bikes	
Fipb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	0
Peak-hour factor, PHF	0.25
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	
Heavy Vehicles (%)	0%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Queues  
3: Commonwealth Ave & Chestnut Hill

6/3/2008



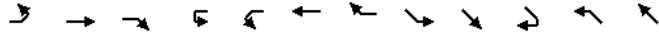
Lane Group	EBL	EBT	WBL	WBT	SET	SER	NWL	NWT
Lane Group Flow (vph)	176	772	223	359	566	58	180	895
v/c Ratio	0.51	1.04	0.84	0.55	1.48	0.16	0.64	1.43
Control Delay	29.4	84.2	42.7	44.5	262.6	25.1	70.0	237.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.4	84.2	42.7	44.5	262.6	25.1	70.0	237.8
Queue Length 50th (ft)	92	-316	121	127	-317	21	144	-938
Queue Length 95th (ft)	107	#395	#227	185	#433	40	m105	m498
Internal Link Dist (ft)		1348		1135	4158			919
Turn Bay Length (ft)	200		100			50		
Base Capacity (vph)	386	742	310	649	383	355	280	627
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	1.04	0.72	0.55	1.48	0.16	0.64	1.43

Intersection Summary
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

3: Commonwealth Ave & Chestnut Hill

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT
Lane Configurations	↔	↕	↔	↔	↕	↕	↔	↔	↕	↕	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	10	10	12	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95			1.00	0.95			0.95	1.00	1.00	1.00
Frt	1.00	0.94			1.00	0.99			1.00	0.85	1.00	0.96
Flt Protected	0.95	1.00			0.95	1.00			0.99	1.00	0.95	1.00
Satd. Flow (prot)	1577	2938			1578	2796			3057	1398	1533	1541
Flt Permitted	0.40	1.00			0.14	1.00			0.52	1.00	0.23	1.00
Satd. Flow (perm)	671	2938			241	2796			1584	1398	366	1541
Volume (vph)	120	395	230	5	205	300	15	35	450	40	135	540
Peak-hour factor, PHF	0.68	0.81	0.81	0.92	0.94	0.92	0.46	0.49	0.91	0.69	0.75	0.82
Adj. Flow (vph)	176	488	284	5	218	326	33	71	495	58	180	659
RTOR Reduction (vph)	0	67	0	0	0	6	0	0	0	17	0	11
Lane Group Flow (vph)	176	705	0	0	223	353	0	0	566	41	180	884
Heavy Vehicles (%)	3%	3%	7%	2%	3%	4%	36%	3%	6%	4%	6%	5%
Turn Type	pm+pt				pm+pt			Perm		Perm	D.P+P	
Protected Phases	9	1			9	1			3		4	3 4
Permitted Phases	1				1			3		3		3
Actuated Green, G (s)	45.0	27.6			45.0	27.6			29.0	29.0	44.0	48.0
Effective Green, g (s)	43.0	27.6			43.0	27.6			29.0	29.0	44.0	48.0
Actuated g/C Ratio	0.36	0.23			0.36	0.23			0.24	0.24	0.37	0.40
Clearance Time (s)	2.0	4.0			2.0	4.0			4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0	3.0	3.0	
Lane Grp Cap (vph)	357	676			258	643			383	338	280	616
v/s Ratio Prot	0.06	c0.24			c0.11	0.13					0.08	c0.57
v/s Ratio Perm	0.11				0.20				0.36	0.03	0.16	
v/c Ratio	0.49	1.04			0.86	0.55			1.48	0.12	0.64	1.44
Uniform Delay, d1	28.0	46.2			31.4	40.7			45.5	35.5	40.6	36.0
Progression Factor	1.00	1.00			1.00	1.00			1.00	1.00	1.77	1.87
Incremental Delay, d2	1.1	46.3			24.6	3.3			228.7	0.7	0.5	196.8
Delay (s)	29.1	92.5			56.0	44.1			274.2	36.3	72.2	264.0
Level of Service	C	F			E	D			F	D	E	F
Approach Delay (s)		80.7				48.6			252.1			231.9
Approach LOS		F				D			F			F

Intersection Summary

HCM Average Control Delay	158.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	104.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

3: Commonwealth Ave & Chestnut Hill

6/3/2008



Movement	NWR
Lane Configurations	↔
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	175
Peak-hour factor, PHF	0.74
Adj. Flow (vph)	236
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	11%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

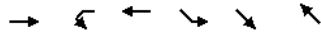
Intersection Summary

HCM Average Control Delay		HCM Level of Service	
HCM Volume to Capacity ratio			
Actuated Cycle Length (s)		Sum of lost time (s)	
Intersection Capacity Utilization		ICU Level of Service	
Analysis Period (min)			
c Critical Lane Group			

## Queues

7: Beacon St &amp; Chestnut Hill Ave

6/3/2008



Lane Group	EBT	WBL	WBT	SEL	SET	NWT
Lane Group Flow (vph)	767	176	731	293	810	1000
v/c Ratio	1.92	0.98	0.44	1.31	0.65	1.66
Control Delay	451.2	94.5	29.2	179.1	20.3	323.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	451.2	94.5	29.2	179.1	20.3	323.8
Queue Length 50th (ft)	~481	95	153	~299	182	~598
Queue Length 95th (ft)	#606	#243	171	m#233	m155	#706
Internal Link Dist (ft)	3431		1419		919	239
Turn Bay Length (ft)		100				
Base Capacity (vph)	399	179	1651	223	1239	602
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.92	0.98	0.44	1.31	0.65	1.66

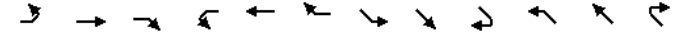
## Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

## HCM Signalized Intersection Capacity Analysis

7: Beacon St &amp; Chestnut Hill Ave

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↑↑		↔	↑↑↑		↔	↑↑			↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	12	12	10	11	10	14	16	16
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				4.0
Lane Util. Factor		0.95		1.00	0.91		1.00	0.95				0.95
Frt		0.98		1.00	0.96		1.00	0.98				0.98
Flt Protected		1.00		0.95	1.00		0.95	1.00				0.99
Satd. Flow (prot)		3039		1510	4401		1472	2915				3420
Flt Permitted		0.51		0.13	1.00		0.12	1.00				0.72
Satd. Flow (perm)		1551		211	4401		188	2915				2468
Volume (vph)	65	550	55	165	430	170	205	555	110	75	700	80
Peak-hour factor, PHF	0.88	0.90	0.67	0.94	0.82	0.82	0.70	0.80	0.95	0.61	0.92	0.69
Adj. Flow (vph)	74	611	82	176	524	207	293	694	116	123	761	116
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	767	0	176	731	0	293	810	0	0	1000	0
Heavy Vehicles (%)	2%	1%	2%	4%	1%	3%	6%	2%	1%	6%	4%	
Turn Type	Perm		D.P+P		D.P+P		Perm				Perm	
Protected Phases		1		11	1 11		8	8 9			9	
Permitted Phases	1			1			9			9		
Actuated Green, G (s)		30.2		40.2	44.2		49.0	51.0			33.0	
Effective Green, g (s)		30.2		40.2	44.2		47.0	51.0			33.0	
Actuated g/C Ratio		0.25		0.34	0.37		0.39	0.42			0.28	
Clearance Time (s)		4.0		4.0			2.0				4.0	
Vehicle Extension (s)		3.0		3.0			3.0				3.0	
Lane Grp Cap (vph)		390		179	1621		223	1239			679	
v/s Ratio Prot				c0.08	0.17		c0.15	0.28				
v/s Ratio Perm		c0.49		0.25			0.36				c0.41	
v/c Ratio		1.97		0.98	0.45		1.31	0.65			1.47	
Uniform Delay, d1		44.9		33.6	28.7		34.3	27.5			43.5	
Progression Factor		1.00		1.00	1.00		1.47	0.69			0.39	
Incremental Delay, d2		444.2		62.0	0.2		144.2	0.2			218.9	
Delay (s)		489.1		95.6	28.9		194.7	19.1			236.1	
Level of Service		F		F	C		F	B			F	
Approach Delay (s)		489.1			41.8			65.8			236.1	
Approach LOS		F			D			E			F	

## Intersection Summary

HCM Average Control Delay	191.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.56		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	32.8
Intersection Capacity Utilization	95.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

8: Beacon St & Gate House Road

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations	↔	↕	↔	↔	↕	↔	↔	↕	↔	↔	↕	↔		
Sign Control	Free			Free			Stop			Stop				
Grade	0%			0%			0%			0%				
Volume (veh/h)	390	700	10	5	625	75	5	5	25	5	225			
Peak Hour Factor	0.99	0.93	0.67	0.50	0.89	0.71	0.42	0.33	0.50	0.84	0.38	0.90		
Hourly flow rate (vph)	394	753	15	10	702	106	12	15	10	30	13	250		
Pedestrians	8			10			5			8				
Lane Width (ft)	12.0			12.0			12.0			12.0				
Walking Speed (ft/s)	4.0			4.0			4.0			4.0				
Percent Blockage	1			1			0			1				
Right turn flare (veh)														
Median type							None			None				
Median storage (veh)														
Upstream signal (ft)														
pX, platoon unblocked														
vC, conflicting volume	816		773			2593		2389		775		2344		771
vC1, stage 1 conf vol														
vC2, stage 2 conf vol														
vCu, unblocked vol	816		773			2593		2389		775		2344		771
tC, single (s)	4.1		4.4			7.1		6.5		6.2		7.2		6.5
tC, 2 stage (s)														
tF (s)	2.2		2.4			3.5		4.0		3.3		3.6		4.0
p0 queue free %	50		99			0		10		97		0		27
cM capacity (veh/h)	793		746			2		17		396		4		18

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	394	768	818	37	293
Volume Left	394	0	10	12	30
Volume Right	0	15	106	10	250
cSH	793	1700	746	4	30
Volume to Capacity	0.50	0.45	0.01	8.76	9.85
Queue Length 95th (ft)	70	0	1	Err	Err
Control Delay (s)	13.9	0.0	0.4	Err	Err
Lane LOS	B		A	F	F
Approach Delay (s)	4.7		0.4	Err	Err
Approach LOS				F	F

Intersection Summary				
Average Delay	1431.2			
Intersection Capacity Utilization	112.6%	ICU Level of Service		H
Analysis Period (min)	15			

Queues

13: Washington St & Chestnut Hill

6/3/2008



Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	635	57	553	83	417	119	356	118
v/c Ratio	2.39	0.46	1.20	0.31	0.46	0.89	0.50	0.21
Control Delay	650.0	35.7	138.5	22.8	20.7	81.8	22.4	18.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	650.0	35.7	138.5	22.8	20.7	81.8	22.4	18.0
Queue Length 50th (ft)	~594	24	~386	25	135	52	117	33
Queue Length 95th (ft) m#682	39	#564	76	#367	#139	#348	85	
Internal Link Dist (ft)	985	930	4158	1061				
Turn Bay Length (ft)	50	50	75	50				
Base Capacity (vph)	266	124	460	266	898	134	714	551
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	2.39	0.46	1.20	0.31	0.46	0.89	0.50	0.21

Intersection Summary	
~	Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
m	Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

13: Washington St & Chestnut Hill

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔ ↗ ↘ ↙ ↘ ↗ ↙ ↘ ↗ ↘ ↙ ↘ ↗ ↘											
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	16	10	11	16	16	16	16	12	12	10
Total Lost time (s)	4.0			4.0			4.0			4.0		
Lane Util. Factor	1.00			1.00			1.00			1.00		
Frt	0.98			1.00			0.98			1.00		
Flt Protected	0.99			0.95			1.00			0.95		
Satd. Flow (prot)	1369			1189			1218			1841		
Flt Permitted	0.15			0.16			1.00			0.45		
Satd. Flow (perm)	209			199			1218			879		
Volume (vph)	60	435	100	35	340	135	65	350	45	80	335	90
Peak-hour factor, PHF	0.86	0.96	0.89	0.61	0.88	0.81	0.78	0.99	0.71	0.67	0.94	0.76
Adj. Flow (vph)	70	453	112	57	386	167	83	354	63	119	356	118
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	635	0	57	553	0	83	417	0	119	356	118
Heavy Vehicles (%)	2%	3%	1%	0%	1%	3%	0%	2%	0%	5%	1%	4%
Bus Blockages (#/hr)	0	0	0	26	26	26	0	0	0	0	0	0
Parking (#/hr)	5	5	5	5	5	5				5	5	5
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases	1			1			3			3		
Permitted Phases	1			1			3			3		
Actuated Green, G (s)	25.2			25.2			43.4			43.4		
Effective Green, g (s)	25.2			25.2			43.4			43.4		
Actuated g/C Ratio	0.28			0.28			0.48			0.48		
Clearance Time (s)	4.0			4.0			4.0			4.0		
Vehicle Extension (s)	3.0			3.0			3.0			3.0		
Lane Grp Cap (vph)	59			56			341			274		
v/s Ratio Prot	c3.04			0.29			0.09			0.21		
v/c Ratio	10.76			1.02			1.62			0.20		
Uniform Delay, d1	32.4			32.4			13.3			15.5		
Progression Factor	1.37			1.00			1.00			1.00		
Incremental Delay, d2	4406.2			125.4			292.9			0.2		
Delay (s)	4450.4			157.8			325.3			13.5		
Level of Service	F			F			B			B		
Approach Delay (s)	4450.4			309.7			15.5			15.9		
Approach LOS	F			F			B			B		

Intersection Summary			
HCM Average Control Delay	1296.9	HCM Level of Service	F
HCM Volume to Capacity ratio	4.30		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	21.4
Intersection Capacity Utilization	106.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

15: Campanella Way & St. T Moore

6/3/2008



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔ ↗ ↘ ↙ ↘ ↗ ↙ ↘ ↗ ↘ ↙ ↘ ↗ ↘					
Sign Control	Yield		Free		Free	
Grade	0%		0%		0%	
Volume (veh/h)	25	65	105	270	125	120
Peak Hour Factor	0.69	0.70	0.51	0.88	0.72	0.81
Hourly flow rate (vph)	36	93	206	307	174	148
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	366					
pX, platoon unblocked						
vC, conflicting volume	966	248	322			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	966	248	322			
tC, single (s)	6.9	6.2	4.2			
tC, 2 stage (s)						
tF (s)	3.9	3.3	2.3			
p0 queue free %	81	88	82			
cM capacity (veh/h)	193	794	1168			

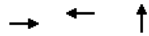
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	129	513	322
Volume Left	36	206	0
Volume Right	93	0	148
cSH	423	1168	1700
Volume to Capacity	0.31	0.18	0.19
Queue Length 95th (ft)	32	16	0
Control Delay (s)	17.2	4.6	0.0
Lane LOS	C	A	
Approach Delay (s)	17.2	4.6	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	4.8		
Intersection Capacity Utilization	53.7%	ICU Level of Service	A
Analysis Period (min)	15		

Queues

16: Washington St & Brock St

6/3/2008



Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	514	531	547
v/c Ratio	0.93	0.84	0.73
Control Delay	53.7	43.6	27.6
Queue Delay	0.0	0.0	0.0
Total Delay	53.7	43.6	27.6
Queue Length 50th (ft)	274	217	212
Queue Length 95th (ft)	#506	#504	#531
Internal Link Dist (ft)	966	802	965
Turn Bay Length (ft)			
Base Capacity (vph)	551	632	754
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.93	0.84	0.73

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

16: Washington St & Brock St

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑			↑				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frpb, ped/bikes		1.00			0.99			0.99				
Flpb, ped/bikes		1.00			1.00			1.00				
Frt		1.00			0.99			0.97				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1625			1565			1604				
Flt Permitted		0.84			1.00			0.99				
Satd. Flow (perm)		1370			1565			1604				
Volume (vph)	15	450	0	0	445	30	60	315	100	0	0	0
Peak-hour factor, PHF	0.80	0.91	0.25	0.25	0.91	0.72	0.90	0.90	0.77	0.25	0.25	0.25
Adj. Flow (vph)	19	495	0	0	489	42	67	350	130	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	10	0	0	0	0
Lane Group Flow (vph)	0	514	0	0	528	0	0	537	0	0	0	0
Confl. Peds. (#/hr)	23					23			9			
Heavy Vehicles (%)	6%	5%	0%	0%	8%	0%	4%	1%	3%	0%	0%	0%
Turn Type	Perm								Perm			
Protected Phases		1			1				4			
Permitted Phases	1								4			
Actuated Green, G (s)		33.0			33.0				41.8			
Effective Green, g (s)		33.0			33.0				41.8			
Actuated g/C Ratio		0.37			0.37				0.46			
Clearance Time (s)		4.0			4.0				4.0			
Vehicle Extension (s)		3.0			3.0				3.0			
Lane Grp Cap (vph)		502			574				745			
v/s Ratio Prot					0.34							
v/s Ratio Perm		c0.38							0.34			
v/c Ratio		1.02			0.92				0.72			
Uniform Delay, d1		28.5			27.2				19.4			
Progression Factor		1.00			1.26				1.00			
Incremental Delay, d2		46.4			19.5				3.5			
Delay (s)		74.9			53.9				22.9			
Level of Service		E			D				C			
Approach Delay (s)		74.9			53.9				22.9			0.0
Approach LOS		E			D				C			A

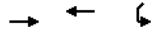
Intersection Summary

HCM Average Control Delay	50.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	75.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

## Queues

18: Commonwealth Ave &amp; South St

6/3/2008



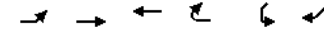
Lane Group	EBT	WBT	SWL
Lane Group Flow (vph)	766	558	222
v/c Ratio	0.46	0.34	0.40
Control Delay	12.8	11.6	7.0
Queue Delay	0.0	0.0	0.0
Total Delay	12.8	11.6	7.0
Queue Length 50th (ft)	84	56	5
Queue Length 95th (ft)	215	149	35
Internal Link Dist (ft)	424	1348	723
Turn Bay Length (ft)			
Base Capacity (vph)	1652	1636	556
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.46	0.34	0.40

## Intersection Summary

## HCM Signalized Intersection Capacity Analysis

18: Commonwealth Ave &amp; South St

6/3/2008



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations		↑↑	↑↑		∩	∩
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	1.00		0.88	
Flt Protected		1.00	1.00		1.00	
Satd. Flow (prot)		3217	3185		1317	
Flt Permitted		1.00	1.00		1.00	
Satd. Flow (perm)		3217	3185		1317	
Volume (vph)	0	705	530	0	15	170
Peak-hour factor, PHF	0.92	0.92	0.95	0.95	0.75	0.84
Adj. Flow (vph)	0	766	558	0	20	202
RTOR Reduction (vph)	0	0	0	0	141	0
Lane Group Flow (vph)	0	766	558	0	81	0
Heavy Vehicles (%)	0%	1%	2%	0%	0%	1%
Parking (#/hr)					2	2
Turn Type						
Protected Phases		1	1		3	
Permitted Phases						
Actuated Green, G (s)		34.4	34.4		21.3	
Effective Green, g (s)		34.4	34.4		21.3	
Actuated g/C Ratio		0.49	0.49		0.30	
Clearance Time (s)		4.0	4.0		4.0	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1574	1559		399	
v/s Ratio Prot		c0.24	0.18		c0.06	
v/s Ratio Perm						
v/c Ratio		0.49	0.36		0.20	
Uniform Delay, d1		12.0	11.1		18.2	
Progression Factor		1.00	1.00		1.00	
Incremental Delay, d2		1.1	0.6		1.1	
Delay (s)		13.1	11.8		19.3	
Level of Service		B	B		B	
Approach Delay (s)		13.1	11.8		19.3	
Approach LOS		B	B		B	

## Intersection Summary

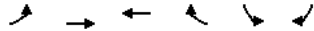
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	70.3	Sum of lost time (s)	14.6
Intersection Capacity Utilization	40.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



HCM Unsignalized Intersection Capacity Analysis

19: Commonwealth Ave & Foster St

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↗
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	660	645	85	0	370
Peak Hour Factor	0.25	0.89	0.96	0.77	0.25	0.90
Hourly flow rate (vph)	0	742	672	110	0	411
Pedestrians		59			59	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		5			5	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)			504			
pX, platoon unblocked	0.93				0.93	0.93
vC, conflicting volume	841				1157	509
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	754				1093	396
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	19
cM capacity (veh/h)	765				187	509

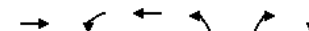
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	371	371	448	334	411
Volume Left	0	0	0	0	0
Volume Right	0	0	0	110	411
cSH	1700	1700	1700	1700	509
Volume to Capacity	0.22	0.22	0.26	0.20	0.81
Queue Length 95th (ft)	0	0	0	0	193
Control Delay (s)	0.0	0.0	0.0	0.0	35.4
Lane LOS					E
Approach Delay (s)	0.0		0.0		35.4
Approach LOS					E

Intersection Summary			
Average Delay		7.5	
Intersection Capacity Utilization	59.9%		ICU Level of Service B
Analysis Period (min)	15		

Queues

20: Washington St & Foster St

6/3/2008



Lane Group	EBT	WBL	WBT	NBL	NBR	SBT
Lane Group Flow (vph)	623	233	378	119	227	169
v/c Ratio	0.91	0.50	0.59	0.70	1.00	0.58
Control Delay	28.3	18.7	25.3	40.9	68.8	35.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.3	18.7	25.3	40.9	68.8	35.0
Queue Length 50th (ft)	139	95	141	64	0	89
Queue Length 95th (ft) m#473	m74	m157	105	#123	129	
Internal Link Dist (ft)	802		985			367
Turn Bay Length (ft)		75			80	
Base Capacity (vph)	684	463	642	227	227	388
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.50	0.59	0.52	1.00	0.44

Intersection Summary	
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
m	Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

20: Washington St & Foster St

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	10	10	12	12	10	10	10	12	10	10
Total Lost time (s)	4.0		4.0		4.0		4.0		4.0		4.0	
Lane Util. Factor	1.00		1.00		1.00		1.00		1.00		1.00	
Frt	0.97		1.00		1.00		1.00		0.85		0.96	
Flt Protected	1.00		0.95		1.00		0.95		1.00		0.99	
Satd. Flow (prot)	1590		1486		1517		1501		1195		1518	
Flt Permitted	1.00		0.16		1.00		0.51		1.00		0.99	
Satd. Flow (perm)	1590		257		1517		809		1195		1518	
Volume (vph)	0	410	125	200	340	0	105	0	195	25	75	40
Peak-hour factor, PHF	0.25	0.87	0.82	0.86	0.90	0.25	0.88	0.25	0.86	0.72	0.88	0.81
Adj. Flow (vph)	0	471	152	233	378	0	119	0	227	35	85	49
RTOR Reduction (vph)	0	11	0	0	0	0	0	0	227	0	0	0
Lane Group Flow (vph)	0	612	0	233	378	0	119	0	0	0	169	0
Heavy Vehicles (%)	0%	5%	1%	2%	10%	0%	1%	0%	1%	0%	0%	0%
Bus Blockages (#/hr)	0	0	6	0	6	0	0	0	0	0	0	0
Parking (#/hr)							2		2		2	
Turn Type			pm+pt		D.Pm		NA		Perm			
Protected Phases	1		9		1						3	
Permitted Phases			1				3				3	
Actuated Green, G (s)	38.1		62.8		38.1		17.2		0.0		17.2	
Effective Green, g (s)	38.1		60.8		38.1		17.2		0.0		17.2	
Actuated g/C Ratio	0.42		0.68		0.42		0.19		0.00		0.19	
Clearance Time (s)	4.0		2.0		4.0		4.0				4.0	
Vehicle Extension (s)	3.0		3.0		3.0		3.0				3.0	
Lane Grp Cap (vph)	673		484		642		155		0		290	
v/s Ratio Prot	c0.39		c0.12		0.25							
v/s Ratio Perm			0.20				c0.15				0.11	
v/c Ratio	0.91		0.48		0.59		0.77		0.00		0.58	
Uniform Delay, d1	24.3		10.3		19.9		34.5		45.0		33.1	
Progression Factor	0.63		1.30		1.06		1.00		1.00		1.00	
Incremental Delay, d2	9.4		0.4		2.0		20.1		0.0		3.0	
Delay (s)	24.8		13.8		23.1		54.6		45.0		36.1	
Level of Service	C		B		C		D		D		D	
Approach Delay (s)	24.8				19.5		48.3				36.1	
Approach LOS	C				B		D				D	

Intersection Summary			
HCM Average Control Delay	28.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

24: Glenmont Rd & Lake St

6/3/2008



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↔	↔	↔	↔	↔
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Volume (veh/h)	0	85	545	0	0	0
Peak Hour Factor	0.25	0.67	0.91	0.25	0.25	0.25
Hourly flow rate (vph)	0	127	599	0	0	0
Pedestrians	6					
Lane Width (ft)	0.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	1130					
pX, platoon unblocked						
vC, conflicting volume	599	605			599	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	599	605			599	
tC, single (s)	6.4	6.3			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.4			2.2	
p0 queue free %	100	74			100	
cM capacity (veh/h)	468	490			988	

Direction, Lane #	WB 1	NB 1
Volume Total	127	599
Volume Left	0	0
Volume Right	127	0
cSH	490	1700
Volume to Capacity	0.26	0.35
Queue Length 95th (ft)	26	0
Control Delay (s)	14.9	0.0
Lane LOS	B	
Approach Delay (s)	14.9	0.0
Approach LOS	B	

Intersection Summary			
Average Delay	2.6		
Intersection Capacity Utilization	46.3%	ICU Level of Service	A
Analysis Period (min)	15		

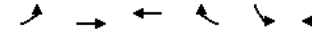
HCM Unsignalized Intersection Capacity Analysis  
25: Lake St & Lake Street

6/3/2008

Intersection Sign configuration not allowed in HCM analysis.

HCM Unsignalized Intersection Capacity Analysis  
26: Commonwealth Ave & Campus Driveway

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	635	955	20	0	20
Peak Hour Factor	0.25	0.89	0.96	0.61	0.25	0.88
Hourly flow rate (vph)	0	713	995	33	0	23
Pedestrians		53			53	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		4			4	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)		747				
pX, platoon unblocked					0.90	
vC, conflicting volume	1081				1421	620
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1081				1357	620
tC, single (s)		4.1			6.8	7.5
tC, 2 stage (s)						
tF (s)		2.2			3.5	3.6
p0 queue free %		100			100	93
cM capacity (veh/h)		624			123	339

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	357	357	663	364	23
Volume Left	0	0	0	0	0
Volume Right	0	0	0	33	23
cSH	1700	1700	1700	1700	339
Volume to Capacity	0.21	0.21	0.39	0.21	0.07
Queue Length 95th (ft)	0	0	0	0	5
Control Delay (s)	0.0	0.0	0.0	0.0	16.4
Lane LOS					C
Approach Delay (s)	0.0		0.0		16.4
Approach LOS					C

Intersection Summary			
Average Delay		0.2	
Intersection Capacity Utilization	48.8%		ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

30: Kenrick St & Lake St

6/3/2008



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘		↘		↘	
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Volume (veh/h)	135	0	105	525	0	0
Peak Hour Factor	0.86	0.25	0.73	0.91	0.25	0.25
Hourly flow rate (vph)	157	0	144	577	0	0
Pedestrians	35				37	
Lane Width (ft)	12.0				0.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	3				0	
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	1045					
pX, platoon unblocked						
vC, conflicting volume	937	35	35			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	937	35	35			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	39	100	91			
cM capacity (veh/h)	259	1013	1530			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>				
Volume Total	157	721				
Volume Left	157	144				
Volume Right	0	0				
cSH	259	1530				
Volume to Capacity	0.61	0.09				
Queue Length 95th (ft)	90	8				
Control Delay (s)	38.3	2.4				
Lane LOS	E	A				
Approach Delay (s)	38.3	2.4				
Approach LOS	E					
<b>Intersection Summary</b>						
Average Delay	8.8					
Intersection Capacity Utilization	52.1%		ICU Level of Service	A		
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis

33: Beacon St & Reservoir Rd

6/3/2008

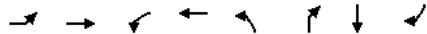


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↘		↘		↘	
Sign Control	Free		Free		Stop	
Grade	0%		0%		0%	
Volume (veh/h)	825	0	0	700	15	265
Peak Hour Factor	0.96	0.25	0.25	0.83	0.70	0.82
Hourly flow rate (vph)	859	0	0	843	21	323
Pedestrians	6		8			
Lane Width (ft)	12.0		12.0			
Walking Speed (ft/s)	4.0		4.0			
Percent Blockage	0		1			
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			859	1709	867	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			859	1709	867	
tC, single (s)			4.1	6.4	6.2	
tC, 2 stage (s)						
tF (s)			2.2	3.5	3.3	
p0 queue free %			100	79	8	
cM capacity (veh/h)			790	101	353	
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>			
Volume Total	859	843	345			
Volume Left	0	0	21			
Volume Right	0	0	323			
cSH	1700	1700	305			
Volume to Capacity	0.51	0.50	1.13			
Queue Length 95th (ft)	0	0	352			
Control Delay (s)	0.0	0.0	128.6			
Lane LOS	F					
Approach Delay (s)	0.0	0.0	128.6			
Approach LOS	F					
<b>Intersection Summary</b>						
Average Delay			21.6			
Intersection Capacity Utilization			74.8%	ICU Level of Service	D	
Analysis Period (min)	15					

Queues

35: Beacon St & College Rd

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	NBL	NBR	SBT	SBR
Lane Group Flow (vph)	159	866	247	670	146	255	389	28
v/c Ratio	0.63	1.07	1.13	0.65	1.40	9.11	0.64	0.02
Control Delay	33.5	75.1	124.3	15.8	258.2	3724.9	38.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.5	75.1	124.3	15.8	258.2	3724.9	38.0	0.0
Queue Length 50th (ft)	46	363	-80	138	-88	-224	86	0
Queue Length 95th (ft)	#189	#888	#254	337	#211	#407	143	0
Internal Link Dist (ft)		679		1940			600	
Turn Bay Length (ft)	200		200		40			75
Base Capacity (vph)	252	812	218	1037	104	28	608	1264
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	1.07	1.13	0.65	1.40	9.11	0.64	0.02

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

35: Beacon St & College Rd

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR2	NBL	NBR	NBR2	SBL2	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	12	12	10	12	12	12	12	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0				4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00				0.95
Frt	1.00	0.98		1.00	0.98		1.00	0.85				1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00				0.98
Satd. Flow (prot)	1555	1652		1593	1658		1516	1419				3113
Flt Permitted	0.36	1.00		0.10	1.00		0.36	1.00				0.98
Satd. Flow (perm)	589	1652		166	1658		582	1419				3113
Volume (vph)	145	740	80	200	470	35	115	125	75	5	100	200
Peak-hour factor, PHF	0.91	0.96	0.84	0.81	0.78	0.52	0.79	0.84	0.71	0.62	0.80	0.78
Adj. Flow (vph)	159	771	95	247	603	67	146	149	106	8	125	256
RTOR Reduction (vph)	0	5	0	0	4	0	0	28	0	0	0	0
Lane Group Flow (vph)	159	861	0	247	666	0	146	227	0	0	0	389
Heavy Vehicles (%)	1%	2%	0%	2%	1%	7%	0%	2%	3%	0%	2%	3%
Turn Type	Perm			D,P+P			D,Pm	NA				Perm
Protected Phases		3		2	2 3							1
Permitted Phases	3			3			1				1	
Actuated Green, G (s)	39.5	39.5		47.6	50.6		15.2	0.0				15.2
Effective Green, g (s)	40.5	40.5		47.6	51.6		16.2	0.0				16.2
Actuated g/C Ratio	0.47	0.47		0.56	0.60		0.19	0.00				0.19
Clearance Time (s)	5.0	5.0		3.0			5.0					5.0
Vehicle Extension (s)	3.0	3.0		3.0			3.0					3.0
Lane Grp Cap (vph)	279	783		211	1002		110	0				591
v/s Ratio Prot		0.52		c0.10	0.40							
v/s Ratio Perm	0.27			c0.56			c0.25					0.12
v/c Ratio	0.57	1.10		1.17	0.66		1.33	no cap				0.66
Uniform Delay, d1	16.2	22.5		23.2	11.2		34.6	Error				32.0
Progression Factor	1.00	1.00		1.00	1.00		1.00					1.00
Incremental Delay, d2	2.7	63.0		115.6	1.7		196.9	Error				2.7
Delay (s)	18.8	85.5		138.9	12.9		231.5	Error				34.7
Level of Service	B	F		F	B		F	F				C
Approach Delay (s)		75.1			46.8							32.4
Approach LOS		E			D							C

Intersection Summary

HCM Average Control Delay	Error	HCM Level of Service	F
HCM Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	85.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	90.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

35: Beacon St & College Rd

6/3/2008

Movement	SBR
Lane Configurations	↖ ↗
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1264
Flt Permitted	1.00
Satd. Flow (perm)	1264
Volume (vph)	15
Peak-hour factor, PHF	0.54
Adj. Flow (vph)	28
RTOR Reduction (vph)	0
Lane Group Flow (vph)	28
Heavy Vehicles (%)	15%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	85.4
Effective Green, g (s)	85.4
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1264
v/s Ratio Prot	
v/s Ratio Perm	c0.02
v/c Ratio	0.02
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	0.0
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

HCM Unsignalized Intersection Capacity Analysis

38: Commonwealth Ave & Mt Alvernia Road

6/3/2008

	↖	→	↗	↖	←	↖	↗	↖	↗	↖	↗	↖	↗											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR												
Lane Configurations	↕			↕			↕			↕														
Sign Control	Free			Free			Stop			Stop														
Grade	0%			0%			0%			0%														
Volume (veh/h)	35	765	5	55	560	10	25	15	245	35	5	20												
Peak Hour Factor	0.46	0.83	0.35	0.83	0.91	0.40	0.71	0.69	0.94	0.65	0.25	0.59												
Hourly flow rate (vph)	76	922	14	66	615	25	35	22	261	54	20	34												
Pedestrians	9			9			10			10														
Lane Width (ft)	12.0			12.0			14.0			14.0														
Walking Speed (ft/s)	4.0			4.0			4.0			4.0														
Percent Blockage	1			1			1			1														
Right turn flare (veh)																								
Median type							None			None														
Median storage (veh)																								
Upstream signal (ft)																								
pX, platoon unblocked																								
vC, conflicting volume	640			946			1904			1864			948			2122			1859			637		
vC1, stage 1 conf vol																								
vC2, stage 2 conf vol																								
vCu, unblocked vol	640			946			1904			1864			948			2122			1859			637		
tC, single (s)	4.1			4.1			7.2			6.5			6.2			7.1			6.5			6.2		
tC, 2 stage (s)																								
tF (s)	2.2			2.2			3.6			4.0			3.3			3.5			4.0			3.3		
p0 queue free %	92			91			0			64			16			0			67			93		
cM capacity (veh/h)	954			710			29			61			311			4			61			468		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	1012	707	318	108
Volume Left	76	66	35	54
Volume Right	14	25	261	34
cSH	954	710	132	7
Volume to Capacity	0.08	0.09	2.40	15.02
Queue Length 95th (ft)	6	8	687	Err
Control Delay (s)	2.2	2.4	706.0	Err
Lane LOS	A	A	F	F
Approach Delay (s)	2.2	2.4	706.0	Err
Approach LOS			F	F

Intersection Summary

Average Delay	608.9
Intersection Capacity Utilization	83.2%
ICU Level of Service	E
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis

46: Chestnut Hill Driveway & T. Moore

6/3/2008

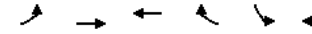


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	60	10	330	155	5	210
Peak Hour Factor	0.69	0.70	0.51	0.88	0.69	0.70
Hourly flow rate (vph)	87	14	647	176	7	300
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1050	735			823	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1050	735			823	
tC, single (s)	6.9	6.2			4.2	
tC, 2 stage (s)						
tF (s)	3.9	3.3			2.3	
p0 queue free %	58	97			99	
cM capacity (veh/h)	205	421			753	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	101	823	307			
Volume Left	87	0	7			
Volume Right	14	176	0			
cSH	221	1700	753			
Volume to Capacity	0.46	0.48	0.01			
Queue Length 95th (ft)	55	0	1			
Control Delay (s)	34.4	0.0	0.3			
Lane LOS	D		A			
Approach Delay (s)	34.4	0.0	0.3			
Approach LOS	D					
<b>Intersection Summary</b>						
Average Delay	2.9					
Intersection Capacity Utilization	40.8%		ICU Level of Service		A	
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis

49: Beacon St Garage &

6/3/2008

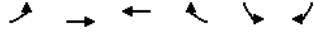


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Sign Control	Free	Free			Stop	↔
Grade	0%	0%			0%	
Volume (veh/h)	55	1035	685	170	5	15
Peak Hour Factor	0.88	0.96	0.83	0.71	0.50	0.75
Hourly flow rate (vph)	62	1078	825	239	10	20
Pedestrians	17	21			17	
Lane Width (ft)	14.0	14.0			12.0	
Walking Speed (ft/s)	4.0	4.0			4.0	
Percent Blockage	2	2			1	
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1082				2186	979
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1082				2186	979
tC, single (s)	4.2				6.9	6.3
tC, 2 stage (s)						
tF (s)	2.3				4.0	3.4
p0 queue free %	90				68	93
cM capacity (veh/h)	617				32	280
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>	<b>SB 2</b>		
Volume Total	1141	1065	10	20		
Volume Left	62	0	10	0		
Volume Right	0	239	0	20		
cSH	617	1700	32	280		
Volume to Capacity	0.10	0.63	0.32	0.07		
Queue Length 95th (ft)	8	0	25	6		
Control Delay (s)	3.6	0.0	164.8	18.8		
Lane LOS	A		F	C		
Approach Delay (s)	3.6	0.0	67.5			
Approach LOS			F			
<b>Intersection Summary</b>						
Average Delay	2.8					
Intersection Capacity Utilization	124.7%		ICU Level of Service		H	
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis

51: Campanella Way & Fr. Herlihy Drive

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↓
Sign Control		Stop	Yield		Stop	
Volume (vph)	0	15	225	0	75	170
Peak Hour Factor	0.25	0.71	0.70	0.25	0.89	0.83
Hourly flow rate (vph)	0	21	321	0	84	205
Direction, Lane #	EB 1	WB 1	SB 1	SB 2		
Volume Total (vph)	21	321	84	205		
Volume Left (vph)	0	0	84	0		
Volume Right (vph)	0	0	0	205		
Hadj (s)	0.00	0.05	0.72	-0.65		
Departure Headway (s)	5.0	4.7	6.1	4.7		
Degree Utilization, x	0.03	0.42	0.14	0.27		
Capacity (veh/h)	661	737	567	727		
Control Delay (s)	8.2	11.0	8.9	8.2		
Approach Delay (s)	8.2	11.0	8.4			
Approach LOS	A	B	A			
Intersection Summary						
Delay	9.7					
HCM Level of Service	A					
Intersection Capacity Utilization	31.6%		ICU Level of Service	A		
Analysis Period (min)	15					



## Queues

2: Commonwealth Ave &amp; Lake Street

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT
Lane Group Flow (vph)	195	665	293	791	138	607
v/c Ratio	0.62	0.63	0.67	0.85	0.33	1.46
Control Delay	46.8	30.2	39.3	41.8	7.7	248.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.8	30.2	39.3	41.8	7.7	248.5
Queue Length 50th (ft)	114	190	160	242	2	~276
Queue Length 95th (ft)	196	213	247	#374	45	#384
Internal Link Dist (ft)		1877		667		202
Turn Bay Length (ft)	200		300		200	
Base Capacity (vph)	317	1234	455	968	436	416
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.54	0.64	0.82	0.32	1.46

## Intersection Summary

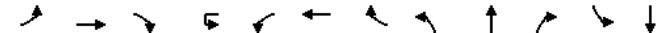
~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

## HCM Signalized Intersection Capacity Analysis

2: Commonwealth Ave &amp; Lake Street

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔↔			↔	↔↔	↔		↔↔		↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1000	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	10	10	10	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95			1.00	0.95	1.00		0.95			
Frpb, ped/bikes	1.00	1.00			1.00	1.00	0.82		1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00		1.00			
Flt	1.00	1.00			1.00	1.00	0.85		0.97			
Flt Protected	0.95	1.00			0.95	1.00	1.00		0.98			
Satd. Flow (prot)	1570	3180			1528	3249	1174		1522			
Flt Permitted	0.95	1.00			0.95	1.00	1.00		0.98			
Satd. Flow (perm)	1570	3180			1528	3249	1174		1522			
Volume (vph)	170	525	5	20	225	720	120	165	255	80	0	0
Peak-hour factor, PHF	0.87	0.80	0.58	0.92	0.83	0.91	0.87	0.84	0.84	0.75	0.25	0.25
Adj. Flow (vph)	195	656	9	22	271	791	138	196	304	107	0	0
RTOR Reduction (vph)	0	1	0	0	0	0	96	0	16	0	0	0
Lane Group Flow (vph)	195	664	0	0	293	791	42	0	591	0	0	0
Confl. Peds. (#/hr)							54					
Heavy Vehicles (%)	0%	2%	0%	0%	3%	0%	1%	1%	0%	1%	0%	0%
Turn Type	Prot			Split	Split		Perm	Split				
Protected Phases	1	1 2		3	3	3		4	4			
Permitted Phases							3					
Actuated Green, G (s)	20.1	32.8			28.3	28.3	28.3		26.1			
Effective Green, g (s)	20.1	32.8			28.3	28.3	28.3		26.1			
Actuated g/C Ratio	0.20	0.33			0.29	0.29	0.29		0.26			
Clearance Time (s)	4.0				4.0	4.0	4.0		4.0			
Vehicle Extension (s)	3.0				3.0	3.0	3.0		3.0			
Lane Grp Cap (vph)	318	1051			436	927	335		400			
v/s Ratio Prot	0.12	c0.21			0.19	c0.24			c0.39			
v/s Ratio Perm							0.04					
v/c Ratio	0.61	0.63			0.67	0.85	0.13		1.48			
Uniform Delay, d1	36.0	28.1			31.3	33.5	26.3		36.6			
Progression Factor	1.00	1.00			1.00	1.00	1.00		1.00			
Incremental Delay, d2	8.6	1.2			4.1	7.7	0.2		227.8			
Delay (s)	44.6	29.3			35.4	41.2	26.5		264.3			
Level of Service	D	C			D	D	C		F			
Approach Delay (s)		32.8				38.1			264.3			0.0
Approach LOS		C				D			F			A

## Intersection Summary

HCM Average Control Delay	87.5	HCM Level of Service	F
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	99.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
2: Commonwealth Ave & Lake Street

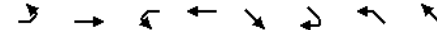
6/3/2008



Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Frbp, ped/bikes	
Fipb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	0
Peak-hour factor, PHF	0.25
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	
Heavy Vehicles (%)	0%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Queues  
3: Commonwealth Ave & Chestnut Hill

6/3/2008



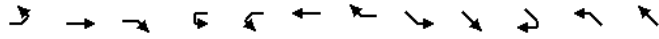
Lane Group	EBL	EBT	WBL	WBT	SET	SER	NWL	NWT
Lane Group Flow (vph)	144	664	247	464	598	42	227	716
v/c Ratio	0.46	0.88	0.85	0.72	1.54	0.12	0.79	1.10
Control Delay	28.1	50.4	41.5	50.9	288.9	25.7	62.4	101.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.1	50.4	41.5	50.9	288.9	25.7	62.4	101.4
Queue Length 50th (ft)	74	214	136	174	-342	16	121	-622
Queue Length 95th (ft)	107	#358	#245	#253	#460	34	#213	#797
Internal Link Dist (ft)		1348		1135	4158			919
Turn Bay Length (ft)	200		100			50		
Base Capacity (vph)	366	758	344	642	388	364	286	648
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.88	0.72	0.72	1.54	0.12	0.79	1.10

Intersection Summary
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

3: Commonwealth Ave & Chestnut Hill

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT
Lane Configurations	↔	↕	↔	↔	↕	↕	↔	↔	↕	↕	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	10	10	12	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95			1.00	0.95			0.95	1.00	1.00	1.00
Fr't	1.00	0.94			1.00	0.98			1.00	0.85	1.00	0.95
Flt Protected	0.95	1.00			0.95	1.00			1.00	1.00	0.95	1.00
Satd. Flow (prot)	1624	2980			1609	2906			3148	1454	1624	1585
Flt Permitted	0.29	1.00			0.15	1.00			0.51	1.00	0.20	1.00
Satd. Flow (perm)	490	2980			259	2906			1605	1454	345	1585
Volume (vph)	115	345	250	5	220	360	25	45	490	30	200	415
Peak-hour factor, PHF	0.80	0.90	0.89	0.92	0.91	0.87	0.50	0.75	0.91	0.72	0.88	0.86
Adj. Flow (vph)	144	383	281	5	242	414	50	60	538	42	227	483
RTOR Reduction (vph)	0	106	0	0	0	7	0	0	0	12	0	14
Lane Group Flow (vph)	144	558	0	0	247	457	0	0	598	30	227	702
Heavy Vehicles (%)	0%	0%	5%	0%	1%	2%	8%	0%	3%	0%	0%	2%
Turn Type	pm+pt			pm+pt			Perm		Perm	D.P+P		
Protected Phases	9	1			9	1			3		4	3 4
Permitted Phases	1				1		3		3		3	
Actuated Green, G (s)	45.0	26.2			45.0	26.2			29.0	29.0	44.0	48.0
Effective Green, g (s)	43.0	26.2			43.0	26.2			29.0	29.0	44.0	48.0
Actuated g/C Ratio	0.36	0.22			0.36	0.22			0.24	0.24	0.37	0.40
Clearance Time (s)	2.0	4.0			2.0	4.0			4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	334	651			282	634			388	351	286	634
v/s Ratio Prot	0.06	0.19			c0.12	0.16					0.10	c0.44
v/s Ratio Perm	0.09				c0.19				c0.37	0.02	0.19	
v/c Ratio	0.43	0.86			0.88	0.72			1.54	0.09	0.79	1.11
Uniform Delay, d1	27.7	45.1			31.2	43.5			45.5	35.2	42.5	36.0
Progression Factor	1.00	1.00			1.00	1.00			1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	13.6			24.7	6.9			256.1	0.5	14.0	68.6
Delay (s)	28.6	58.7			55.9	50.5			301.6	35.7	56.5	104.6
Level of Service	C	E			E	D			F	D	E	F
Approach Delay (s)		53.4				52.3			284.2			93.0
Approach LOS		D				D			F			F

Intersection Summary

HCM Average Control Delay	112.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	101.3%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

3: Commonwealth Ave & Chestnut Hill

6/3/2008



Movement	NWR
Lane Configurations	↔
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Fr't	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	205
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	233
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	4%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

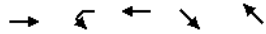
Intersection Summary

HCM Average Control Delay		HCM Level of Service	
HCM Volume to Capacity ratio			
Actuated Cycle Length (s)		Sum of lost time (s)	
Intersection Capacity Utilization		ICU Level of Service	
Analysis Period (min)			
c Critical Lane Group			

## Queues

7: Beacon St &amp; Chestnut Hill Ave

6/3/2008



Lane Group	EBT	WBL	WBT	SET	NWT
Lane Group Flow (vph)	692	205	821	989	756
v/c Ratio	1.99	1.40	0.60	0.62	0.98
Control Delay	482.9	248.9	40.4	24.2	51.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	482.9	248.9	40.4	24.2	51.8
Queue Length 50th (ft)	~477	~185	215	203	332
Queue Length 95th (ft)	#526	#280	262	244	#470
Internal Link Dist (ft)	3431		1419	919	239
Turn Bay Length (ft)		100			
Base Capacity (vph)	348	146	1368	1599	773
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.99	1.40	0.60	0.62	0.98

## Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

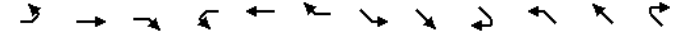
# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

## HCM Signalized Intersection Capacity Analysis

7: Beacon St &amp; Chestnut Hill Ave

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↑↑		↓	↑↑↑			↑↑↑			↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	12	12	10	11	10	14	16	16
Total Lost time (s)		4.0		4.0	4.0			4.0				4.0
Lane Util. Factor		0.95		1.00	0.91			0.91				0.95
Frt		0.98		1.00	0.96			0.98				0.98
Flt Protected		0.99		0.95	1.00			0.99				1.00
Satd. Flow (prot)		3054		1555	4446			4245				3468
Flt Permitted		0.53		0.15	1.00			0.66				0.74
Satd. Flow (perm)		1617		241	4446			2824				2578
Volume (vph)	75	415	80	160	530	225	170	595	105	55	520	95
Peak-hour factor, PHF	0.86	0.81	0.86	0.78	0.92	0.92	0.77	0.92	0.87	0.83	0.90	0.85
Adj. Flow (vph)	87	512	93	205	576	245	221	647	121	66	578	112
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	692	0	205	821	0	0	989	0	0	756	0
Heavy Vehicles (%)	1%	0%	0%	1%	0%	1%	1%	4%	3%	2%	3%	6%
Turn Type	Perm			D,P+P			D,P+P				Perm	
Protected Phases		1		11	1		8	8	9		9	
Permitted Phases	1			1			9				9	
Actuated Green, G (s)		27.2		35.2	39.2			64.0			39.0	
Effective Green, g (s)		27.2		35.2	39.2			62.0			39.0	
Actuated g/C Ratio		0.21		0.27	0.30			0.48			0.30	
Clearance Time (s)		4.0		4.0							4.0	
Vehicle Extension (s)		3.0		3.0							3.0	
Lane Grp Cap (vph)		338		146	1341			1598			773	
v/s Ratio Prot				c0.09	0.18			c0.11				
v/s Ratio Perm		c0.43		0.29				0.19			c0.29	
v/c Ratio		2.05		1.40	0.61			0.62			0.98	
Uniform Delay, d1		51.4		43.7	38.9			25.2			45.1	
Progression Factor		1.00		1.00	1.00			1.00			0.53	
Incremental Delay, d2		481.5		217.6	0.8			1.8			26.1	
Delay (s)		532.9		261.3	39.7			27.0			50.1	
Level of Service		F		F	D			C			D	
Approach Delay (s)		532.9			84.0			27.0			50.1	
Approach LOS		F			F			C			D	

## Intersection Summary

HCM Average Control Delay	150.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	32.8
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

8: Beacon St & Gate House Road

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR						
Lane Configurations	↖	↗			↕			↕			↕							
Sign Control	Free			Free			Stop			Stop								
Grade	0%			0%			0%			0%								
Volume (veh/h)	245	505	5	5	680	75	5	5	5	105	5	310						
Peak Hour Factor	0.92	0.85	1.00	0.38	0.90	0.75	0.58	0.38	0.25	0.84	0.50	0.93						
Hourly flow rate (vph)	266	594	5	13	756	100	9	13	20	125	10	333						
Pedestrians	29			26			2			25								
Lane Width (ft)	12.0			12.0			12.0			12.0								
Walking Speed (ft/s)	4.0			4.0			4.0			4.0								
Percent Blockage	2			2			0			2								
Right turn flare (veh)																		
Median type							None			None								
Median storage (veh)																		
Upstream signal (ft)																		
pX, platoon unblocked																		
vC, conflicting volume	881		601			2330		2038		625		2036		1991		860		
vC1, stage 1 conf vol																		
vC2, stage 2 conf vol																		
vCu, unblocked vol	881		601			2330		2038		625		2036		1991		860		
tC, single (s)	4.1		4.1			7.1		6.5		6.2		7.1		6.5		6.3		
tC, 2 stage (s)																		
tF (s)	2.2			2.2			3.5		4.0		3.3		3.5		4.0		3.4	
p0 queue free %	65			99			0		63		96		0		74		0	
cM capacity (veh/h)	756			984			0		36		477		20		38		333	

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	266	599	869	42	468
Volume Left	266	0	13	9	125
Volume Right	0	5	100	20	333
cSH	756	1700	984	0	62
Volume to Capacity	0.35	0.35	0.01	Err	7.52
Queue Length 95th (ft)	40	0	1	Err	Err
Control Delay (s)	12.3	0.0	0.4	Err	Err
Lane LOS	B		A	F	F
Approach Delay (s)	3.8		0.4		Err
Approach LOS			F		F

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	120.9%	ICU Level of Service		H
Analysis Period (min)	15			

Queues

13: Washington St & Market Street

6/3/2008



Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	712	36	692	107	343	155	464	119
v/c Ratio	14.83	0.27	1.13	0.60	0.49	0.71	0.82	0.27
Control Delay	6232.5	28.5	106.5	38.2	25.5	42.5	38.1	22.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6232.5	28.5	106.5	38.2	25.5	42.5	38.1	22.2
Queue Length 50th (ft)	~920	13	~514	50	151	76	242	48
Queue Length 95th (ft) m#837	37	#873	#122	255	#185	#453	70	
Internal Link Dist (ft)	985	930	4158	1061				
Turn Bay Length (ft)	50	50	75	50				
Base Capacity (vph)	48	133	611	188	747	230	598	474
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	14.83	0.27	1.13	0.57	0.46	0.67	0.78	0.25

Intersection Summary	
~	Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
m	Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

13: Washington St & Market Street

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔ ↗ ↘ ↙ ↘ ↗ ↖ ↗ ↘ ↙ ↘ ↗ ↖											
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	16	10	11	16	16	16	16	12	12	10
Total Lost time (s)	4.0			4.0			4.0			4.0		
Lane Util. Factor	1.00			1.00			1.00			1.00		
Frt	0.96			1.00			0.98			1.00		
Flt Protected	0.99			0.95			1.00			0.95		
Satd. Flow (prot)	1373			1189			1228			1823		
Flt Permitted	0.22			0.27			1.00			0.26		
Satd. Flow (perm)	311			344			1228			505		
Volume (vph)	85	365	180	25	450	140	90	285	20	135	450	80
Peak-hour factor, PHF	0.74	0.92	0.90	0.69	0.91	0.71	0.84	0.94	0.50	0.87	0.97	0.67
Adj. Flow (vph)	115	397	200	36	495	197	107	303	40	155	464	119
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	712	0	36	692	0	107	343	0	155	464	119
Heavy Vehicles (%)	0%	1%	0%	0%	1%	1%	1%	2%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	26	26	26	0	0	0	0	0	0
Parking (#/hr)	5	5	5	5	5	5				5	5	5
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases	1			1			3			3		
Permitted Phases	1			1			3			3		
Actuated Green, G (s)	41.0			41.0			37.6			37.6		
Effective Green, g (s)	41.0			41.0			37.6			37.6		
Actuated g/C Ratio	0.41			0.41			0.38			0.38		
Clearance Time (s)	4.0			4.0			4.0			4.0		
Vehicle Extension (s)	3.0			3.0			3.0			3.0		
Lane Grp Cap (vph)	128			141			503			190		
v/s Ratio Prot	c2.29			0.10			0.21			0.26		
v/c Ratio	5.56			0.26			1.38			0.56		
Uniform Delay, d1	29.5			19.4			29.5			24.7		
Progression Factor	1.38			1.00			1.00			1.00		
Incremental Delay, d2	2054.7			4.3			181.3			3.8		
Delay (s)	2095.3			23.8			210.8			28.5		
Level of Service	F			C			F			C		
Approach Delay (s)	2095.3			201.6			25.4			34.8		
Approach LOS	F			F			C			C		

Intersection Summary			
HCM Average Control Delay	637.6	HCM Level of Service	F
HCM Volume to Capacity ratio	3.31		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	21.4
Intersection Capacity Utilization	119.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

15: Campanella Way & St. T Moore

6/3/2008



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↘ ↗ ↖					
Sign Control	Yield		Free		Free	
Grade	0%		0%		0%	
Volume (veh/h)	30	75	55	475	145	80
Peak Hour Factor	0.72	0.87	0.67	0.88	0.78	0.79
Hourly flow rate (vph)	42	86	82	540	186	101
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	282					
pX, platoon unblocked						
vC, conflicting volume	940	237	287			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	940	237	287			
tC, single (s)	6.4	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	85	89	94			
cM capacity (veh/h)	276	778	1275			

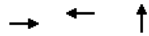
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	128	622	287
Volume Left	42	82	0
Volume Right	86	0	101
cSH	488	1275	1700
Volume to Capacity	0.26	0.06	0.17
Queue Length 95th (ft)	26	5	0
Control Delay (s)	15.0	1.7	0.0
Lane LOS	B	A	
Approach Delay (s)	15.0	1.7	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	62.0%	ICU Level of Service	B
Analysis Period (min)	15		

Queues

16: Washington St & Brock St

6/3/2008



Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	646	564	538
v/c Ratio	1.74	0.82	0.72
Control Delay	367.9	46.1	30.2
Queue Delay	0.0	0.0	0.0
Total Delay	367.9	46.1	30.2
Queue Length 50th (ft)	~615	262	241
Queue Length 95th (ft)	#837	m#436	#569
Internal Link Dist (ft)	966	802	965
Turn Bay Length (ft)			
Base Capacity (vph)	371	684	744
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	1.74	0.82	0.72

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

16: Washington St & Brock St

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑			↑				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frpb, ped/bikes		1.00			0.98			0.99				
Flpb, ped/bikes		1.00			1.00			1.00				
Frt		1.00			0.98			0.97				
Flt Protected		0.99			1.00			0.99				
Satd. Flow (prot)		1628			1603			1618				
Flt Permitted		0.49			1.00			0.99				
Satd. Flow (perm)		804			1603			1618				
Volume (vph)	40	525	0	0	465	50	85	285	105	0	0	0
Peak-hour factor, PHF	0.53	0.92	0.25	0.25	0.94	0.72	0.80	0.89	0.94	0.25	0.25	0.25
Adj. Flow (vph)	75	571	0	0	495	69	106	320	112	0	0	0
RTOR Reduction (vph)	0	0	0	0	5	0	0	8	0	0	0	0
Lane Group Flow (vph)	0	646	0	0	559	0	0	530	0	0	0	0
Confl. Peds. (#/hr)	52					52			13			
Heavy Vehicles (%)	0%	5%	0%	0%	3%	0%	0%	1%	2%	0%	0%	0%
Turn Type	Perm							Perm				
Protected Phases		1			1				4			
Permitted Phases	1								4			
Actuated Green, G (s)		39.2			39.2				45.6			
Effective Green, g (s)		39.2			39.2				45.6			
Actuated g/C Ratio		0.39			0.39				0.46			
Clearance Time (s)		4.0			4.0				4.0			
Vehicle Extension (s)		3.0			3.0				3.0			
Lane Grp Cap (vph)		315			628				738			
v/s Ratio Prot					0.35							
v/s Ratio Perm		c0.80							0.33			
v/c Ratio		2.05			0.89				0.72			
Uniform Delay, d1		30.4			28.4				22.0			
Progression Factor		1.00			1.48				1.00			
Incremental Delay, d2		483.8			12.5				3.4			
Delay (s)		514.2			54.4				25.4			
Level of Service		F			D				C			
Approach Delay (s)		514.2			54.4				25.4			0.0
Approach LOS		F			D				C			A

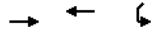
Intersection Summary

- HCM Average Control Delay 215.4 HCM Level of Service F
- HCM Volume to Capacity ratio 1.33
- Actuated Cycle Length (s) 100.0 Sum of lost time (s) 15.2
- Intersection Capacity Utilization 103.3% ICU Level of Service G
- Analysis Period (min) 15
- c Critical Lane Group

## Queues

18: Commonwealth Ave &amp; South St

6/3/2008



Lane Group	EBT	WBT	SWL
Lane Group Flow (vph)	821	684	220
v/c Ratio	1.11	0.41	0.40
Control Delay	86.4	12.2	8.3
Queue Delay	0.0	0.0	0.0
Total Delay	86.4	12.2	8.3
Queue Length 50th (ft)	~185	72	10
Queue Length 95th (ft)	#371	178	45
Internal Link Dist (ft)	424	1348	723
Turn Bay Length (ft)			
Base Capacity (vph)	742	1669	545
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	1.11	0.41	0.40

## Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

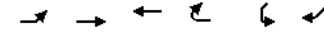
# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

## HCM Signalized Intersection Capacity Analysis

18: Commonwealth Ave &amp; South St

6/3/2008



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations		↑↑	↑↑		↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	1.00		0.89	
Flt Protected		1.00	1.00		0.99	
Satd. Flow (prot)		3245	3249		1331	
Flt Permitted		0.93	1.00		0.99	
Satd. Flow (perm)		3032	3249		1331	
Volume (vph)	5	665	595	0	30	160
Peak-hour factor, PHF	0.25	0.83	0.87	0.25	0.75	0.89
Adj. Flow (vph)	20	801	684	0	40	180
RTOR Reduction (vph)	0	0	0	0	125	0
Lane Group Flow (vph)	0	821	684	0	95	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%
Parking (#/hr)					2	2
Turn Type						
Protected Phases		1	1		3	
Permitted Phases						
Actuated Green, G (s)		34.4	34.4		21.3	
Effective Green, g (s)		34.4	34.4		21.3	
Actuated g/C Ratio		0.49	0.49		0.30	
Clearance Time (s)		4.0	4.0		4.0	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1484	1590		403	
v/s Ratio Prot			0.21		c0.07	
v/s Ratio Perm		c0.27				
v/c Ratio		0.55	0.43		0.23	
Uniform Delay, d1		12.6	11.6		18.4	
Progression Factor		1.00	1.00		1.00	
Incremental Delay, d2		1.5	0.9		1.4	
Delay (s)		14.1	12.5		19.7	
Level of Service		B	B		B	
Approach Delay (s)		14.1	12.5		19.7	
Approach LOS		B	B		B	

## Intersection Summary

HCM Average Control Delay 14.2 HCM Level of Service B

HCM Volume to Capacity ratio 0.43

Actuated Cycle Length (s) 70.3 Sum of lost time (s) 14.6

Intersection Capacity Utilization 43.8% ICU Level of Service A

Analysis Period (min) 15

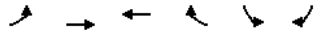
c Critical Lane Group



HCM Unsignalized Intersection Capacity Analysis

19: Commonwealth Ave & Foster St

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↗
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	660	715	55	0	375
Peak Hour Factor	0.25	0.83	0.94	0.74	0.25	0.89
Hourly flow rate (vph)	0	795	761	74	0	421
Pedestrians					65	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					5	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)			504			
pX, platoon unblocked	0.90				0.90	0.90
vC, conflicting volume	900				1260	482
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	774				1176	309
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	28
cM capacity (veh/h)	722				159	588

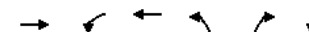
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	398	398	507	328	421
Volume Left	0	0	0	0	0
Volume Right	0	0	0	74	421
cSH	1700	1700	1700	1700	588
Volume to Capacity	0.23	0.23	0.30	0.19	0.72
Queue Length 95th (ft)	0	0	0	0	148
Control Delay (s)	0.0	0.0	0.0	0.0	25.1
Lane LOS					D
Approach Delay (s)	0.0		0.0		25.1
Approach LOS					D

Intersection Summary			
Average Delay		5.1	
Intersection Capacity Utilization	56.7%		ICU Level of Service B
Analysis Period (min)	15		

Queues

20: Washington St & Foster St

6/3/2008



Lane Group	EBT	WBL	WBT	NBL	NBR	SBT
Lane Group Flow (vph)	701	264	452	78	153	271
v/c Ratio	1.22	0.51	0.79	0.49	1.00	0.79
Control Delay	125.4	28.7	29.8	37.4	83.3	41.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	125.4	28.7	29.8	37.4	83.3	41.9
Queue Length 50th (ft)	~504	97	229	44	0	164
Queue Length 95th (ft)	m144	m135	m214	82	#119	220
Internal Link Dist (ft)	802		985			367
Turn Bay Length (ft)		75			80	
Base Capacity (vph)	576	520	570	207	153	441
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.22	0.51	0.79	0.38	1.00	0.61

Intersection Summary	
~	Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
m	Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

20: Washington St & Foster St

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	10	10	12	12	10	10	10	12	10	10
Total Lost time (s)	4.0		4.0		4.0		4.0		4.0		4.0	
Lane Util. Factor	1.00		1.00		1.00		1.00		1.00		1.00	
Frt	0.97		1.00		1.00		1.00		0.85		0.98	
Flt Protected	1.00		0.95		1.00		0.95		1.00		0.99	
Satd. Flow (prot)	1589		1501		1605		1486		1184		1540	
Flt Permitted	1.00		0.11		1.00		0.40		1.00		0.99	
Satd. Flow (perm)	1589		179		1605		630		1184		1540	
Volume (vph)	0	455	150	230	425	0	70	0	135	45	140	40
Peak-hour factor, PHF	0.25	0.86	0.87	0.87	0.94	0.25	0.90	0.25	0.88	0.70	0.88	0.84
Adj. Flow (vph)	0	529	172	264	452	0	78	0	153	64	159	48
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	153	0	0	0
Lane Group Flow (vph)	0	689	0	264	452	0	78	0	0	0	271	0
Heavy Vehicles (%)	0%	5%	1%	1%	4%	0%	2%	0%	2%	0%	0%	0%
Bus Blockages (#/hr)	0	0	6	0	6	0	0	0	0	0	0	0
Parking (#/hr)							2		2		2	
Turn Type			pm+pt		D.Pm		NA		Perm			
Protected Phases	1		9		1						3	
Permitted Phases			1				3				3	
Actuated Green, G (s)	35.4		67.7		35.4		22.3		0.0		22.3	
Effective Green, g (s)	35.4		65.7		35.4		22.3		0.0		22.3	
Actuated g/C Ratio	0.35		0.66		0.35		0.22		0.00		0.22	
Clearance Time (s)	4.0		2.0		4.0		4.0				4.0	
Vehicle Extension (s)	3.0		3.0		3.0		3.0				3.0	
Lane Grp Cap (vph)	563		518		568		140		0		343	
v/s Ratio Prot	c0.43		c0.15		0.28							
v/s Ratio Perm			0.18				0.12				0.18	
v/c Ratio	1.22		0.51		0.80		0.56		0.00		0.79	
Uniform Delay, d1	32.3		18.3		29.0		34.5		50.0		36.6	
Progression Factor	0.80		1.55		0.82		1.00		1.00		1.00	
Incremental Delay, d2	102.6		0.3		4.8		4.7		0.0		11.7	
Delay (s)	128.3		28.7		28.7		39.2		50.0		48.3	
Level of Service	F		C		C		D		D		D	
Approach Delay (s)	128.3				28.7		46.4				48.3	
Approach LOS	F				C		D				D	

Intersection Summary

HCM Average Control Delay	70.0	HCM Level of Service	E
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

24: Glenmont Rd & Lake St

6/3/2008



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↔	↔	↔	↔	↔
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	110	525	0	0	0
Peak Hour Factor	0.25	0.78	0.88	0.25	0.25	0.25
Hourly flow rate (vph)	0	141	597	0	0	0
Pedestrians	76				76	
Lane Width (ft)	12.0				0.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	6				0	
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	1130					
pX, platoon unblocked						
vC, conflicting volume	673	749			673	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	673	749			673	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	63			100	
cM capacity (veh/h)	397	383			869	

Direction, Lane #

	WB 1	NB 1
Volume Total	141	597
Volume Left	0	0
Volume Right	141	0
cSH	383	1700
Volume to Capacity	0.37	0.35
Queue Length 95th (ft)	41	0
Control Delay (s)	19.8	0.0
Lane LOS	C	
Approach Delay (s)	19.8	0.0
Approach LOS	C	

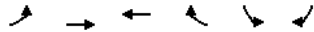
Intersection Summary

Average Delay	3.8		
Intersection Capacity Utilization	50.7%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

26: Commonwealth Ave & Campus Driveway

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Sign Control	Free	Free	Free	Free	Stop	Stop
Grade	0%	0%	0%	0%	0%	0%
Volume (veh/h)	0	635	1020	5	0	55
Peak Hour Factor	0.25	0.83	0.93	0.75	0.25	0.89
Hourly flow rate (vph)	0	765	1097	7	0	62
Pedestrians		101			101	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		8			8	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)		747				
pX, platoon unblocked					0.86	
vC, conflicting volume	1204				1584	754
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1204				1515	754
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	79
cM capacity (veh/h)	537				88	299

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	383	383	731	372	62
Volume Left	0	0	0	0	0
Volume Right	0	0	0	7	62
cSH	1700	1700	1700	1700	299
Volume to Capacity	0.23	0.23	0.43	0.22	0.21
Queue Length 95th (ft)	0	0	0	0	19
Control Delay (s)	0.0	0.0	0.0	0.0	20.2
Lane LOS					C
Approach Delay (s)	0.0		0.0		20.2
Approach LOS					C

Intersection Summary			
Average Delay		0.6	
Intersection Capacity Utilization	51.4%		ICU Level of Service A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

30: Kenrick St & Lake St

6/3/2008



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↓			↑		
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	115	0	150	485	0	0
Peak Hour Factor	0.78	0.25	0.73	0.88	0.25	0.25
Hourly flow rate (vph)	147	0	205	551	0	0
Pedestrians	42				47	
Lane Width (ft)	12.0				0.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	4				0	
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)					1045	
pX, platoon unblocked						
vC, conflicting volume	1051	42	42			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1051	42	42			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	30	100	86			
cM capacity (veh/h)	210	998	1512			

Direction, Lane #	EB 1	NB 1
Volume Total	147	757
Volume Left	147	205
Volume Right	0	0
cSH	210	1512
Volume to Capacity	0.70	0.14
Queue Length 95th (ft)	112	12
Control Delay (s)	54.4	3.2
Lane LOS	F	A
Approach Delay (s)	54.4	3.2
Approach LOS	F	

Intersection Summary			
Average Delay		11.6	
Intersection Capacity Utilization	51.3%		ICU Level of Service A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

33: Beacon St & Reservoir Rd

6/3/2008

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↓	↓
Sign Control	Free		Free		Stop	
Grade	0%		0%		0%	
Volume (veh/h)	520	0	0	1075	10	195
Peak Hour Factor	0.88	0.25	0.25	0.93	0.39	0.89
Hourly flow rate (vph)	591	0	0	1156	26	219
Pedestrians	10		7			
Lane Width (ft)	12.0		12.0			
Walking Speed (ft/s)	4.0		4.0			
Percent Blockage	1		1			
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			591		1757 598	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			591		1757 598	
tC, single (s)			4.1		6.4 6.2	
tC, 2 stage (s)						
tF (s)			2.2		3.5 3.3	
p0 queue free %			100		73 56	
cM capacity (veh/h)			995		94 501	
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>			
Volume Total	591	1156	245			
Volume Left	0	0	26			
Volume Right	0	0	219			
cSH	1700	1700	344			
Volume to Capacity	0.35	0.68	0.71			
Queue Length 95th (ft)	0	0	130			
Control Delay (s)	0.0	0.0	37.5			
Lane LOS	E					
Approach Delay (s)	0.0	0.0	37.5			
Approach LOS	E					
<b>Intersection Summary</b>						
Average Delay	4.6					
Intersection Capacity Utilization	84.3%		ICU Level of Service		E	
Analysis Period (min)	15					

Queues

35: Beacon St & College Rd

6/3/2008

Lane Group	EBL	EBT	WBL	WBT	NBL	NBR	SBT	SBR
Lane Group Flow (vph)	131	561	381	824	162	267	241	35
v/c Ratio	1.12	0.72	1.22	0.83	0.83	9.21	0.34	0.02
Control Delay	151.0	29.0	142.7	26.6	59.6	3767.3	31.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	151.0	29.0	142.7	26.6	59.6	3767.3	31.6	0.0
Queue Length 50th (ft)	-76	213	-149	275	76	-261	52	0
Queue Length 95th (ft)	#148	413	#361	#787	#187	#470	103	0
Internal Link Dist (ft)	679		1940		600			
Turn Bay Length (ft)	200		200		40		75	
Base Capacity (vph)	117	776	313	992	212	29	777	1454
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.12	0.72	1.22	0.83	0.76	9.21	0.31	0.02
<b>Intersection Summary</b>								
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.								
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.								

HCM Signalized Intersection Capacity Analysis

35: Beacon St & College Rd

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR2	NBL	NBR	NBR2	SBL2	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	12	12	10	12	12	12	12	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0				4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00				0.95
Frt	1.00	0.99		1.00	0.98		1.00	0.85				1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00				0.99
Satd. Flow (prot)	1570	1688		1608	1628		1501	1439				3179
Flt Permitted	0.23	1.00		0.24	1.00		0.56	1.00				0.99
Satd. Flow (perm)	380	1688		411	1628		884	1439				3179
Volume (vph)	85	420	40	305	680	75	130	130	100	5	45	145
Peak-hour factor, PHF	0.65	0.82	0.81	0.80	0.93	0.81	0.80	0.87	0.85	0.42	0.75	0.86
Adj. Flow (vph)	131	512	49	381	731	93	162	149	118	12	60	169
RTOR Reduction (vph)	0	3	0	0	4	0	0	29	0	0	0	0
Lane Group Flow (vph)	131	558	0	381	820	0	162	238	0	0	0	241
Heavy Vehicles (%)	0%	0%	0%	1%	1%	21%	1%	1%	1%	0%	0%	1%
Turn Type	Perm		D,P+P				D,Pm	NA			Perm	
Protected Phases		3		2	2 3							1
Permitted Phases	3			3			1				1	
Actuated Green, G (s)	39.7	39.7		49.9	52.9		18.9	0.0				18.9
Effective Green, g (s)	40.7	40.7		49.9	53.9		19.9	0.0				19.9
Actuated g/C Ratio	0.45	0.45		0.55	0.59		0.22	0.00				0.22
Clearance Time (s)	5.0	5.0		3.0			5.0					5.0
Vehicle Extension (s)	3.0	3.0		3.0			3.0					3.0
Lane Grp Cap (vph)	169	752		345	961		193	0				693
v/s Ratio Prot		0.33		c0.11	0.50							
v/s Ratio Perm	0.34			c0.49			c0.18					0.08
v/c Ratio	0.78	0.74		1.10	0.85		0.84	no cap				0.35
Uniform Delay, d1	21.4	20.9		18.6	15.4		34.2	Error				30.2
Progression Factor	1.00	1.00		1.00	1.00		1.00					1.00
Incremental Delay, d2	19.6	4.0		79.6	7.4		26.1	Error				0.3
Delay (s)	41.0	24.9		98.1	22.9		60.2	Error				30.5
Level of Service	D	C		F	C		E	F				C
Approach Delay (s)		28.0			46.7							26.6
Approach LOS		C			D							C

Intersection Summary

HCM Average Control Delay	Error	HCM Level of Service	F
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	91.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

35: Beacon St & College Rd

6/3/2008



Movement	SBR
Lane Configurations	↔
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1454
Flt Permitted	1.00
Satd. Flow (perm)	1454
Volume (vph)	25
Peak-hour factor, PHF	0.72
Adj. Flow (vph)	35
RTOR Reduction (vph)	0
Lane Group Flow (vph)	35
Heavy Vehicles (%)	0%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	91.3
Effective Green, g (s)	91.3
Actuated g/C Ratio	1.00
Clearance Time (s)	5.0
Vehicle Extension (s)	
Lane Grp Cap (vph)	1454
v/s Ratio Prot	
v/s Ratio Perm	c0.02
v/c Ratio	0.02
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	0.0
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

HCM Average Control Delay	Error	HCM Level of Service	F
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	91.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

38: Commonwealth Ave & Mt Alvernia Road

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕			↕			↕			↕		
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Volume (veh/h)	5	550	5	95	700	5	70	15	230	10	5	20
Peak Hour Factor	0.47	0.89	0.40	0.84	0.86	0.62	0.79	0.83	0.92	0.45	0.67	0.62
Hourly flow rate (vph)	11	618	12	113	814	8	89	18	250	22	7	32
Pedestrians	63			51			46			4		
Lane Width (ft)	12.0			12.0			14.0			12.0		
Walking Speed (ft/s)	4.0			4.0			4.0			4.0		
Percent Blockage	5			4			4			0		
Right turn flare (veh)												
Median type	None						None					
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	826		676		1835		1744		721		2004	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	826		676		1835		1744		721		2004	
tC, single (s)	4.1		4.1		7.1		6.5		6.3		7.1	
tC, 2 stage (s)												
tF (s)	2.2		2.2		3.5		4.0		3.4		3.5	
p0 queue free %	99		87		0		75		35		0	
cM capacity (veh/h)	811		874		38		72		383		10	

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	641	935	357	62
Volume Left	11	113	89	22
Volume Right	12	8	250	32
cSH	811	874	111	26
Volume to Capacity	0.01	0.13	3.22	2.34
Queue Length 95th (ft)	1	11	Err	188
Control Delay (s)	0.4	3.3	Err	927.6
Lane LOS	A	A	F	F
Approach Delay (s)	0.4	3.3	Err	927.6
Approach LOS			F	F

Intersection Summary			
Average Delay	1818.3		
Intersection Capacity Utilization	118.6%	ICU Level of Service	H
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

41: Rogers Park & Foster St

6/3/2008



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↕			↕	↕	
Sign Control	Stop			Free	Free	
Grade	0%			0%		0%
Volume (veh/h)	70	85	0	105	545	0
Peak Hour Factor	0.76	0.94	0.25	0.90	0.90	0.25
Hourly flow rate (vph)	92	90	0	117	606	0
Pedestrians				38		46
Lane Width (ft)				12.0		12.0
Walking Speed (ft/s)				4.0		4.0
Percent Blockage				3		4
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	946					
pX, platoon unblocked	0.93	0.93	0.93			
vC, conflicting volume	768	644	606			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	751	617	576			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	73	80	100			
cM capacity (veh/h)	337	443	937			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	183	117	606
Volume Left	92	0	0
Volume Right	90	0	0
cSH	382	1700	1700
Volume to Capacity	0.48	0.07	0.36
Queue Length 95th (ft)	62	0	0
Control Delay (s)	22.7	0.0	0.0
Lane LOS	C		
Approach Delay (s)	22.7	0.0	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	4.6		
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

46: Chestnut Hill Driveway & T. Moore

6/3/2008



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	55	15	240	85	40	385
Peak Hour Factor	0.69	0.70	0.51	0.88	0.69	0.70
Hourly flow rate (vph)	80	21	471	97	58	550
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1185	519			567	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1185	519			567	
tC, single (s)	6.9	6.2			4.2	
tC, 2 stage (s)						
tF (s)	3.9	3.3			2.3	
p0 queue free %	50	96			94	
cM capacity (veh/h)	159	559			943	

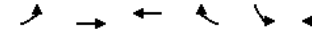
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	101	567	608
Volume Left	80	0	58
Volume Right	21	97	0
cSH	188	1700	943
Volume to Capacity	0.54	0.33	0.06
Queue Length 95th (ft)	70	0	5
Control Delay (s)	44.6	0.0	1.6
Lane LOS	E		A
Approach Delay (s)	44.6	0.0	1.6
Approach LOS	E		A

Intersection Summary			
Average Delay		4.3	
Intersection Capacity Utilization	59.2%		ICU Level of Service B
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

49: Beacon St Garage &

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Sign Control	Free	Free	Free		Stop	↔
Grade	0%	0%	0%		0%	
Volume (veh/h)	25	690	975	25	50	100
Peak Hour Factor	0.78	0.88	0.93	0.79	0.64	0.25
Hourly flow rate (vph)	32	784	1048	32	78	400
Pedestrians		50	47		42	
Lane Width (ft)	14.0	14.0			12.0	
Walking Speed (ft/s)	4.0	4.0			4.0	
Percent Blockage	5	5			4	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1122				2001	1156
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1122				2001	1156
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				0	0
cM capacity (veh/h)	608				58	222

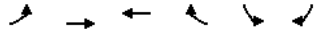
Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	816	1080	78	400
Volume Left	32	0	78	0
Volume Right	0	32	0	400
cSH	608	1700	58	222
Volume to Capacity	0.05	0.64	1.35	1.80
Queue Length 95th (ft)	4	0	170	692
Control Delay (s)	1.5	0.0	353.8	416.3
Lane LOS	A		F	F
Approach Delay (s)	1.5	0.0	406.0	
Approach LOS			F	

Intersection Summary			
Average Delay		82.3	
Intersection Capacity Utilization	80.9%		ICU Level of Service D
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

51: Campanella Way & Fr. Herlihy Drive

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↓
Sign Control		Stop	Yield		Stop	
Volume (vph)	0	45	135	0	60	65
Peak Hour Factor	0.25	0.61	0.70	0.25	0.73	0.82
Hourly flow rate (vph)	0	74	193	0	82	79
Direction, Lane #	EB 1	WB 1	SB 1	SB 2		
Volume Total (vph)	74	193	82	79		
Volume Left (vph)	0	0	82	0		
Volume Right (vph)	0	0	0	79		
Hadj (s)	0.00	0.09	0.77	-0.63		
Departure Headway (s)	4.5	4.5	5.9	4.5		
Degree Utilization, x	0.09	0.24	0.13	0.10		
Capacity (veh/h)	759	768	583	757		
Control Delay (s)	8.0	8.9	8.6	6.8		
Approach Delay (s)	8.0	8.9	7.7			
Approach LOS	A	A	A			
Intersection Summary						
Delay	8.3					
HCM Level of Service	A					
Intersection Capacity Utilization	26.1%		ICU Level of Service	A		
Analysis Period (min)	15					

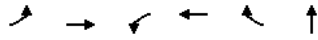


# Build 2018

Queues

2: Commonwealth Ave & Lake Street

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT
Lane Group Flow (vph)	379	678	342	659	112	459
v/c Ratio	0.80	0.49	1.31	1.18	0.35	1.27
Control Delay	42.2	18.4	196.4	130.9	10.0	169.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.2	18.4	196.4	130.9	10.0	169.3
Queue Length 50th (ft)	186	132	~240	~226	0	~161
Queue Length 95th (ft)	#340	172	#387	#342	38	#213
Internal Link Dist (ft)		1877		667		286
Turn Bay Length (ft)	200		300		200	
Base Capacity (vph)	474	1486	261	560	317	362
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.46	1.31	1.18	0.35	1.27

Intersection Summary

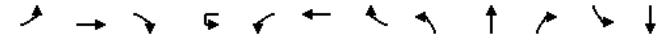
~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2: Commonwealth Ave & Lake Street

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔↔			↔	↔↔	↔		↔↔		↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1000	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	10	10	10	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95			1.00	0.95	1.00		0.95			
Frpb, ped/bikes	1.00	1.00			1.00	1.00	0.93		1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00		1.00			
Frt	1.00	1.00			1.00	1.00	0.85		0.97			
Flt Protected	0.95	1.00			0.95	1.00	1.00		0.99			
Satd. Flow (prot)	1555	3185			1483	3185	1281		1393			
Flt Permitted	0.95	1.00			0.95	1.00	1.00		0.99			
Satd. Flow (perm)	1555	3185			1483	3185	1281		1393			
Volume (vph)	345	590	0	7	287	613	95	63	225	51	0	0
Peak-hour factor, PHF	0.91	0.87	0.25	0.92	0.86	0.93	0.85	0.70	0.78	0.63	0.25	0.25
Adj. Flow (vph)	379	678	0	8	334	659	112	90	288	81	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	92	0	20	0	0	0
Lane Group Flow (vph)	379	678	0	0	342	659	20	0	439	0	0	0
Confl. Peds. (#/hr)							21					
Heavy Vehicles (%)	1%	2%	0%	2%	6%	2%	5%	25%	3%	21%	0%	0%
Turn Type	Prot			Split	Split		Perm	Split				
Protected Phases	1	2		3	3	3		4	4			
Permitted Phases							3					
Actuated Green, G (s)	26.0	37.3			15.0	15.0	15.0		21.0			
Effective Green, g (s)	26.0	37.3			15.0	15.0	15.0		21.0			
Actuated g/C Ratio	0.30	0.44			0.18	0.18	0.18		0.25			
Clearance Time (s)	4.0				4.0	4.0	4.0		4.0			
Vehicle Extension (s)	3.0				3.0	3.0	3.0		3.0			
Lane Grp Cap (vph)	474	1393			261	560	225		343			
v/s Ratio Prot	c0.24	c0.21			c0.23	0.21			c0.32			
v/s Ratio Perm							0.02					
v/c Ratio	0.80	0.49			1.31	1.18	0.09		1.28			
Uniform Delay, d1	27.3	17.2			35.2	35.2	29.4		32.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00		1.00			
Incremental Delay, d2	13.2	0.3			164.4	97.1	0.2		147.0			
Delay (s)	40.5	17.4			199.5	132.2	29.6		179.2			
Level of Service	D	B			F	F	C		F			
Approach Delay (s)		25.7				142.6			179.2			0.0
Approach LOS		C				F			F			A

Intersection Summary

HCM Average Control Delay	102.0	HCM Level of Service	F
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	85.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
2: Commonwealth Ave & Lake Street

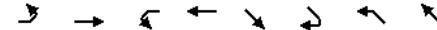
6/3/2008



Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Frpb, ped/bikes	
Fipb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	0
Peak-hour factor, PHF	0.25
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	
Heavy Vehicles (%)	0%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Queues  
3: Commonwealth Ave & Chestnut Hill

6/3/2008



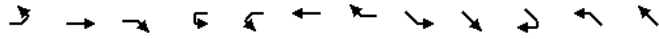
Lane Group	EBL	EBT	WBL	WBT	SET	SER	NWL	NWT
Lane Group Flow (vph)	181	777	223	379	566	58	189	895
v/c Ratio	0.54	1.05	0.84	0.58	1.48	0.16	0.68	1.43
Control Delay	30.0	86.8	42.7	45.4	262.6	25.1	70.4	237.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.0	86.8	42.7	45.4	262.6	25.1	70.4	237.8
Queue Length 50th (ft)	95	-322	121	136	-317	21	151	-938
Queue Length 95th (ft)	110	#401	#227	196	#433	40	m109	m498
Internal Link Dist (ft)		1348		1135	4158			919
Turn Bay Length (ft)	200		100			50		
Base Capacity (vph)	377	741	310	650	383	355	280	627
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	1.05	0.72	0.58	1.48	0.16	0.68	1.43

Intersection Summary
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

3: Commonwealth Ave & Chestnut Hill

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT
Lane Configurations	↔	↕	↔	↔	↕	↕	↔	↔	↕	↕	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	10	10	12	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95			1.00	0.95			0.95	1.00	1.00	1.00
Frt	1.00	0.95			1.00	0.99			1.00	0.85	1.00	0.96
Flt Protected	0.95	1.00			0.95	1.00			0.99	1.00	0.95	1.00
Satd. Flow (prot)	1577	2940			1578	2803			3057	1398	1533	1541
Flt Permitted	0.38	1.00			0.14	1.00			0.52	1.00	0.23	1.00
Satd. Flow (perm)	637	2940			241	2803			1584	1398	366	1541
Volume (vph)	123	399	230	5	205	318	15	35	450	40	142	540
Peak-hour factor, PHF	0.68	0.81	0.81	0.92	0.94	0.92	0.46	0.49	0.91	0.69	0.75	0.82
Adj. Flow (vph)	181	493	284	5	218	346	33	71	495	58	189	659
RTOR Reduction (vph)	0	65	0	0	0	5	0	0	0	17	0	11
Lane Group Flow (vph)	181	712	0	0	223	374	0	0	566	41	189	884
Heavy Vehicles (%)	3%	3%	7%	2%	3%	4%	36%	3%	6%	4%	6%	5%
Turn Type	pm+pt			pm+pt			Perm		Perm	D.P+P		
Protected Phases	9	1			9	1			3		4	3 4
Permitted Phases	1				1		3		3		3	
Actuated Green, G (s)	45.0	27.6			45.0	27.6			29.0	29.0	44.0	48.0
Effective Green, g (s)	43.0	27.6			43.0	27.6			29.0	29.0	44.0	48.0
Actuated g/C Ratio	0.36	0.23			0.36	0.23			0.24	0.24	0.37	0.40
Clearance Time (s)	2.0	4.0			2.0	4.0			4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0	3.0	3.0	
Lane Grp Cap (vph)	349	676			258	645			383	338	280	616
v/s Ratio Prot	0.07	c0.24			c0.11	0.13					0.08	c0.57
v/s Ratio Perm	0.12				0.20				0.36	0.03	0.16	
v/c Ratio	0.52	1.05			0.86	0.58			1.48	0.12	0.68	1.44
Uniform Delay, d1	28.2	46.2			31.4	41.0			45.5	35.5	40.9	36.0
Progression Factor	1.00	1.00			1.00	1.00			1.00	1.00	1.75	1.86
Incremental Delay, d2	1.3	49.3			24.6	3.8			228.7	0.7	0.6	196.8
Delay (s)	29.5	95.5			56.0	44.8			274.2	36.3	72.2	263.9
Level of Service	C	F			E	D			F	D	E	F
Approach Delay (s)		83.0				48.9			252.1			230.4
Approach LOS		F				D			F			F

Intersection Summary

HCM Average Control Delay	157.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	105.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

3: Commonwealth Ave & Chestnut Hill

6/3/2008



Movement	NWR
Lane Configurations	↔
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	175
Peak-hour factor, PHF	0.74
Adj. Flow (vph)	236
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	11%

Turn Type			
Protected Phases			
Permitted Phases			
Actuated Green, G (s)			
Effective Green, g (s)			
Actuated g/C Ratio			
Clearance Time (s)			
Vehicle Extension (s)			
Lane Grp Cap (vph)			
v/s Ratio Prot			
v/s Ratio Perm			
v/c Ratio			
Uniform Delay, d1			
Progression Factor			
Incremental Delay, d2			
Delay (s)			
Level of Service			
Approach Delay (s)			
Approach LOS			

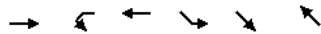
Intersection Summary

HCM Average Control Delay		HCM Level of Service	
HCM Volume to Capacity ratio			
Actuated Cycle Length (s)		Sum of lost time (s)	
Intersection Capacity Utilization		ICU Level of Service	
Analysis Period (min)			
c Critical Lane Group			

Queues

7: Beacon St & Chestnut Hill Ave

6/3/2008



Lane Group	EBT	WBL	WBT	SEL	SET	NWT
Lane Group Flow (vph)	771	176	743	293	810	1005
v/c Ratio	1.93	0.98	0.45	1.31	0.65	1.68
Control Delay	455.6	94.5	29.3	179.1	20.3	329.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	455.6	94.5	29.3	179.1	20.3	329.9
Queue Length 50th (ft)	~484	95	157	~299	182	~604
Queue Length 95th (ft)	#610	#243	174	m#232	m155	#712
Internal Link Dist (ft)	3431		1419		919	239
Turn Bay Length (ft)		100				
Base Capacity (vph)	399	179	1649	223	1239	600
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.93	0.98	0.45	1.31	0.65	1.68

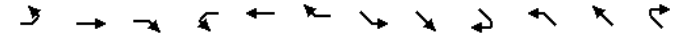
Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

7: Beacon St & Chestnut Hill Ave

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↑↑		↔	↑↑↑		↔	↑↑			↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	12	12	10	11	10	14	16	16
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				4.0
Lane Util. Factor		0.95		1.00	0.91		1.00	0.95				0.95
Frt		0.98		1.00	0.96		1.00	0.98				0.98
Flt Protected		1.00		0.95	1.00		0.95	1.00				0.99
Satd. Flow (prot)		3038		1510	4398		1472	2915				3420
Flt Permitted		0.51		0.13	1.00		0.12	1.00				0.71
Satd. Flow (perm)		1550		211	4398		188	2915				2460
Volume (vph)	65	552	56	165	435	175	205	555	110	77	702	80
Peak-hour factor, PHF	0.88	0.90	0.67	0.94	0.82	0.82	0.70	0.80	0.95	0.61	0.92	0.69
Adj. Flow (vph)	74	613	84	176	530	213	293	694	116	126	763	116
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	771	0	176	743	0	293	810	0	0	1005	0
Heavy Vehicles (%)	2%	1%	2%	4%	1%	3%	6%	2%	1%	6%	4%	
Turn Type	Perm		D.P+P		D.P+P		Perm				Perm	
Protected Phases		1		11		8		8				9
Permitted Phases	1			1			9				9	
Actuated Green, G (s)		30.2		40.2		49.0		51.0				33.0
Effective Green, g (s)		30.2		40.2		47.0		51.0				33.0
Actuated g/C Ratio		0.25		0.34		0.37		0.39				0.28
Clearance Time (s)		4.0		4.0				2.0				4.0
Vehicle Extension (s)		3.0		3.0				3.0				3.0
Lane Grp Cap (vph)		390		179	1620		223	1239				677
v/s Ratio Prot				c0.08	0.17		c0.15	0.28				
v/s Ratio Perm		c0.50		0.25			0.36				c0.41	
v/c Ratio		1.98		0.98	0.46		1.31	0.65				1.48
Uniform Delay, d1		44.9		33.6	28.8		34.4	27.5				43.5
Progression Factor		1.00		1.00	1.00		1.46	0.69				0.39
Incremental Delay, d2		448.8		62.0	0.2		144.2	0.2				224.1
Delay (s)		493.7		95.6	29.0		194.5	19.1				241.2
Level of Service		F		F	C		F	B				F
Approach Delay (s)		493.7			41.8			65.7				241.2
Approach LOS		F			D			E				F

Intersection Summary

HCM Average Control Delay	193.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.57		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	32.8
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

8: Beacon St & Gate House Road

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR						
Lane Configurations	↖	↗			↕			↕			↕							
Sign Control	Free			Free			Stop			Stop								
Grade	0%			0%			0%			0%								
Volume (veh/h)	383	700	10	5	634	72	5	5	28	5	313							
Peak Hour Factor	0.99	0.93	0.67	0.50	0.89	0.71	0.42	0.33	0.50	0.84	0.38	0.90						
Hourly flow rate (vph)	387	753	15	10	712	101	12	15	10	33	13	348						
Pedestrians	8			10			5			8								
Lane Width (ft)	12.0			12.0			12.0			12.0								
Walking Speed (ft/s)	4.0			4.0			4.0			4.0								
Percent Blockage	1			1			0			1								
Right turn flare (veh)																		
Median type							None			None								
Median storage (veh)																		
Upstream signal (ft)																		
pX, platoon unblocked																		
vC, conflicting volume	822		773			2684			2381		775		2345		2337		779	
vC1, stage 1 conf vol																		
vC2, stage 2 conf vol																		
vCu, unblocked vol	822		773			2684			2381		775		2345		2337		779	
tC, single (s)	4.1		4.4			7.1			6.5		6.2		7.2		6.5		6.3	
tC, 2 stage (s)																		
tF (s)	2.2		2.4			3.5			4.0		3.3		3.6		4.0		3.4	
p0 queue free %	51		99			0			13		97		0		29		8	
cM capacity (veh/h)	789		746			0			17		396		4		18		377	

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	387	768	824	37	394
Volume Left	387	0	10	12	33
Volume Right	0	15	101	10	348
cSH	789	1700	746	1	39
Volume to Capacity	0.49	0.45	0.01	40.06	10.00
Queue Length 95th (ft)	68	0	1	Err	Err
Control Delay (s)	13.9	0.0	0.4	Err	Err
Lane LOS	B		A	F	F
Approach Delay (s)	4.6		0.4	Err	Err
Approach LOS			F	F	F

Intersection Summary				
Average Delay	1792.2			
Intersection Capacity Utilization	119.2%	ICU Level of Service		H
Analysis Period (min)	15			

Queues

13: Washington St & Chestnut Hill

6/3/2008



Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	645	57	572	83	418	119	355	162
v/c Ratio	2.71	0.46	1.24	0.31	0.47	0.89	0.50	0.29
Control Delay	790.7	35.8	153.7	22.8	20.7	83.5	22.3	19.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	790.7	35.8	153.7	22.8	20.7	83.5	22.3	19.0
Queue Length 50th (ft)	-646	24	-408	25	135	53	117	47
Queue Length 95th (ft) m#580	39	#588	76	#370	#140	#347	114	
Internal Link Dist (ft)	985	930	4158	1061				
Turn Bay Length (ft)	50	50	75	50				
Base Capacity (vph)	238	124	461	267	898	133	714	551
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	2.71	0.46	1.24	0.31	0.47	0.89	0.50	0.29

Intersection Summary	
~	Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
m	Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

13: Washington St & Chestnut Hill

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔ ↗ ↘ ↙ ↘ ↗ ↙ ↘ ↗ ↘ ↙ ↘ ↗ ↘											
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	16	10	11	16	16	16	16	12	12	10
Total Lost time (s)	4.0			4.0			4.0			4.0		
Lane Util. Factor	1.00			1.00			1.00			1.00		
Frt	0.98			1.00			0.98			1.00		
Flt Protected	0.99			0.95			1.00			0.95		
Satd. Flow (prot)	1369			1189			1220			1841		
Flt Permitted	0.12			0.16			1.00			0.45		
Satd. Flow (perm)	161			199			1220			881		
Volume (vph)	65	439	100	35	356	135	65	351	45	80	334	123
Peak-hour factor, PHF	0.86	0.96	0.89	0.61	0.88	0.81	0.78	0.99	0.71	0.67	0.94	0.76
Adj. Flow (vph)	76	457	112	57	405	167	83	355	63	119	355	162
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	645	0	57	572	0	83	418	0	119	355	162
Heavy Vehicles (%)	2%	3%	1%	0%	1%	3%	0%	2%	0%	5%	1%	4%
Bus Blockages (#/hr)	0	0	0	26	26	26	0	0	0	0	0	0
Parking (#/hr)	5	5	5	5	5	5				5	5	5
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases	1			1			3			3		
Permitted Phases	1			1			3			3		
Actuated Green, G (s)	25.2			25.2			43.4			43.4		
Effective Green, g (s)	25.2			25.2			43.4			43.4		
Actuated g/C Ratio	0.28			0.28			0.48			0.48		
Clearance Time (s)	4.0			4.0			4.0			4.0		
Vehicle Extension (s)	3.0			3.0			3.0			3.0		
Lane Grp Cap (vph)	45			56			342			425		
v/s Ratio Prot	c4.00			0.29			0.09			0.21		
v/c Ratio	14.33			1.02			1.67			0.20		
Uniform Delay, d1	32.4			32.4			32.4			13.3		
Progression Factor	1.60			1.00			1.00			1.00		
Incremental Delay, d2	6003.9			125.4			315.2			0.2		
Delay (s)	6055.8			157.8			347.6			13.5		
Level of Service	F			F			B			B		
Approach Delay (s)	6055.8			330.4			15.5			15.9		
Approach LOS	F			F			B			B		
<b>Intersection Summary</b>												
HCM Average Control Delay	1713.7			HCM Level of Service			F					
HCM Volume to Capacity ratio	5.57											
Actuated Cycle Length (s)	90.0			Sum of lost time (s)			21.4					
Intersection Capacity Utilization	108.2%			ICU Level of Service			G					
Analysis Period (min)	15											
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

15: Campanella Way & St. T Moore

6/3/2008

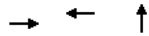


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔ ↗ ↘ ↙ ↘ ↗ ↙ ↘ ↗ ↘ ↙ ↘ ↗ ↘					
Sign Control	Yield		Free		Free	
Grade	0%		0%		0%	
Volume (veh/h)	25	87	85	315	182	96
Peak Hour Factor	0.69	0.70	0.51	0.88	0.72	0.81
Hourly flow rate (vph)	36	124	167	358	253	119
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	366					
pX, platoon unblocked						
vC, conflicting volume	1003	312	371			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1003	312	371			
tC, single (s)	6.9	6.2	4.2			
tC, 2 stage (s)						
tF (s)	3.9	3.3	2.3			
p0 queue free %	81	83	85			
cM capacity (veh/h)	189	731	1119			
<b>Direction, Lane #</b>						
	EB 1	NB 1	SB 1			
Volume Total	161	525	371			
Volume Left	36	167	0			
Volume Right	124	0	119			
cSH	443	1119	1700			
Volume to Capacity	0.36	0.15	0.22			
Queue Length 95th (ft)	41	13	0			
Control Delay (s)	17.7	3.9	0.0			
Lane LOS	C	A				
Approach Delay (s)	17.7	3.9	0.0			
Approach LOS	C					
<b>Intersection Summary</b>						
Average Delay	4.6					
Intersection Capacity Utilization	58.3%		ICU Level of Service		B	
Analysis Period (min)	15					

Queues

16: Washington St & Brock St

6/3/2008



Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	563	531	557
v/c Ratio	1.07	0.88	0.71
Control Delay	88.4	59.3	26.4
Queue Delay	0.0	0.0	0.0
Total Delay	88.4	59.3	26.4
Queue Length 50th (ft)	~360	292	208
Queue Length 95th (ft)	#571	#504	#546
Internal Link Dist (ft)	966	802	965
Turn Bay Length (ft)			
Base Capacity (vph)	527	604	782
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	1.07	0.88	0.71

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

16: Washington St & Brock St

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑			↑				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frpb, ped/bikes		1.00			0.99			0.99				
Flpb, ped/bikes		1.00			1.00			1.00				
Frt		1.00			0.99			0.97				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1625			1565			1603				
Flt Permitted		0.79			1.00			0.99				
Satd. Flow (perm)		1282			1565			1603				
Volume (vph)	15	495	0	0	445	30	67	316	102	0	0	0
Peak-hour factor, PHF	0.80	0.91	0.25	0.25	0.91	0.72	0.90	0.90	0.77	0.25	0.25	0.25
Adj. Flow (vph)	19	544	0	0	489	42	74	351	132	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	9	0	0	0	0
Lane Group Flow (vph)	0	563	0	0	528	0	0	548	0	0	0	0
Confl. Peds. (#/hr)	23					23			9			
Heavy Vehicles (%)	6%	5%	0%	0%	8%	0%	4%	1%	3%	0%	0%	0%
Turn Type	Perm						Perm					
Protected Phases		1			1			4				
Permitted Phases	1						4					
Actuated Green, G (s)		31.4			31.4			43.4				
Effective Green, g (s)		31.4			31.4			43.4				
Actuated g/C Ratio		0.35			0.35			0.48				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		447			546			773				
v/s Ratio Prot					0.34							
v/s Ratio Perm		c0.44						0.34				
v/c Ratio		1.26			0.97			0.71				
Uniform Delay, d1		29.3			28.8			18.3				
Progression Factor		1.00			1.77			1.00				
Incremental Delay, d2		133.8			26.3			3.0				
Delay (s)		163.1			77.2			21.3				
Level of Service		F			E			C				
Approach Delay (s)		163.1			77.2			21.3				0.0
Approach LOS		F			E			C				A

Intersection Summary

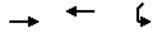
HCM Average Control Delay	87.7	HCM Level of Service	F
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	78.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



## Queues

18: Commonwealth Ave &amp; South St

6/3/2008



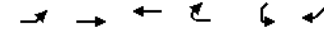
Lane Group	EBT	WBT	SWL
Lane Group Flow (vph)	771	585	234
v/c Ratio	0.47	0.36	0.41
Control Delay	12.9	11.7	7.0
Queue Delay	0.0	0.0	0.0
Total Delay	12.9	11.7	7.0
Queue Length 50th (ft)	85	60	5
Queue Length 95th (ft)	216	157	36
Internal Link Dist (ft)	424	1348	723
Turn Bay Length (ft)			
Base Capacity (vph)	1652	1636	564
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.47	0.36	0.41

## Intersection Summary

## HCM Signalized Intersection Capacity Analysis

18: Commonwealth Ave &amp; South St

6/3/2008



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations		↑↑	↑↑		∩	∩
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	1.00		0.88	
Flt Protected		1.00	1.00		1.00	
Satd. Flow (prot)		3217	3185		1316	
Flt Permitted		1.00	1.00		1.00	
Satd. Flow (perm)		3217	3185		1316	
Volume (vph)	0	709	556	0	15	180
Peak-hour factor, PHF	0.92	0.92	0.95	0.95	0.75	0.84
Adj. Flow (vph)	0	771	585	0	20	214
RTOR Reduction (vph)	0	0	0	0	149	0
Lane Group Flow (vph)	0	771	585	0	85	0
Heavy Vehicles (%)	0%	1%	2%	0%	0%	1%
Parking (#/hr)					2	2
Turn Type						
Protected Phases		1	1		3	
Permitted Phases						
Actuated Green, G (s)		34.4	34.4		21.3	
Effective Green, g (s)		34.4	34.4		21.3	
Actuated g/C Ratio		0.49	0.49		0.30	
Clearance Time (s)		4.0	4.0		4.0	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1574	1559		399	
v/s Ratio Prot		c0.24	0.18		c0.06	
v/s Ratio Perm						
v/c Ratio		0.49	0.38		0.21	
Uniform Delay, d1		12.1	11.2		18.3	
Progression Factor		1.00	1.00		1.00	
Incremental Delay, d2		1.1	0.7		1.2	
Delay (s)		13.1	11.9		19.5	
Level of Service		B	B		B	
Approach Delay (s)		13.1	11.9		19.5	
Approach LOS		B	B		B	

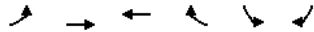
## Intersection Summary

HCM Average Control Delay	13.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	70.3	Sum of lost time (s)	14.6
Intersection Capacity Utilization	41.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

19: Commonwealth Ave & Foster St

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↗
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	664	681	85	0	368
Peak Hour Factor	0.25	0.89	0.96	0.77	0.25	0.90
Hourly flow rate (vph)	0	746	709	110	0	409
Pedestrians		59			59	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		5			5	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)			504			
pX, platoon unblocked	0.92				0.92	0.92
vC, conflicting volume	879				1197	528
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	783				1128	402
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	18
cM capacity (veh/h)	739				176	500

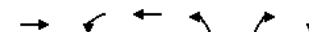
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	373	373	473	347	409
Volume Left	0	0	0	0	0
Volume Right	0	0	0	110	409
cSH	1700	1700	1700	1700	500
Volume to Capacity	0.22	0.22	0.28	0.20	0.82
Queue Length 95th (ft)	0	0	0	0	198
Control Delay (s)	0.0	0.0	0.0	0.0	36.9
Lane LOS					E
Approach Delay (s)	0.0		0.0		36.9
Approach LOS					E

Intersection Summary			
Average Delay		7.6	
Intersection Capacity Utilization	60.8%		ICU Level of Service B
Analysis Period (min)	15		

Queues

20: Washington St & Foster St

6/3/2008



Lane Group	EBT	WBL	WBT	NBL	NBR	SBT
Lane Group Flow (vph)	681	291	378	119	236	174
v/c Ratio	1.19	0.53	0.71	0.70	1.00	0.59
Control Delay	111.3	21.4	30.9	41.0	67.5	35.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	111.3	21.4	30.9	41.0	67.5	35.1
Queue Length 50th (ft)	~421	126	153	64	0	91
Queue Length 95th (ft) m#452	m101	m161	105	#126	132	
Internal Link Dist (ft)	802		985			367
Turn Bay Length (ft)		75			80	
Base Capacity (vph)	572	551	533	224	236	390
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.19	0.53	0.71	0.53	1.00	0.45

Intersection Summary	
~	Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
m	Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

20: Washington St & Foster St

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	10	10	12	12	10	10	10	12	10	10
Total Lost time (s)	4.0		4.0		4.0		4.0		4.0		4.0	
Lane Util. Factor	1.00		1.00		1.00		1.00		1.00		1.00	
Frt	0.96		1.00		1.00		1.00		0.85		0.96	
Flt Protected	1.00		0.95		1.00		0.95		1.00		0.99	
Satd. Flow (prot)	1580		1486		1517		1501		1195		1520	
Flt Permitted	1.00		0.13		1.00		0.50		1.00		0.99	
Satd. Flow (perm)	1580		197		1517		796		1195		1520	
Volume (vph)	0	412	170	250	340	0	105	0	203	25	79	40
Peak-hour factor, PHF	0.25	0.87	0.82	0.86	0.90	0.25	0.88	0.25	0.86	0.72	0.88	0.81
Adj. Flow (vph)	0	474	207	291	378	0	119	0	236	35	90	49
RTOR Reduction (vph)	0	17	0	0	0	0	0	0	236	0	0	0
Lane Group Flow (vph)	0	664	0	291	378	0	119	0	0	0	174	0
Heavy Vehicles (%)	0%	5%	1%	2%	10%	0%	1%	0%	1%	0%	0%	0%
Bus Blockages (#/hr)	0	0	6	0	6	0	0	0	0	0	0	0
Parking (#/hr)							2		2		2	
Turn Type			pm+pt		D.Pm		NA		Perm			
Protected Phases	1		9		1						3	
Permitted Phases			1				3				3	
Actuated Green, G (s)	31.7		62.6		31.7		17.4		0.0		17.4	
Effective Green, g (s)	31.7		60.6		31.7		17.4		0.0		17.4	
Actuated g/C Ratio	0.35		0.67		0.35		0.19		0.00		0.19	
Clearance Time (s)	4.0		2.0		4.0		4.0				4.0	
Vehicle Extension (s)	3.0		3.0		3.0		3.0				3.0	
Lane Grp Cap (vph)	557		547		534		154		0		294	
v/s Ratio Prot	c0.42		c0.17		0.25							
v/s Ratio Perm			0.19				c0.15				0.11	
v/c Ratio	1.19		0.53		0.71		0.77		0.00		0.59	
Uniform Delay, d1	29.2		15.8		25.2		34.4		45.0		33.1	
Progression Factor	0.64		1.27		1.02		1.00		1.00		1.00	
Incremental Delay, d2	91.2		0.5		3.8		21.0		0.0		3.2	
Delay (s)	109.8		20.5		29.5		55.5		45.0		36.2	
Level of Service	F		C		C		E		D		D	
Approach Delay (s)	109.8				25.6		48.5				36.2	
Approach LOS	F				C		D				D	

Intersection Summary

HCM Average Control Delay	61.4	HCM Level of Service	E
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

24: Glenmont Rd & Lake St

6/3/2008



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↔	↔	↔	↔	↔
Sign Control	Stop		Free			Free
Grade	0%		0%		0%	
Volume (veh/h)	0	85	554	0	0	0
Peak Hour Factor	0.25	0.67	0.91	0.25	0.25	0.25
Hourly flow rate (vph)	0	127	609	0	0	0
Pedestrians	6					
Lane Width (ft)	0.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	1130					
pX, platoon unblocked						
vC, conflicting volume	609	615			609	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	609	615			609	
tC, single (s)	6.4	6.3			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.4			2.2	
p0 queue free %	100	74			100	
cM capacity (veh/h)	462	484			980	

Direction, Lane #

	WB 1	NB 1
Volume Total	127	609
Volume Left	0	0
Volume Right	127	0
cSH	484	1700
Volume to Capacity	0.26	0.36
Queue Length 95th (ft)	26	0
Control Delay (s)	15.1	0.0
Lane LOS	C	
Approach Delay (s)	15.1	0.0
Approach LOS	C	

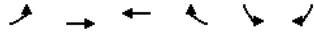
Intersection Summary

Average Delay	2.6		
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

26: Commonwealth Ave & Campus Driveway

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Sign Control	Free	Free	Free		Stop	
Grade	0%	0%	0%		0%	
Volume (veh/h)	0	638	952	57	0	60
Peak Hour Factor	0.61	0.89	0.96	0.61	0.88	0.88
Hourly flow rate (vph)	0	717	992	93	0	68
Pedestrians		53			53	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		4			4	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)		747				
pX, platoon unblocked					0.90	
vC, conflicting volume	1138				1450	649
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1138				1390	649
tC, single (s)	4.1				6.8	7.5
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.6
p0 queue free %	100				100	79
cM capacity (veh/h)	594				117	323

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	358	358	661	424	68
Volume Left	0	0	0	0	0
Volume Right	0	0	0	93	68
cSH	1700	1700	1700	1700	323
Volume to Capacity	0.21	0.21	0.39	0.25	0.21
Queue Length 95th (ft)	0	0	0	0	20
Control Delay (s)	0.0	0.0	0.0	0.0	19.1
Lane LOS					C
Approach Delay (s)	0.0		0.0		19.1
Approach LOS					C

Intersection Summary				
Average Delay		0.7		
Intersection Capacity Utilization	50.6%		ICU Level of Service	A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis

30: Kenrick St & Lake St

6/3/2008



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↓			↑		
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	135	0	105	534	0	0
Peak Hour Factor	0.86	0.25	0.73	0.91	0.25	0.25
Hourly flow rate (vph)	157	0	144	587	0	0
Pedestrians	35				37	
Lane Width (ft)	12.0				0.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	3				0	
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)					1045	
pX, platoon unblocked						
vC, conflicting volume	946	35	35			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	946	35	35			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	38	100	91			
cM capacity (veh/h)	255	1013	1530			

Direction, Lane #	EB 1	NB 1
Volume Total	157	731
Volume Left	157	144
Volume Right	0	0
cSH	255	1530
Volume to Capacity	0.62	0.09
Queue Length 95th (ft)	92	8
Control Delay (s)	39.3	2.4
Lane LOS	E	A
Approach Delay (s)	39.3	2.4
Approach LOS	E	

Intersection Summary			
Average Delay		8.9	
Intersection Capacity Utilization	52.7%		ICU Level of Service A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

33: Beacon St & Reservoir Rd

6/3/2008

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↓	↓
Sign Control	Free		Free		Stop	
Grade	0%		0%		0%	
Volume (veh/h)	825	0	0	695	15	266
Peak Hour Factor	0.96	0.25	0.25	0.83	0.70	0.82
Hourly flow rate (vph)	859	0	0	837	21	324
Pedestrians	6		8			
Lane Width (ft)	12.0		12.0			
Walking Speed (ft/s)	4.0		4.0			
Percent Blockage	0		1			
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			859		1703 867	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			859		1703 867	
tC, single (s)			4.1		6.4 6.2	
tC, 2 stage (s)						
tF (s)			2.2		3.5 3.3	
p0 queue free %			100		79 8	
cM capacity (veh/h)			790		101 353	
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>			
Volume Total	859	837	346			
Volume Left	0	0	21			
Volume Right	0	0	324			
cSH	1700	1700	306			
Volume to Capacity	0.51	0.49	1.13			
Queue Length 95th (ft)	0	0	354			
Control Delay (s)	0.0	0.0	129.0			
Lane LOS	F					
Approach Delay (s)	0.0	0.0	129.0			
Approach LOS	F					
<b>Intersection Summary</b>						
Average Delay	21.8					
Intersection Capacity Utilization	74.9%		ICU Level of Service		D	
Analysis Period (min)	15					

Queues

35: Beacon St & College Rd

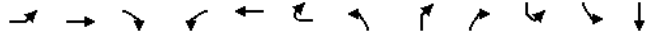
6/3/2008

Lane Group	EBL	EBT	WBL	WBT	NBL	NBR	SBT	SBR
Lane Group Flow (vph)	164	866	251	675	146	271	389	28
v/c Ratio	0.66	1.07	1.15	0.65	1.40	11.29	0.64	0.02
Control Delay	35.8	75.1	130.6	16.0	258.2	4717.0	38.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.8	75.1	130.6	16.0	258.2	4717.0	38.0	0.0
Queue Length 50th (ft)	49	363	-84	140	-88	-244	86	0
Queue Length 95th (ft)	#200	#888	#260	341	#211	#435	143	0
Internal Link Dist (ft)	679		1940		600			
Turn Bay Length (ft)	200		200		40		75	
Base Capacity (vph)	247	812	218	1035	104	24	608	1264
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	1.07	1.15	0.65	1.40	11.29	0.64	0.02
<b>Intersection Summary</b>								
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.								
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.								

HCM Signalized Intersection Capacity Analysis

35: Beacon St & College Rd

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR2	NBL	NBR	NBR2	SBL2	SBL	SBT
Lane Configurations	↔	↔		↔	↔		↔	↔		↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	12	12	10	12	12	12	12	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0				4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00				0.95
Frt	1.00	0.98		1.00	0.98		1.00	0.85				1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00				0.98
Satd. Flow (prot)	1555	1652		1593	1656		1516	1420				3113
Flt Permitted	0.36	1.00		0.10	1.00		0.36	1.00				0.98
Satd. Flow (perm)	583	1652		166	1656		582	1420				3113
Volume (vph)	149	740	80	203	471	37	115	140	74	5	100	200
Peak-hour factor, PHF	0.91	0.96	0.84	0.81	0.78	0.52	0.79	0.84	0.71	0.62	0.80	0.78
Adj. Flow (vph)	164	771	95	251	604	71	146	167	104	8	125	256
RTOR Reduction (vph)	0	5	0	0	4	0	0	24	0	0	0	0
Lane Group Flow (vph)	164	861	0	251	671	0	146	247	0	0	0	389
Heavy Vehicles (%)	1%	2%	0%	2%	1%	7%	0%	2%	3%	0%	2%	3%
Turn Type	Perm		D,P+P			D,Pm	NA				Perm	
Protected Phases		3		2	2 3							1
Permitted Phases	3			3			1				1	
Actuated Green, G (s)	39.5	39.5		47.6	50.6		15.2	0.0				15.2
Effective Green, g (s)	40.5	40.5		47.6	51.6		16.2	0.0				16.2
Actuated g/C Ratio	0.47	0.47		0.56	0.60		0.19	0.00				0.19
Clearance Time (s)	5.0	5.0		3.0			5.0					5.0
Vehicle Extension (s)	3.0	3.0		3.0			3.0					3.0
Lane Grp Cap (vph)	276	783		211	1001		110	0				591
v/s Ratio Prot		0.52		c0.10	0.41							
v/s Ratio Perm	0.28			c0.57			c0.25					0.12
v/c Ratio	0.59	1.10		1.19	0.67		1.33	no cap				0.66
Uniform Delay, d1	16.4	22.5		23.2	11.2		34.6	Error				32.0
Progression Factor	1.00	1.00		1.00	1.00		1.00					1.00
Incremental Delay, d2	3.4	63.0		122.6	1.8		196.9	Error				2.7
Delay (s)	19.8	85.5		145.8	13.0		231.5	Error				34.7
Level of Service	B	F		F	B		F	F				C
Approach Delay (s)		75.0			49.0							32.4
Approach LOS		E			D							C

Intersection Summary

HCM Average Control Delay	Error	HCM Level of Service	F
HCM Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	85.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

35: Beacon St & College Rd

6/3/2008



Movement	SBR	SBT
Lane Configurations	↔	↔
Ideal Flow (vphpl)	1900	
Lane Width	12	
Total Lost time (s)	4.0	
Lane Util. Factor	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	1264	
Flt Permitted	1.00	
Satd. Flow (perm)	1264	
Volume (vph)	15	
Peak-hour factor, PHF	0.54	
Adj. Flow (vph)	28	
RTOR Reduction (vph)	0	
Lane Group Flow (vph)	28	
Heavy Vehicles (%)	15%	
Turn Type	Free	
Protected Phases		
Permitted Phases	Free	
Actuated Green, G (s)	85.4	
Effective Green, g (s)	85.4	
Actuated g/C Ratio	1.00	
Clearance Time (s)	5.0	
Vehicle Extension (s)		
Lane Grp Cap (vph)	1264	
v/s Ratio Prot		
v/s Ratio Perm	c0.02	
v/c Ratio	0.02	
Uniform Delay, d1	0.0	
Progression Factor	1.00	
Incremental Delay, d2	0.0	
Delay (s)	0.0	
Level of Service	A	
Approach Delay (s)		
Approach LOS		

Intersection Summary

HCM Average Control Delay	Error	HCM Level of Service	F
HCM Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	85.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

38: Commonwealth Ave & Mt Alvernia Road

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕			↕			↕			↕		
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Volume (veh/h)	35	786	5	55	566	10	27	15	264	35	5	20
Peak Hour Factor	0.46	0.83	0.35	0.83	0.91	0.40	0.71	0.69	0.94	0.65	0.25	0.59
Hourly flow rate (vph)	76	947	14	66	622	25	38	22	281	54	20	34
Pedestrians	9			9			10			10		
Lane Width (ft)	12.0			12.0			14.0			14.0		
Walking Speed (ft/s)	4.0			4.0			4.0			4.0		
Percent Blockage	1			1			1			1		
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	647			971			1936 1896			973 2174 1890		643
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	647			971			1936 1896			973 2174 1890		643
tC, single (s)	4.1			4.1			7.2 6.5			6.2 7.1 6.5		6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6 4.0			3.3 3.5 4.0		3.3
p0 queue free %	92			90			0 63			7 0 66		93
cM capacity (veh/h)	948			695			27 58			301 1 58		464

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	1037	713	341	108
Volume Left	76	66	38	54
Volume Right	14	25	281	34
cSH	948	695	126	3
Volume to Capacity	0.08	0.10	2.71	40.47
Queue Length 95th (ft)	7	8	774	Err
Control Delay (s)	2.2	2.5	845.2	Err
Lane LOS	A	A	F	F
Approach Delay (s)	2.2	2.5	845.2	Err
Approach LOS			F	F

Intersection Summary			
Average Delay	622.7		
Intersection Capacity Utilization	85.3%	ICU Level of Service	E
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

41: Rogers Park & Foster St

6/3/2008



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↕			↕	↕	
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	120	85	0	148	589	0
Peak Hour Factor	0.83	0.94	0.25	0.80	0.96	0.25
Hourly flow rate (vph)	145	90	0	185	614	0
Pedestrians				29 30		
Lane Width (ft)				12.0 12.0		
Walking Speed (ft/s)				4.0 4.0		
Percent Blockage				2 2		
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)				946		
pX, platoon unblocked	0.92	0.92	0.92			
vC, conflicting volume	829	643	614			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	813	611	579			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	54	80	100			
cM capacity (veh/h)	313	443	922			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	235	185	614
Volume Left	145	0	0
Volume Right	90	0	0
cSH	352	1700	1700
Volume to Capacity	0.67	0.11	0.36
Queue Length 95th (ft)	114	0	0
Control Delay (s)	33.5	0.0	0.0
Lane LOS	D		
Approach Delay (s)	33.5	0.0	0.0
Approach LOS	D		

Intersection Summary			
Average Delay	7.6		
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

46: Chestnut Hill Driveway & T. Moore

6/3/2008

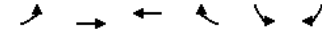


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	60	10	319	156	7	300
Peak Hour Factor	0.69	0.70	0.51	0.88	0.69	0.70
Hourly flow rate (vph)	87	14	625	177	10	429
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1163	714			803	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1163	714			803	
tC, single (s)	6.9	6.2			4.2	
tC, 2 stage (s)						
tF (s)	3.9	3.3			2.3	
p0 queue free %	50	97			99	
cM capacity (veh/h)	173	433			767	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	101	803	439			
Volume Left	87	0	10			
Volume Right	14	177	0			
cSH	189	1700	767			
Volume to Capacity	0.54	0.47	0.01			
Queue Length 95th (ft)	69	0	1			
Control Delay (s)	44.2	0.0	0.4			
Lane LOS	E		A			
Approach Delay (s)	44.2	0.0	0.4			
Approach LOS	E		A			
<b>Intersection Summary</b>						
Average Delay	3.5					
Intersection Capacity Utilization	40.3%			ICU Level of Service	A	
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis

49: Beacon St Garage &

6/3/2008



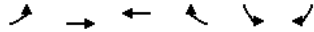
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Sign Control	Free	Free			Stop	
Grade	0%	0%			0%	
Volume (veh/h)	62	1029	677	269	5	19
Peak Hour Factor	0.88	0.96	0.83	0.71	0.50	0.75
Hourly flow rate (vph)	70	1072	816	379	10	25
Pedestrians		17	21		17	
Lane Width (ft)	14.0	14.0			12.0	
Walking Speed (ft/s)	4.0	4.0			4.0	
Percent Blockage	2	2			1	
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1212				2256	1039
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1212				2256	1039
tC, single (s)	4.2				6.9	6.3
tC, 2 stage (s)						
tF (s)	2.3				4.0	3.4
p0 queue free %	87				64	90
cM capacity (veh/h)	551				27	258
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>	<b>SB 2</b>		
Volume Total	1142	1195	10	25		
Volume Left	70	0	10	0		
Volume Right	0	379	0	25		
cSH	551	1700	27	258		
Volume to Capacity	0.13	0.70	0.36	0.10		
Queue Length 95th (ft)	11	0	28	8		
Control Delay (s)	4.8	0.0	197.6	20.4		
Lane LOS	A		F	C		
Approach Delay (s)	4.8	0.0	70.6			
Approach LOS			F			
<b>Intersection Summary</b>						
Average Delay	3.4					
Intersection Capacity Utilization	130.9%			ICU Level of Service	H	
Analysis Period (min)	15					



HCM Unsignalized Intersection Capacity Analysis

51: Campanella Way & Fr. Herlihy Drive

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↓
Sign Control		Stop	Yield		Stop	
Volume (vph)	0	1	181	0	107	138
Peak Hour Factor	0.25	0.71	0.70	0.25	0.89	0.83
Hourly flow rate (vph)	0	1	259	0	120	166
Direction, Lane #	EB 1	WB 1	SB 1	SB 2		
Volume Total (vph)	1	259	120	166		
Volume Left (vph)	0	0	120	0		
Volume Right (vph)	0	0	0	166		
Hadj (s)	0.00	0.05	0.72	-0.65		
Departure Headway (s)	4.9	4.6	5.9	4.5		
Degree Utilization, x	0.00	0.33	0.20	0.21		
Capacity (veh/h)	676	741	591	766		
Control Delay (s)	7.9	9.9	9.1	7.5		
Approach Delay (s)	7.9	9.9	8.1			
Approach LOS	A	A	A			
Intersection Summary						
Delay	9.0					
HCM Level of Service	A					
Intersection Capacity Utilization	28.4%		ICU Level of Service	A		
Analysis Period (min)	15					

Queues

2: Commonwealth Ave & Lake Street

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT
Lane Group Flow (vph)	229	665	410	814	138	648
v/c Ratio	0.73	0.64	0.90	0.84	0.32	1.57
Control Delay	53.9	30.9	59.2	43.0	8.0	297.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.9	30.9	59.2	43.0	8.0	297.3
Queue Length 50th (ft)	137	190	247	252	3	~303
Queue Length 95th (ft)	#255	213	#408	#392	46	#413
Internal Link Dist (ft)		1877		667		202
Turn Bay Length (ft)	200		300		200	
Base Capacity (vph)	312	1215	456	968	434	412
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.55	0.90	0.84	0.32	1.57

Intersection Summary

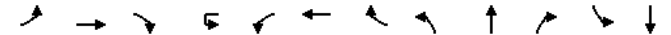
~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2: Commonwealth Ave & Lake Street

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1000	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	10	10	10	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95			1.00	0.95	1.00		0.95			
Frpb, ped/bikes	1.00	1.00			1.00	1.00	0.81		1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00		1.00			
Flt	1.00	1.00			1.00	1.00	0.85		0.97			
Flt Protected	0.95	1.00			0.95	1.00	1.00		0.99			
Satd. Flow (prot)	1570	3180			1529	3249	1171		1521			
Flt Permitted	0.95	1.00			0.95	1.00	1.00		0.99			
Satd. Flow (perm)	1570	3180			1529	3249	1171		1521			
Volume (vph)	199	525	5	37	307	741	120	144	292	97	0	0
Peak-hour factor, PHF	0.87	0.80	0.58	0.92	0.83	0.91	0.87	0.84	0.84	0.75	0.25	0.25
Adj. Flow (vph)	229	656	9	40	370	814	138	171	348	129	0	0
RTOR Reduction (vph)	0	1	0	0	0	0	92	0	19	0	0	0
Lane Group Flow (vph)	229	664	0	0	410	814	46	0	629	0	0	0
Confl. Peds. (#/hr)							54					
Heavy Vehicles (%)	0%	2%	0%	0%	3%	0%	1%	1%	0%	1%	0%	0%
Turn Type	Prot			Split	Split		Perm	Split				
Protected Phases	1	1 2		3	3	3		4	4			
Permitted Phases							3					
Actuated Green, G (s)	20.0	32.7			30.0	30.0	30.0		26.0			
Effective Green, g (s)	20.0	32.7			30.0	30.0	30.0		26.0			
Actuated g/C Ratio	0.20	0.32			0.30	0.30	0.30		0.26			
Clearance Time (s)	4.0				4.0	4.0	4.0		4.0			
Vehicle Extension (s)	3.0				3.0	3.0	3.0		3.0			
Lane Grp Cap (vph)	312	1033			456	968	349		393			
v/s Ratio Prot	c0.15	c0.21			c0.27	0.25			c0.41			
v/s Ratio Perm							0.04					
v/c Ratio	0.73	0.64			0.90	0.84	0.13		1.60			
Uniform Delay, d1	37.9	29.0			33.9	33.1	25.8		37.4			
Progression Factor	1.00	1.00			1.00	1.00	1.00		1.00			
Incremental Delay, d2	14.2	1.4			20.1	6.7	0.2		281.6			
Delay (s)	52.1	30.4			54.0	39.8	26.0		319.0			
Level of Service	D	C			D	D	C		F			
Approach Delay (s)		36.0				42.7			319.0			0.0
Approach LOS		D				D			F			A

Intersection Summary

HCM Average Control Delay	102.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	100.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
2: Commonwealth Ave & Lake Street

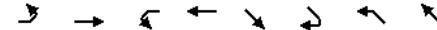
6/3/2008



Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Frbp, ped/bikes	
Fipb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	0
Peak-hour factor, PHF	0.25
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	
Heavy Vehicles (%)	0%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Queues  
3: Commonwealth Ave & Chestnut Hill

6/3/2008



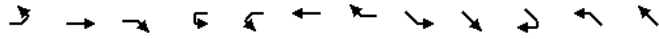
Lane Group	EBL	EBT	WBL	WBT	SET	SER	NWL	NWT
Lane Group Flow (vph)	146	684	247	483	598	42	233	716
v/c Ratio	0.48	0.91	0.85	0.75	1.54	0.12	0.81	1.10
Control Delay	28.3	54.6	41.5	52.2	288.9	25.7	64.7	101.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.3	54.6	41.5	52.2	288.9	25.7	64.7	101.4
Queue Length 50th (ft)	75	227	136	182	~342	16	125	~622
Queue Length 95th (ft)	109	#382	#245	#270	#460	34	#225	#797
Internal Link Dist (ft)		1348		1135	4158			919
Turn Bay Length (ft)	200		100			50		
Base Capacity (vph)	359	754	344	643	388	364	286	648
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.91	0.72	0.75	1.54	0.12	0.81	1.10

Intersection Summary
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

3: Commonwealth Ave & Chestnut Hill

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT
Lane Configurations	↘	↗			↘	↗			↗	↘	↘	↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	10	10	12	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95			1.00	0.95			0.95	1.00	1.00	1.00
Frt	1.00	0.94			1.00	0.98			1.00	0.85	1.00	0.95
Flt Protected	0.95	1.00			0.95	1.00			1.00	1.00	0.95	1.00
Satd. Flow (prot)	1624	2987			1609	2909			3148	1454	1624	1585
Flt Permitted	0.27	1.00			0.15	1.00			0.51	1.00	0.20	1.00
Satd. Flow (perm)	459	2987			259	2909			1605	1454	345	1585
Volume (vph)	117	363	250	5	220	377	25	45	490	30	205	415
Peak-hour factor, PHF	0.80	0.90	0.89	0.92	0.91	0.87	0.50	0.75	0.91	0.72	0.88	0.86
Adj. Flow (vph)	146	403	281	5	242	433	50	60	538	42	233	483
RTOR Reduction (vph)	0	101	0	0	0	7	0	0	0	12	0	14
Lane Group Flow (vph)	146	583	0	0	247	476	0	0	598	30	233	702
Heavy Vehicles (%)	0%	0%	5%	0%	1%	2%	8%	0%	3%	0%	0%	2%
Turn Type	pm+pt			pm+pt			Perm		Perm	D.P+P		
Protected Phases	9	1		9	1				3		4	3 4
Permitted Phases	1			1			3		3		3	
Actuated Green, G (s)	45.0	26.2		45.0	26.2				29.0	29.0	44.0	48.0
Effective Green, g (s)	43.0	26.2		43.0	26.2				29.0	29.0	44.0	48.0
Actuated g/C Ratio	0.36	0.22		0.36	0.22				0.24	0.24	0.37	0.40
Clearance Time (s)	2.0	4.0		2.0	4.0				4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0				3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	328	652		282	635				388	351	286	634
v/s Ratio Prot	0.06	c0.20		c0.12	0.16						0.10	c0.44
v/s Ratio Perm	0.10			0.19					c0.37	0.02	0.20	
v/c Ratio	0.45	0.89		0.88	0.75				1.54	0.09	0.81	1.11
Uniform Delay, d1	27.8	45.6		31.3	43.8				45.5	35.2	42.7	36.0
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	17.2		24.7	7.9				256.1	0.5	16.1	68.6
Delay (s)	28.8	62.7		56.0	51.8				301.6	35.7	58.8	104.6
Level of Service	C	E		E	D				F	D	E	F
Approach Delay (s)		56.8			53.2				284.2			93.4
Approach LOS		E			D				F			F

Intersection Summary

HCM Average Control Delay	113.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	101.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

3: Commonwealth Ave & Chestnut Hill

6/3/2008



Movement	NWR
Lane Configurations	↗
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	4.0
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	205
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	233
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	4%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

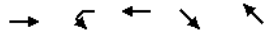
Intersection Summary

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## Queues

7: Beacon St &amp; Chestnut Hill Ave

6/3/2008



Lane Group	EBT	WBL	WBT	SET	NWT
Lane Group Flow (vph)	711	205	832	989	760
v/c Ratio	2.05	1.40	0.61	0.62	0.99
Control Delay	509.1	248.9	40.6	24.2	55.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	509.1	248.9	40.6	24.2	55.6
Queue Length 50th (ft)	~495	~185	218	203	336
Queue Length 95th (ft)	#543	#280	266	244	#477
Internal Link Dist (ft)	3431		1419	919	239
Turn Bay Length (ft)		100			
Base Capacity (vph)	347	146	1368	1599	765
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	2.05	1.40	0.61	0.62	0.99

## Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

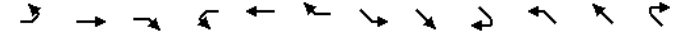
# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

## HCM Signalized Intersection Capacity Analysis

7: Beacon St &amp; Chestnut Hill Ave

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↑↑		↓	↑↑↑			↑↑↑			↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	12	12	10	11	10	14	16	16
Total Lost time (s)		4.0		4.0	4.0			4.0				4.0
Lane Util. Factor		0.95		1.00	0.91			0.91				0.95
Frt		0.98		1.00	0.96			0.98				0.98
Flt Protected		0.99		0.95	1.00			0.99				1.00
Satd. Flow (prot)		3053		1555	4445			4245				3468
Flt Permitted		0.53		0.15	1.00			0.66				0.73
Satd. Flow (perm)		1613		241	4445			2825				2550
Volume (vph)	75	426	84	160	536	229	170	595	105	57	521	95
Peak-hour factor, PHF	0.86	0.81	0.86	0.78	0.92	0.92	0.77	0.92	0.87	0.83	0.90	0.85
Adj. Flow (vph)	87	526	98	205	583	249	221	647	121	69	579	112
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	711	0	205	832	0	0	989	0	0	760	0
Heavy Vehicles (%)	1%	0%	0%	1%	0%	1%	1%	4%	3%	2%	3%	6%
Turn Type	Perm			D,P+P			D,P+P				Perm	
Protected Phases		1		11	1	11	8	8	9		9	
Permitted Phases	1			1			9				9	
Actuated Green, G (s)		27.2		35.2		39.2		64.0			39.0	
Effective Green, g (s)		27.2		35.2		39.2		62.0			39.0	
Actuated g/C Ratio		0.21		0.27		0.30		0.48			0.30	
Clearance Time (s)		4.0		4.0							4.0	
Vehicle Extension (s)		3.0		3.0							3.0	
Lane Grp Cap (vph)		337		146		1340		1599			765	
v/s Ratio Prot				c0.09		0.19		c0.11				
v/s Ratio Perm		c0.44		0.29				0.19			c0.30	
v/c Ratio		2.11		1.40		0.62		0.62			0.99	
Uniform Delay, d1		51.4		43.8		39.0		25.2			45.4	
Progression Factor		1.00		1.00		1.00		1.00			0.53	
Incremental Delay, d2		509.4		217.6		0.9		1.8			29.6	
Delay (s)		560.8		261.5		39.9		27.0			53.8	
Level of Service		F		F		D		C			D	
Approach Delay (s)		560.8				83.7		27.0			53.8	
Approach LOS		F				F		C			D	

## Intersection Summary

HCM Average Control Delay	158.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	32.8
Intersection Capacity Utilization	89.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

8: Beacon St & Gate House Road

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR					
Lane Configurations	↔	↕	↔	↔	↕	↔	↔	↕	↔	↔	↕	↔					
Sign Control	Free			Free			Stop			Stop							
Grade	0%			0%			0%			0%							
Volume (veh/h)	284	511	5	5	682	82	5	5	5	115	5	337					
Peak Hour Factor	0.92	0.85	1.00	0.38	0.90	0.75	0.58	0.38	0.25	0.84	0.50	0.93					
Hourly flow rate (vph)	309	601	5	13	758	109	9	13	20	137	10	362					
Pedestrians	29			26			2			25							
Lane Width (ft)	12.0			12.0			12.0			12.0							
Walking Speed (ft/s)	4.0			4.0			4.0			4.0							
Percent Blockage	2			2			0			2							
Right turn flare (veh)																	
Median type							None			None							
Median storage (veh)																	
Upstream signal (ft)																	
pX, platoon unblocked																	
vC, conflicting volume	892		608			2458		2141		632		2135		2089		866	
vC1, stage 1 conf vol																	
vC2, stage 2 conf vol																	
vCu, unblocked vol	892		608			2458		2141		632		2135		2089		866	
tC, single (s)	4.1		4.1			7.1		6.5		6.2		7.1		6.5		6.3	
tC, 2 stage (s)																	
tF (s)	2.2		2.2			3.5		4.0		3.3		3.5		4.0		3.4	
p0 queue free %	59		99			0		53		96		0		67		0	
cM capacity (veh/h)	748		978			0		28		473		14		30		330	

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	309	606	880	42	509
Volume Left	309	0	13	9	137
Volume Right	0	5	109	20	362
cSH	748	1700	978	0	46
Volume to Capacity	0.41	0.36	0.01	Err	11.07
Queue Length 95th (ft)	51	0	1	Err	Err
Control Delay (s)	13.1	0.0	0.4	Err	Err
Lane LOS	B	A	F	F	F
Approach Delay (s)	4.4		0.4	Err	Err
Approach LOS			F	F	F

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	124.8%	ICU Level of Service		H
Analysis Period (min)	15			

Queues

13: Washington St & Market Street

6/3/2008



Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	779	36	710	107	338	155	468	160
v/c Ratio	15.58	0.25	1.18	0.60	0.47	0.70	0.82	0.35
Control Delay	6624.7	27.7	123.0	38.2	24.9	40.6	37.5	23.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6624.7	27.7	123.0	38.2	24.9	40.6	37.5	23.4
Queue Length 50th (ft)	~1009	13	~543	50	147	75	243	66
Queue Length 95th (ft) m#875	36	#898	#124	251	#183	#460	92	
Internal Link Dist (ft)	985	930	4158	1061				
Turn Bay Length (ft)	50	50	75	50				
Base Capacity (vph)	50	142	604	186	755	235	604	479
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	15.58	0.25	1.18	0.58	0.45	0.66	0.77	0.33

Intersection Summary	
~	Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
m	Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

13: Washington St & Market Street

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔		↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	16	10	11	16	16	16	16	12	12	10
Total Lost time (s)	4.0		4.0		4.0		4.0		4.0		4.0	
Lane Util. Factor	1.00		1.00		1.00		1.00		1.00		1.00	
Frt	0.97		1.00		0.96		1.00		0.98		1.00	
Flt Protected	0.99		0.95		1.00		0.95		1.00		0.95	
Satd. Flow (prot)	1375		1189		1230		1823		1871		1421	
Flt Permitted	0.11		0.27		1.00		0.27		1.00		0.41	
Satd. Flow (perm)	151		341		1230		511		1871		610	
Volume (vph)	119	385	180	25	467	140	90	280	20	135	454	107
Peak-hour factor, PHF	0.74	0.92	0.90	0.69	0.91	0.71	0.84	0.94	0.50	0.87	0.97	0.67
Adj. Flow (vph)	161	418	200	36	513	197	107	298	40	155	468	160
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	779	0	36	710	0	107	338	0	155	468	160
Heavy Vehicles (%)	0%	1%	0%	0%	1%	1%	1%	2%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	26	26	26	0	0	0	0	0	0
Parking (#/hr)	5	5	5	5	5	5				5	5	5
Turn Type	Perm		Perm		Perm		Perm		Perm		Perm	
Protected Phases	1		1		1		3		3		3	
Permitted Phases	1		1		1		3		3		3	
Actuated Green, G (s)	40.3		40.3		40.3		38.3		38.3		38.3	
Effective Green, g (s)	40.3		40.3		40.3		38.3		38.3		38.3	
Actuated g/C Ratio	0.40		0.40		0.40		0.38		0.38		0.38	
Clearance Time (s)	4.0		4.0		4.0		4.0		4.0		4.0	
Vehicle Extension (s)	3.0		3.0		3.0		3.0		3.0		3.0	
Lane Grp Cap (vph)	61		137		496		196		717		234	
v/s Ratio Prot			0.58				0.18				c0.31	
v/s Ratio Perm	c5.18		0.11				0.21				0.25	
v/c Ratio	12.77		0.26		1.43		0.55		0.47		0.66	
Uniform Delay, d1	29.8		19.9		29.8		24.1		23.2		25.5	
Progression Factor	1.32		1.00		1.00		1.00		1.00		1.00	
Incremental Delay, d2	5299.6		4.6		205.5		3.1		0.5		6.9	
Delay (s)	5338.9		24.5		235.4		27.2		23.7		32.4	
Level of Service	F		C		F		C		C		D	
Approach Delay (s)	5338.9		225.2				24.5				32.8	
Approach LOS	F		F				C				C	

Intersection Summary			
HCM Average Control Delay	1585.0	HCM Level of Service	F
HCM Volume to Capacity ratio	6.96		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	21.4
Intersection Capacity Utilization	124.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

15: Campanella Way & St. T Moore

6/3/2008



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Sign Control	Yield		Free		Free	
Grade	0%		0%		0%	
Volume (veh/h)	30	75	58	508	186	120
Peak Hour Factor	0.72	0.87	0.67	0.88	0.78	0.79
Hourly flow rate (vph)	42	86	87	577	238	152
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	282					
pX, platoon unblocked						
vC, conflicting volume	1065	314	390			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1065	314	390			
tC, single (s)	6.4	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	82	88	93			
cM capacity (veh/h)	230	703	1168			

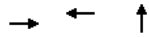
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	128	664	390
Volume Left	42	87	0
Volume Right	86	0	152
cSH	421	1168	1700
Volume to Capacity	0.30	0.07	0.23
Queue Length 95th (ft)	32	6	0
Control Delay (s)	17.2	1.9	0.0
Lane LOS	C	A	
Approach Delay (s)	17.2	1.9	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		

Queues

16: Washington St & Brock St

6/3/2008



Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	683	564	599
v/c Ratio	1.89	0.85	0.78
Control Delay	434.9	50.9	32.4
Queue Delay	0.0	0.0	0.0
Total Delay	434.9	50.9	32.4
Queue Length 50th (ft)	~670	302	278
Queue Length 95th (ft)	#889 m#402	#659	
Internal Link Dist (ft)	966	802	965
Turn Bay Length (ft)			
Base Capacity (vph)	361	662	767
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	1.89	0.85	0.78

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

16: Washington St & Brock St

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑			↕				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frpb, ped/bikes		1.00			0.98			0.99				
Flpb, ped/bikes		1.00			1.00			1.00				
Frt		1.00			0.98			0.98				
Flt Protected		0.99			1.00			0.99				
Satd. Flow (prot)		1628			1603			1621				
Flt Permitted		0.46			1.00			0.99				
Satd. Flow (perm)		746			1603			1621				
Volume (vph)	40	559	0	0	465	50	131	290	102	0	0	0
Peak-hour factor, PHF	0.53	0.92	0.25	0.25	0.94	0.72	0.80	0.89	0.94	0.25	0.25	0.25
Adj. Flow (vph)	75	608	0	0	495	69	164	326	109	0	0	0
RTOR Reduction (vph)	0	0	0	0	6	0	0	6	0	0	0	0
Lane Group Flow (vph)	0	683	0	0	558	0	0	593	0	0	0	0
Confl. Peds. (#/hr)	52					52			13			
Heavy Vehicles (%)	0%	5%	0%	0%	3%	0%	0%	1%	2%	0%	0%	0%
Turn Type	Perm							Perm				
Protected Phases		1			1				4			
Permitted Phases	1								4			
Actuated Green, G (s)		37.8			37.8				47.0			
Effective Green, g (s)		37.8			37.8				47.0			
Actuated g/C Ratio		0.38			0.38				0.47			
Clearance Time (s)		4.0			4.0				4.0			
Vehicle Extension (s)		3.0			3.0				3.0			
Lane Grp Cap (vph)		282			606				762			
v/s Ratio Prot					0.35							
v/s Ratio Perm		c0.92							0.37			
v/c Ratio		2.42			0.92				0.78			
Uniform Delay, d1		31.1			29.7				22.1			
Progression Factor		1.00			1.56				1.00			
Incremental Delay, d2		650.6			15.5				5.0			
Delay (s)		681.7			61.9				27.2			
Level of Service		F			E				C			
Approach Delay (s)		681.7			61.9				27.2			0.0
Approach LOS		F			E				C			A

Intersection Summary

HCM Average Control Delay	279.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.51		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	108.1%	ICU Level of Service	G
Analysis Period (min)	15		

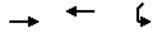
c Critical Lane Group



## Queues

18: Commonwealth Ave &amp; South St

6/3/2008



Lane Group	EBT	WBT	SWL
Lane Group Flow (vph)	862	709	233
v/c Ratio	1.16	0.42	0.42
Control Delay	107.5	12.4	8.2
Queue Delay	0.0	0.0	0.0
Total Delay	107.5	12.4	8.2
Queue Length 50th (ft)	~203	76	10
Queue Length 95th (ft)	#394	185	45
Internal Link Dist (ft)	424	1348	723
Turn Bay Length (ft)			
Base Capacity (vph)	742	1669	553
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	1.16	0.42	0.42

## Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

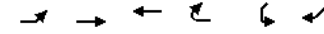
# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

## HCM Signalized Intersection Capacity Analysis

18: Commonwealth Ave &amp; South St

6/3/2008



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations		↑↑	↑↑		↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	1.00		0.89	
Flt Protected		1.00	1.00		0.99	
Satd. Flow (prot)		3245	3249		1329	
Flt Permitted		0.93	1.00		0.99	
Satd. Flow (perm)		3032	3249		1329	
Volume (vph)	5	699	617	0	30	172
Peak-hour factor, PHF	0.25	0.83	0.87	0.25	0.75	0.89
Adj. Flow (vph)	20	842	709	0	40	193
RTOR Reduction (vph)	0	0	0	0	135	0
Lane Group Flow (vph)	0	862	709	0	98	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%
Parking (#/hr)					2	2
Turn Type						
Protected Phases		1	1		3	
Permitted Phases						
Actuated Green, G (s)		34.4	34.4		21.3	
Effective Green, g (s)		34.4	34.4		21.3	
Actuated g/C Ratio		0.49	0.49		0.30	
Clearance Time (s)		4.0	4.0		4.0	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1484	1590		403	
v/s Ratio Prot			0.22		c0.07	
v/s Ratio Perm		c0.28				
v/c Ratio		0.58	0.45		0.24	
Uniform Delay, d1		12.8	11.7		18.4	
Progression Factor		1.00	1.00		1.00	
Incremental Delay, d2		1.7	0.9		1.4	
Delay (s)		14.5	12.6		19.9	
Level of Service		B	B		B	
Approach Delay (s)		14.5	12.6		19.9	
Approach LOS		B	B		B	

## Intersection Summary

HCM Average Control Delay 14.4 HCM Level of Service B

HCM Volume to Capacity ratio 0.45

Actuated Cycle Length (s) 70.3 Sum of lost time (s) 14.6

Intersection Capacity Utilization 45.7% ICU Level of Service A

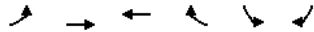
Analysis Period (min) 15

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis

19: Commonwealth Ave & Foster St

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↗
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	694	749	55	0	386
Peak Hour Factor	0.25	0.83	0.94	0.74	0.25	0.89
Hourly flow rate (vph)	0	836	797	74	0	434
Pedestrians					65	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					5	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)			504			
pX, platoon unblocked	0.89				0.89	0.89
vC, conflicting volume	936				1317	501
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	804				1232	315
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	25
cM capacity (veh/h)	697				145	578

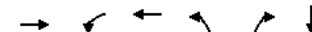
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	418	418	531	340	434
Volume Left	0	0	0	0	0
Volume Right	0	0	0	74	434
cSH	1700	1700	1700	1700	578
Volume to Capacity	0.25	0.25	0.31	0.20	0.75
Queue Length 95th (ft)	0	0	0	0	165
Control Delay (s)	0.0	0.0	0.0	0.0	27.6
Lane LOS					D
Approach Delay (s)	0.0		0.0		27.6
Approach LOS					D

Intersection Summary			
Average Delay		5.6	
Intersection Capacity Utilization	58.5%	ICU Level of Service	B
Analysis Period (min)	15		

Queues

20: Washington St & Foster St

6/3/2008



Lane Group	EBT	WBL	WBT	NBL	NBR	SBT
Lane Group Flow (vph)	737	315	452	78	218	274
v/c Ratio	1.34	0.59	0.83	0.48	1.00	0.79
Control Delay	177.5	29.9	33.2	37.3	69.8	41.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	177.5	29.9	33.2	37.3	69.8	41.9
Queue Length 50th (ft)	~588	123	258	44	0	166
Queue Length 95th (ft)	m137	m168	m220	82	#136	222
Internal Link Dist (ft)	802		985			367
Turn Bay Length (ft)		75			80	
Base Capacity (vph)	552	536	546	206	218	442
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.34	0.59	0.83	0.38	1.00	0.62

Intersection Summary	
~	Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
m	Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

20: Washington St & Foster St

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↗		↘	↖		↘	↖	↗	↘	↖	↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	10	10	12	12	10	10	10	12	10	10
Total Lost time (s)	4.0		4.0		4.0		4.0		4.0		4.0	
Lane Util. Factor	1.00		1.00		1.00		1.00		1.00		1.00	
Frt	0.96		1.00		1.00		1.00		0.85		0.98	
Flt Protected	1.00		0.95		1.00		0.95		1.00		0.99	
Satd. Flow (prot)	1583		1501		1605		1486		1184		1540	
Flt Permitted	1.00		0.12		1.00		0.40		1.00		0.99	
Satd. Flow (perm)	1583		186		1605		627		1184		1540	
Volume (vph)	0	452	184	274	425	0	70	0	192	45	143	40
Peak-hour factor, PHF	0.25	0.86	0.87	0.87	0.94	0.25	0.90	0.25	0.88	0.70	0.88	0.84
Adj. Flow (vph)	0	526	211	315	452	0	78	0	218	64	162	48
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	218	0	0	0
Lane Group Flow (vph)	0	722	0	315	452	0	78	0	0	0	274	0
Heavy Vehicles (%)	0%	5%	1%	1%	4%	0%	2%	0%	2%	0%	0%	0%
Bus Blockages (#/hr)	0	0	6	0	6	0	0	0	0	0	0	0
Parking (#/hr)							2		2		2	
Turn Type			pm+pt		D.Pm		NA		Perm			
Protected Phases	1		9		1						3	
Permitted Phases			1				3				3	
Actuated Green, G (s)	34.0		67.5		34.0		22.5		0.0		22.5	
Effective Green, g (s)	34.0		65.5		34.0		22.5		0.0		22.5	
Actuated g/C Ratio	0.34		0.66		0.34		0.22		0.00		0.22	
Clearance Time (s)	4.0		2.0		4.0		4.0				4.0	
Vehicle Extension (s)	3.0		3.0		3.0		3.0				3.0	
Lane Grp Cap (vph)	538		536		546		141		0		347	
v/s Ratio Prot	c0.46		c0.19		0.28							
v/s Ratio Perm			0.20				0.12				0.18	
v/c Ratio	1.34		0.59		0.83		0.55		0.00		0.79	
Uniform Delay, d1	33.0		29.7		30.3		34.3		50.0		36.5	
Progression Factor	0.80		1.44		0.87		1.00		1.00		1.00	
Incremental Delay, d2	155.5		0.6		5.6		4.6		0.0		11.3	
Delay (s)	181.8		43.3		31.9		38.9		50.0		47.9	
Level of Service	F		D		C		D		D		D	
Approach Delay (s)	181.8				36.6		47.1				47.9	
Approach LOS	F				D		D				D	

Intersection Summary

HCM Average Control Delay	91.2	HCM Level of Service	F
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

24: Glenmont Rd & Lake St

6/3/2008



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↖	↗	↖	↖
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	110	572	0	0	0
Peak Hour Factor	0.25	0.78	0.88	0.25	0.25	0.25
Hourly flow rate (vph)	0	141	650	0	0	0
Pedestrians	76					76
Lane Width (ft)	12.0					0.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	6					0
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	1130					
pX, platoon unblocked						
vC, conflicting volume	726	802			726	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	726	802			726	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	60			100	
cM capacity (veh/h)	369	357			830	

Direction, Lane #

	WB 1	NB 1
Volume Total	141	650
Volume Left	0	0
Volume Right	141	0
cSH	357	1700
Volume to Capacity	0.40	0.38
Queue Length 95th (ft)	46	0
Control Delay (s)	21.5	0.0
Lane LOS	C	
Approach Delay (s)	21.5	0.0
Approach LOS	C	

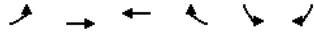
Intersection Summary

Average Delay	3.8		
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

26: Commonwealth Ave & Campus Driveway

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Sign Control	Free	Free	Free		Stop	
Grade	0%	0%	0%		0%	
Volume (veh/h)	0	669	1039	28	0	156
Peak Hour Factor	0.75	0.83	0.93	0.75	0.89	0.89
Hourly flow rate (vph)	0	806	1117	37	0	175
Pedestrians		101			101	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		8			8	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)		747				
pX, platoon unblocked					0.85	
vC, conflicting volume	1256				1640	779
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1256				1579	779
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	39
cM capacity (veh/h)	514				80	288

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	403	403	745	410	175
Volume Left	0	0	0	0	0
Volume Right	0	0	0	37	175
cSH	1700	1700	1700	1700	288
Volume to Capacity	0.24	0.24	0.44	0.24	0.61
Queue Length 95th (ft)	0	0	0	0	93
Control Delay (s)	0.0	0.0	0.0	0.0	35.3
Lane LOS					E
Approach Delay (s)	0.0		0.0		35.3
Approach LOS					E

Intersection Summary			
Average Delay		2.9	
Intersection Capacity Utilization	56.5%		ICU Level of Service B
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

30: Kenrick St & Lake St

6/3/2008



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↓			↑		
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	115	0	150	532	0	0
Peak Hour Factor	0.78	0.25	0.73	0.88	0.25	0.25
Hourly flow rate (vph)	147	0	205	605	0	0
Pedestrians	42				47	
Lane Width (ft)	12.0				0.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	4				0	
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)					1045	
pX, platoon unblocked						
vC, conflicting volume	1105	42	42			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1105	42	42			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	25	100	86			
cM capacity (veh/h)	195	998	1512			

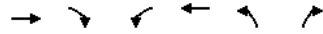
Direction, Lane #	EB 1	NB 1
Volume Total	147	810
Volume Left	147	205
Volume Right	0	0
cSH	195	1512
Volume to Capacity	0.75	0.14
Queue Length 95th (ft)	125	12
Control Delay (s)	64.6	3.2
Lane LOS	F	A
Approach Delay (s)	64.6	3.2
Approach LOS	F	

Intersection Summary			
Average Delay		12.6	
Intersection Capacity Utilization	54.1%		ICU Level of Service A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

33: Beacon St & Reservoir Rd

6/3/2008

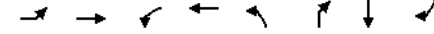


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↓	↓
Sign Control	Free		Free		Stop	
Grade	0%		0%		0%	
Volume (veh/h)	515	0	0	1121	10	198
Peak Hour Factor	0.88	0.25	0.25	0.93	0.39	0.89
Hourly flow rate (vph)	585	0	0	1205	26	222
Pedestrians	10		7			
Lane Width (ft)	12.0		12.0			
Walking Speed (ft/s)	4.0		4.0			
Percent Blockage	1		1			
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			585		1801	592
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			585		1801	592
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		71	56
cM capacity (veh/h)			999		88	505
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>			
Volume Total	585	1205	248			
Volume Left	0	0	26			
Volume Right	0	0	222			
cSH	1700	1700	339			
Volume to Capacity	0.34	0.71	0.73			
Queue Length 95th (ft)	0	0	138			
Control Delay (s)	0.0	0.0	39.8			
Lane LOS	E					
Approach Delay (s)	0.0	0.0	39.8			
Approach LOS	E					
<b>Intersection Summary</b>						
Average Delay	4.8					
Intersection Capacity Utilization	87.2%		ICU Level of Service		E	
Analysis Period (min)	15					

Queues

35: Beacon St & College Rd

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	NBL	NBR	SBT	SBR
Lane Group Flow (vph)	135	562	400	813	162	279	241	35
v/c Ratio	1.09	0.72	1.28	0.82	0.83	10.73	0.34	0.02
Control Delay	138.2	29.1	166.8	25.6	59.6	4459.0	31.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	138.2	29.1	166.8	25.6	59.6	4459.0	31.6	0.0
Queue Length 50th (ft)	-77	214	-171	266	76	-278	52	0
Queue Length 95th (ft)	#149	414	#388	#768	#187	#493	103	0
Internal Link Dist (ft)	679		1940		600			
Turn Bay Length (ft)	200		200		40		75	
Base Capacity (vph)	124	776	313	997	212	26	777	1454
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.09	0.72	1.28	0.82	0.76	10.73	0.31	0.02
<b>Intersection Summary</b>								
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.								
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.								

HCM Signalized Intersection Capacity Analysis

35: Beacon St & College Rd

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR2	NBL	NBR	NBR2	SBL2	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	12	12	10	12	12	12	12	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0				4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00				0.95
Frt	1.00	0.99		1.00	0.99		1.00	0.85				1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00				0.99
Satd. Flow (prot)	1570	1688		1608	1638		1501	1439				3179
Flt Permitted	0.24	1.00		0.24	1.00		0.56	1.00				0.99
Satd. Flow (perm)	395	1688		410	1638		884	1439				3179
Volume (vph)	88	421	40	320	684	63	130	140	100	5	45	145
Peak-hour factor, PHF	0.65	0.82	0.81	0.80	0.93	0.81	0.80	0.87	0.85	0.42	0.75	0.86
Adj. Flow (vph)	135	513	49	400	735	78	162	161	118	12	60	169
RTOR Reduction (vph)	0	3	0	0	3	0	0	26	0	0	0	0
Lane Group Flow (vph)	135	559	0	400	810	0	162	253	0	0	0	241
Heavy Vehicles (%)	0%	0%	0%	1%	1%	21%	1%	1%	1%	0%	0%	1%
Turn Type	Perm		D,P+P				D,Pm	NA			Perm	
Protected Phases		3		2	2 3							1
Permitted Phases	3			3			1				1	
Actuated Green, G (s)	39.7	39.7		49.9	52.9		18.9	0.0				18.9
Effective Green, g (s)	40.7	40.7		49.9	53.9		19.9	0.0				19.9
Actuated g/C Ratio	0.45	0.45		0.55	0.59		0.22	0.00				0.22
Clearance Time (s)	5.0	5.0		3.0			5.0					5.0
Vehicle Extension (s)	3.0	3.0		3.0			3.0					3.0
Lane Grp Cap (vph)	176	752		345	967		193	0				693
v/s Ratio Prot		0.33		c0.12	0.49							
v/s Ratio Perm	0.34			c0.52			c0.18					0.08
v/c Ratio	0.77	0.74		1.16	0.84		0.84	no cap				0.35
Uniform Delay, d1	21.3	21.0		18.6	15.1		34.2	Error				30.2
Progression Factor	1.00	1.00		1.00	1.00		1.00					1.00
Incremental Delay, d2	17.9	4.0		99.2	6.4		26.1	Error				0.3
Delay (s)	39.2	25.0		117.8	21.6		60.2	Error				30.5
Level of Service	D	C		F	C		E	F				C
Approach Delay (s)		27.7			53.3							26.6
Approach LOS		C			D							C

Intersection Summary

HCM Average Control Delay	Error	HCM Level of Service	F
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	91.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

35: Beacon St & College Rd

6/3/2008



Movement	SBR
Lane Configurations	↔
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1454
Flt Permitted	1.00
Satd. Flow (perm)	1454
Volume (vph)	25
Peak-hour factor, PHF	0.72
Adj. Flow (vph)	35
RTOR Reduction (vph)	0
Lane Group Flow (vph)	35
Heavy Vehicles (%)	0%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	91.3
Effective Green, g (s)	91.3
Actuated g/C Ratio	1.00
Clearance Time (s)	5.0
Vehicle Extension (s)	
Lane Grp Cap (vph)	1454
v/s Ratio Prot	
v/s Ratio Perm	c0.02
v/c Ratio	0.02
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	0.0
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

HCM Average Control Delay	Error	HCM Level of Service	F
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	91.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis

38: Commonwealth Ave & Mt Alvernia Road

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕			↕			↕			↕		
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Volume (veh/h)	5	579	5	95	700	5	89	15	244	10	5	20
Peak Hour Factor	0.47	0.89	0.40	0.84	0.86	0.62	0.79	0.83	0.92	0.45	0.67	0.62
Hourly flow rate (vph)	11	651	12	113	814	8	113	18	265	22	7	32
Pedestrians	63			51			46			4		
Lane Width (ft)	12.0			12.0			14.0			12.0		
Walking Speed (ft/s)	4.0			4.0			4.0			4.0		
Percent Blockage	5			4			4			0		
Right turn flare (veh)												
Median type	None						None					
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	826		709		1867		1776		754		2052	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	826		709		1867		1776		754		2052	
tC, single (s)	4.1		4.1		7.1		6.5		6.3		7.1	
tC, 2 stage (s)												
tF (s)	2.2		2.2		3.5		4.0		3.4		3.5	
p0 queue free %	99		87		0		73		28		0	
cM capacity (veh/h)	811		850		36		68		367		8	

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	674	935	396	62
Volume Left	11	113	113	22
Volume Right	12	8	265	32
cSH	811	850	96	20
Volume to Capacity	0.01	0.13	4.11	3.15
Queue Length 95th (ft)	1	11	Err	Err
Control Delay (s)	0.4	3.4	Err	Err
Lane LOS	A	A	F	F
Approach Delay (s)	0.4	3.4	Err	Err
Approach LOS			F	F

Intersection Summary			
Average Delay	2217.0		
Intersection Capacity Utilization	123.9%	ICU Level of Service	H
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

41: Rogers Park & Foster St

6/3/2008



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↕			↕	↕	
Sign Control	Stop			Free	Free	
Grade	0%			0%		0%
Volume (veh/h)	70	85	0	162	628	0
Peak Hour Factor	0.76	0.94	0.25	0.90	0.90	0.25
Hourly flow rate (vph)	92	90	0	180	698	0
Pedestrians				38		46
Lane Width (ft)				12.0		12.0
Walking Speed (ft/s)				4.0		4.0
Percent Blockage				3		4
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	946					
pX, platoon unblocked	0.88	0.88	0.88			
vC, conflicting volume	924	736	698			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	914	700	657			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	64	76	100			
cM capacity (veh/h)	256	376	829			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	183	180	698
Volume Left	92	0	0
Volume Right	90	0	0
cSH	304	1700	1700
Volume to Capacity	0.60	0.11	0.41
Queue Length 95th (ft)	91	0	0
Control Delay (s)	33.1	0.0	0.0
Lane LOS	D		
Approach Delay (s)	33.1	0.0	0.0
Approach LOS	D		

Intersection Summary			
Average Delay	5.7		
Intersection Capacity Utilization	56.3%	ICU Level of Service	B
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

46: Chestnut Hill Driveway & T. Moore

6/3/2008

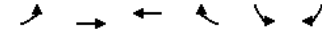


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	55	15	279	92	19	422
Peak Hour Factor	0.69	0.70	0.51	0.88	0.69	0.70
Hourly flow rate (vph)	80	21	547	105	28	603
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1257	599			652	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1257	599			652	
tC, single (s)	6.9	6.2			4.2	
tC, 2 stage (s)						
tF (s)	3.9	3.3			2.3	
p0 queue free %	46	96			97	
cM capacity (veh/h)	148	503			876	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	101	652	630			
Volume Left	80	0	28			
Volume Right	21	105	0			
cSH	174	1700	876			
Volume to Capacity	0.58	0.38	0.03			
Queue Length 95th (ft)	78	0	2			
Control Delay (s)	51.3	0.0	0.8			
Lane LOS	F		A			
Approach Delay (s)	51.3	0.0	0.8			
Approach LOS	F					
<b>Intersection Summary</b>						
Average Delay	4.1					
Intersection Capacity Utilization	52.9%		ICU Level of Service		A	
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis

49: Beacon St Garage &

6/3/2008



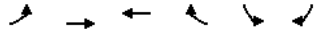
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔	↕	↕	↔	↔
Sign Control	Free	Free			Stop	
Grade	0%	0%			0%	
Volume (veh/h)	27	686	986	40	98	131
Peak Hour Factor	0.78	0.88	0.93	0.79	0.64	0.25
Hourly flow rate (vph)	35	780	1060	51	153	524
Pedestrians		50	47		42	
Lane Width (ft)	14.0	14.0			12.0	
Walking Speed (ft/s)	4.0	4.0			4.0	
Percent Blockage	5	5			4	
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1153				2023	1178
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1153				2023	1178
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	94				0	0
cM capacity (veh/h)	592				56	215
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>	<b>SB 2</b>		
Volume Total	814	1111	153	524		
Volume Left	35	0	153	0		
Volume Right	0	51	0	524		
cSH	592	1700	56	215		
Volume to Capacity	0.06	0.65	2.74	2.43		
Queue Length 95th (ft)	5	0	395	1078		
Control Delay (s)	1.7	0.0	943.0	693.1		
Lane LOS	A		F	F		
Approach Delay (s)	1.7	0.0	749.6			
Approach LOS			F			
<b>Intersection Summary</b>						
Average Delay	195.6					
Intersection Capacity Utilization	83.0%		ICU Level of Service		E	
Analysis Period (min)	15					



HCM Unsignalized Intersection Capacity Analysis

51: Campanella Way & Fr. Herlihy Drive

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	↓
Sign Control		Stop	Yield		Stop	
Volume (vph)	0	45	178	0	66	73
Peak Hour Factor	0.25	0.61	0.70	0.25	0.73	0.82
Hourly flow rate (vph)	0	74	254	0	90	89
Direction, Lane #	EB 1	WB 1	SB 1	SB 2		
Volume Total (vph)	74	254	90	89		
Volume Left (vph)	0	0	90	0		
Volume Right (vph)	0	0	0	89		
Hadj (s)	0.00	0.09	0.77	-0.63		
Departure Headway (s)	4.7	4.5	6.1	4.6		
Degree Utilization, x	0.10	0.32	0.15	0.11		
Capacity (veh/h)	734	760	566	728		
Control Delay (s)	8.2	9.7	8.9	7.0		
Approach Delay (s)	8.2	9.7	8.0			
Approach LOS	A	A	A			
Intersection Summary						
Delay	8.9					
HCM Level of Service	A					
Intersection Capacity Utilization	28.4%		ICU Level of Service	A		
Analysis Period (min)	15					

# Build Alternatives 2018

Queues

2: Commonwealth Ave & Lake Street

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT
Lane Group Flow (vph)	290	1021	382	622	120	473
v/c Ratio	1.07	0.90	1.08	0.82	0.31	1.07
Control Delay	118.8	42.5	111.8	49.8	8.5	96.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	118.8	42.5	111.8	49.8	8.5	96.7
Queue Length 50th (ft)	~229	340	~305	220	0	~177
Queue Length 95th (ft)	#399	#411	#459	#305	40	#221
Internal Link Dist (ft)		1877		667		286
Turn Bay Length (ft)	200		300		200	
Base Capacity (vph)	271	1149	353	758	391	441
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.07	0.89	1.08	0.82	0.31	1.07

Intersection Summary

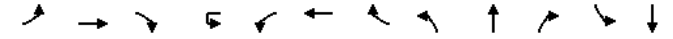
~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2: Commonwealth Ave & Lake Street

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1000	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	10	10	10	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95			1.00	0.95	1.00		0.95			
Frpb, ped/bikes	1.00	1.00			1.00	1.00	0.91		1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00		1.00			
Frt	1.00	0.96			1.00	1.00	0.85		0.95			
Flt Protected	0.95	1.00			0.95	1.00	1.00		0.99			
Satd. Flow (prot)	1555	3083			1483	3185	1259		1333			
Flt Permitted	0.95	1.00			0.95	1.00	1.00		0.99			
Satd. Flow (perm)	1555	3083			1483	3185	1259		1333			
Volume (vph)	264	671	215	7	322	578	102	63	181	95	0	0
Peak-hour factor, PHF	0.91	0.87	0.86	0.92	0.86	0.93	0.85	0.70	0.78	0.63	0.25	0.25
Adj. Flow (vph)	290	771	250	8	374	622	120	90	232	151	0	0
RTOR Reduction (vph)	0	29	0	0	0	0	91	0	50	0	0	0
Lane Group Flow (vph)	290	992	0	0	382	622	29	0	423	0	0	0
Confl. Peds. (#/hr)							21					
Heavy Vehicles (%)	1%	2%	0%	2%	6%	2%	5%	25%	3%	21%	0%	0%
Turn Type	Prot			Split	Split		Perm	Split				
Protected Phases	1	1 2		3	3	3		4	4			
Permitted Phases							3					
Actuated Green, G (s)	19.0	39.2			26.0	26.0	26.0		32.0			
Effective Green, g (s)	19.0	39.2			26.0	26.0	26.0		32.0			
Actuated g/C Ratio	0.17	0.36			0.24	0.24	0.24		0.29			
Clearance Time (s)	4.0				4.0	4.0	4.0		4.0			
Vehicle Extension (s)	3.0				3.0	3.0	3.0		3.0			
Lane Grp Cap (vph)	271	1107			353	758	300		391			
v/s Ratio Prot	c0.19	c0.32			c0.26	0.20			c0.32			
v/s Ratio Perm							0.02					
v/c Ratio	1.07	0.90			1.08	0.82	0.10		1.08			
Uniform Delay, d1	45.1	33.1			41.6	39.4	32.4		38.6			
Progression Factor	1.00	1.00			1.00	1.00	1.00		1.00			
Incremental Delay, d2	74.5	9.6			71.6	7.1	0.1		69.0			
Delay (s)	119.6	42.7			113.2	46.5	32.6		107.6			
Level of Service	F	D			F	D	C		F			
Approach Delay (s)		59.7				67.7			107.6			0.0
Approach LOS		E				E			F			A

Intersection Summary

HCM Average Control Delay	70.6	HCM Level of Service	E
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	109.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
2: Commonwealth Ave & Lake Street

6/3/2008

Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Frpb, ped/bikes	
Flpb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	0
Peak-hour factor, PHF	0.25
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	
Heavy Vehicles (%)	0%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
<b>Intersection Summary</b>	

HCM Unsignalized Intersection Capacity Analysis  
26: Commonwealth Ave & Campus Driveway

6/3/2008

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	763	952	182	0	67
Peak Hour Factor	0.89	0.89	0.96	0.61	0.25	0.88
Hourly flow rate (vph)	0	857	992	298	0	76
Pedestrians		53			53	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		4			4	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)		747				
pX, platoon unblocked					0.83	
vC, conflicting volume	1343				1622	751
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1343				1544	751
tC, single (s)	4.1				6.8	7.5
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.6
p0 queue free %	100				100	72
cM capacity (veh/h)	497				85	273
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>EB 2</b>	<b>WB 1</b>	<b>WB 2</b>	<b>SB 1</b>	
Volume Total	429	429	661	629	76	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	298	76	
cSH	1700	1700	1700	1700	273	
Volume to Capacity	0.25	0.25	0.39	0.37	0.28	
Queue Length 95th (ft)	0	0	0	0	28	
Control Delay (s)	0.0	0.0	0.0	0.0	23.2	
Lane LOS					C	
Approach Delay (s)	0.0		0.0		23.2	
Approach LOS					C	
<b>Intersection Summary</b>						
Average Delay			0.8			
Intersection Capacity Utilization			55.6%		ICU Level of Service	B
Analysis Period (min)			15			

## Queues

## 2: Commonwealth Ave &amp; Lake Street

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT
Lane Group Flow (vph)	190	854	428	798	192	653
v/c Ratio	0.98	0.97	1.10	0.97	0.49	1.10
Control Delay	117.6	70.4	121.4	72.4	14.8	101.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	117.6	70.4	121.4	72.4	14.8	101.6
Queue Length 50th (ft)	162	369	~410	352	26	~314
Queue Length 95th (ft)	#302	#396	#543	#485	91	#390
Internal Link Dist (ft)		1877		667		202
Turn Bay Length (ft)	200		300		200	
Base Capacity (vph)	193	876	388	825	394	596
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.97	1.10	0.97	0.49	1.10

## Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

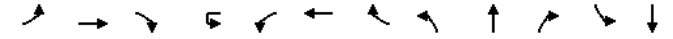
# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

## HCM Signalized Intersection Capacity Analysis

## 2: Commonwealth Ave &amp; Lake Street

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1000	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	10	10	10	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95			1.00	0.95	1.00		0.95			
Frpb, ped/bikes	1.00	1.00			1.00	1.00	0.77		1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00		1.00			
Frt	1.00	0.97			1.00	1.00	0.85		0.96			
Flt Protected	0.95	1.00			0.95	1.00	1.00		0.99			
Satd. Flow (prot)	1570	3110			1529	3249	1101		1503			
Flt Permitted	0.95	1.00			0.95	1.00	1.00		0.99			
Satd. Flow (perm)	1570	3110			1529	3249	1101		1503			
Volume (vph)	165	559	129	37	322	726	167	144	256	133	0	0
Peak-hour factor, PHF	0.87	0.80	0.83	0.92	0.83	0.91	0.87	0.84	0.84	0.75	0.25	0.25
Adj. Flow (vph)	190	699	155	40	388	798	192	171	305	177	0	0
RTOR Reduction (vph)	0	14	0	0	0	0	114	0	29	0	0	0
Lane Group Flow (vph)	190	840	0	0	428	798	78	0	624	0	0	0
Confl. Peds. (#/hr)							54					
Heavy Vehicles (%)	0%	2%	0%	0%	3%	0%	1%	1%	0%	1%	0%	0%
Turn Type	Prot			Split	Split		Perm	Split				
Protected Phases	1	1 2		3	3	3		4	4			
Permitted Phases							3					
Actuated Green, G (s)	16.0	36.0			33.0	33.0	33.0		49.0			
Effective Green, g (s)	16.0	36.0			33.0	33.0	33.0		49.0			
Actuated g/C Ratio	0.12	0.28			0.25	0.25	0.25		0.38			
Clearance Time (s)	4.0				4.0	4.0	4.0		4.0			
Vehicle Extension (s)	3.0				3.0	3.0	3.0		3.0			
Lane Grp Cap (vph)	193	861			388	825	279		567			
v/s Ratio Prot	0.12	c0.27			c0.28	0.25			c0.41			
v/s Ratio Perm							0.07					
v/c Ratio	0.98	0.98			1.10	0.97	0.28		1.10			
Uniform Delay, d1	56.9	46.6			48.5	48.0	38.9		40.5			
Progression Factor	1.00	1.00			1.00	1.00	1.00		1.00			
Incremental Delay, d2	60.9	24.5			76.5	23.3	0.5		68.1			
Delay (s)	117.8	71.0			125.0	71.3	39.5		108.6			
Level of Service	F	E			F	E	D		F			
Approach Delay (s)		79.5				83.2			108.6			0.0
Approach LOS		E				F			F			A

## Intersection Summary

HCM Average Control Delay	87.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
2: Commonwealth Ave & Lake Street

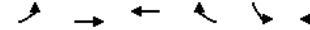
6/3/2008



Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Frbp, ped/bikes	
Fipb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	0
Peak-hour factor, PHF	0.25
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	
Heavy Vehicles (%)	0%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

HCM Unsignalized Intersection Capacity Analysis  
26: Commonwealth Ave & Campus Driveway

6/3/2008

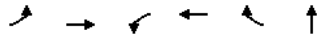


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	739	1039	98	0	203
Peak Hour Factor	0.83	0.83	0.93	0.75	0.25	0.89
Hourly flow rate (vph)	0	890	1117	131	0	228
Pedestrians		101			101	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		8			8	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)		747				
pX, platoon unblocked					0.79	
vC, conflicting volume	1349				1729	826
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1349				1658	826
tC, single (s)		4.1			6.8	6.9
tC, 2 stage (s)						
tF (s)		2.2			3.5	3.3
p0 queue free %		100			100	15
cM capacity (veh/h)	473				66	268
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	445	445	745	503	228	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	131	228	
cSH	1700	1700	1700	1700	268	
Volume to Capacity	0.26	0.26	0.44	0.30	0.85	
Queue Length 95th (ft)	0	0	0	0	177	
Control Delay (s)	0.0	0.0	0.0	0.0	64.2	
Lane LOS					F	
Approach Delay (s)	0.0		0.0		64.2	
Approach LOS					F	
Intersection Summary						
Average Delay			6.2			
Intersection Capacity Utilization			62.5%		ICU Level of Service	B
Analysis Period (min)			15			

Queues

2: Commonwealth Ave & Lake Street

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT
Lane Group Flow (vph)	290	1021	375	622	120	473
v/c Ratio	1.02	0.93	1.04	0.81	0.31	1.03
Control Delay	106.2	50.5	104.4	52.1	8.6	86.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	106.2	50.5	104.4	52.1	8.6	86.4
Queue Length 50th (ft)	~233	385	~316	240	0	~187
Queue Length 95th (ft)	#413	#486	#472	311	41	#229
Internal Link Dist (ft)		1877		667		286
Turn Bay Length (ft)	200		300		200	
Base Capacity (vph)	285	1105	359	771	393	458
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.92	1.04	0.81	0.31	1.03

Intersection Summary

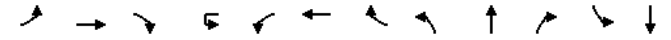
~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2: Commonwealth Ave & Lake Street

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1000	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	10	10	10	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95			1.00	0.95	1.00		0.95			
Frpb, ped/bikes	1.00	1.00			1.00	1.00	0.90		1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00		1.00			
Frt	1.00	0.96			1.00	1.00	0.85		0.95			
Flt Protected	0.95	1.00			0.95	1.00	1.00		0.99			
Satd. Flow (prot)	1555	3083			1482	3185	1250		1333			
Flt Permitted	0.95	1.00			0.95	1.00	1.00		0.99			
Satd. Flow (perm)	1555	3083			1482	3185	1250		1333			
Volume (vph)	264	671	215	1	322	578	102	63	181	95	0	0
Peak-hour factor, PHF	0.91	0.87	0.86	0.92	0.86	0.93	0.85	0.70	0.78	0.63	0.25	0.25
Adj. Flow (vph)	290	771	250	1	374	622	120	90	232	151	0	0
RTOR Reduction (vph)	0	26	0	0	0	0	91	0	46	0	0	0
Lane Group Flow (vph)	290	995	0	0	375	622	29	0	427	0	0	0
Confl. Peds. (#/hr)							21					
Heavy Vehicles (%)	1%	2%	0%	2%	6%	2%	5%	25%	3%	21%	0%	0%
Turn Type	Prot			Split	Split		Perm	Split				
Protected Phases	1	2		3	3	3		4	4			
Permitted Phases							3					
Actuated Green, G (s)	22.0	41.8			29.0	29.0	29.0		37.0			
Effective Green, g (s)	22.0	41.8			29.0	29.0	29.0		37.0			
Actuated g/C Ratio	0.18	0.35			0.24	0.24	0.24		0.31			
Clearance Time (s)	4.0				4.0	4.0	4.0		4.0			
Vehicle Extension (s)	3.0				3.0	3.0	3.0		3.0			
Lane Grp Cap (vph)	286	1076			359	771	303		412			
v/s Ratio Prot	c0.19	c0.32			c0.25	0.20			c0.32			
v/s Ratio Perm							0.02					
v/c Ratio	1.01	0.92			1.04	0.81	0.10		1.04			
Uniform Delay, d1	48.9	37.5			45.4	42.8	35.2		41.4			
Progression Factor	1.00	1.00			1.00	1.00	1.00		1.00			
Incremental Delay, d2	56.8	13.0			59.6	6.2	0.1		53.9			
Delay (s)	105.7	50.4			105.0	48.9	35.4		95.3			
Level of Service	F	D			F	D	D		F			
Approach Delay (s)		62.7				66.3			95.3			0.0
Approach LOS		E				E			F			A

Intersection Summary

HCM Average Control Delay	69.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	119.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
2: Commonwealth Ave & Lake Street

6/3/2008



Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Frbp, ped/bikes	
Fipb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	0
Peak-hour factor, PHF	0.25
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	
Heavy Vehicles (%)	0%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Queues

26: Commonwealth Ave & Campus Driveway

6/3/2008



Lane Group	EBL	EBT	WBT	SBL
Lane Group Flow (vph)	104	746	1085	76
v/c Ratio	0.34	0.37	0.71	0.42
Control Delay	9.7	6.4	17.8	12.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	9.7	6.4	17.8	12.5
Queue Length 50th (ft)	6	29	127	2
Queue Length 95th (ft)	61	170	#427	40
Internal Link Dist (ft)		667	961	372
Turn Bay Length (ft)		75		
Base Capacity (vph)	310	2021	1545	294
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.34	0.37	0.70	0.26

Intersection Summary

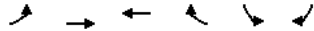
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.



HCM Signalized Intersection Capacity Analysis

26: Commonwealth Ave & Campus Driveway

6/3/2008



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔↔	↔↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	
Lane Util. Factor	0.91	0.91	0.95		1.00	
Frpb, ped/bikes	1.00	1.00	1.00		0.86	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.99		0.88	
Flt Protected	0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1477	3104	3021		1014	
Flt Permitted	0.17	0.89	1.00		1.00	
Satd. Flow (perm)	257	2779	3021		1014	
Volume (vph)	125	632	952	57	6	61
Peak-hour factor, PHF	0.89	0.89	0.96	0.61	0.88	0.88
Adj. Flow (vph)	140	710	992	93	7	69
RTOR Reduction (vph)	0	0	6	0	62	0
Lane Group Flow (vph)	104	746	1079	0	14	0
Confl. Peds. (#/hr)	53		53		53	
Heavy Vehicles (%)	0%	0%	5%	14%	0%	29%
Turn Type	D,P+P					
Protected Phases	1	1 2	2		3	
Permitted Phases	2					
Actuated Green, G (s)	41.2	41.2	32.3		7.2	
Effective Green, g (s)	41.2	41.2	32.3		7.2	
Actuated g/C Ratio	0.62	0.62	0.48		0.11	
Clearance Time (s)	4.0		4.0		4.0	
Vehicle Extension (s)	3.0		3.0		3.0	
Lane Grp Cap (vph)	321	1757	1461		109	
v/s Ratio Prot	0.04	c0.06	c0.36		c0.01	
v/s Ratio Perm	0.16	0.21				
v/c Ratio	0.32	0.42	0.74		0.13	
Uniform Delay, d1	6.7	6.6	13.9		27.0	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	0.6	0.2	2.0		0.6	
Delay (s)	7.3	6.8	15.8		27.5	
Level of Service	A	A	B		C	
Approach Delay (s)		6.9	15.8		27.5	
Approach LOS		A	B		C	
<b>Intersection Summary</b>						
HCM Average Control Delay		12.5		HCM Level of Service		B
HCM Volume to Capacity ratio		0.59				
Actuated Cycle Length (s)		66.8		Sum of lost time (s)		18.4
Intersection Capacity Utilization		73.4%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

Queues

2: Commonwealth Ave & Lake Street

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT
Lane Group Flow (vph)	190	854	401	798	192	653
v/c Ratio	0.98	0.95	1.10	1.03	0.51	1.07
Control Delay	117.6	64.8	123.2	88.4	16.3	93.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	117.6	64.8	123.2	88.4	16.3	93.9
Queue Length 50th (ft)	162	365	~384	~378	28	~308
Queue Length 95th (ft)	#302	384	#515	#508	96	#384
Internal Link Dist (ft)		1877		667		202
Turn Bay Length (ft)	200		300		200	
Base Capacity (vph)	193	899	364	775	377	608
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.95	1.10	1.03	0.51	1.07

Intersection Summary

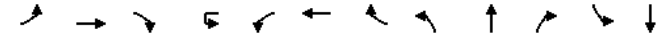
~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2: Commonwealth Ave & Lake Street

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔↔			↔	↔↔	↔		↔↔			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1000	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	10	10	10	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95			1.00	0.95	1.00		0.95			
Frpb, ped/bikes	1.00	1.00			1.00	1.00	0.77		1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00		1.00			
Frt	1.00	0.97			1.00	1.00	0.85		0.96			
Flt Protected	0.95	1.00			0.95	1.00	1.00		0.99			
Satd. Flow (prot)	1570	3110			1526	3249	1101		1503			
Flt Permitted	0.95	1.00			0.95	1.00	1.00		0.99			
Satd. Flow (perm)	1570	3110			1526	3249	1101		1503			
Volume (vph)	165	559	129	12	322	726	167	144	256	133	0	0
Peak-hour factor, PHF	0.87	0.80	0.83	0.92	0.83	0.91	0.87	0.84	0.84	0.75	0.25	0.25
Adj. Flow (vph)	190	699	155	13	388	798	192	171	305	177	0	0
RTOR Reduction (vph)	0	14	0	0	0	0	114	0	30	0	0	0
Lane Group Flow (vph)	190	840	0	0	401	798	78	0	623	0	0	0
Confl. Peds. (#/hr)							54					
Heavy Vehicles (%)	0%	2%	0%	0%	3%	0%	1%	1%	0%	1%	0%	0%
Turn Type	Prot			Split	Split		Perm	Split				
Protected Phases	1	1 2		3	3	3		4	4			
Permitted Phases							3					
Actuated Green, G (s)	16.0	37.0			31.0	31.0	31.0		50.0			
Effective Green, g (s)	16.0	37.0			31.0	31.0	31.0		50.0			
Actuated g/C Ratio	0.12	0.28			0.24	0.24	0.24		0.38			
Clearance Time (s)	4.0				4.0	4.0	4.0		4.0			
Vehicle Extension (s)	3.0				3.0	3.0	3.0		3.0			
Lane Grp Cap (vph)	193	885			364	775	263		578			
v/s Ratio Prot	0.12	c0.27			c0.26	0.25			c0.41			
v/s Ratio Perm							0.07					
v/c Ratio	0.98	0.95			1.10	1.03	0.30		1.08			
Uniform Delay, d1	56.9	45.6			49.5	49.5	40.6		40.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00		1.00			
Incremental Delay, d2	60.9	18.8			77.4	40.2	0.6		60.4			
Delay (s)	117.8	64.3			126.9	89.7	41.2		100.4			
Level of Service	F	E			F	F	D		F			
Approach Delay (s)		74.1				93.7			100.4			0.0
Approach LOS		E				F			F			A

Intersection Summary

HCM Average Control Delay	88.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
2: Commonwealth Ave & Lake Street

6/3/2008



Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Frbp, ped/bikes	
Fipb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	0
Peak-hour factor, PHF	0.25
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	
Heavy Vehicles (%)	0%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Queues

26: Commonwealth Ave & Campus Driveway

6/3/2008



Lane Group	EBL	EBT	WBT	SBL
Lane Group Flow (vph)	84	776	1154	228
v/c Ratio	0.38	0.36	0.72	0.70
Control Delay	11.3	6.1	15.1	19.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	11.3	6.1	15.1	19.3
Queue Length 50th (ft)	6	37	118	8
Queue Length 95th (ft)	37	138	#380	#112
Internal Link Dist (ft)		667	961	372
Turn Bay Length (ft)				
Base Capacity (vph)	220	2186	1695	337
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.38	0.35	0.68	0.68

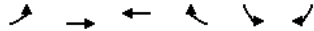
Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

26: Commonwealth Ave & Campus Driveway

6/3/2008



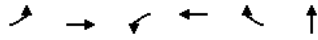
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↵	↕	↕	↕	↵	↵
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	12	12	12
Total Lost time (s)	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frbp, ped/bikes	1.00	1.00	1.00		0.79	
Fipb, ped/bikes	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	1.00		0.88	
Flt Protected	0.95	1.00	1.00		0.99	
Satd. Flow (prot)	1514	3249	3190		1187	
Flt Permitted	0.15	1.00	1.00		0.99	
Satd. Flow (perm)	232	3249	3190		1187	
Volume (vph)	70	644	1039	28	25	178
Peak-hour factor, PHF	0.83	0.83	0.93	0.75	0.89	0.89
Adj. Flow (vph)	84	776	1117	37	28	200
RTOR Reduction (vph)	0	0	3	0	174	0
Lane Group Flow (vph)	84	776	1151	0	54	0
Confl. Peds. (#/hr)	101			101	101	101
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%
Turn Type	D.P+P					
Protected Phases	1	1 2	2		3	
Permitted Phases	2					
Actuated Green, G (s)	31.6	35.6	27.5		7.6	
Effective Green, g (s)	31.6	35.6	27.5		7.6	
Actuated g/C Ratio	0.55	0.62	0.48		0.13	
Clearance Time (s)	4.0					
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	219	2008	1523		157	
v/s Ratio Prot	0.03	c0.24	c0.36		c0.05	
v/s Ratio Perm	0.18					
v/c Ratio	0.38	0.39	0.76		0.35	
Uniform Delay, d1	7.6	5.5	12.3		22.7	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.1	2.2		1.3	
Delay (s)	8.7	5.6	14.5		24.1	
Level of Service	A	A	B		C	
Approach Delay (s)		5.9	14.5		24.1	
Approach LOS		A	B		C	
<b>Intersection Summary</b>						
HCM Average Control Delay			12.2		HCM Level of Service	B
HCM Volume to Capacity ratio			0.65			
Actuated Cycle Length (s)			57.6		Sum of lost time (s)	18.4
Intersection Capacity Utilization		66.4%			ICU Level of Service	C
Analysis Period (min)			15			

c Critical Lane Group

Queues

2: Commonwealth Ave & Lake Street

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT
Lane Group Flow (vph)	290	1021	153	622	120	419
v/c Ratio	1.03	0.83	0.54	1.01	0.35	1.01
Control Delay	100.4	28.8	40.7	77.4	9.4	77.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	100.4	28.8	40.7	77.4	9.4	77.1
Queue Length 50th (ft)	~181	251	79	~202	0	~120
Queue Length 95th (ft)	#337	316	135	#309	39	#172
Internal Link Dist (ft)		1877		667		286
Turn Bay Length (ft)	200		300		200	
Base Capacity (vph)	281	1268	285	613	342	416
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.03	0.81	0.54	1.01	0.35	1.01

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2: Commonwealth Ave & Lake Street

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗	↘	↘	↗	↘	↘	↗	↘	↘	↘	↘
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1000	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	10	10	10	12	12	12
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0				
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		0.95				
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.92		1.00				
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00				
Frt	1.00	0.96		1.00	1.00	0.85		0.97				
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99				
Satd. Flow (prot)	1555	3083		1481	3185	1278		1362				
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99				
Satd. Flow (perm)	1555	3083		1481	3185	1278		1362				
Volume (vph)	264	671	215	132	578	102	63	181	61	0	0	0
Peak-hour factor, PHF	0.91	0.87	0.86	0.86	0.93	0.85	0.70	0.78	0.63	0.25	0.25	0.25
Adj. Flow (vph)	290	771	250	153	622	120	90	232	97	0	0	0
RTOR Reduction (vph)	0	35	0	0	0	97	0	31	0	0	0	0
Lane Group Flow (vph)	290	986	0	153	622	23	0	388	0	0	0	0
Confl. Peds. (#/hr)								21				
Heavy Vehicles (%)	1%	2%	0%	6%	2%	5%	25%	3%	21%	0%	0%	0%
Turn Type	Prot			Split		Perm	Split					
Protected Phases	1	2		3	3		4	4				
Permitted Phases						3						
Actuated Green, G (s)	16.0	34.3		17.0	17.0	17.0		25.0				
Effective Green, g (s)	16.0	34.3		17.0	17.0	17.0		25.0				
Actuated g/C Ratio	0.18	0.39		0.19	0.19	0.19		0.28				
Clearance Time (s)	4.0			4.0	4.0	4.0		4.0				
Vehicle Extension (s)	3.0			3.0	3.0	3.0		3.0				
Lane Grp Cap (vph)	282	1198		285	613	246		386				
v/s Ratio Prot	c0.19	c0.32		0.10	c0.20			c0.28				
v/s Ratio Perm						0.02						
v/c Ratio	1.03	0.82		0.54	1.01	0.09		1.01				
Uniform Delay, d1	36.2	24.3		32.1	35.6	29.3		31.6				
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00				
Incremental Delay, d2	61.1	4.7		1.9	40.1	0.2		47.2				
Delay (s)	97.3	29.0		34.0	75.7	29.5		78.9				
Level of Service	F	C		C	E	C		E				
Approach Delay (s)		44.1			62.4			78.9			0.0	
Approach LOS		D			E			E			A	

Intersection Summary

HCM Average Control Delay	55.9	HCM Level of Service	E
HCM Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	88.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Queues

26: Commonwealth Ave & Campus Driveway

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	157	708	180	912	42	76
v/c Ratio	0.58	0.28	0.48	0.39	0.23	0.41
Control Delay	21.6	5.4	14.5	6.1	25.4	17.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.6	5.4	14.5	6.1	25.4	17.6
Queue Length 50th (ft)	20	34	20	48	15	14
Queue Length 95th (ft)	88	156	#186	223	46	54
Internal Link Dist (ft)		667		961	983	372
Turn Bay Length (ft)	75		75			
Base Capacity (vph)	272	2489	376	2322	305	284
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.28	0.48	0.39	0.14	0.27

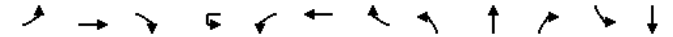
Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

26: Commonwealth Ave & Campus Driveway

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0			4.0
Lane Util. Factor	1.00	0.95			1.00	0.95			1.00			1.00
Frt	1.00	1.00			1.00	0.98			0.98			0.93
Flt Protected	0.95	1.00			0.95	1.00			0.99			1.00
Satd. Flow (prot)	1516	3245			1486	3021			1640			1356
Flt Permitted	0.29	1.00			0.37	1.00			0.97			0.97
Satd. Flow (perm)	463	3245			578	3021			1603			1320
Volume (vph)	96	626	5	1	165	786	57	5	29	5	6	25
Peak-hour factor, PHF	0.61	0.89	0.92	0.92	0.92	0.96	0.61	0.92	0.92	0.92	0.88	0.88
Adj. Flow (vph)	157	703	5	1	179	819	93	5	32	5	7	28
RTOR Reduction (vph)	0	0	0	0	0	5	0	0	5	0	0	37
Lane Group Flow (vph)	157	708	0	0	180	907	0	0	37	0	0	39
Heavy Vehicles (%)	0%	0%	2%	2%	2%	5%	14%	2%	2%	2%	0%	2%
Turn Type	Perm			Perm	Perm			Perm				Perm
Protected Phases		1				1			2			2
Permitted Phases	1			1	1			2			2	
Actuated Green, G (s)	63.8	63.8			63.8	63.8			7.7			7.7
Effective Green, g (s)	64.8	64.8			64.8	64.8			8.7			8.7
Actuated g/C Ratio	0.73	0.73			0.73	0.73			0.10			0.10
Clearance Time (s)	5.0	5.0			5.0	5.0			5.0			5.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0			3.0
Lane Grp Cap (vph)	338	2371			422	2207			157			129
v/s Ratio Prot		0.22				0.30						
v/s Ratio Perm	c0.34				0.31				0.02			c0.03
v/c Ratio	0.46	0.30			0.43	0.41			0.24			0.30
Uniform Delay, d1	4.9	4.1			4.7	4.6			36.9			37.2
Progression Factor	1.00	1.00			1.00	1.00			1.00			1.00
Incremental Delay, d2	1.0	0.1			0.7	0.1			0.8			1.3
Delay (s)	5.9	4.2			5.4	4.7			37.7			38.5
Level of Service	A	A			A	A			D			D
Approach Delay (s)		4.5				4.8			37.7			38.5
Approach LOS		A				A			D			D

Intersection Summary

HCM Average Control Delay	6.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	88.7	Sum of lost time (s)	15.2
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis  
26: Commonwealth Ave & Campus Driveway

6/3/2008

<b>Movement</b>	<b>SBR</b>
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Fr	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	36
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	41
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	29%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
<b>Intersection Summary</b>	

Queues

2: Commonwealth Ave & Lake Street

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT
Lane Group Flow (vph)	190	854	163	798	192	621
v/c Ratio	0.91	0.90	0.46	1.05	0.50	1.07
Control Delay	93.8	52.8	44.3	91.4	13.9	93.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	93.8	52.8	44.3	91.4	13.9	93.3
Queue Length 50th (ft)	147	326	109	~355	19	~271
Queue Length 95th (ft)	#271	347	163	#482	82	#349
Internal Link Dist (ft)		1877		667		202
Turn Bay Length (ft)	200		300		200	
Base Capacity (vph)	209	949	357	759	386	579
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.90	0.46	1.05	0.50	1.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2: Commonwealth Ave & Lake Street

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔↔		↔	↔↔	↔		↔↔				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1000	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	10	10	10	12	12	12
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0				
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		0.95				
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.78		1.00				
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00				
Frt	1.00	0.97		1.00	1.00	0.85		0.96				
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99				
Satd. Flow (prot)	1570	3110		1525	3249	1125		1511				
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99				
Satd. Flow (perm)	1570	3110		1525	3249	1125		1511				
Volume (vph)	165	559	129	135	726	167	144	256	109	0	0	0
Peak-hour factor, PHF	0.87	0.80	0.83	0.83	0.91	0.87	0.84	0.84	0.75	0.25	0.25	0.25
Adj. Flow (vph)	190	699	155	163	798	192	171	305	145	0	0	0
RTOR Reduction (vph)	0	16	0	0	0	123	0	24	0	0	0	0
Lane Group Flow (vph)	190	838	0	163	798	69	0	597	0	0	0	0
Confl. Peds. (#/hr)								54				
Heavy Vehicles (%)	0%	2%	0%	3%	0%	1%	1%	0%	1%	0%	0%	0%
Turn Type	Prot			Split		Perm		Split				
Protected Phases	1	2		3	3			4	4			
Permitted Phases						3						
Actuated Green, G (s)	16.0	35.8		28.0	28.0	28.0		44.0				
Effective Green, g (s)	16.0	35.8		28.0	28.0	28.0		44.0				
Actuated g/C Ratio	0.13	0.30		0.23	0.23	0.23		0.37				
Clearance Time (s)	4.0			4.0	4.0	4.0		4.0				
Vehicle Extension (s)	3.0			3.0	3.0	3.0		3.0				
Lane Grp Cap (vph)	210	929		356	759	263		555				
v/s Ratio Prot	0.12	c0.27		0.11	c0.25			c0.39				
v/s Ratio Perm						0.06						
v/c Ratio	0.90	0.90		0.46	1.05	0.26		1.08				
Uniform Delay, d1	51.1	40.3		39.4	45.9	37.5		37.9				
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00				
Incremental Delay, d2	41.4	11.8		0.9	47.0	0.5		60.1				
Delay (s)	92.6	52.1		40.3	92.9	38.0		98.0				
Level of Service	F	D		D	F	D		F				
Approach Delay (s)		59.5			76.3			98.0			0.0	
Approach LOS		E			E			F			A	

Intersection Summary

HCM Average Control Delay	74.9	HCM Level of Service	E
HCM Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	119.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



## Queues

26: Commonwealth Ave &amp; Campus Driveway

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	65	763	151	1006	31	224
v/c Ratio	0.40	0.38	0.58	0.51	0.10	0.63
Control Delay	21.8	8.6	24.5	9.9	20.4	19.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.8	8.6	24.5	9.9	20.4	19.1
Queue Length 50th (ft)	8	50	22	73	7	41
Queue Length 95th (ft)	#57	173	#175	279	34	138
Internal Link Dist (ft)		667		961	916	372
Turn Bay Length (ft)	75		75			
Base Capacity (vph)	163	2017	262	1990	407	443
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.38	0.58	0.51	0.08	0.51

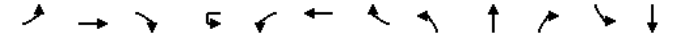
## Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

## HCM Signalized Intersection Capacity Analysis

26: Commonwealth Ave &amp; Campus Driveway

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0	4.0		4.0
Lane Util. Factor	1.00	0.95			1.00	0.95			1.00	0.95		1.00
Frt	1.00	1.00			1.00	0.99			0.99	0.99		0.92
Flt Protected	0.95	1.00			0.95	1.00			0.99	0.99		0.99
Satd. Flow (prot)	1516	3245			1486	3200			1641	1556		1556
Flt Permitted	0.23	1.00			0.33	1.00			0.95	0.95		0.96
Satd. Flow (perm)	366	3245			510	3200			1571	1504		1504
Volume (vph)	49	629	5	12	127	901	28	5	21	3	25	61
Peak-hour factor, PHF	0.75	0.83	0.92	0.92	0.92	0.93	0.75	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	758	5	13	138	969	37	5	23	3	27	66
RTOR Reduction (vph)	0	0	0	0	0	3	0	0	2	0	0	65
Lane Group Flow (vph)	65	763	0	0	151	1003	0	0	29	0	0	159
Heavy Vehicles (%)	0%	0%	2%	2%	2%	1%	0%	2%	2%	2%	0%	2%
Turn Type	Perm			Perm	Perm			Perm			Perm	
Protected Phases		1				1			2			2
Permitted Phases	1			1	1			2			2	
Actuated Green, G (s)	35.6	35.6			35.6	35.6			10.4			10.4
Effective Green, g (s)	36.6	36.6			36.6	36.6			11.4			11.4
Actuated g/C Ratio	0.58	0.58			0.58	0.58			0.18			0.18
Clearance Time (s)	5.0	5.0			5.0	5.0			5.0			5.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0			3.0
Lane Grp Cap (vph)	211	1873			294	1847			282			270
v/s Ratio Prot		0.23				c0.31						
v/s Ratio Perm	0.18				0.30				0.02			c0.11
v/c Ratio	0.31	0.41			0.51	0.54			0.10			0.59
Uniform Delay, d1	6.9	7.4			8.1	8.3			21.7			23.9
Progression Factor	1.00	1.00			1.00	1.00			1.00			1.00
Incremental Delay, d2	0.8	0.1			1.5	0.3			0.2			3.3
Delay (s)	7.7	7.5			9.6	8.6			21.9			27.1
Level of Service	A	A			A	A			C			C
Approach Delay (s)		7.6				8.7			21.9			27.1
Approach LOS		A				A			C			C

## Intersection Summary

HCM Average Control Delay	10.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	63.4	Sum of lost time (s)	15.4
Intersection Capacity Utilization	58.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

26: Commonwealth Ave & Campus Driveway

6/3/2008



<b>Movement</b>	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Fr	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	117
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	131
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	0%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
<b>Intersection Summary</b>	

Queues

2: Commonwealth Ave & Lake Street

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT
Lane Group Flow (vph)	290	1020	152	622	120	419
v/c Ratio	1.03	0.83	0.53	1.02	0.35	1.01
Control Delay	101.2	29.8	40.6	78.1	9.4	77.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	101.2	29.8	40.6	78.1	9.4	77.8
Queue Length 50th (ft)	~181	259	79	~202	0	~120
Queue Length 95th (ft)	#337	324	134	#309	39	#172
Internal Link Dist (ft)		1877		667		286
Turn Bay Length (ft)	200		300		200	
Base Capacity (vph)	281	1265	285	612	342	415
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.03	0.81	0.53	1.02	0.35	1.01

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2: Commonwealth Ave & Lake Street

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↘↗		↘	↘↗	↗		↗↘		↘	↘↗	↘
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1000	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	10	10	10	12	12	12
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0				
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		0.95				
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.92		1.00				
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00				
Frt	1.00	0.98		1.00	1.00	0.85		0.97				
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99				
Satd. Flow (prot)	1555	3136		1481	3185	1278		1362				
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99				
Satd. Flow (perm)	1555	3136		1481	3185	1278		1362				
Volume (vph)	264	783	103	131	578	102	63	181	61	0	0	0
Peak-hour factor, PHF	0.91	0.87	0.86	0.86	0.93	0.85	0.70	0.78	0.63	0.25	0.25	0.25
Adj. Flow (vph)	290	900	120	152	622	120	90	232	97	0	0	0
RTOR Reduction (vph)	0	12	0	0	0	97	0	31	0	0	0	0
Lane Group Flow (vph)	290	1008	0	152	622	23	0	388	0	0	0	0
Confl. Peds. (#/hr)								21				
Heavy Vehicles (%)	1%	2%	0%	6%	2%	5%	25%	3%	21%	0%	0%	0%
Turn Type	Prot			Split		Perm		Split				
Protected Phases	1	2		3	3			4	4			
Permitted Phases						3						
Actuated Green, G (s)	16.0	34.6		17.0	17.0	17.0		25.0				
Effective Green, g (s)	16.0	34.6		17.0	17.0	17.0		25.0				
Actuated g/C Ratio	0.18	0.39		0.19	0.19	0.19		0.28				
Clearance Time (s)	4.0			4.0	4.0	4.0		4.0				
Vehicle Extension (s)	3.0			3.0	3.0	3.0		3.0				
Lane Grp Cap (vph)	281	1225		284	611	245		384				
v/s Ratio Prot	c0.19	c0.32		0.10	c0.20			c0.28				
v/s Ratio Perm						0.02						
v/c Ratio	1.03	0.82		0.54	1.02	0.09		1.01				
Uniform Delay, d1	36.3	24.3		32.2	35.8	29.5		31.8				
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00				
Incremental Delay, d2	62.2	4.6		1.9	41.0	0.2		48.7				
Delay (s)	98.5	28.9		34.2	76.8	29.6		80.5				
Level of Service	F	C		C	E	C		F				
Approach Delay (s)		44.3			63.2			80.5			0.0	
Approach LOS		D			E			F			A	

Intersection Summary

HCM Average Control Delay	56.5	HCM Level of Service	E
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	88.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Queues

26: Commonwealth Ave & Campus Driveway

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	157	825	165	926	42	76
v/c Ratio	0.69	0.52	0.48	0.40	0.18	0.34
Control Delay	37.3	13.5	14.7	6.7	21.5	18.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.3	13.5	14.7	6.7	21.5	18.8
Queue Length 50th (ft)	34	78	12	43	10	14
Queue Length 95th (ft)	#108	242	#124	224	42	56
Internal Link Dist (ft)		667		961	381	372
Turn Bay Length (ft)	75		75			
Base Capacity (vph)	228	1597	347	2328	418	393
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.52	0.48	0.40	0.10	0.19

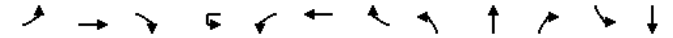
Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

26: Commonwealth Ave & Campus Driveway

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↔	↕	↔	↔	↕	↕	↔	↔	↕	↕	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0	4.0		4.0
Lane Util. Factor	1.00	0.95			1.00	0.95			1.00	0.98		1.00
Frt	1.00	0.98			1.00	0.98			0.98	0.98		0.96
Flt Protected	0.95	1.00			0.95	1.00			0.99	0.99		1.00
Satd. Flow (prot)	1516	3168			1486	3022			1640	1477		1477
Flt Permitted	0.31	1.00			0.27	1.00			0.97	0.96		0.96
Satd. Flow (perm)	492	3168			415	3022			1600	1426		1426
Volume (vph)	96	626	112	1	151	800	57	5	29	5	6	40
Peak-hour factor, PHF	0.61	0.89	0.92	0.92	0.92	0.96	0.61	0.92	0.92	0.92	0.88	0.88
Adj. Flow (vph)	157	703	122	1	164	833	93	5	32	5	7	45
RTOR Reduction (vph)	0	14	0	0	0	6	0	0	5	0	0	22
Lane Group Flow (vph)	157	811	0	0	165	920	0	0	37	0	0	54
Heavy Vehicles (%)	0%	0%	2%	2%	2%	5%	14%	2%	2%	2%	0%	2%
Turn Type	Perm		pm+pt	pm+pt			Perm			Perm		Perm
Protected Phases		2	1	1	2	1		3				3
Permitted Phases	2		1	2			3				3	
Actuated Green, G (s)	24.4	24.4			31.7	35.7		4.8				4.8
Effective Green, g (s)	25.4	25.4			32.7	36.7		4.8				4.8
Actuated g/C Ratio	0.46	0.46			0.59	0.66		0.09				0.09
Clearance Time (s)	5.0	5.0			4.0			4.0				4.0
Vehicle Extension (s)	3.0	3.0			3.0			3.0				3.0
Lane Grp Cap (vph)	224	1445			384	1991		138				123
v/s Ratio Prot		0.26			0.06	c0.30						
v/s Ratio Perm	c0.32				0.20			0.02				c0.04
v/c Ratio	0.70	0.56			0.43	0.46		0.27				0.44
Uniform Delay, d1	12.1	11.1			5.8	4.7		23.8				24.2
Progression Factor	1.00	1.00			1.00	1.00		1.00				1.00
Incremental Delay, d2	9.5	0.5			0.8	0.2		1.1				2.5
Delay (s)	21.6	11.6			6.5	4.8		24.9				26.7
Level of Service	C	B			A	A		C				C
Approach Delay (s)		13.2				5.1		24.9				26.7
Approach LOS		B				A		C				C

Intersection Summary

HCM Average Control Delay	9.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	55.7	Sum of lost time (s)	18.2
Intersection Capacity Utilization	47.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

26: Commonwealth Ave & Campus Driveway

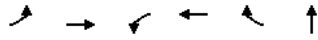
6/3/2008



<b>Movement</b>	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Fr	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	21
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	24
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	29%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
<b>Intersection Summary</b>	

Queues  
2: Commonwealth Ave & Lake Street

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT
Lane Group Flow (vph)	190	858	163	798	192	621
v/c Ratio	0.91	0.90	0.46	1.05	0.50	1.07
Control Delay	94.0	53.8	44.4	91.6	13.9	93.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.0	53.8	44.4	91.6	13.9	93.5
Queue Length 50th (ft)	147	333	109	~355	19	~271
Queue Length 95th (ft)	#271	354	163	#482	82	#349
Internal Link Dist (ft)		1877		667		202
Turn Bay Length (ft)	200		300		200	
Base Capacity (vph)	209	951	356	759	386	579
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.90	0.46	1.05	0.50	1.07

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis  
2: Commonwealth Ave & Lake Street

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔↔		↔	↔↔	↔		↔↔				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1000	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	10	10	10	12	12	12
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0				
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		0.95				
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.78		1.00				
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00				
Frt	1.00	0.99		1.00	1.00	0.85		0.96				
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99				
Satd. Flow (prot)	1570	3151		1525	3249	1125		1511				
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99				
Satd. Flow (perm)	1570	3151		1525	3249	1125		1511				
Volume (vph)	165	630	58	135	726	167	144	256	109	0	0	0
Peak-hour factor, PHF	0.87	0.80	0.83	0.83	0.91	0.87	0.84	0.84	0.75	0.25	0.25	0.25
Adj. Flow (vph)	190	788	70	163	798	192	171	305	145	0	0	0
RTOR Reduction (vph)	0	6	0	0	0	123	0	24	0	0	0	0
Lane Group Flow (vph)	190	852	0	163	798	69	0	597	0	0	0	0
Confl. Peds. (#/hr)								54				
Heavy Vehicles (%)	0%	2%	0%	3%	0%	1%	1%	0%	1%	0%	0%	0%
Turn Type	Prot			Split		Perm		Split				
Protected Phases	1	2		3	3			4	4			
Permitted Phases						3						
Actuated Green, G (s)	16.0	35.9		28.0	28.0	28.0		44.0				
Effective Green, g (s)	16.0	35.9		28.0	28.0	28.0		44.0				
Actuated g/C Ratio	0.13	0.30		0.23	0.23	0.23		0.37				
Clearance Time (s)	4.0			4.0	4.0	4.0		4.0				
Vehicle Extension (s)	3.0			3.0	3.0	3.0		3.0				
Lane Grp Cap (vph)	210	943		356	759	263		554				
v/s Ratio Prot	0.12	c0.27		0.11	c0.25			c0.39				
v/s Ratio Perm						0.06						
v/c Ratio	0.90	0.90		0.46	1.05	0.26		1.08				
Uniform Delay, d1	51.2	40.3		39.4	45.9	37.5		38.0				
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00				
Incremental Delay, d2	41.4	11.8		0.9	47.0	0.5		60.8				
Delay (s)	92.6	52.2		40.4	92.9	38.0		98.7				
Level of Service	F	D		D	F	D		F				
Approach Delay (s)		59.5			76.4			98.7			0.0	
Approach LOS		E			E			F			A	

Intersection Summary

HCM Average Control Delay	75.0	HCM Level of Service	E
HCM Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	119.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

## Queues

26: Commonwealth Ave &amp; Campus Driveway

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	65	835	134	1022	31	225
v/c Ratio	0.42	0.42	0.59	0.52	0.10	0.64
Control Delay	23.4	9.0	27.5	10.2	20.3	21.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.4	9.0	27.5	10.2	20.3	21.5
Queue Length 50th (ft)	9	57	21	78	7	48
Queue Length 95th (ft)	#64	191	#164	286	34	#151
Internal Link Dist (ft)		667		961	528	372
Turn Bay Length (ft)	75		75			
Base Capacity (vph)	156	1971	226	1969	403	428
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.42	0.59	0.52	0.08	0.53

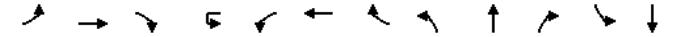
## Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

## HCM Signalized Intersection Capacity Analysis

26: Commonwealth Ave &amp; Campus Driveway

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0	4.0		4.0
Lane Util. Factor	1.00	0.95			1.00	0.95			1.00	0.95		1.00
Frt	1.00	0.99			1.00	0.99			0.99	0.99		0.93
Flt Protected	0.95	1.00			0.95	1.00			0.99	0.99		0.99
Satd. Flow (prot)	1516	3198			1486	3201			1641	1571		1571
Flt Permitted	0.22	1.00			0.29	1.00			0.95	0.95		0.96
Satd. Flow (perm)	355	3198			459	3201			1579	1519		1519
Volume (vph)	49	629	71	12	111	916	28	5	21	3	25	76
Peak-hour factor, PHF	0.75	0.83	0.92	0.92	0.92	0.93	0.75	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	758	77	13	121	985	37	5	23	3	27	83
RTOR Reduction (vph)	0	7	0	0	0	3	0	0	2	0	0	48
Lane Group Flow (vph)	65	828	0	0	134	1019	0	0	29	0	0	177
Heavy Vehicles (%)	0%	0%	2%	2%	2%	1%	0%	2%	2%	2%	0%	2%
Turn Type	Perm		Perm	Perm			Perm		Perm		Perm	
Protected Phases		1			1			2				2
Permitted Phases	1		1	1			2				2	
Actuated Green, G (s)	36.1	36.1			36.1	36.1		11.0				11.0
Effective Green, g (s)	37.1	37.1			37.1	37.1		12.0				12.0
Actuated g/C Ratio	0.58	0.58			0.58	0.58		0.19				0.19
Clearance Time (s)	5.0	5.0			5.0	5.0		5.0				5.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0				3.0
Lane Grp Cap (vph)	204	1839			264	1841		294				283
v/s Ratio Prot		0.26				c0.32						
v/s Ratio Perm	0.18				0.29			0.02				c0.12
v/c Ratio	0.32	0.45			0.51	0.55		0.10				0.63
Uniform Delay, d1	7.1	7.9			8.2	8.5		21.8				24.2
Progression Factor	1.00	1.00			1.00	1.00		1.00				1.00
Incremental Delay, d2	0.9	0.2			1.5	0.4		0.1				4.3
Delay (s)	8.0	8.0			9.8	8.9		21.9				28.4
Level of Service	A	A			A	A		C				C
Approach Delay (s)		8.0				9.0		21.9				28.4
Approach LOS		A				A		C				C

## Intersection Summary

HCM Average Control Delay	10.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	64.5	Sum of lost time (s)	15.4
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

26: Commonwealth Ave & Campus Driveway

6/3/2008

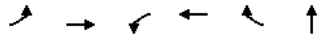


<b>Movement</b>	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Fr	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	102
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	115
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	0%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
<b>Intersection Summary</b>	



Queues  
2: Commonwealth Ave & Lake Street

6/3/2008



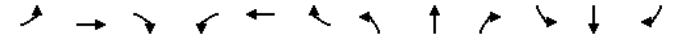
Lane Group	EBL	EBT	WBL	WBT	WBR	NBT
Lane Group Flow (vph)	290	1020	152	644	279	158
v/c Ratio	0.83	0.72	0.46	0.90	0.55	0.67
Control Delay	51.8	19.0	31.8	47.7	8.6	29.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.8	19.0	31.8	47.7	8.6	29.6
Queue Length 50th (ft)	129	184	61	153	0	27
Queue Length 95th (ft)	#290	261	120	#285	51	50
Internal Link Dist (ft)		1877		667		256
Turn Bay Length (ft)	200		300		200	
Base Capacity (vph)	349	1507	332	714	504	301
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.68	0.46	0.90	0.55	0.52

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis  
2: Commonwealth Ave & Lake Street

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔↔		↔	↔↔	↔		↔↔				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1000	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	10	10	10	12	12	12
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0				
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		0.95				
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.93		1.00				
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00				
Frt	1.00	0.98		1.00	1.00	0.85		0.97				
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98				
Satd. Flow (prot)	1555	3136		1481	3185	1293		1312				
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98				
Satd. Flow (perm)	1555	3136		1481	3185	1293		1312				
Volume (vph)	264	783	103	131	599	237	44	48	21	0	0	0
Peak-hour factor, PHF	0.91	0.87	0.86	0.86	0.93	0.85	0.70	0.78	0.63	0.25	0.25	0.25
Adj. Flow (vph)	290	900	120	152	644	279	63	62	33	0	0	0
RTOR Reduction (vph)	0	13	0	0	0	216	0	28	0	0	0	0
Lane Group Flow (vph)	290	1007	0	152	644	63	0	130	0	0	0	0
Confl. Peds. (#/hr)								21				
Heavy Vehicles (%)	1%	2%	0%	6%	2%	5%	25%	3%	21%	0%	0%	0%
Turn Type	Prot			Split		Perm		Split				
Protected Phases	1	2		3	3			4	4			
Permitted Phases						3						
Actuated Green, G (s)	16.2	32.4		16.2	16.2	16.2		11.4				
Effective Green, g (s)	16.2	32.4		16.2	16.2	16.2		11.4				
Actuated g/C Ratio	0.22	0.45		0.22	0.22	0.22		0.16				
Clearance Time (s)	4.0			4.0	4.0	4.0		4.0				
Vehicle Extension (s)	3.0			3.0	3.0	3.0		3.0				
Lane Grp Cap (vph)	350	1411		333	717	291		208				
v/s Ratio Prot	c0.19	c0.32		0.10	c0.20			c0.10				
v/s Ratio Perm						0.05						
v/c Ratio	0.83	0.71		0.46	0.90	0.22		0.63				
Uniform Delay, d1	26.6	16.0		24.1	27.1	22.7		28.3				
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00				
Incremental Delay, d2	19.8	1.7		1.0	14.0	0.4		5.8				
Delay (s)	46.4	17.8		25.1	41.1	23.1		34.1				
Level of Service	D	B		C	D	C		C				
Approach Delay (s)		24.1			34.2			34.1			0.0	
Approach LOS		C			C			C			A	

Intersection Summary

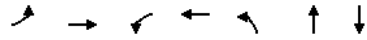
HCM Average Control Delay	29.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

## Queues

26: Commonwealth Ave &amp; Campus Driveway

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	133	797	165	926	108	144	76
v/c Ratio	0.78	0.52	0.67	0.48	0.36	0.30	0.43
Control Delay	59.5	19.5	31.0	13.8	24.9	21.6	31.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.5	19.5	31.0	13.8	24.9	21.6	31.8
Queue Length 50th (ft)	52	132	32	119	40	48	26
Queue Length 95th (ft)	#131	322	#193	349	104	125	81
Internal Link Dist (ft)		667		961		381	372
Turn Bay Length (ft)	75		75				
Base Capacity (vph)	170	1545	246	1938	375	628	290
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.52	0.67	0.48	0.29	0.23	0.26

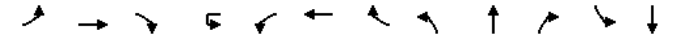
## Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

## HCM Signalized Intersection Capacity Analysis

26: Commonwealth Ave &amp; Campus Driveway

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0	4.0			4.0
Lane Util. Factor	1.00	0.95			1.00	0.95		0.95	0.95			1.00
Frt	1.00	0.98			1.00	0.98		1.00	0.96			0.96
Flt Protected	0.95	1.00			0.95	1.00		0.95	0.98			1.00
Satd. Flow (prot)	1516	3165			1486	3022		1513	1504			1477
Flt Permitted	0.31	1.00			0.26	1.00		0.72	0.92			0.96
Satd. Flow (perm)	492	3165			408	3022		1141	1417			1421
Volume (vph)	81	601	112	1	151	800	57	156	44	31	6	40
Peak-hour factor, PHF	0.61	0.89	0.92	0.92	0.92	0.96	0.61	0.92	0.92	0.92	0.88	0.88
Adj. Flow (vph)	133	675	122	1	164	833	93	170	48	34	7	45
RTOR Reduction (vph)	0	11	0	0	0	5	0	0	12	0	0	16
Lane Group Flow (vph)	133	786	0	0	165	921	0	108	132	0	0	60
Heavy Vehicles (%)	0%	0%	2%	2%	2%	5%	14%	2%	2%	2%	0%	2%
Turn Type	Perm		pm+pt	pm+pt			D,P+P				Perm	
Protected Phases		2	1	1	2	1	3	3	4			4
Permitted Phases	2		1	2			4				4	
Actuated Green, G (s)	36.2	36.2			42.6	46.6	15.8	15.8	15.8			7.2
Effective Green, g (s)	37.2	37.2			43.6	47.6	15.8	15.8	15.8			7.2
Actuated g/C Ratio	0.46	0.46			0.53	0.58	0.19	0.19	0.19			0.09
Clearance Time (s)	5.0	5.0			4.0		4.0		4.0			4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			3.0
Lane Grp Cap (vph)	224	1441			302	1761	260	283	283			125
v/s Ratio Prot		0.25			0.04	c0.30	0.04	c0.05				
v/s Ratio Perm	c0.27				0.25		0.04	0.04				c0.04
v/c Ratio	0.59	0.55			0.55	0.52	0.42	0.47	0.48			0.48
Uniform Delay, d1	16.6	16.1			10.8	10.2	28.7	29.2	29.2			35.5
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			1.00
Incremental Delay, d2	4.2	0.4			2.0	0.3	1.1	1.2	1.2			2.9
Delay (s)	20.8	16.5			12.8	10.5	29.7	30.4	30.4			38.3
Level of Service	C	B			B	B	C	C	C			D
Approach Delay (s)		17.2				10.9		30.1				38.3
Approach LOS		B				B		C				D

## Intersection Summary

HCM Average Control Delay	16.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	81.7	Sum of lost time (s)	22.3
Intersection Capacity Utilization	55.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis  
26: Commonwealth Ave & Campus Driveway

6/3/2008

<b>Movement</b>	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Fr	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	21
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	24
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	29%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
<b>Intersection Summary</b>	

Queues

2: Commonwealth Ave & Lake Street

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT
Lane Group Flow (vph)	190	858	163	851	364	337
v/c Ratio	0.65	0.71	0.40	0.97	0.62	0.98
Control Delay	44.9	24.9	30.2	58.1	8.4	78.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.9	24.9	30.2	58.1	8.4	78.6
Queue Length 50th (ft)	97	199	73	241	0	88
Queue Length 95th (ft)	#180	223	124	#393	64	#170
Internal Link Dist (ft)		1877		667		202
Turn Bay Length (ft)	200		300		200	
Base Capacity (vph)	294	1303	410	873	588	343
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.66	0.40	0.97	0.62	0.98

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2: Commonwealth Ave & Lake Street

6/3/2008



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔↔		↔	↔↔	↔		↔↔				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1000	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	10	10	10	12	12	12
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0				
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		0.95				
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.84		1.00				
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00				
Frt	1.00	0.99		1.00	1.00	0.85		0.97				
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98				
Satd. Flow (prot)	1570	3151		1525	3249	1206		1510				
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98				
Satd. Flow (perm)	1570	3151		1525	3249	1206		1510				
Volume (vph)	165	630	58	135	774	317	107	119	51	0	0	0
Peak-hour factor, PHF	0.87	0.80	0.83	0.83	0.91	0.87	0.84	0.84	0.75	0.25	0.25	0.25
Adj. Flow (vph)	190	788	70	163	851	364	127	142	68	0	0	0
RTOR Reduction (vph)	0	7	0	0	0	266	0	24	0	0	0	0
Lane Group Flow (vph)	190	851	0	163	851	98	0	313	0	0	0	0
Confl. Peds. (#/hr)								54				
Heavy Vehicles (%)	0%	2%	0%	3%	0%	1%	1%	0%	1%	0%	0%	0%
Turn Type	Prot			Split		Perm		Split				
Protected Phases	1	1 2		3	3			4	4			
Permitted Phases						3						
Actuated Green, G (s)	16.0	32.6		23.1	23.1	23.1		18.0				
Effective Green, g (s)	16.0	32.6		23.1	23.1	23.1		18.0				
Actuated g/C Ratio	0.19	0.38		0.27	0.27	0.27		0.21				
Clearance Time (s)	4.0			4.0	4.0	4.0		4.0				
Vehicle Extension (s)	3.0			3.0	3.0	3.0		3.0				
Lane Grp Cap (vph)	293	1199		411	876	325		317				
v/s Ratio Prot	0.12	c0.27		0.11	c0.26			c0.21				
v/s Ratio Perm						0.08						
v/c Ratio	0.65	0.71		0.40	0.97	0.30		0.99				
Uniform Delay, d1	32.2	22.5		25.6	31.0	24.9		33.7				
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00				
Incremental Delay, d2	10.6	1.9		0.6	23.5	0.5		46.3				
Delay (s)	42.9	24.5		26.2	54.5	25.4		80.0				
Level of Service	D	C		C	D	C		F				
Approach Delay (s)		27.8			43.5			80.0			0.0	
Approach LOS		C			D			F			A	

Intersection Summary

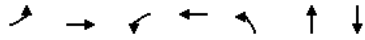
HCM Average Control Delay	42.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	85.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Queues

26: Commonwealth Ave & Campus Driveway

6/3/2008



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	45	783	134	1022	215	96	225
v/c Ratio	0.52	0.48	0.79	0.63	0.56	0.17	0.51
Control Delay	45.1	15.8	55.6	18.6	25.1	10.1	18.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.1	15.8	55.6	18.6	25.1	10.1	18.8
Queue Length 50th (ft)	12	108	46	160	71	11	24
Queue Length 95th (ft)	#69	247	#216	398	171	53	71
Internal Link Dist (ft)		667		961		528	372
Turn Bay Length (ft)	75		75				
Base Capacity (vph)	87	1633	170	1633	419	680	639
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.48	0.79	0.63	0.51	0.14	0.35

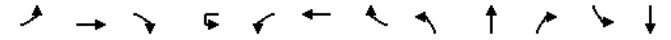
Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

26: Commonwealth Ave & Campus Driveway

6/3/2008



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0	4.0			4.0
Lane Util. Factor	1.00	0.95			1.00	0.95		1.00	1.00			0.95
Frt	1.00	0.99			1.00	0.99		1.00	0.91			0.92
Flt Protected	0.95	1.00			0.95	1.00		0.95	1.00			0.99
Satd. Flow (prot)	1516	3195			1486	3201		1593	1527			2960
Flt Permitted	0.18	1.00			0.28	1.00		0.55	1.00			0.91
Satd. Flow (perm)	294	3195			440	3201		917	1527			2697
Volume (vph)	34	586	71	12	111	916	28	198	36	52	25	76
Peak-hour factor, PHF	0.75	0.83	0.92	0.92	0.92	0.93	0.75	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	45	706	77	13	121	985	37	215	39	57	27	83
RTOR Reduction (vph)	0	7	0	0	0	2	0	0	38	0	0	101
Lane Group Flow (vph)	45	776	0	0	134	1020	0	215	58	0	0	124
Heavy Vehicles (%)	0%	0%	2%	2%	2%	1%	0%	2%	2%	2%	0%	2%
Turn Type	Perm		Perm	Perm		D,P+P				Perm		
Protected Phases		1				1		2	2 3			3
Permitted Phases	1		1	1				3			3	
Actuated Green, G (s)	38.8	38.8			38.8	38.8		21.0	26.0			8.8
Effective Green, g (s)	39.8	39.8			39.8	39.8		23.0	27.0			9.8
Actuated g/C Ratio	0.49	0.49			0.49	0.49		0.28	0.33			0.12
Clearance Time (s)	5.0	5.0			5.0	5.0		5.0				5.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0				3.0
Lane Grp Cap (vph)	144	1564			215	1567		369	507			325
v/s Ratio Prot		0.24				c0.32		c0.09	0.04			
v/s Ratio Perm	0.15				0.30			c0.07				0.05
v/c Ratio	0.31	0.50			0.62	0.65		0.58	0.11			0.38
Uniform Delay, d1	12.5	14.0			15.2	15.5		24.2	18.8			33.0
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00			1.00
Incremental Delay, d2	1.2	0.2			5.5	1.0		2.3	0.1			0.7
Delay (s)	13.7	14.2			20.8	16.5		26.5	18.9			33.7
Level of Service	B	B			C	B		C	B			C
Approach Delay (s)		14.2				17.0			24.2			33.7
Approach LOS		B				B			C			C

Intersection Summary

HCM Average Control Delay	18.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	81.3	Sum of lost time (s)	18.5
Intersection Capacity Utilization	64.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis  
26: Commonwealth Ave & Campus Driveway

6/3/2008

<b>Movement</b>	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Fr	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	102
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	115
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	0%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
<b>Intersection Summary</b>	

# Boston College Parking Supply Inventory

BOSTON COLLEGE PARKING SUPPLY

Facility	Number of Spaces							
	Existing Utilization			Lost				
	Existing	Number of Vehicles Parked	Percent	# of Spaces	IMP Project	Added	Net Changes	Future
<b>Brighton Campus</b>								
St. Clement's -- Across Foster	74	58	78%	74	Grad Housing (1)	34	-40	34
St. Clement's Front	27	19	70%	0		0	0	27
St. Clement's Upper	31	27	87%	0		0	0	31
St. Clement's Lower	29	26	90%	0		0	0	29
<i>Foster Street Area Total</i>	<i>161</i>	<i>130</i>	<i>81%</i>	<i>74</i>		<i>34</i>	<i>-40</i>	<i>121</i>
Garage Front	23	10	43%	23	Garage (5)	500	477	500
Tennis Lower	38	0	0%	38	Athletics Center (2)	0	-38	0
Tennis Middle	42	20	48%	42	Athletics Center (2)	0	-42	0
Tennis Upper	42	33	79%	42	Athletics Center (2)	0	-42	0
Bishop Peterson (Front)	61	31	51%	0		0	0	61
Bishop Peterson (Rear Lower)	6	6	100%	0		0	0	6
Bishop Peterson (Rear Upper)	17	7	41%	0		0	0	17
Bishop Peterson (Across from Garage)	4	4	100%	0		0	0	4
Bishop Peterson (Lake St. Side)	25	22	88%	0		0	0	25
<i>Playing Fields Area</i>	<i>258</i>	<i>133</i>	<i>52%</i>	<i>145</i>		<i>500</i>	<i>355</i>	<i>613</i>
3 Lake Street	17	16	94%	0		0	0	17
Library Lot	163	20	12%	163	Internal Housing (7)	0	-163	0
Facing Library -- row parallel Lake	21	8	38%	21	Internal Housing (7)	0	-21	0
St. William's	31	11	35%	0		0	0	31
St. William's (Rear)	4	0	0%	4	Internal Housing (7)	0	-4	0
St. William's (Rear Row Behind Bldg.)	22	9	41%	22	Internal Housing (7)	0	-22	0
Chancery (Rear close to Library Lot)	36	33	92%	36	Internal Housing (7)	0	-36	0
Chancery Arc	16	12	75%	0		0	0	16
Chancery (Perpendicular to Comm)	32	16	50%	14	Internal Housing (7)	0	-14	18
Gymnasium Lot	22	10	45%	22	Fine Arts District (10)	0	-22	0
Cardinal's Residence (along road)	26	0	0%	0		0	0	26
Cardinal's Residence Lot East	4	0	0%	0		0	0	4
Cardinal's Residence Lot West	6	0	0%	6	Fine Arts District (10)	0	-6	0
<i>Commonwealth Ave. Area</i>	<i>400</i>	<i>135</i>	<i>34%</i>	<i>288</i>		<i>0</i>	<i>-288</i>	<i>112</i>
<b>Brighton Campus Total</b>	<b>819</b>	<b>398</b>	<b>49%</b>	<b>507</b>		<b>534</b>	<b>27</b>	<b>846</b>



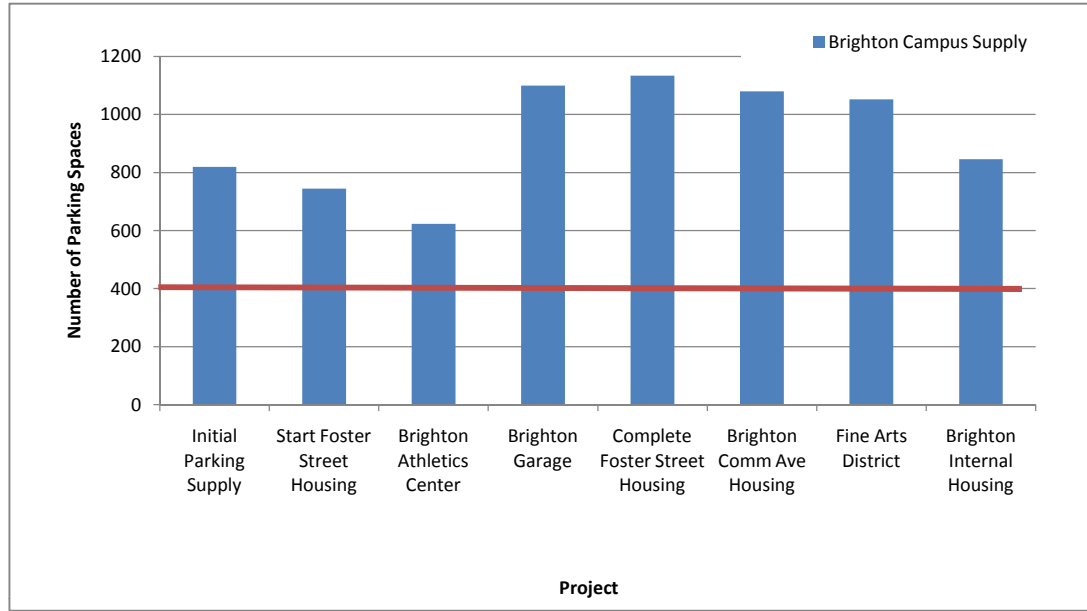
**Chestnut Hill Campus**

More Hall Rear	85	72	85%	85	Housing (12)	100	15	100
More Hall arc (2 + 9 unlined)	2	4	200%	2	Housing (12)	0	-2	0
					Recreation Center			
110/Walsh	25	23	92%	25	(13)	0	-25	0
St. Ignatius	18	10	56%	0		0	0	18
Vanderslice	22	18	82%	0		0	0	22
Southwell	4	4	100%	0		0	0	4
66 Comm Ave	9	2	22%	0		0	0	9
Rubenstein/66	10	7	70%	0		0	0	10
Rubenstein Rear/Gabelli	7	3	43%	0		0	0	7
Rubenstein Wall	14	12	86%	0		0	0	14
Rubenstein Front	8	7	88%	0		0	0	8
Voute	1	1	100%	0		0	0	1
Ignacio	8	5	63%	0		0	0	8
Comm Ave Garage	958	610	64%	0		0	0	958
					University Center			
Mod Lot	168	170	101%	168	(17)	0	-168	0
Campanella Way Arc	126	118	94%	126	17	0	-126	0
					Recreation Center			
Tennis courts	4	4	100%	4	(13)	0	-4	0
Shea Lot	29	29	100%	0		0	0	29
Campanella/Edmonds	15	15	100%	15	13	0	-15	0
Edmonds North	37	33	89%	37	13	0	-37	0
Edmonds South	63	59	94%	63	13	0	-63	0
<i>Campanella Way Facilities</i>	<i>1613</i>	<i>1206</i>	<i>75%</i>	<i>525</i>		<i>100</i>	<i>-425</i>	<i>1188</i>
2000 Commonwealth Avenue	0			0		200	200	200
St. Mary's Side Lot	23	21	91%	0		0	0	23
St. Mary's Arc	5	3	60%	0		0	0	5
Linden Lane	30	27	90%	0		0	0	30
Bapst Rear	5	1	20%	0		0	0	5
Gasson/Lyons Quad (temp off-line)	22	0	0%	0		0	0	22
Gasson Rear (temp off-line)	4	0	0%	0		0	0	4
<i>Linden Lane/Gasson Total</i>	<i>89</i>	<i>52</i>	<i>58%</i>	<i>0</i>		<i>0</i>	<i>0</i>	<i>89</i>
					Stokes Commons			
Lyons Rear	8	8	100%	8	(19)	0	-8	0
					19 and Academic			
Campus Green	66	52	79%	66	Bldg. (20)	0	-66	0
McElroy Gate Outbuilding	35	25	71%	35	Academic Bldg. (21)	90	55	90
<i>McElroy Gate Total</i>	<i>109</i>	<i>85</i>	<i>78%</i>	<i>109</i>		<i>90</i>	<i>-19</i>	<i>90</i>
McGuinn Rear	23	20	87%	0		0	0	23
Service Bldg Cushing/Higgins	43	37	86%	43	Science Center (18)	0	-43	0
Service Bldg Garage	7	8	114%	7	18	0	-7	0
Service Bldg Rear	13	5	38%	0		0	0	13
<i>McGuinn/Service Bldg. Total</i>	<i>86</i>	<i>70</i>	<i>81%</i>	<i>50</i>		<i>0</i>	<i>-50</i>	<i>36</i>
Merket	32	32	100%	0		0	0	32
Merket roadway	19	15	79%	0		0	0	19
Conte circle	6	5	83%	0		0	0	6
Beacon Street Garage	825	571	69%	0		350	350	1175
<i>Beacon Street Garage Total</i>	<i>882</i>	<i>623</i>	<i>71%</i>	<i>0</i>		<i>350</i>	<i>350</i>	<i>1232</i>
Hovey house	11	5	45%	0		0	0	11
Murray/Waul & Murray Carriage House	28	17	61%	0		0	0	28
31 Lawrence	5	4	80%	0		0	0	5
Connolly & Carriage House	11	4	36%	0		0	0	11
Haley House	6	2	33%	0		0	0	6
Childcare Center	4	7	175%	0		0	0	4

Remainder Triangle and Beacon St.	75			0		0	0	75	
<i>Hammond Triangle Total</i>	<i>140</i>	<i>39</i>	<i>28%</i>	<i>0</i>		<i>0</i>	<i>0</i>	<i>140</i>	
O'Connell Front	5	5	100%	0		0	0	5	
O'Connell Rear	15	9	60%	0		0	0	15	
Shaw House	2	2	100%	0		0	0	2	
College/Quincy/Mayflower	70			0		0	0	70	
<i>Upper Campus total</i>	<i>92</i>	<i>16</i>	<i>17%</i>	<i>0</i>		<i>0</i>	<i>0</i>	<i>92</i>	
<b>Chestnut Hill Campus Total</b>	<b>3011</b>	<b>2091</b>	<b>69%</b>	<b>0</b>	<b>684</b>	<b>0</b>	<b>740</b>	<b>56</b>	<b>3067</b>
<b>Newton Campus</b>									
Alumni Circle	17			0		0	0	17	
Duschene	38			0		0	0	38	
Alumni Rear	23			0		0	0	23	
Colby Road	44			0		0	0	44	
Cottage Roadway	71			0		0	0	71	
Quonset Hut	67			0		0	0	67	
Hardey/Cushing Rear	20			0		0	0	20	
Hardey/Cushing Circle	18			0		0	0	18	
Trinity Chapel Staff	18			0		0	0	18	
Mary House	7			0		0	0	7	
Stuart Front	4			0		0	0	4	
Keyes South	34			0		0	0	34	
Keyes North	127			0		0	0	127	
Stuart/Mill Street	187			0		0	0	187	
New Surfae Parking	0			0		150	150	187	
<b>Newton Campus Total</b>	<b>675</b>			<b>0</b>		<b>150</b>	<b>150</b>	<b>825</b>	
<b>Total for Three Campuses</b>	<b>4505</b>				<b>1191</b>		<b>1424</b>	<b>233</b>	<b>4738</b>

Not available or not counted

Added	Utilization	Brighton Campus Supply
	398	819
0	398	745
0	398	623
500	398	1100
34	398	1134
0	398	1080
0	398	1052
0	398	846
534	398	846



Added	Utilization	Chestnut Hill Campus Supply
	2091	3011
0	2091	2902
0	2091	2815
200	2091	3015
100	2091	3115
90	2091	3205
0	2091	3061
350	2091	3382
0	2091	3332
0	2091	3038
740	2091	3038

