

## Appendix 9.4      Traffic Impact Study





*Engineering Report*  
**Traffic Impact Study**  
**Silo Ridge Resort Community**  
  
NYS Route 44 & NYS Route 22  
Town of Amenia  
Dutchess County, New York

April 11, 2006  
Revised: October 2, 2007



Prepared for:

Higher Ground Country Club Mgmt.  
Co., LLP  
P.O. Box 86, Route 22  
Amenia, New York 12501

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**Traffic Impact Study**  
**Silo Ridge Resort Community**  
**NYS Route 44 & NYS Route 22**  
**Town of Amenia**  
**Dutchess County, New York**

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Prepared by:

**The Dutchess County Office**  
***The Chazen Companies***  
**21 Fox Street**  
**Poughkeepsie, New York 12601**  
**(845) 454-3980**

*Orange County*  
*(845) 567-1133*

*Capital District*  
*(518) 273-0055*

*North Country*  
*(518) 812-0513*

## TABLE OF CONTENTS

SECTION 1: EXECUTIVE SUMMARY.....	1
SECTION 2: INTRODUCTION .....	7
SECTION 2.1: PROJECT DESCRIPTION AND LOCATION.....	7
SECTION 2.2: SCOPE OF STUDY.....	11
SECTION 2.3: STUDY METHODOLOGY .....	13
SECTION 3: EXISTING AND PROJECTED TRAFFIC CONDITIONS.....	15
SECTION 3.1: ROADWAYS AND INTERSECTIONS .....	15
SECTION 3.2: EXISTING ACCIDENT HISTORY .....	24
SECTION 3.3: EXISTING VOLUMES .....	26
SECTION 3.4: PROJECTED NO-BUILD VEHICULAR VOLUMES .....	32
SECTION 3.5: CURRENT TRANSIT/PEDESTRIAN/BICYCLE ACTIVITY .....	37
Section 3.5.1: Current Bus Activity .....	37
Section 3.5.2: Current Train Activity .....	37
Section 3.5.3: Current Pedestrian/Bicycle Activity .....	37
SECTION 4: VEHICULAR TRIP GENERATION.....	39
SECTION 4.1: TRIP GENERATION ANALYSIS.....	39
SECTION 4.2: VEHICULAR DIRECTIONAL DISTRIBUTION .....	41
SECTION 5: ANALYSIS .....	51

SECTION 5.1: CAPACITY/LEVEL-OF-SERVICE .....	51
SECTION 5.2: CONSTRUCTION ACTIVITY/EMERGENCY SERVICES .....	57
SECTION 6: TRADITIONAL NEIGHBORHOOD DEVELOPMENT .	57
SECTION 7: CONCLUSIONS / FINDINGS .....	75
APPENDIX A: LEVEL-OF-SERVICE CRITERIA.....	77
APPENDIX B: CURRENT BUS ACTIVITY .....	78
APPENDIX C: CURRENT TRAIN ACTIVITY .....	84
APPENDIX D: HARLEM VALLEY RAIL TRAIL.....	87
APPENDIX E: ACCIDENT HISTORY .....	105
APPENDIX F: CAPACITY ANALYSES	

## SECTION 1: EXECUTIVE SUMMARY

The Silo Ridge Resort Community project is a proposal to provide for the residential and recreational development of an existing site, Silo Ridge Country Club, situated between NYS Route 44 and NYS Route 22 in the Town of Amenia, Dutchess County, NY.

The actual development area will consist of an approximately 210±-acre portion of the total available 670 acres. A portion of the proposed project area has sloping terrain and contains approximately 26.5± acres of state and federal wetlands. The development as proposed will consist of 328 town home units, 41 single-family homes, a hotel with a maximum of 320 rooms inclusive of banquet and conference facilities and 2,000 square feet of ancillary retail space, and a 15,000 square foot Spa/Health/Wellness center. The existing golf course will be upgraded and the 6,000 square feet clubhouse retained and refurbished along with its included restaurant, which will seat 125 patrons.

The development will consist of three separate sites, the main site is that currently occupied by the existing clubhouse and golf course for the Silo Ridge Country Club. The main site will have two access points from NYS Route 22, including the current entrance to the existing site facilities, and a new access located further south approximately 1500 feet from the current access. The main site will also have a new access to Route 44, which will be opposite the access to the site parcel, referred to as Area L on the north side of Route 44. The third site parcel, Area M, will have access to Route 44 further west, also from the north side of Route 44.

It is anticipated that completion of the proposed development will occur in 2012; therefore, 2012 is to be considered the design year for the Silo Ridge Resort Community.

Measurement of possible impact to traffic flow on the adjacent roadway network can be determined by reviewing the capacity changes to the local intersections and access points within the highway network that result from application of the site generated traffic. The existing, local, external intersections deemed to be critical from a potential traffic impact perspective, as designated by the adopted Final Scoping Document, are as follows:

- Route 44 at Route 22/Route 343,
- Lake Amenia Road/Dunn Road (CR 81) at Route 22,
- The Existing Site Access at Route 22,

- West Lake Amenia Road at Route 44, and
- Lake Amenia Road at Route 44

Traffic counts were conducted during the weeks of January 16 and January 23, 2006, between hours of 7:00 AM and 9:00 AM and 4:00 PM and 6:00 PM. These counts were confined to Tuesday thru Thursday in an effort to capture typical weekday traffic conditions. Also, traffic counts were taken on Friday May 4 and 11, 2007 between the hours of 4:00 PM and 6:00 PM; Saturday May 5, 12 and 19, 2007 between the hours of 11:00 AM and 1:00 PM; and Sunday May 6 and 20, 2007 between the hours of 4:00 PM and 6:00 PM. These timeframes were chosen based upon the existing and proposed land uses specific to the project site and observations of existing traffic activity on the adjacent roadway network. The intent was to assess the “worst case” conditions as mandated in the Final Scoping Document and as such the following time periods were deemed consistent with this criterion:

- Weekday AM - 7:00 AM to 9:00 AM,
- Weekday (Friday) PM - 4:00 PM to 6:00 PM,
- Saturday Mid-Day - 11:00 AM to 1:00 PM, and
- Sunday PM - 4:00 PM to 6:00 PM

Information from the New York State Department of Transportation forecast a per annum growth rate for the study area of 2.0 percent. Therefore, a growth rate of 2.0 percent was applied to the 2007 counts to project them forward to the design year of 2012. This growth rate addresses general background growth in the area of the site.

The generation analysis for a proposed development provides the anticipated traffic impact that can be expected as a result of that development. The Institute of Transportation Engineers (ITE) provides traffic and transportation professionals with a source document as a guide to trip generation rates for all land uses and building types. This document, Trip Generation Manual<sup>1</sup>, 7th Edition, is updated periodically and details rates developed for the average weekday, and Saturday and Sunday, during the peak hours of the generator and during the peak hours of the adjacent roadway traffic.

The proposed Silo Ridge Resort Community project involves multiple land uses. The residential portion of the development will involve both single family homes, Land Use # 210, and townhouse units, Land Use #230. The

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<sup>1</sup> *Trip Generation Manual, 7<sup>th</sup> Edition*, Institute of Transportation Engineers, 2004

development will also offer a hotel<sup>2</sup> with a maximum of 320 rooms and including banquet and conference facilities, and 15,000 square feet of a Spa/Health/Fitness center, Land Use #492. Ancillary retail, restaurant, cocktail lounges, etc. are accounted for by the ITE under Land Use #310.

The existing golf course will be upgraded and the existing 6,000 square feet clubhouse retained and refurbished. The golf course generation and the clubhouse facility are existing on-site and therefore will be included in the *Existing* traffic flow rather than as an addition under the *Build* condition. Since the AM manual intersection counts were conducted during the golf off-season, ITE data was used to estimate activity, which was then included in the current activity foundation information.

In addition to the Proposed Action detailed above this report assesses potential impacts to traffic emanating from a Traditional Neighborhood Alternative. This Alternative consists of two separate sites, as compared to three under the Proposed Action. The existing main driveway to the Silo Ridge Country Club on Route 22 will remain the primary site access to the proposed Hotel/Golf Course facilities; however, access to this primary site shall now be limited to Route 22 via this existing driveway and one additional driveway to the south i.e. no direct access shall be provided to Route 44 under this Alternative.

The second site is located on the north side of Route 44 consisting of the combined parcels designated as “L” and “M” under the Proposed Action and now designated as the Vineyard Townhomes (38 units) and Winery/Restaurant (80 seats). The access driveways to parcels “L” and “M” under the Proposed Action shall be retained with an internal connection between the two under this Traditional Neighborhood Alternative.

The capacity analysis methodology is based upon the 2000 Highway Capacity Manual<sup>3</sup> using Synchro Traffic Signal Software by Trafficware<sup>4</sup>. Appendix A, Tables 3 and 4, summarize the level-of-service criteria for unsignalized and signalized intersections respectively.

The Silo Ridge Resort Community is committed to creating an environmentally responsible neighborhood in all respects. The proximity of the Wassaic train station is an asset worth enhancing by use of an on-demand shuttle service transporting Silo Ridge residents to and from the

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<sup>2</sup> Hotel land-use 310 includes supporting facilities such as banquet rooms and conference facilities, restaurants and cocktail lounges. Fitness facilities may be included but are added as additional generating facilities in this case.

<sup>3</sup> Special Report 209, 2000, published by the Transportation Research Board, National Research Council, Washington, D.C.

<sup>4</sup> Synchro Traffic Signal Software, Version 7, by Trafficware Ltd., 2007

train service. This shuttle service anticipates the attractiveness of the Community to New York City residents both as second home inhabitants and as hotel and conference attendees.

Consideration is also being given to use of alternative energy vehicles to be used on-site and for local exploration of tourism, shopping, and recreational pursuits. These vehicles would be available to residents and guests to enable responsible use and maintenance of the area's assets. Shuttle service to the Amenia Town Center is also being considered as a long-term community service.

Linkage to the area's unique recreational and environmental resources will enhance the quality of life for residents of Silo Ridge Resort Community. The Harlem Valley Trail is an example of these local resources and its scenic and natural flora and fauna will be mirrored by the site's landscaping and walkways, thus engaging residents in its use and enjoyment.

The construction activity for the site will be formally presented in a Construction Phasing Plan for approval in the DEIS process. However, the multiple, permanent access schemes will accommodate all construction related activity. There will not be a need for separate temporary construction access. The construction activity will be sensitive to the on-going site activities and will minimize interaction between the two. Specific operations will be identified and detailed in the Plan.

Emergency services will be maintained during the entire construction sequence and all such services will be guided by local over-sight and co-ordination. The County-wide 911 system will be utilized for real-time access to the County Sheriff, the State Police (Troop K), the Town Constable, the Amenia Fire District, and the Wassaic Fire District.

This Traffic Impact Study has analyzed the impact of traffic generation forecast for the proposed Silo Ridge Resort Community in relationship to the existing highway network for both the Proposed Action and Traditional Neighborhood Alternative. The following findings are the result of this analysis and are meant to provide an informed basis for the local decision making process.

- The analysis of the intersection of Route 44 at Route 22 indicates acceptable *Build* LOS under both the Proposed Action and Traditional Neighborhood Alternative. We recommend that this intersection be reassessed upon project completion in concert with NYSDOT oversight, and modifications to signal timing and/or phasing be implemented as required. The addition of the proposed



site generated traffic does not have a significant adverse impact on capacity at this intersection.

- The *Build* LOS at the intersections of Route 44 at Lake Amenia Road and West Lake Amenia Road indicate substantial reserve capacity at both and no significant impact from either the Proposed Action or the Traditional Neighborhood Alternative.
- The analysis of the intersection of Route 22 at Lake Amenia Road/Dunn Road (CR 81) indicate no significant impact to traffic proceeding on Route 22 with increased delays to traffic on the side roads. However, a review of expected queue lengths indicates that only 2 or 3 vehicles (maximum) are impacted during the peak hours. As such, we recommend this intersection be reassessed upon project completion under NYSDOT oversight.
- The applicant shall seek the installation of a three-color traffic signal under the NYSDOT Highway Work Permit process at the intersection of Route 22 and the main site entrance. This application shall include the provision of a “Left Turn” storage lane for traffic entering the site from northbound Route 22 and appurtenances for the safe accommodation of pedestrian traffic.
- All other site access points indicate acceptable LOS as they intersect the adjacent roadway system. The applicant intends to address the inherent safety issue associated with left turns from Route 44 by the provision of storage lanes under the NYSDOT Highway Work Permit process.
- The analyses of the historical accident history for the adjacent roadway network did not show any significant current condition which merits mitigation other than additional warning for motorists approaching, in the eastbound direction, the Route 44 “hairpin” curve near the site. The number of incidents (10) occurring, 90% of which involved eastbound vehicles, suggest that additional advance warning is appropriate. It is recommended that the maintaining agency, NYSDOT, consider flashing beacons and/or other devices which will highlight the significant change in alignment and grade of Route 44. No other locations within the network exhibited patterns of contributing circumstances, location, or weather conditions which would be exacerbated by the new traffic generation from the proposed development.

Given these conclusions resulting from this Traffic Impact Study, the Silo Ridge Resort Community as proposed for completion in 2012 will not have a significant impact upon the traffic and safety operating conditions on the adjacent highway network with the proposed mitigation implemented. Furthermore, the commitment of the Silo Ridge Resort Community development to responsible transportation alternatives, such as transit shuttle services, alternative fuel vehicles, and pedestrian friendly design, linked trails, traffic calming roadways, and visionary, communicative attitudes, proffer a community of excellence relative to traffic engineering and safety.

## **SECTION 2: INTRODUCTION**

### **SECTION 2.1: PROJECT DESCRIPTION AND LOCATION**

The Silo Ridge Resort Community project is a proposal to provide for the residential and recreational development of an existing site, Silo Ridge Country Club, situated between NYS Route 44 and NYS Route 22 in the Town of Amenia, Dutchess County, NY.

The Applicant, Higher Ground Country Club, LLC, is proposing the development of a resort community on a 668±-acre site to be known as Silo Ridge Resort Community. The project area is located adjacent to US Route 44 and New York State (NYS) Route 22 in the Town of Amenia, Dutchess County, New York, identified as Parcel Numbers 7066-00-732810, 7066-00-860725, 7066-00-742300, 7066-00-670717, and 7067-00-709177 by the Town of Amenia Tax Map. The main site is currently developed with a 170-acre 18-hole championship golf course with clubhouse and pavilion facilities. This existing main site encompasses parcels 7066-00-732810, 7066-00-670717, 7066-00-860725 south of Route 44 and west of Route 22. Parcels 7066-00-709177 and 7067-00-742300, totaling approximately 68.71 acres, are located on the opposite or north side of Route 44 and are referred to as “Area M” and “Area L” on the site plan.

The actual development area will consist of an approximately 210±-acre portion of the total available 668 acres. A portion of the proposed project area has sloping terrain and contains approximately 26.5± acres of state and federal wetlands. The development as proposed will consist of 328 town home units, 41 single-family homes, a hotel with a maximum of 320 rooms inclusive of banquet and conference facilities and 2,000 square feet of ancillary retail space, and a 15,000 square foot Spa/Health/Wellness center. The existing golf course will be upgraded and the 6,000 square feet clubhouse retained and refurbished along with its included restaurant, which will seat 125 patrons.

As noted, the development will consist of three separate sites, the main site is that currently occupied by the existing clubhouse and golf course. The main site will have two access points from NYS Route 22, including the current entrance to the existing site facilities, and a new access located further south approximately 1500 feet from the current access. The main site will also have a new access to Route 44, which will be opposite the access to the site parcel, referred to as Area L on the north side of Route 44. The third site parcel, Area M, will have access to Route 44 further west, also from the north side of Route 44. These four preferred access points to the state highways will require Highway Work Permits (HWP) from the New York State Department of Transportation (NYSDOT). As such the design of these intersections will

be guided by NYSDOT. The project site is designated as Industrial (M) and Agricultural Density (RA) by the Town of Amenia Zoning Map (1980). The Applicant is proposing a text amendment to the M and RA Districts to allow hotel uses. A Special Use Permit will be required to allow town homes in the RA District.

Figure 1 details the site relative to the general geographic area and Figure 2 shows the roadway network immediately adjacent to the site inclusive of the intersections deemed critical from a traffic operations perspective.

The rural location of the site is well served by US Route 44 and NYS Route 22 which provide north/south and east/west connections to the state highway system. NYS Route 343 also provides convenient access to Connecticut and points east. Route 22 also links the site to efficient railroad service on the Metro North Harlem Valley line via the Wassaic station which is located approximately 4 miles south of the site. NYS Route 22 also ties the site to the regional interstate network via I-684 further to the south. I-684 provides direct access to the New York City metropolitan area through Putnam and Westchester Counties. Also, from I-684, the I-84 interchange provides access to destinations to the east and west.

The existing, local, external intersections deemed to be critical from a potential traffic impact perspective, as designated by the adopted Final Scoping Document, are as follows:

- Route 44 at Route 22/Route 343,
- Lake Amenia Road/Dunn Road (CR 81) at Route 22,
- The Existing Site Access at Route 22,
- West Lake Amenia Road at Route 44, and
- Lake Amenia Road at Route 44

Dunn Road is only slightly offset from Lake Amenia Road, and as such, this intersection will be analyzed as a single, four-way intersection in conjunction with Lake Amenia Road and Route 22 relative to capacity. This intersection is shown as a four-way intersection (due to scale) and is depicted as Dunn Road/Route 22 in Figure 2.

The operating conditions at these external intersections and at the site's proposed access points will be reviewed and recommendations will be advanced to accommodate traffic activity associated with the project.

FIGURE 1: Area Map

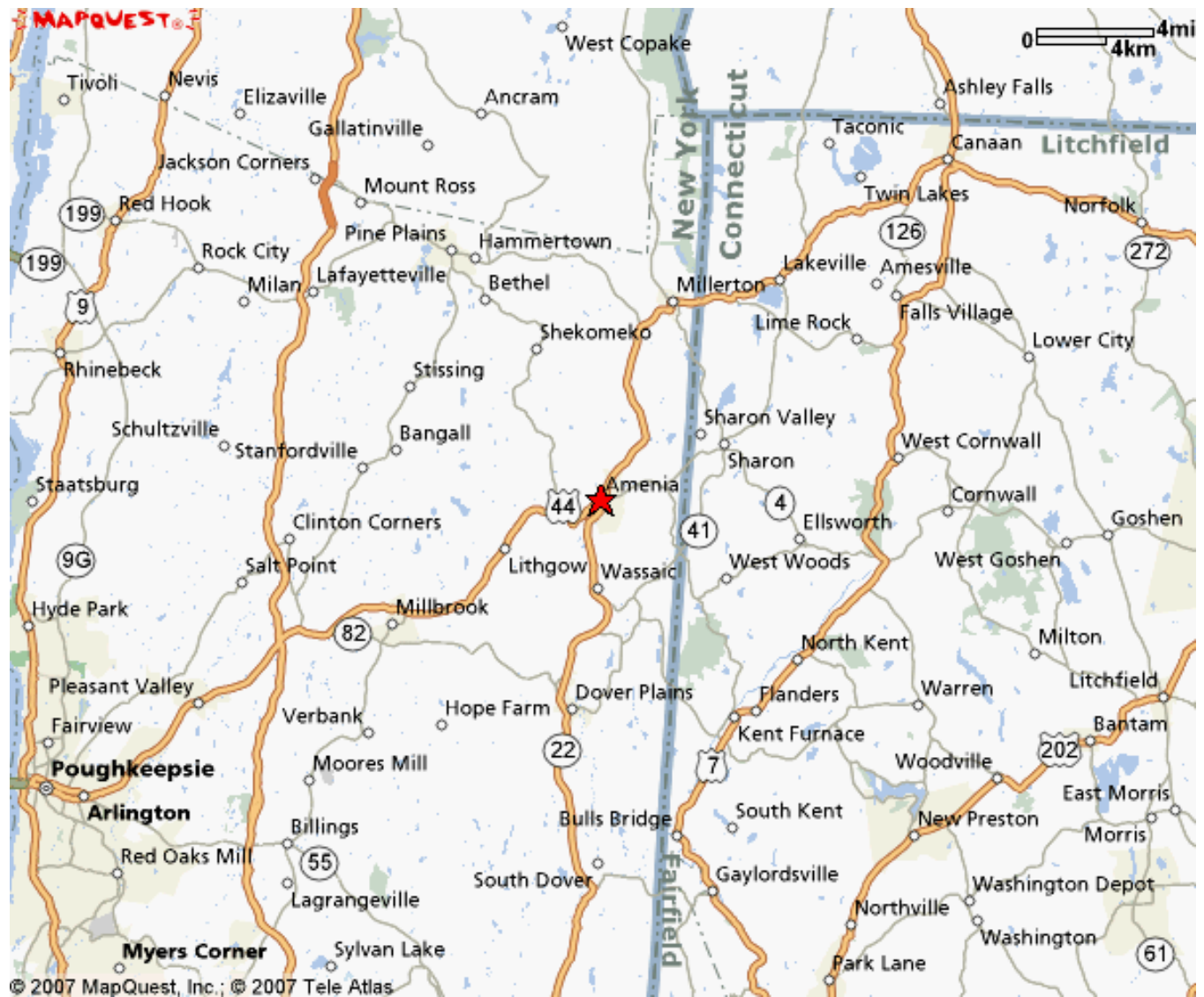


FIGURE 2: Site Map



■ Critical Intersection

## **SECTION 2.2: SCOPE OF STUDY**

This Study has been prepared to document the traffic impacts associated with the Silo Ridge Resort Community project and to identify and quantify those impacts, and to recommend mitigation for those impacts where appropriate.

The location of the site on NYS Route 22 provides for efficient access to the state and interstate highways and convenient access to the Metro North Harlem Valley railroad service needed to integrate the site into the existing transportation infrastructure.

Measurement of possible impacts to this infrastructure can be determined by reviewing the changes to traffic volume capacity changes at the local intersections and site access points within the highway network resulting from application of the site or project generated traffic. The operating conditions at these intersections will be reviewed and recommendations advanced to accommodate traffic activity associated with the project.

As previously noted the existing intersections deemed critical in the assessment of the impact on traffic conditions resulting from the project are:

- Route 44 at Route 22/Route 343,
- Lake Amenia Road/Dunn Road (CR 81) at Route 22,
- The Existing Site Access at Route 22,
- West Lake Amenia Road at Route 44, and
- Lake Amenia Road at Route 44

Traffic counts were conducted during the weeks of January 16 and January 23, 2006, between hours of 7:00 AM and 9:00 AM and 4:00 PM and 6:00 PM. These counts were confined to Tuesday thru Thursday in an effort to capture typical weekday traffic conditions. Also, traffic counts were taken on Friday May 4 and 11, 2007 between the hours of 4:00 PM and 6:00 PM; Saturday May 5, 12 and 19, 2007 between the hours of 11:00 AM and 1:00 PM; and Sunday May 6 and 20, 2007 between the hours of 4:00 PM and 6:00 PM. These timeframes were chosen based upon the existing and proposed land uses specific to the project site and observations of existing traffic activity on the adjacent roadway network. The intent was to assess the “worst case” conditions as mandated in the Final Scoping Document and as such the following time periods were deemed consistent with this criterion:

- Weekday AM - 7:00 AM to 9:00 AM,
- Weekday (Friday) PM - 4:00 PM to 6:00 PM,
- Saturday Mid-Day - 11:00 AM to 1:00 PM, and
- Sunday PM - 4:00 PM to 6:00 PM

The use of the existing golf course, clubhouse, banquet, and conference facilities is consistent throughout the week and does not exhibit peaking on the weekends<sup>5</sup>. Notwithstanding the mandate contained in the Final Scoping Document to consider the residential components of the project as being “*occupied by full-time residents*”, there exists a proliferation of recreational, vacation homes in the immediate environs of the site. As such consideration of weekend traffic conditions; Friday PM through Sunday PM, is required in light of observed traffic to and from these second homes.

The residential and recreational nature of the site will blend into the rural environment and enhance the natural setting and character of the surroundings. The Route 22 and Route 44 corridors serve the Town of Amenia as connectors to retail/commercial activity, work locations, and recreational locations. Thus, analysis of weekend traffic activity is consistent with capturing the worst-case conditions since it is assumed that residents, both full-time and part-time, will take advantage of weekend interactive opportunities within the community.

In order to assess the most potentially critical traffic impact, the highest 60 consecutive minutes of volume activity is used for each intersection and a growth rate of 2.0% per annum applied to project *Existing* vehicular volumes to the design year of 2012. This growth rate is meant to include potential development in the area occurring through 2012 and resulting in the anticipated *No-Build* conditions i.e. traffic conditions in 2012 without the proposed action. This growth rate is based upon recommendations by the New York State Department of Transportation (NYSDOT)<sup>6</sup>.

The resulting volumes were used as the foundation data to which the anticipated site generated volumes were added to provide *Build* conditions. These volumes were then compared to the roadway capacity to determine traffic flow conditions with the proposed development. This comparison provides for identification of appropriate operational improvements, as necessary, to mitigate the proposed project’s generated traffic.

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<sup>5</sup> Based on discussions with the General Manager of the Silo Ridge Country Club.

<sup>6</sup> Planning and Program Management Group, New York State Department of Transportation, November 2004.



## SECTION 2.3: STUDY METHODOLOGY

Throughout this study, distinction is made between the *Existing* traffic, i.e. traffic currently accommodated on the roadway network, and *No-Build* traffic, i.e. traffic anticipated to exist on the system without the proposed project, and *Build* traffic, i.e. the combination of *No-Build* and site or project generated traffic volumes.

The following is a brief description of the detailed tasks, which were a part of the analysis.

- Information pertinent to the existing traffic and roadway conditions was collected and analyzed relative to its affect on safe and efficient operating characteristics.
- Communication with the New York State Department of Transportation, the Dutchess County Department of Public Works, Town of Amenia officials, and other pertinent entities was maintained to ensure effective outreach during the Study.
- Field observations were made to observe the traffic movements within the existing roadway network to determine traffic patterns and distributions.
- Manual vehicular traffic counts were conducted for the key or critical intersections and roadways that would be impacted by site generated traffic.
- A trip generation analysis was conducted for the proposed land use components of the development.
- A directional distribution analysis was conducted to distribute site-generated traffic.
- Capacity analyses of the key intersections were conducted to determine if mitigating measures would be necessary to maintain current operating conditions.
- Accident data was reviewed to determine existing conditions and to identify any locations on the roadway network that are currently problematic and which may be exacerbated by the proposed project.

- Alternate modes of travel, such as pedestrian, bicycle, and transit were identified and explored both internal and external to the site, including potential shuttle services.
- Emergency and construction vehicle access were examined and evaluated.
- Conclusions were made of the traffic impact of the proposed Silo Ridge Resort Community project and mitigation identified to lessen or offset potential impacts.

## SECTION 3: EXISTING AND PROJECTED TRAFFIC CONDITIONS

### SECTION 3.1: ROADWAYS AND INTERSECTIONS

As shown in Figure 2, Site Map, the Silo Ridge Resort Community Project site is located on parcels of land located on the west side of Route 22 and south and north side of Route 44 in the Town of Amenia. The location of the site provides for convenient and efficient access to the state and interstate highways needed to provide market access and to link the site to existing work, retail, and recreational environments. Route 22, Route 44, and Route 343 are the primary state highways serving the site. County Road 81, locally known in the vicinity of the site as Old Route 22 (also referenced by the County as Amenia-Wassaic Road), also serves the site, as do town roadways, Lake Amenia Road and Dunn Road. These roadways will be reviewed relative to function and operating characteristics.

NYS Route 22 is a State owned and maintained roadway, which traverses north/south through Dutchess County and points north and south. Within the Town of Amenia it is a primary, two-lane thoroughfare for recreational, tourist, commercial, and retail and commuter activity. It not only serves as a local primary highway but also as a significant regional corridor on the eastern edge of the border with Connecticut, Massachusetts, and Vermont. Route 22 carries very moderate volumes, approaching only 5,500 Annual Average Daily Traffic<sup>7</sup> (AADT) in the vicinity of the site. However, this north-south route does carry considerable truck traffic as it connects to I-684 into Westchester County and traverses north through Putnam County, Dutchess County into Columbia County. Route 22 carries Route 343 as an overlap from Dover Plains to Amenia. North of Amenia, Route 22 overlaps with Route 44 into Millerton. The section of Route 22 south of the hamlet is posted at 55 mph. The speed limit reduces to 35 mph within the hamlet of Amenia, and increases to 45 north of the hamlet. Within the 35 mph zone southbound heading into the main intersection with Route 44, there is a school speed zone of 25 mph with appropriate signs and flashing beacons. The pavement and shoulders for this section of Route 22 are in fair condition with one 12 feet wide lane in each direction and generally paved three feet wide shoulders. Within the hamlet, sidewalks are provided on both sides of Route 22. The general alignment is moderate in horizontal curvature and grades, (vertical curvature). Roadside development is generally sparse south and north of the hamlet of Amenia. This roadway outside the hamlet has considerable future growth potential. All signing and pavement markings are in accordance with the NYS Manual of Uniform Traffic Control Devices.

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<sup>7</sup> New York State Department of Transportation, *Traffic Volume Report*, 2003.

US Route 44 is a State owned and maintained roadway, which traverses east/west through Dutchess County and points west (into Ulster County) and east (into Connecticut). Within the Town of Amenia it is a primary, two-lane thoroughfare for recreational, tourist, commercial, and retail and commuter activity. It not only serves as a local primary highway but also one of only two significant east-west state facilities crossing Dutchess County (the other being Route 55). Route 44 carries only moderate volumes through its Easterly segments, approaching 4,000 Annual Average Daily Traffic<sup>8</sup> (AADT) in the vicinity of the site. The westerly segments (near Route 9) approach 40,000 AADT, which steadily decreases as it traverses easterly. By the time it passes through Millbrook, volumes have diminished considerably (10,760). North of Amenia, Route 44 overlaps with Route 22 into Millerton. The majority of the section of Route 44 in the vicinity of the site is posted at 55 mph, albeit with numerous advisory speeds supplementing curve warning signs. The speed limit reduces to 35 mph within the hamlet of Amenia, and increase to 45 mph north of the hamlet. The pavement and shoulders for this section of Route 44 are in good condition with one 12 feet wide lane in each direction and paved one-three feet wide shoulders. The general alignment in the vicinity of the site is extremely curvilinear and with significant grades, (vertical curvature). Roadside development is generally more developed than Route 22, although still very rural in character. Within the hamlet, sidewalks are provided on both sides of Route 44. All signing and pavement markings are in accordance with the NYS Manual of Uniform Traffic Control Devices.

NYS Route 343 is a State owned and maintained roadway, which traverses east/west through the easterly portion of Dutchess County, from Millbrook to Connecticut. The total length is only approximately 18.5 miles. Within the Town of Amenia it is a primary, two-lane thoroughfare which overlaps with Route 22, south of the hamlet before proceeding into Connecticut. Route 343 carries very moderate volumes, approaching only 5,000 Annual Average Daily Traffic<sup>9</sup> (AADT) in the vicinity of the site. The majority of the section of Route 343 in the subject area is posted at 55 mph. The speed limit reduces to 35 mph within the hamlet of Amenia. The pavement and shoulders for this section of Route 343 are in fair condition with one 12 feet wide lane in each direction and paved three feet wide shoulders. The general alignment is moderate in horizontal and vertical curvature. Roadside development is generally sparse south and east of the hamlet of Amenia. Within the hamlet, sidewalks are provided on both sides of Route 343. All signing and pavement markings are in accordance with the NYS Manual of Uniform Traffic Control Devices.

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<sup>8</sup> New York State Department of Transportation, *Traffic Volume Report*, 2003.

<sup>9</sup> Ibid.

Interstate 84 is a New York State Department of Transportation owned roadway but it is operated and maintained by the New York State Thruway Authority. This roadway is the key east-west corridor traversing the state from Connecticut to Pennsylvania. It consists of a two-lane roadway in each direction with a natural non-traversable median separating the roadways. Each roadway is 24 feet in width with shoulders that vary in width from 6 feet to 10 feet. I-84 carries heavy volumes, approximately 56,057 Annual Average Daily Traffic (AADT)<sup>10</sup>. The vehicle composition includes a very heavy truck component consistent with its function as an interstate corridor. It also carries significant daily commuter east-west traffic due to a lack of viable alternatives in Dutchess County. The roadways are posted at 55 mph and 65 mph and are in fair condition. All signing and pavement markings are in accordance with the NYS Manual of Uniform Traffic Control Devices.

Interstate 684 is a New York State Department of Transportation roadway. This roadway is a key north-south corridor connecting Route 22 and Interstate 84 to Westchester County and Interstate 287 and the Hutchinson River Parkway. It consists of a two-three lane roadway in each direction with a natural non-traversable median separating the roadways. Each roadway is 24-36 feet in width with shoulders that vary in width from 6 feet to 10 feet. I-684 carries heavy volumes, approximately 75,513 Annual Average Daily Traffic (AADT)<sup>11</sup> near the Putnam/Westchester County line. The vehicle composition includes a very heavy truck component consistent with its function as an interstate corridor. The roadways are posted at 55 mph and 65 mph and are in fair to good condition. All signing and pavement markings are in accordance with the NYS Manual of Uniform Traffic Control Devices.

County Road (CR) 81 is a County owned and maintained roadway, which traverses north/south from Route 22 (overlap 343) on the north to County Road 3 to the south, wholly within the Town of Amenia. It is a two-lane roadway which parallels Route 22 (overlap 343). CR 81 carries very moderate volumes of 860 Annual Average Daily Traffic<sup>12</sup> (AADT) in the vicinity of the site. The speed limit is 55 mph, and the alignment and grade are moderate. The pavement and shoulders are in fair condition with one 11 feet wide lane in each direction. Roadside development is residential and is sparse. All signing and pavement markings are in accordance with the NYS Manual of Uniform Traffic Control Devices.

Lake Amenia Road is a Town owned and maintained roadway, which connects Route 22 with Route 44 in the vicinity of the site. The roadway splits as it approaches Route 44 into two separate roadways with the

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<sup>10</sup> Ibid.

<sup>11</sup> Ibid.

<sup>12</sup> Poughkeepsie-Dutchess County Transportation Council, *2004 Traffic Count Report*, May 2005.

westerly leg known as West Lake Amenia Road and the easterly leg Lake Amenia Road, both forming intersections with Route 44. There is a single lane in each direction and just south of its split it is constrained by a single-lane bridge, which is provided with warning signs. The speed limit is not posted (55 mph statutory). The pavement is in fair condition. The general alignment is curvilinear and grades are significant especially in the vicinity of Route 44. There are no lane markings. The roadway serves residential facilities.

Dunn Road is a Town owned and maintained roadway, which connects Route 22 (opposite Lake Amenia Road) with CR 81 in the vicinity of the site. At its intersection with Route 22, it is crossed by the Harlem Valley Rail Trail with appropriate signing and pavement markings (crosswalk). There is a single lane in each direction. The speed limit is not posted (55 mph). The pavement is in fair condition. The general alignment is tangent and grades are not significant. There are no lane markings.

Use of the local roadways, state, county and town, by bicyclists and pedestrians is limited, which is not unusual given the rural environment and older roadways without adequate shoulders, and alignment and grades that are often not conducive to such activity. However, it is noted that there is both a local and county commitment to enhancing quality of life for residents of all ages. These efforts are evidenced by the quality of local parks, the emerging Harlem Valley Rail Trail, the continued educational dedication to nature, and the emphasis on a community based on “old-fashioned” relationships. These nurturing relationships will be the focus of the Silo Ridge Resort Community in both its commitment to infrastructure (walkable community concepts), and its interaction with the hamlet’s economic vitality and tourist oriented focus.

The following intersections were analyzed relative to operating characteristics. These characteristics define the parameters used in the capacity analysis for each location. Included is the current access to the Silo Ridge Country Club on Route 22 and the proposed additional access drives anticipated for the Silo Ridge Resort Community.

#### Route 44 at Route 22



This intersection is located in the “center” of the hamlet of Amenia. It is a four-way intersection controlled by a three-color signal, NYSDOT # D-29. This intersection includes the confluence of Route 343 as it leaves its overlap with Route 22 and is the beginning of the Route 44/Route 22

overlap. For purposes of this narrative and the capacity analysis, Route 22 is assumed to be north-south in orientation, with Route 44 and Route 343 east-west. More specifically, Route 44 is the eastbound approach and consists of one lane for all movements and a parking lane. Route 22 is the northbound approach with Route 343 as an overlap, and consists of one travel lane for all movements and one parking lane. The westbound approach is Route 343 and also has one lane with an adjacent parking lane. Finally, the southbound approach is Route 22 with Route 44 as an overlap, and consists of one lane and a parking lane. All approaches have a parking lane and sidewalks on both sides.

The signal is actuated on all approaches with loop detectors controlling phase sequence and timing. Pedestrian buttons, indications, and crosswalks are provided in all four quadrants. Appropriate guide, warning and regulatory



signing (parking, winery, hospital, intersection, etc.) including overhead destination guide signs on the eastbound and southbound approaches, are provided. Right-Turn-On-Red prohibitions are applied on all four approaches. All signal faces are standard three lenses (red/yellow/green); there are no left-turn phases. Approach sight lines to the signal faces are good

on all approaches.

Within the approaches to the intersection there is heavy retail and commercial activity. Multiple driveways are adjacent to the approaches and in some cases, such as the Sunoco service station located in the northeast quadrant which has multiple driveways, impact the free flow of traffic during busy times of the retail establishment. The traffic observations at this location showed considerable interaction between the eastbound Route 44 traffic turning left to Route 44/Route 22 and the opposing Route 343 traffic trying to turn left to proceed south on Route 22/Route 343. This was further confirmed from the manual traffic counts which showed that in the AM nearly 49% of the eastbound traffic turned left and in the PM approximately 43%. At the same time the opposing left turn percentages were 23 and 24 AM and PM respectively. Although these movements did not result in undue delay or safety concerns, future considerations may have to be given to left-turn lanes and signal phases. Pedestrian activity and use of the pedestrian buttons was nominal and the pedestrian indications reflected a non-exclusive operation, i.e., pedestrians crossed with the adjacent roadway green phase. There were no observed problems with this operation.





### Route 44 at Lake Amenia Road

Lake Amenia Road intersects Route 44 in two separate locations. As Lake Amenia Road proceeds north from Route 22 it splits into a “Y” configuration before it meets Route 44. The westerly junction which is nearest the site is signed in the field as West Lake Amenia Road. This “t” intersection is



controlled by a stop sign on the West Lake Amenia Road approach. West Lake Amenia Road must increase in grade to approximately 4-5% in the last few hundred feet to meet Route 44. The Route 44 approach from the left (west) has a down-hill grade of approximately 3-4%. The approach of West Lake Amenia Road is angled such that a right turn is difficult with an

approximate 120 degree turn necessary. By observation and manual count, this movement is very nominal in volume. The Route 44 approaches have one lane, as does West Lake Amenia Road. The sight line to the west for traffic exiting West Lake Amenia Road is approximately 800 feet, while the sight line to the east is constrained by a horizontal curve on Route 44 to approximately 400 feet. This sight line to the east is also hindered by the



grade differential and the box beam guide rail on the south side of Route 44. This Route 44 approach horizontal curve is posted with an advisory speed of 50 mph.

The more easterly intersection of Lake Amenia Road with Route 44 is actually signed as Lake Amenia Road. It too is a “t” intersection and is controlled by a stop sign on the Lake Amenia

Road approach. Lake Amenia Road must increase in grade to approximately 5-6% in the last few hundred feet to meet Route 44. The Route 44 approach from the left (west) has a down-hill grade of approximately 3-4%. The approach of Lake Amenia Road is angled such that a left turn is difficult with an approximate 120 degree turn necessary. By observation and manual count, this movement is very nominal in volume. The Route 44 approaches have one lane, as does Lake Amenia Road. The sight line to the left (west) for traffic exiting Lake Amenia Road is approximately 700 feet, while the sight line to the right (east) is approximately 850 feet.





Route 22 at Lake Amenia RoadRoute 22 at Dunn Road

Both Lake Amenia Road and Dunn Road intersect with Route 22 to form an off-set, four-way intersection. The off-set is approximately 20 feet and occurs on a horizontal curve on Route 22. There is a cemetery in the northwest quadrant adjacent to Lake Amenia Road. For purposes of this narrative and the capacity analysis Route 22 will be

represented as north-south. This four-way intersection is controlled by a stop sign on the Lake Amenia Road eastbound approach and on the Dunn Road westbound approach. The Lake Amenia Road approach has a stop sign on both the left and right sides due to the location of trees hindering the sight line to the right side stop sign. This condition along with a downgrade of 6-7% towards the intersection causes a “stop-ahead” sign to be posted on the Lake Amenia Road approach. The Dunn Road approach is tangent and flat. Near the intersection the Harlem Valley Rail Trail crosses Dunn Road with appropriate signing and pavement markings. The Route 22 approaches have one travel lane and paved shoulders, with pavement markings. Lake Amenia Road and Dunn Road also



have one travel lane, but are absent shoulders and markings, except for stop bars. Lake Amenia Road intersects Route 22 on the inside of the Route 22 horizontal curve and therefore the sight line to the right (south) for traffic exiting Lake Amenia Road is approximately 600 feet, while the sight line to the left (north) is approximately 550 feet. Dunn Road intersects Route 22 on the outside of the Route 22 horizontal curve and therefore the sight line to the right (north) for traffic exiting Dunn Road is approximately 800 feet, while the sight line to the left (south) is approximately 750 feet.

Route 22 at the Existing Main Site Driveway

The existing access to the main site will be retained at its current location which occurs on a tangent portion of Route 22. The access provides a one lane ingress and one lane egress separated by a raised, curbed median. Route 22 also



consists of one twelve foot lane northbound and southbound, separated by passing zone pavement markings. Edge lines are also provided delineating four feet paved shoulders. The speed limit is 55 mph, and the pavement condition is good. The sight line for motorists leaving the site looking to the right (south) is over 1000 feet. The sight line for motorists looking to the left (north) is also over 1000 feet.

#### Route 22 at the New Main Site Driveway

The proposed new driveway will be approximately 1,500 feet south of the existing access and will also enter on the tangent portion of Route 22, near Reference Marker 22/8204/1224. The access will provide a one lane ingress and one lane egress. Route 22 consists of one twelve foot lane northbound and southbound, separated by southbound passing zone pavement markings. Edge lines are also provided delineating four feet paved shoulders. The speed limit is 55 mph, and the pavement condition is good. The sight line for motorists leaving the site looking to the right (south) will be over 800 feet. The sight line for motorists looking to the left (north) will also be over 800 feet.



#### Route 44 at the New Main Site driveway and the Site “L” Driveway

This proposed new access will serve both the Main Site and new Site L. It will be located approximately 800 feet west of the Route 44 intersection with West Lake Amenia Road. Route 44 in this area is proceeding at a 3-4% downgrade from west to east. In the eastbound direction (downhill) it has a single lane separated by a double yellow line from the westbound lane which is transitioning from one westbound lane to one passing lane and one climbing lane. The full two lane westbound section begins approximately 480 feet west of the proposed access drives. This four-way intersection will provide a one lane ingress and one lane egress for each access driveway. In addition to the centerline on Route 44, edge lines are also provided delineating four feet paved shoulders on the south side of Route 44, and the edge of pavement on the north side (no shoulders). The speed limit is 55 mph, and the pavement condition is good. As a motorist proceeds west, approximately 450 feet, there is a 30 mph advisory sign along



with curve warning sign indicating a significant (hairpin) curve. Relative to Site L, located on the north side of Route 44, the sight line for motorists leaving the site looking to the right (west) will be over 700 feet. The sight line for motorists looking to the left (east) will be over 800 feet. Relative to the Main Site, located on the south side of Route 44, the sight line for motorists leaving the site looking to the right (east) will be over 750 feet. The sight line for motorists looking to the left (west) will be 650 feet. It is recommended that due to the grade on Route 44 and adjacent roadway curvature that the cross-section of Route 44 be modified to include turning lanes for left-turning vehicles in both the westbound and eastbound directions. This recommendation is a safety driven mitigation rather than a capacity issue.

#### Route 44 at the Site “M” Driveway

This proposed new access will serve the new Site M parcel, located on the north side of Route 44. The drive will be in the vicinity of Reference Marker 44/8202/2230 and opposite the private residential driveway of #5028 Route 44. Route 44 in the area of the proposed drive is



level but quickly begins a downgrade (5-7%) in the eastbound direction as it proceeds around the hairpin curve towards Amenia. At the proposed access, in the eastbound direction (downhill), Route 44 has a single lane separated by a double yellow line from the westbound lane which is now transitioning from two westbound lanes (one passing lane and one climbing lane) to one lane. The full two lane westbound section ends approximately 375 feet east of the proposed access drive. The site access will provide a one lane ingress and one lane egress for users. In addition to the centerline on Route 44, edge lines are also provided delineating four feet paved shoulders on the south side of Route 44, and three feet shoulders on the north side. The pavement condition is good. Although this section of Route 44 is 55 mph, as a motorist proceeds east prior to the proposed access, there is a 25 mph advisory sign along with curve warning sign indicating a significant (hairpin) curve. Chevron arrow signs guide motorists around the curve. Relative to Site M, located on the north side of Route 44, the sight line for motorists leaving the site looking to the right (west) will be approximately 900 feet. The sight line for motorists looking to the left (east) will be approximately 475 feet. For motorists proceeding west



of the proposed access, and for those eastbound further west of the access, a 50 mph advisory speed sign and curve warning sign are provided to slow traffic in both directions. Given the existing sight lines and minimal access activity forecast, the current cross-section of Route 44 is recommended to be retained.

### **SECTION 3.2: EXISTING ACCIDENT HISTORY**

The most currently available accident information was obtained from the New York State Department of Transportation and the Dutchess County Traffic Safety Board to allow for an assessment of roadway safety in the vicinity of the Silo Ridge Resort Community site.

Information for Route 44 and Route 22 was provided from June 1, 1999 through May 31, 2002. The segment of Route 44 covered was from CR 83, west of the site to and including the intersection with Route 22 in the hamlet of Amenia, a total of 2.1 miles. The segment of Route 22 extended 5.5 miles south of the Route 22/44 intersection.

Review of the Route 44 information does not reveal any pattern of weather or contributing circumstances which would indicate the existence of specific areas of concern. Relative to type of accident, of the 36 incidents reported, 17, or 47% involved single vehicle occurrences losing control due to circumstances including animal actions, wet conditions, and unsafe speed. Further, relative to location of these 17 incidents, 10 of these single vehicle accidents did occur on the hairpin curve, with 9 of them proceeding easterly downhill through the curve. This result is not unexpected given the significant alignment and grade change at this location. The existing signing is in compliance with the NYS Manual of Uniform Traffic Control Devices (MUTCD) and the split of these 10 incidents relative to day/night (6/4) accidents does not show a pattern associated with light conditions. Therefore, it is recommended that the NYSDOT consider further warning to motorists of the impending alignment change in the eastbound direction by the placement of flashing beacons or other emphasis of this turn condition. Current signing consists of a 25 mph advisory sign with curve sign and a series of chevron signs through the curve.

Within the hamlet on Route 44 there are a number of incidents (8) related to parking, inappropriate lane usage, and left-turns not yielding to opposing traffic, all of which is normal in this environment. Further, only one of these incidents occurred at the traffic signal. This is interesting since observation of the signal operation revealed the left-turn movements being made under some duress since they are not exclusive (through movements stopped) within the signal phasing.

Review of the Route 22 information does not reveal any pattern of weather or contributing circumstances which would indicate the existence of specific areas of concern. Nor are there any indications of concern relative to specific locations along Route 22. Of the 63 incidents which occurred in this 5.5 mile section of Route 22, the primary categories involved an animal action (14), and single vehicle run-off-the-road (11). Rear-end (7), sideswipe (7), and left-turn (6) incidents were the next most prevalent.

There was one pedestrian accident on Route 22 which occurred approximately 1000 feet south of the Route 44 and Route 22 intersection in January of 2001. Two elderly pedestrians (88 and 75 years of age) were struck crossing Route 22 without aid of a signal or crosswalk. No citations were issued, but "pedestrian error/confusion" was listed in the police report as a contributing circumstance.

There were 11 non-reportable accidents included in the total which indicates no injuries occurred in these incidents nor was the damage to the vehicles in excess of \$1000.

Review of the accidents occurring on the county and local roads provided by the Dutchess County Traffic Safety Board also did not reveal any patterns of incidents which should be of concern or which might be exacerbated by the proposed traffic generation.

The accident information is included in Appendix D.

### **SECTION 3.3: EXISTING TRAFFIC VOLUMES**

The existing, local, external intersections deemed to be critical from a potential traffic impact perspective, as designated by the adopted Final Scoping Document, are as follows:

- Route 44 at Route 22/Route 343,
- Lake Amenia Road/Dunn Road (CR 81) at Route 22,
- The Existing Site Access at Route 22,
- West Lake Amenia Road at Route 44, and
- Lake Amenia Road at Route 44

Dunn Road is only slightly offset from Lake Amenia Road, and as such, this intersection will be analyzed as a single, four-way intersection in conjunction with Lake Amenia Road and Route 22 relative to capacity. This intersection is shown as a four-way intersection (due to scale) and is depicted as Dunn Road/Route 22 in Figure 2, Site Map.

Traffic counts were conducted during the weeks of January 16 and January 23, 2006, between hours of 7:00 AM and 9:00 AM and 4:00 PM and 6:00 PM. These counts were confined to Tuesday thru Thursday in an effort to capture typical weekday traffic conditions. Also, traffic counts were taken on Friday May 4 and 11, 2007 between the hours of 4:00 PM and 6:00 PM; Saturday May 5, 12 and 19, 2007 between the hours of 11:00 AM and 1:00 PM; and Sunday May 6 and 20, 2007 between the hours of 4:00 PM and 6:00 PM. These timeframes were chosen based upon the existing and proposed land uses specific to the project site and observations of existing traffic activity on the adjacent roadway network. The intent was to assess the “worst case” conditions as mandated in the Final Scoping Document and as such the following time periods were deemed consistent with this criterion:

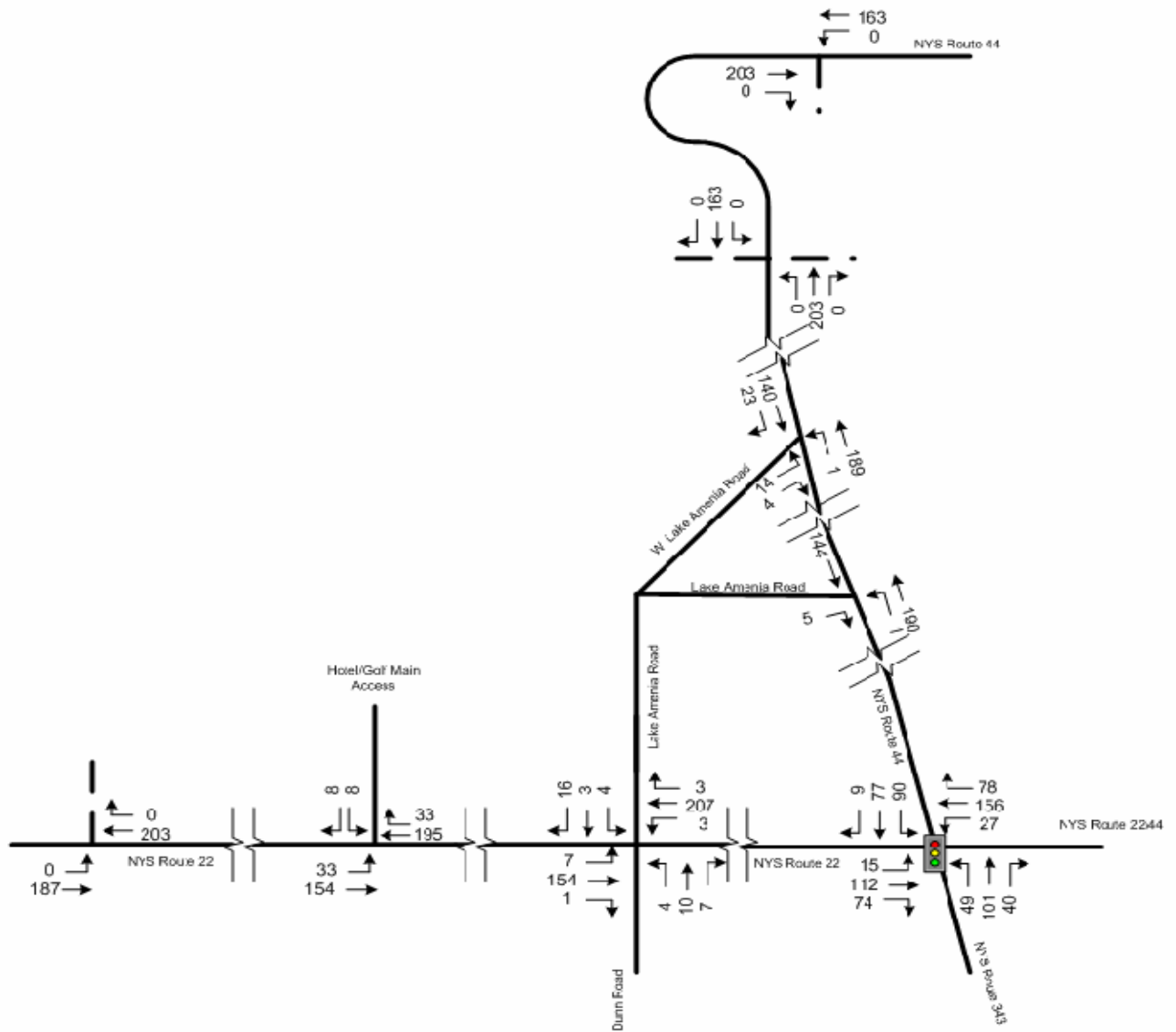
- Weekday AM - 7:00 AM to 9:00 AM,
- Weekday (Friday) PM - 4:00 PM to 6:00 PM,
- Saturday Mid-Day - 11:00 AM to 1:00 PM, and
- Sunday PM - 4:00 PM to 6:00 PM

The AM traffic counts taken in 2006 were subjected to a 2.0% per annum growth factor to account for any background growth occurring between then and now. Also, since these counts were taken during the golfing off-season ITE generated traffic volumes were used to reflect current golf course usage.

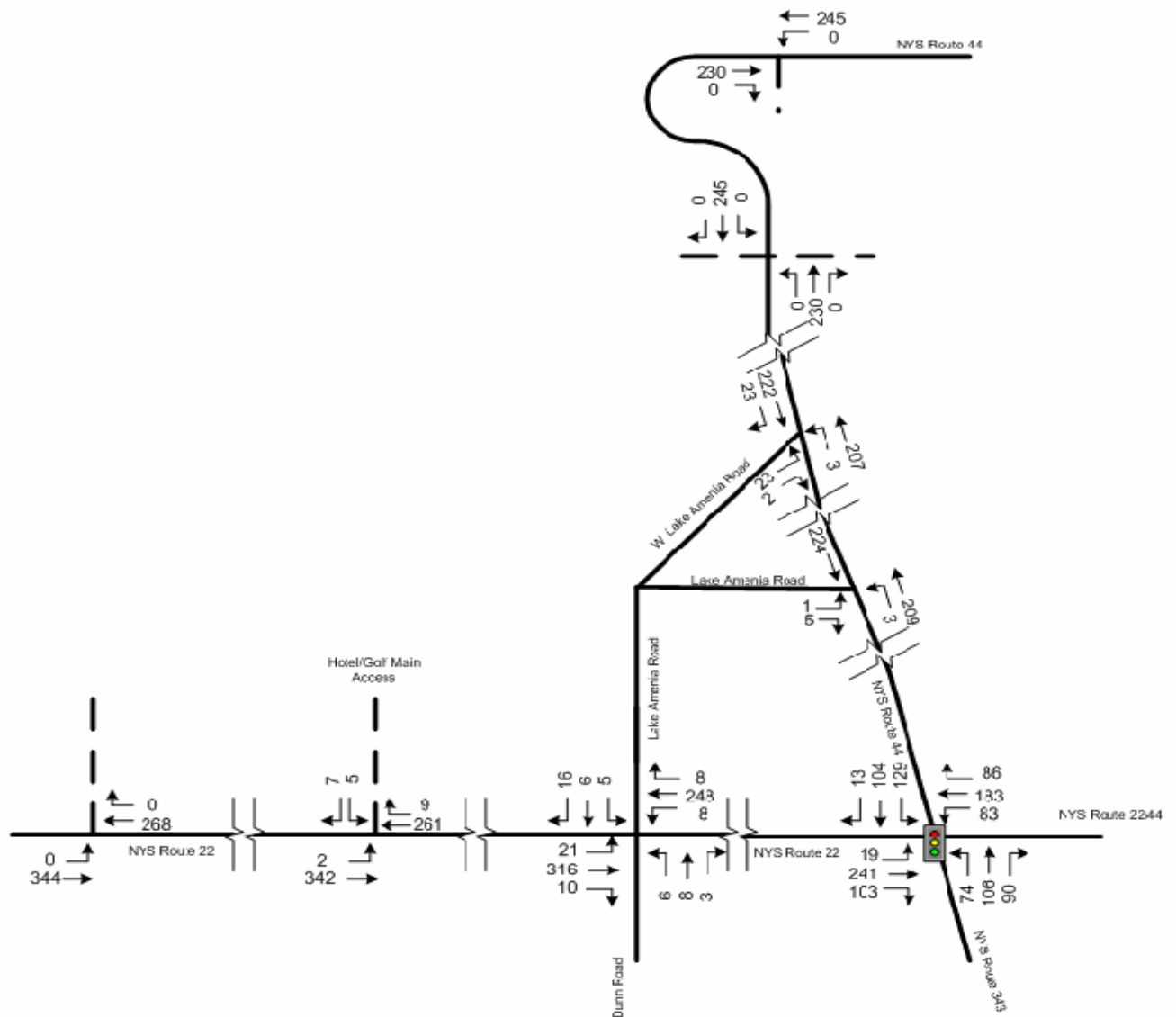
In order to assess the most potentially critical traffic impact, the highest 60 consecutive minutes (peak hour) of volumes were used for each intersection individually and then these volumes were used for the capacity analyses resulting in a worst case scenario. Since the peak hours; the highest consecutive 60 minutes of traffic volumes, may not be the same for each intersection the resulting volumes may not be balanced between intersections.

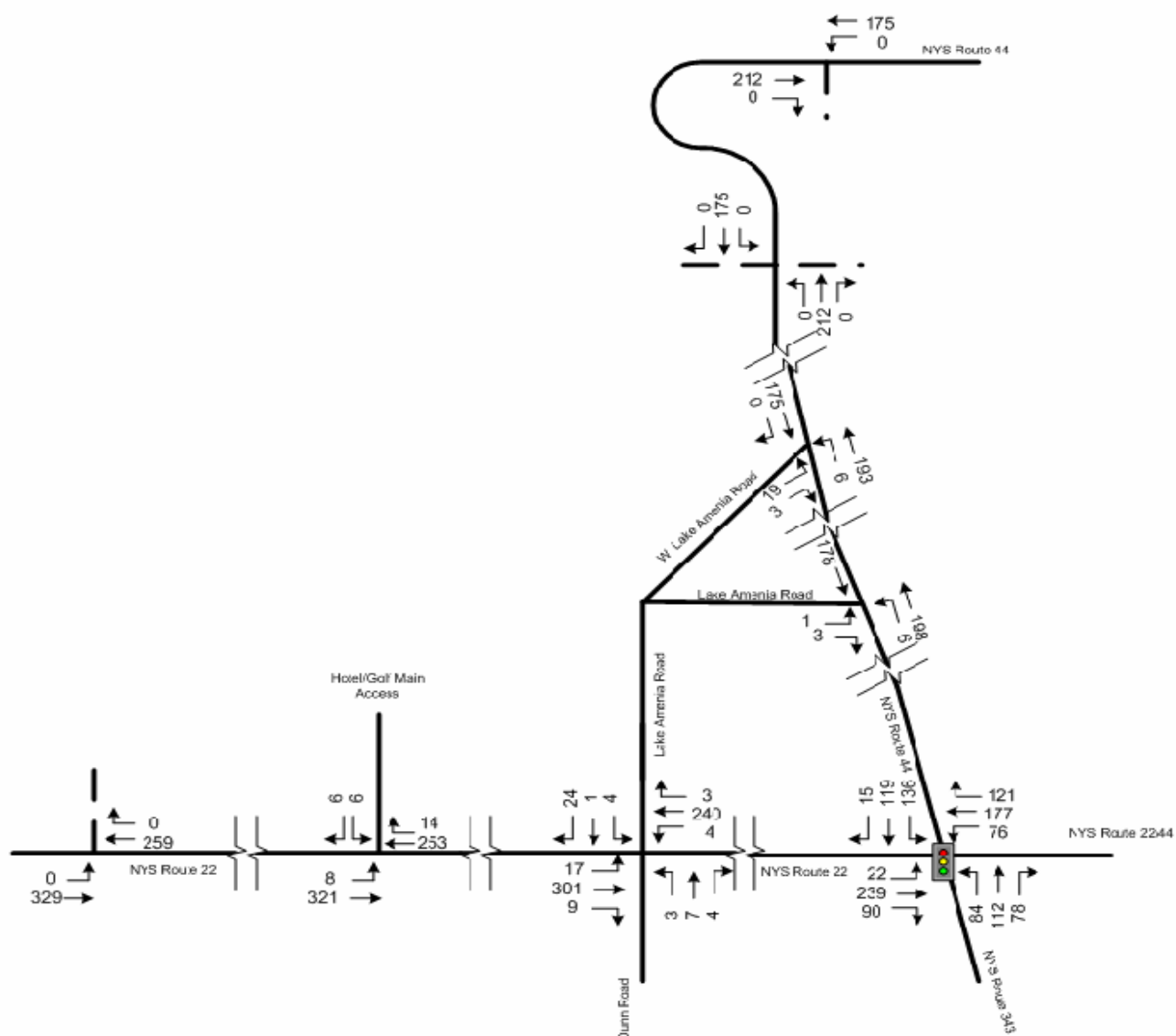
Figures 4 through 7 summarize the vehicular movements at each intersection for the observed peak periods.

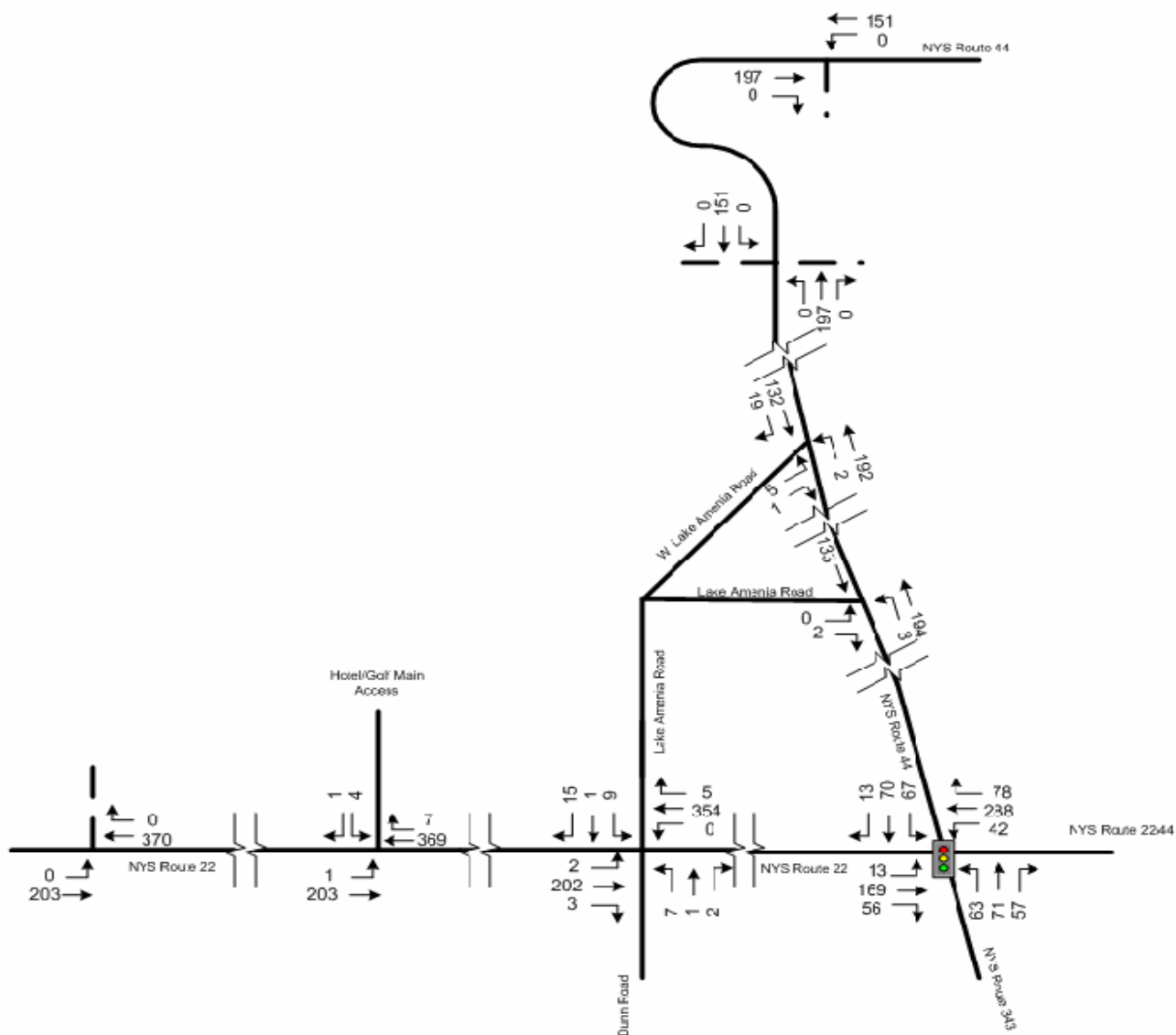










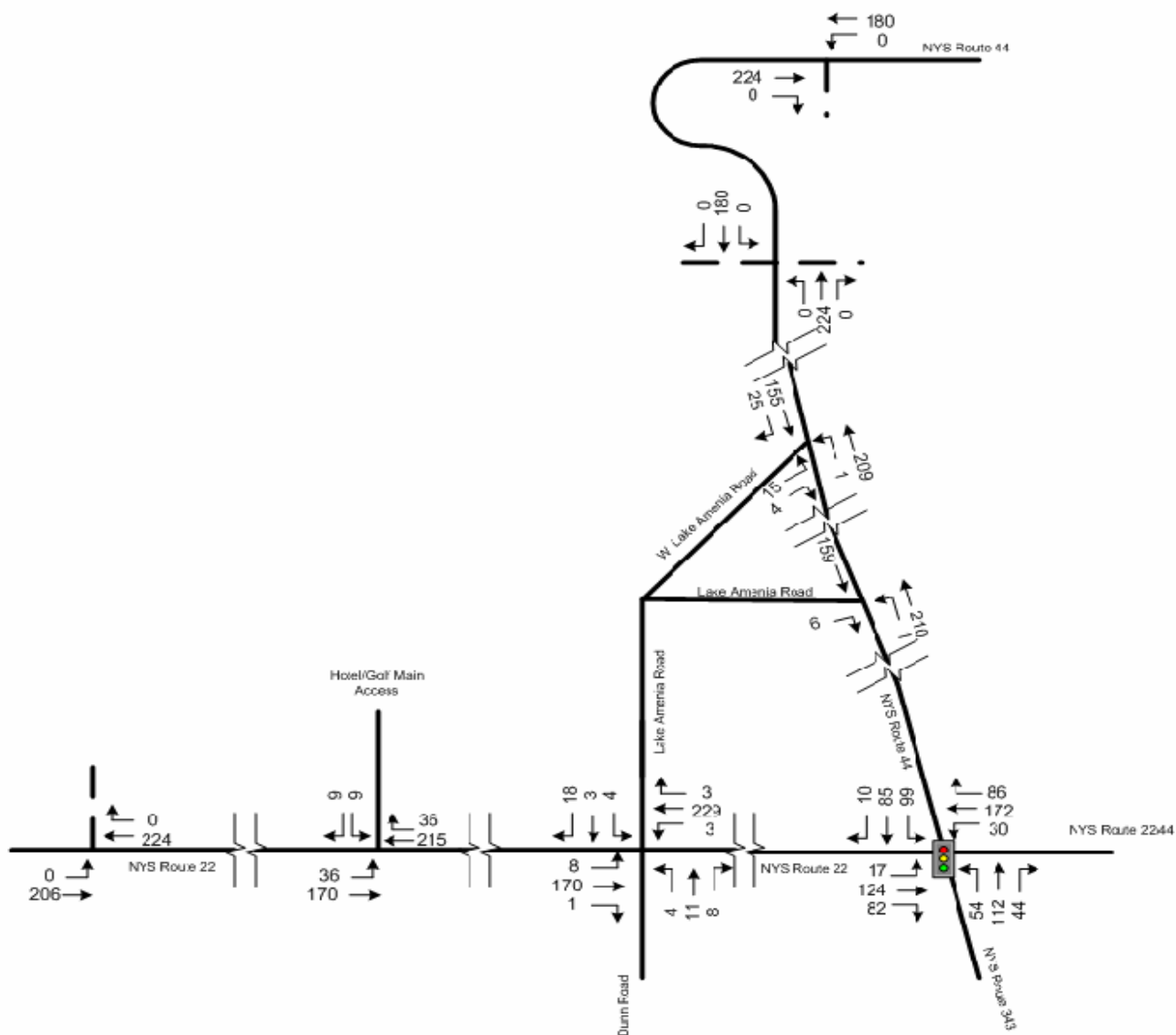


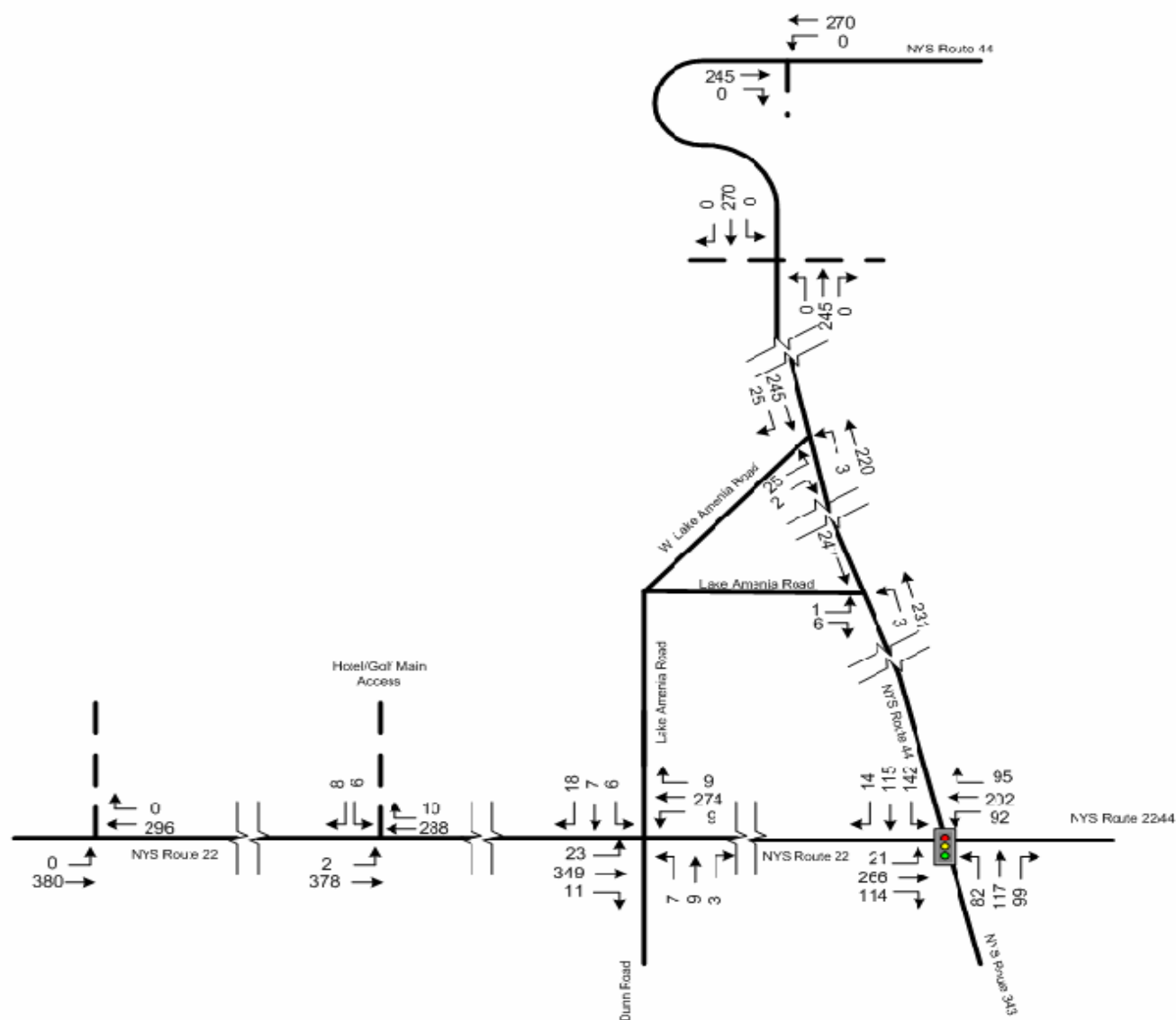
### SECTION 3.4: PROJECTED *NO-BUILD* VEHICULAR VOLUMES

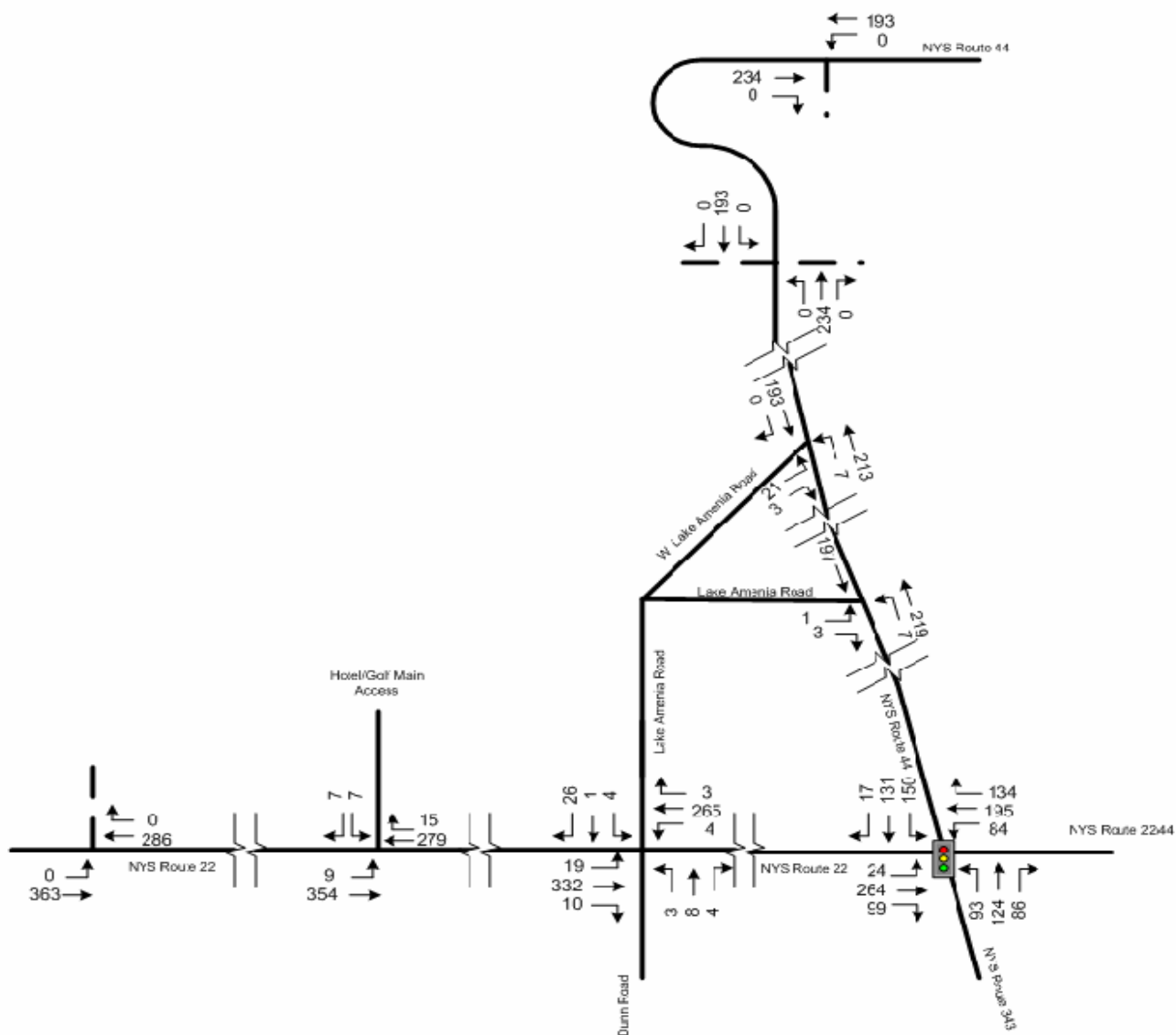
Information from the New York State Department of Transportation forecast a per annum growth rate for the study area of 2.0%. Therefore, a growth rate of 2.0% was applied to the 2007 counts to project them forward to the design year of 2012. This growth rate addresses general background growth in the area of the site and is inclusive of other potential development in the immediate area.

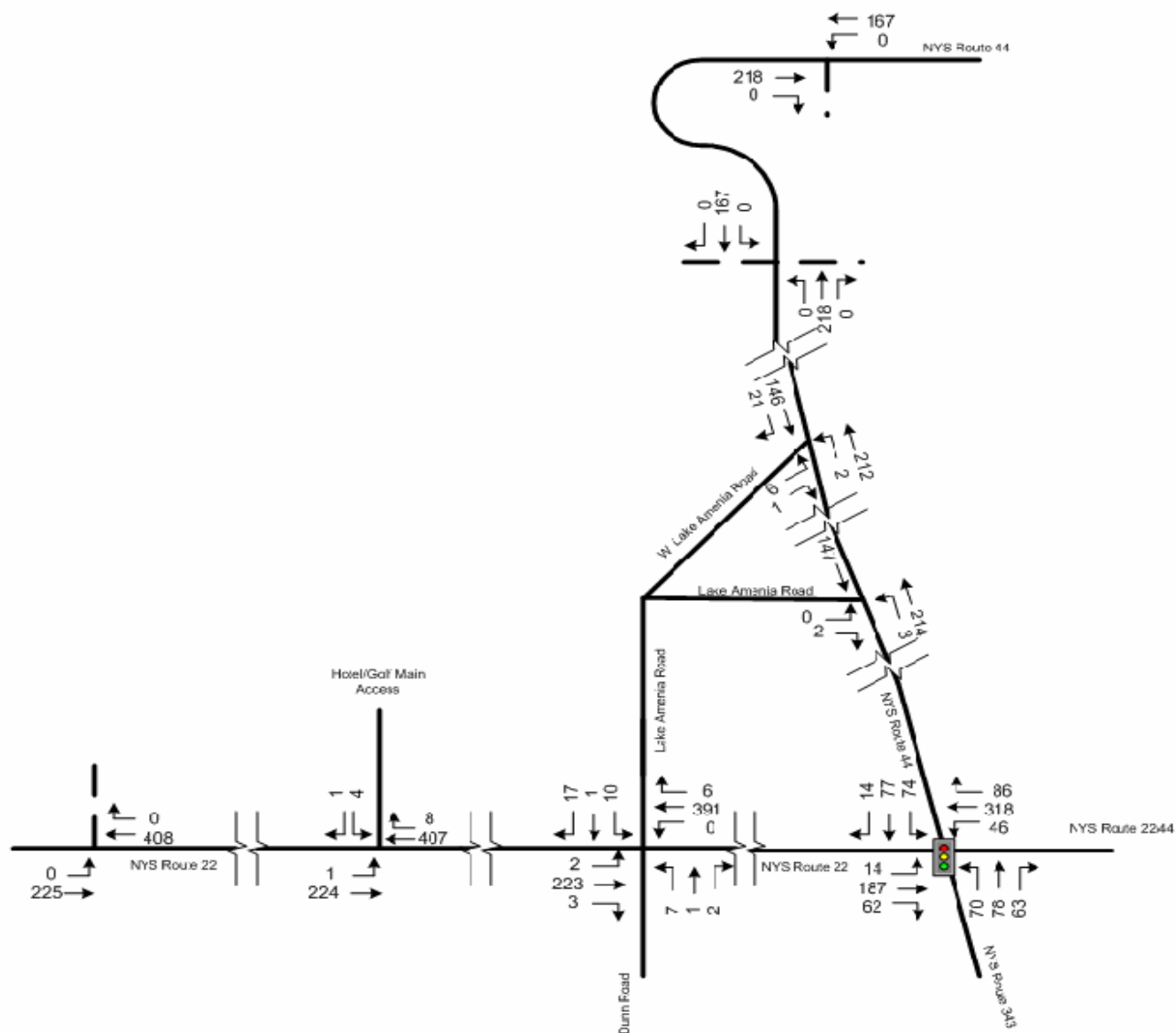
Figures 8 through 11 show the projected 2012 vehicular volumes for the peak periods observed, referred to as the *No-Build* scenario. These volumes, as noted, are anticipated in 2012 without the proposed action.

This information is utilized as the foundation volumes in 2012 to which the anticipated generation of the proposed project is added to predict the combined, or *Build* traffic volumes anticipated in 2012.











## **SECTION 3.5: CURRENT TRANSIT, PEDESTRIAN AND BICYCLE ACTIVITY**

The geographic location of the Silo Ridge Resort Community provides an opportunity relative to mass transit usage. The Dutchess County LOOP bus system is well established and a dependable option for Dutchess County residents. The MTA Metro-North Railroad provides the Harlem Line service to eastern Dutchess County and the Hudson Line service to the western portion of the County. The Harlem Line traverses as far north as Wassaic in the Town of Amenia, very near the proposed site. Given the demographics of anticipated residential ownership within the Silo Ridge Resort Community, it is forecast that the Harlem Line service into New York City will be a significant asset to residents in the Community. Therefore, shuttle service to and from the Wassaic train station and the use of environmentally friendly vehicles for use on and off-site is a viable consideration as mobility alternatives and positive environmental initiatives.

### **SECTION 3.5.1: CURRENT BUS ACTIVITY**

Appendix B contains information obtained from the Dutchess County Planning Department web page<sup>13</sup> regarding current mass transit bus activity in the vicinity of the site.

### **SECTION 3.5.2: CURRENT TRAIN ACTIVITY**

Appendix C contains information obtained from the MTA website, [www.mta.nyc.ny.us](http://www.mta.nyc.ny.us) regarding current train activity and scheduling in the vicinity of the site.

### **SECTION 3.5.3: CURRENT PEDESTRIAN/BICYCLE ACTIVITY**

The Harlem Valley Rail Trail was the vision of a group of volunteers who formed the Harlem Valley Rail Trail Association, Inc. (HVRTA) in April of 1996. The actual planning for the trail began in the mid-1980's and foresaw a 46 mile rail trail in the Harlem Valley and Taconic Hills of eastern New York. A portion of the trail opened in 1996 and the entire Trail is on the original railroad bed of the New York and Harlem Railroad. It is divided into six sections. Section 1 includes the Amenia trailhead which is located off of Mechanic Street in Amenia via Route 343 (approximately a quarter mile east of the hamlet). The Trail is a unique recreational and environmental resource

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<sup>13</sup> [www.co.dutchess.ny.us/countygov/departments/planning/plloopbus.htm](http://www.co.dutchess.ny.us/countygov/departments/planning/plloopbus.htm)

that will enhance the quality of life for residents of Silo Ridge Resort Community. It's scenic and natural flora and fauna will be mirrored by the on-site landscaping and walkways and will engage residents in its use and enjoyment. Appendix D contains some of the information available on the Trail's website<sup>14</sup>.

The Silo Ridge Resort Community is committed to creating an environmentally responsible neighborhood in all respects. The proximity of the Wassaic train station is an asset worth enhancing by use of an on-demand shuttle service transporting Silo Ridge residents to and from the train station. This shuttle service anticipates the attractiveness of the Community to New York City residents both as second home inhabitants and as hotel and conference attendees.

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<sup>14</sup> [www.hvrt.org](http://www.hvrt.org).

## SECTION 4: VEHICULAR TRIP GENERATION

### SECTION 4.1: TRIP GENERATION ANALYSIS

The generation analysis for a proposed development provides the anticipated traffic impact that can be expected as a result of that development. The Institute of Transportation Engineers (ITE) provides traffic and transportation professionals with a source document as a guide to trip generation rates for all land uses and building types. This document, Trip Generation Manual<sup>15</sup>, 7th Edition, is updated periodically and details rates developed for the average weekday, Saturday and Sunday, during the peak hours of the generator and during the peak hours of the adjacent roadway traffic.

The Institute of Transportation Engineers defines a trip or trip end as “A *single or one-direction vehicle movement with either the origin or destination (exiting or entering) inside a study site. For trip generation purposes, the total trip ends for a land use over a given period of time are the total of all trips entering and all trips exiting a site during a designated time period.*”<sup>16</sup>

The proposed Silo Ridge Resort Community project involves multiple land uses. The residential portion of the development will involve both single family homes, Land Use # 210, and townhouse units, Land Use #230. The development will also offer a hotel<sup>17</sup> with a maximum of 320 rooms and including banquet and conference facilities, and 15,000 square feet of a Spa/Health/Fitness center, Land Use #492. Ancillary retail, restaurant, cocktail lounges, etc. are accounted for by the ITE under Land Use #310.

The existing golf course will be upgraded and the existing 6,000 square feet clubhouse retained and refurbished. The golf course generation and the clubhouse facility are existing on-site and therefore will be included in the *Existing* traffic flow rather than as an addition under the *Build* condition. Since the AM manual intersection counts were conducted during the golf off-season, ITE data was used to estimate activity, which was then included in the current activity foundation information.

Software based on the ITE document created by MicroTrans<sup>18</sup>, Inc. provided the generation data for the new land-use. Consistent with the intent to create a worst case set of traffic conditions from which to estimate impact, each

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<sup>15</sup> *Trip Generation Manual, 7<sup>th</sup> Edition*, Institute of Transportation Engineers, 2004.

<sup>16</sup> *Trip Generation Manual, 7<sup>th</sup> Edition*, Users Guide, Institute of Transportation Engineers, 2004.

<sup>17</sup> Hotel land-use 310 includes supporting facilities such as banquet rooms and conference facilities. Restaurant and fitness facilities may be included but are added as additional generating facilities in this case.

<sup>18</sup> Trip Generation, Version 5, 2004.

proposed land-use was reviewed using both equations and the weighted average rate.<sup>19</sup> In each case, the methodology used was that which produced the most trips per independent variable (number of units, number of seats, number of square feet, etc.).

Table 1 details the forecast vehicular trip generation values for the proposed development. Each land-use generation methodology is specified in the Table.

It should be noted that although the intent of this proposed development is to minimize both internal and external vehicular trip by the use of multi-modal facilities (shuttle service to train station), non-traditional vehicles (electric vehicles for internal and short external trips), “walk-able” internal design features, and linkages to recreation, retail, and residence, none of these positive trip reduction techniques were used in the generation analysis to reduce trips. Also, while considerable patronage of on-site hotel ancillary facilities including the Spa/Health/Fitness center by on-site residents is expected, no credit has been taken in the assessment of impacts on the adjacent roadway. This approach was employed to maximize potential impact on the adjacent roadway network, i.e. consistent with the worst case scenario. The actual impact will be less, consistent with the success of the above-noted actions.

**Table 1: Trip Generation**

Generator	Weekday AM Peak Hour Volumes		Weekday PM Peak Hour Volumes		Saturday Peak Hour Volumes		Sunday Peak Hour Volumes	
	Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit
<b>Land Use # 210</b> Single Family Detached (41 Units)	10	29	30	18	26	22	22	20
<b>Land Use # 230</b> Townhouse/Condo (328 Units)	23	111	107	53	74	63	61	64
<b>Land Use # 492</b> Spa/Health/Fitness (15,000 s.f.)	8	11	31	30	31 <sup>1</sup>	30 <sup>1</sup>	31 <sup>1</sup>	30 <sup>1</sup>
<b>Total Site Activity</b>	<b>150</b>	<b>221</b>	<b>268</b>	<b>190</b>	<b>260</b>	<b>216</b>	<b>196</b>	<b>211</b>

<sup>1</sup> In the absence of ITE data for Saturday and Sunday peak hour trip generation the estimated weekday PM volumes have been used.

<sup>19</sup> Three methods are provided by ITE for calculating forecasted trips at proposed developments. The two most used methodologies are the regression equation (based on the third method...plot versus size of the independent variable), and the weighted trip generation rate.

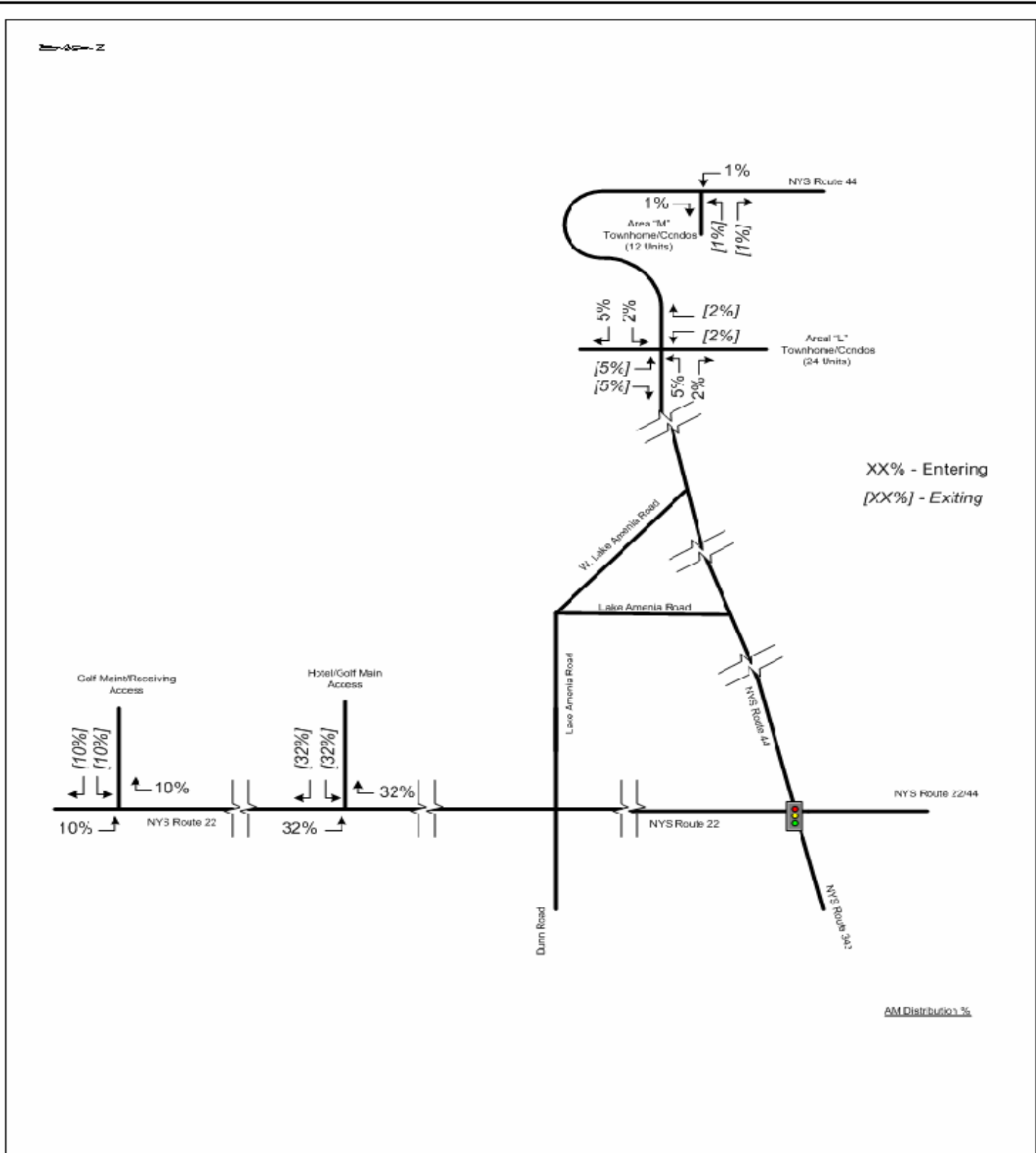
## SECTION 4.2: VEHICULAR DIRECTIONAL DISTRIBUTION

The distribution of the site generated vehicular traffic is based upon the land-uses being proposed and the marketing demographics based upon regional considerations. If the land-uses being proposed are consistent with existing activity then the new traffic flows would approximate the distribution of the existing volumes at the locations monitored during the manual counts. Since the proposed land-uses are consistent with the area's existing characteristics, it is assumed that the traffic generation will also follow existing distribution patterns.

The arrival and departure distribution of site generated traffic was arrived at based upon the proposed land use components, their location and the fact that existing distribution patterns throughout the adjacent roadway network are not expected to be significantly impacted. Hence the estimated arrival/departure distributions at the site access driveways were distributed at the adjacent intersections in accordance with observed, existing traffic patterns inclusive of arrival and departure trips.

The percentage of site generated traffic assigned to the site access driveways is shown in Figure 12 while Figures 13 through 16 depict site generated traffic volumes for the peak periods considered. These volumes were added to the corresponding *No-Build* values resulting in the *Build* traffic volumes shown in Figures 17 through 20.

The *Existing*, *No Build*, and *Build* were used in the assessment of impacts on traffic capacity.



THE  
*Chazen*  
COMPANIES

**Silo Ridge Resort Community**

**Assigned Percentage of Site Generated Traffic at Proposed Access Driveways**

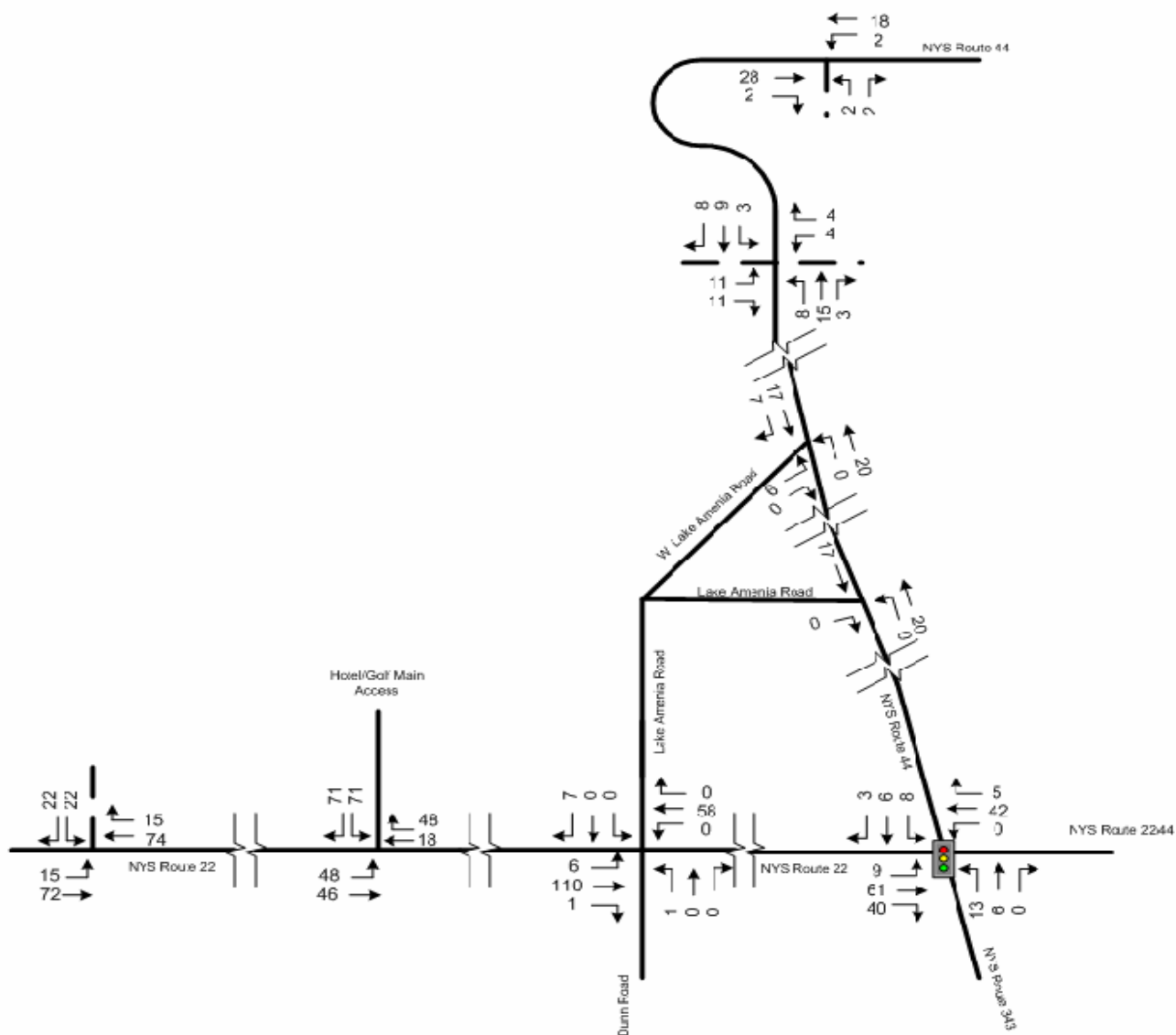
Town of Amsterdam, Dutchess County, New York

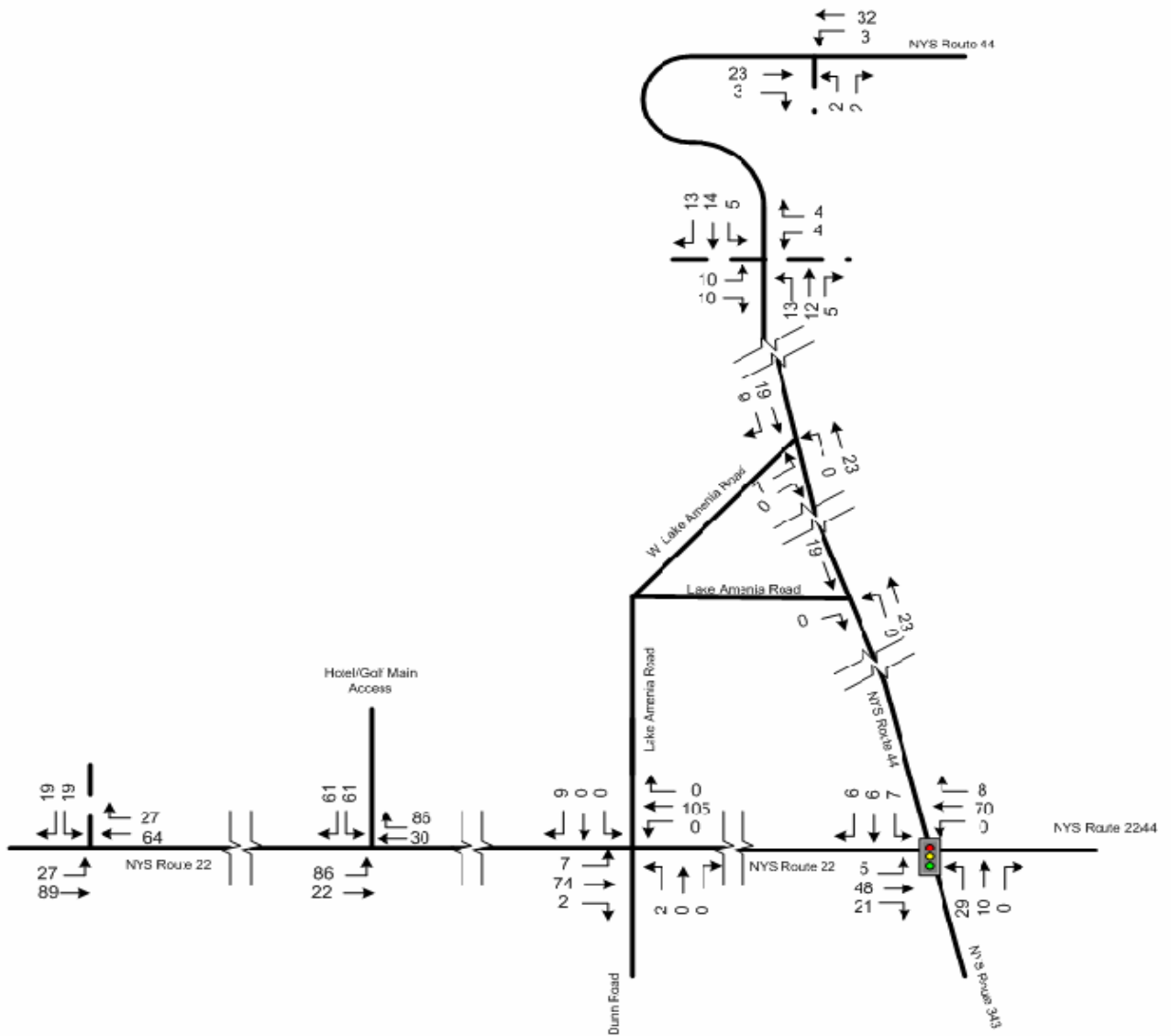
Source: The Chazen Companies

Drawn by: DAE

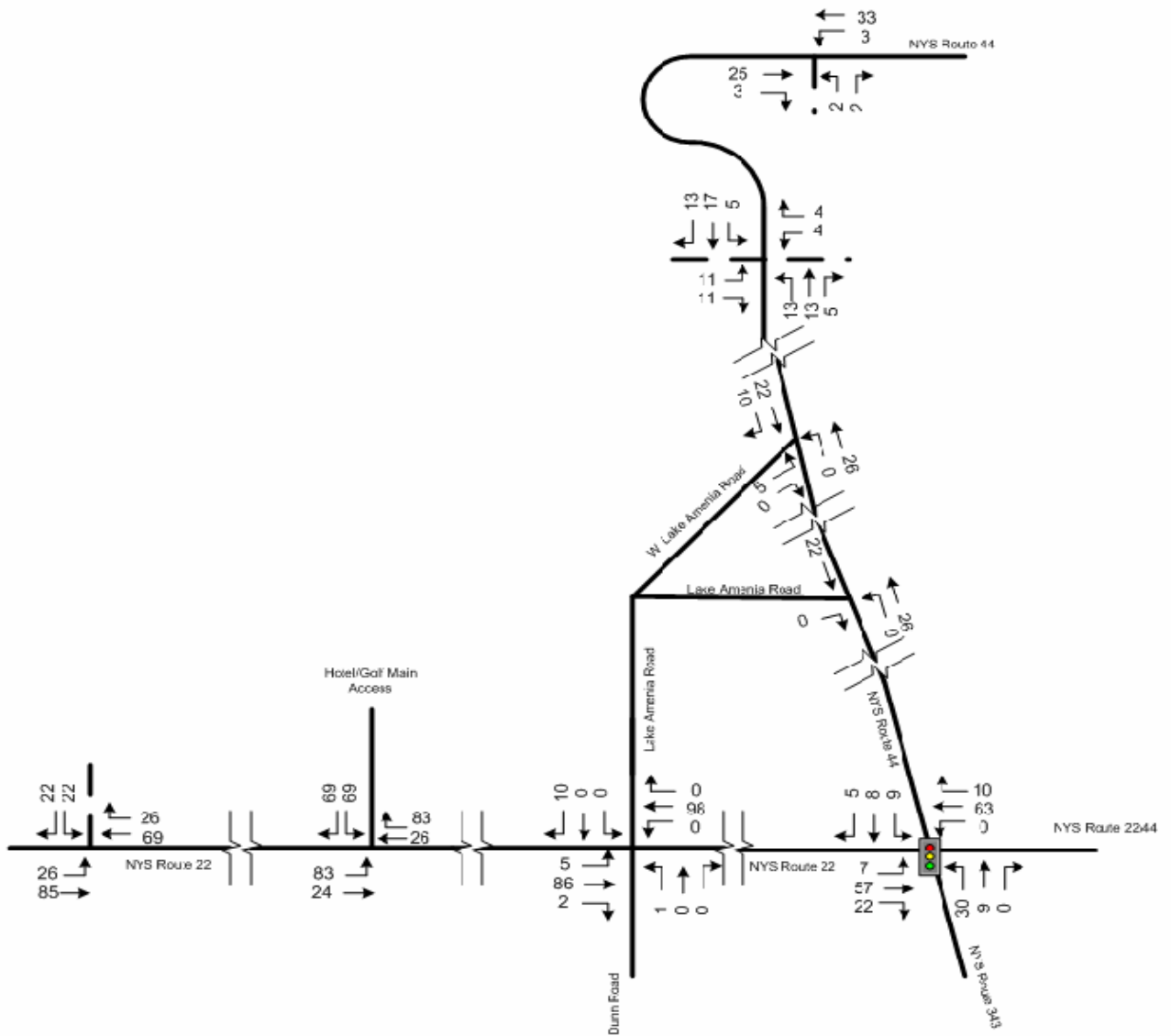
Not to Scale

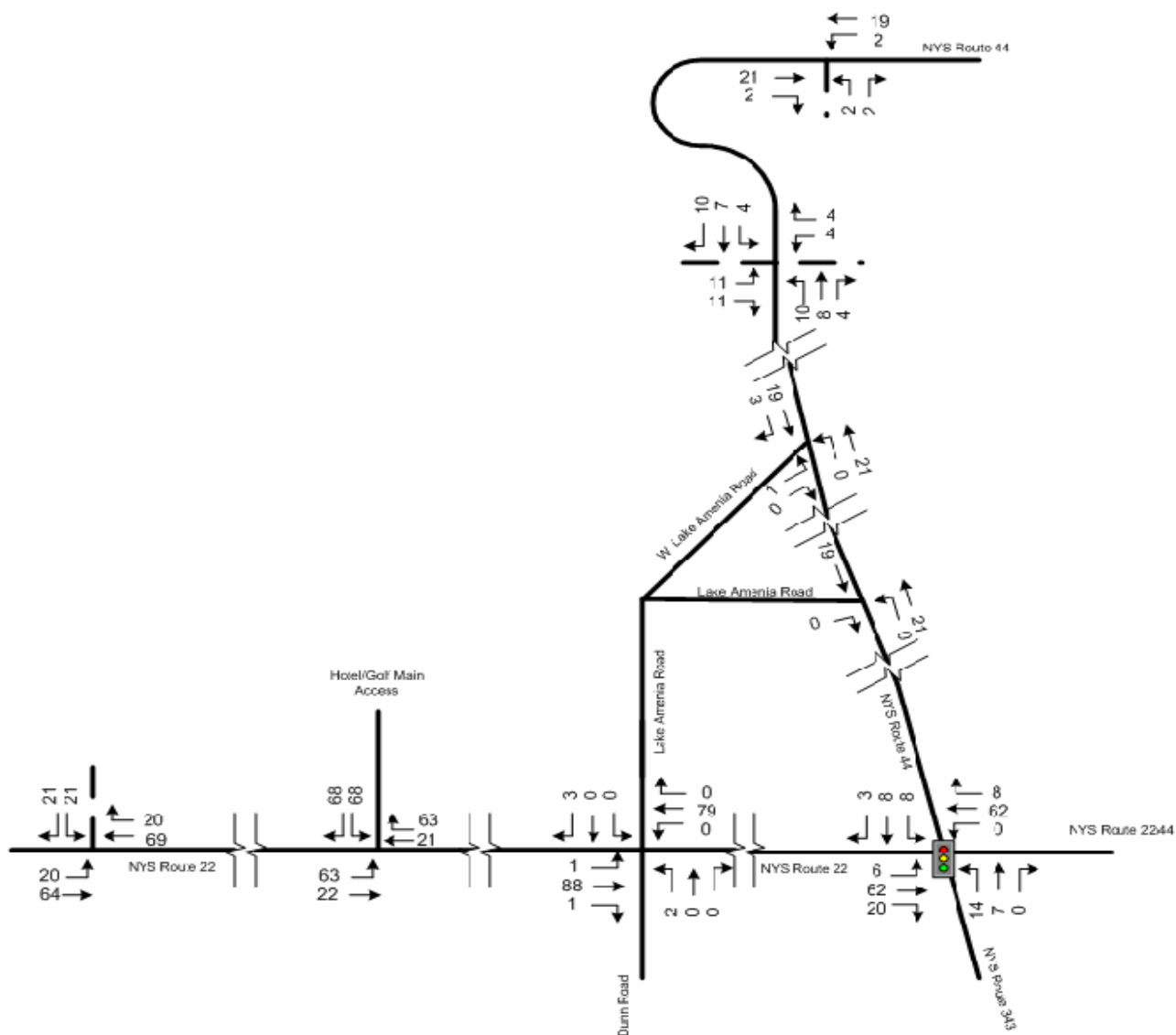
Figure  
12

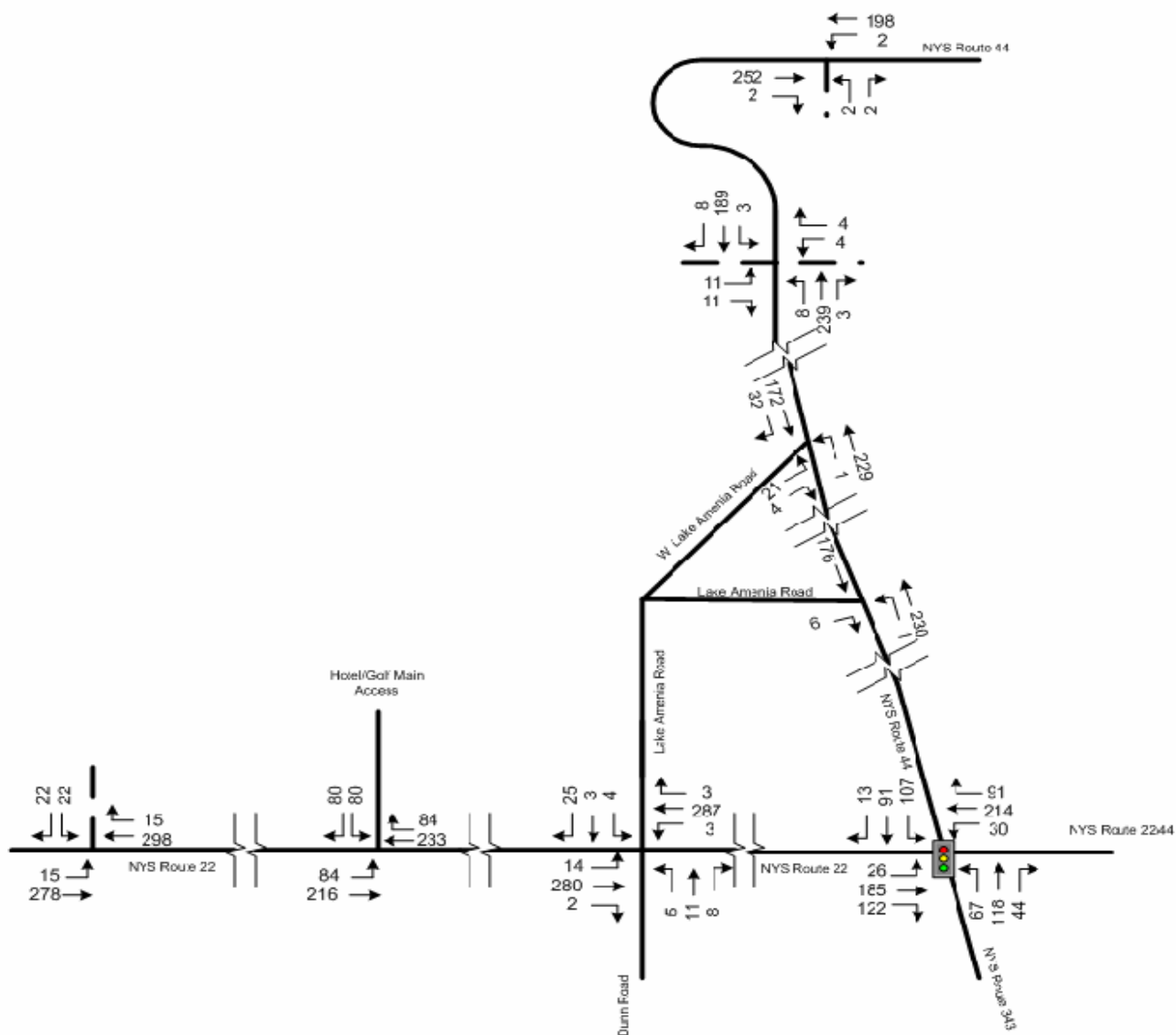


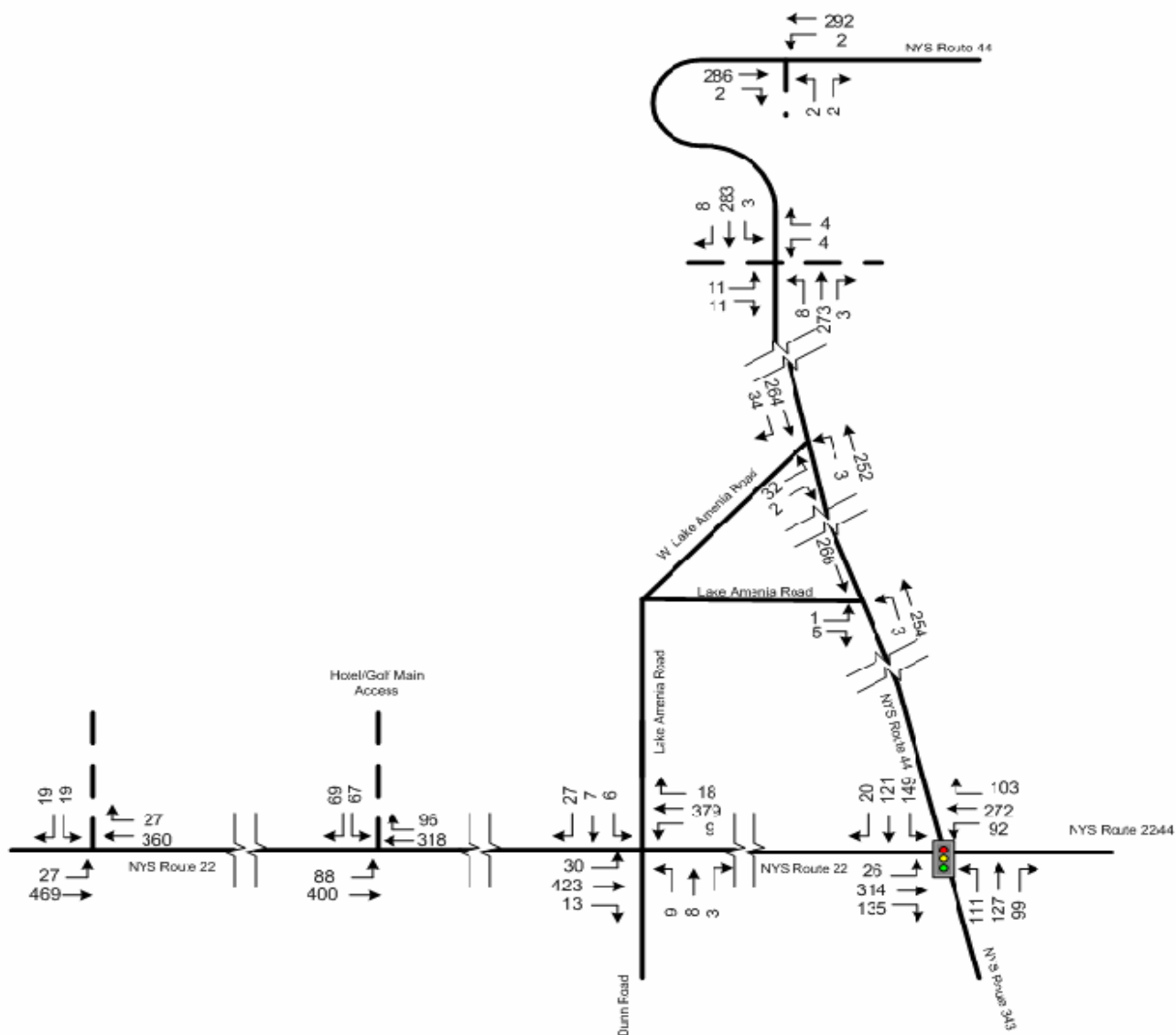


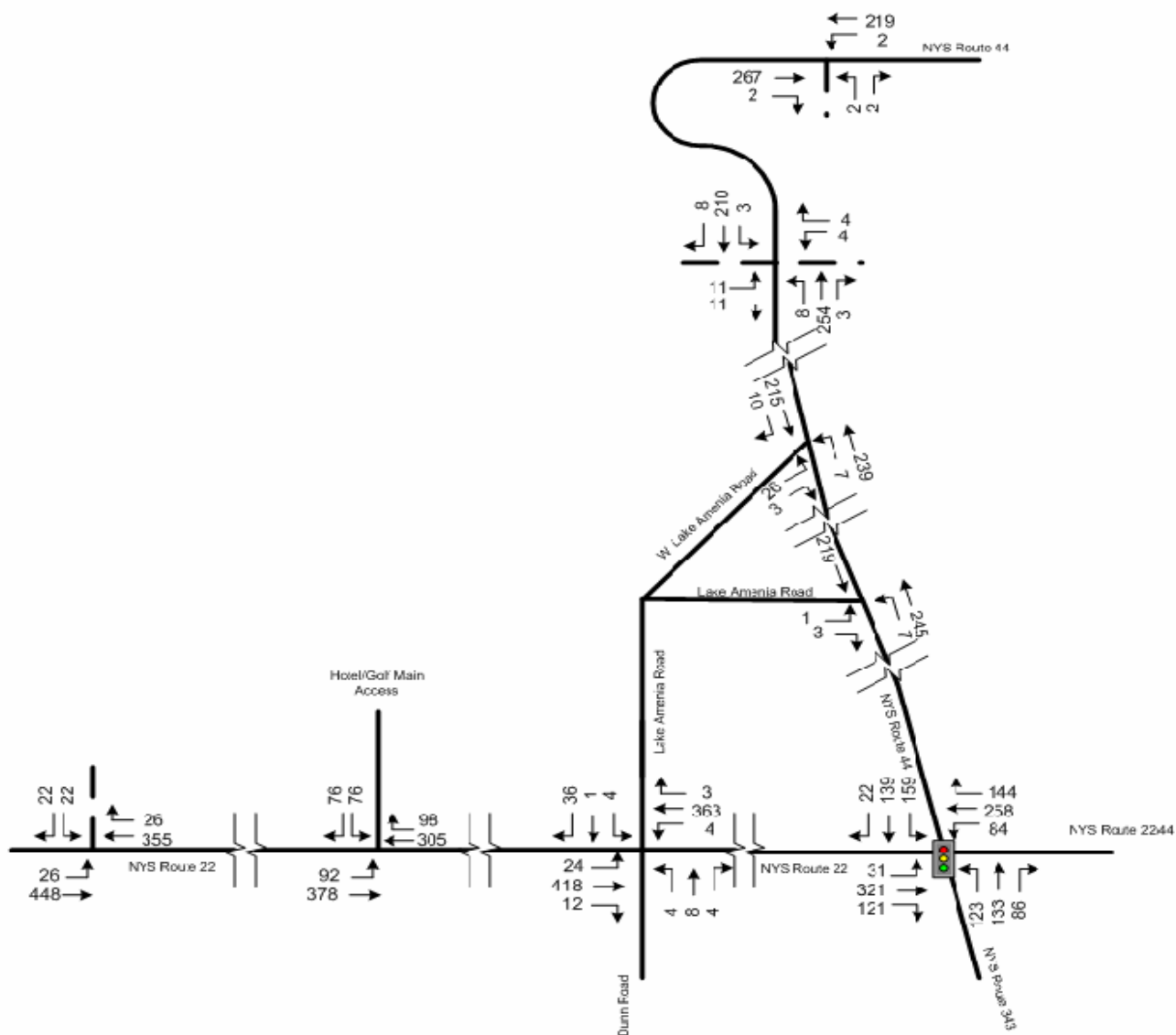


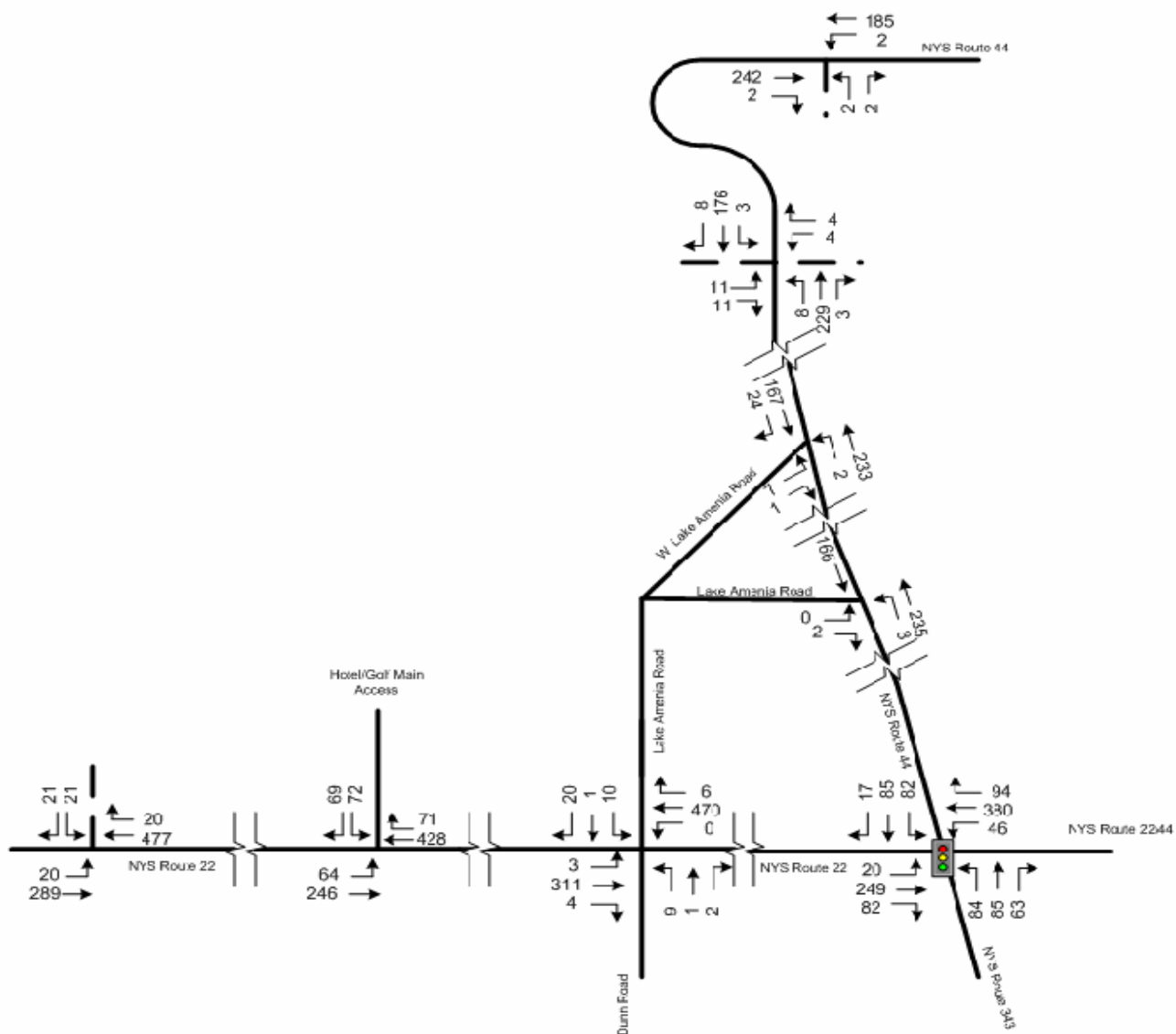












## **SECTION 5: ANALYSIS**

### **SECTION 5.1: CAPACITY/LEVEL-OF-SERVICE**

The capacity analysis methodology is based upon the 2000 Highway Capacity Manual.<sup>20</sup> The terminology employed to identifying traffic flow conditions is the computed “Level-of-Service” (LOS) based upon the calculated average delay per vehicle. LOS A represents the best condition and LOS F represents the worst. A LOS C is generally used as a design standard while an intersection LOS D is acceptable during peak periods given that all approaches have LOS D or better. LOS E represents an operation at or near capacity. In order to identify a signalized intersection’s LOS, the average amount of vehicle delay is computed for each approach to the intersection as well as for the intersection as whole. For unsignalized intersections, the average vehicle delay is computed for each critical movement to the intersection, which are normally the stop or yield controlled approaches along with the left-turns from the main roadways. Appendix A, Tables 3 and 4 summarize the level-of-service criteria for signalized and unsignalized intersections, respectively.

Each key intersection, existing and proposed, was analyzed during the peak hour periods considered using Existing (2007), No-Build (2012) and Build (2012) traffic volumes. The actual capacity analyses were undertaken with the use of software developed by Trafficware Ltd.<sup>21</sup> and based upon 2000 Highway Capacity Manual methodology. The results of the capacity analyses are summarized in Table 2 followed by a synopsis the results for each location.

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<sup>20</sup> Special Report 209, 2000, published by the Transportation Research Board, National Research Council, Washington, D.C.

<sup>21</sup> Synchro Traffic Signal Software, Version 7, by Trafficware Ltd., 2006

<b>Table 2:Capacity Summary</b> <b>Level-of-Service/Estimated Delay (Seconds per vehicle)</b>					
<b>INTERSECTION</b>	<b>PEAK</b>	<b>APPROACH</b>	<b>EXISTING VOLUMES 2006</b>	<b>NO BUILD VOLUMES 2012</b>	<b>BUILD VOLUMES 2012</b>
<b>Route 44 at Route 22</b>  <b>Signalized</b>	<b>AM</b>	<b>OVERALL</b> EB WB NB SB	<b>B/10.7</b> B/12.1 B/11.0 A/9.0 B/10.9	<b>B/11.9</b> B/13.7 B/12.3 A/9.8 B/12.0	<b>B/14.3</b> B/16.3 B/14.6 B/13.1 B/13.9
	<b>PM</b>	<b>OVERALL</b> EB WB NB SB	<b>B/17.6</b> C/21.0 B/16.8 B/14.6 B/19.0	<b>C/21.4</b> C/27.4 B/19.9 B/16.3 C/24.0	<b>C/27.9</b> D/37.6 C/28.7 B/18.8 C/30.9
	<b>Saturday Mid-Day</b>	<b>OVERALL</b> EB WB NB SB	<b>B/19.3</b> C/23.8 B/16.5 B/18.3 B/19.2	<b>C/23.8</b> C/31.2 B/19.1 C/21.0 C/24.4	<b>C/32.3</b> D/43.0 C/25.3 C/28.0 C/34.3
	<b>Sunday PM</b>	<b>OVERALL</b> EB WB NB SB	<b>B/14.3</b> B/15.9 B/17.6 A/9.7 B/14.9	<b>B/16.4</b> B/17.4 B/19.9 B/11.0 B/17.7	<b>C/21.1</b> B/19.7 C/25.2 B/14.7 C/24.0
<b>Route 22 at Lake Amenia Rd. and Dunn Rd. (CR 81)</b>  <b>Unsignalized</b>	<b>AM</b>	EB WB NB SB	B/11.1 B/11.8 A/0.5 A/0.3	B/11.4 B/12.3 A/0.6 A/0.3	B/12.8 C/15.4 A/0.7 A/0.2
	<b>PM</b>	EB WB NB SB	C/16.6 C/22.4 A/1.0 A/0.4	C/23.0 D/32.2 A/1.1 A/0.4	C/21.7 E/38.4 A/1.3 A/0.5
	<b>Saturday Mid-Day</b>	EB WB NB SB	B/12.0 C/16.5 A/1.0 A/0.3	B/12.6 C/18.2 A/1.1 A/0.3	B/14.8 D/26.8 A/1.4 A/0.2
	<b>Sunday PM</b>	EB WB NB SB	C/15.7 C/19.5 A/0.3 A/0.0	C/17.3 C/22.0 A/0.3 A/0.0	C/22.5 E/35.6 A/0.4 A/0.0



<b>Table 2:Capacity Summary</b> <b>Level-of-Service/Estimated Delay (Seconds per vehicle)</b>					
<b>INTERSECTION</b>	<b>PEAK</b>	<b>APPROACH</b>	<b>EXISTING VOLUMES 2006</b>	<b>NO BUILD VOLUMES 2012</b>	<b>BUILD VOLUMES 2012</b>
<b>Route 22 at Existing Hotel/Golf Course Driveway</b>  <b>Unsignalized</b>	<b>AM</b>	EB(LEFT) EB(RIGHT) NB	B/11.8 A/9.5 A/1.6	B/12.3 A/9.6 A/1.6	C/17.8 B/10.5 A/2.8
	<b>PM</b>	EB(LEFT) EB(RIGHT) NB	C/18.9 B/10.1 A/0.2	C/21.3 B/10.3 A/0.2	F/Undetermined B/12.2 A/7.4
	<b>Saturday Mid-Day</b>	EB(LEFT) EB(RIGHT) NB	C/15.2 B/10.1 A/0.4	C/16.4 B/10.3 A/0.5	F/87.7 C/15.7 A/4.4
	<b>Sunday PM</b>	EB(LEFT) EB(RIGHT) NB	C/17.4 B/12.2 A/0.2	C/19.9 B/12.9 A/0.1	F/Undetermined D/30.0 A/7.3
<b>Route 44 at West Lake Amenia Rd.</b>  <b>Unsignalized</b>	<b>AM</b>	WB NB	A/0.2 B/10.6	A/0.1 B/11.0	A/0.1 B/11.6
	<b>PM</b>	WB NB	A/0.3 B/12.4	A/0.3 B/13.2	A/0.3 B/14.1
	<b>Saturday Mid-Day</b>	WB NB	A/0.6 B/11.6	A/0.6 B/12.2	A/0.6 B/13.0
	<b>Sunday PM</b>	WB NB	A/0.1 B/10.6	A/0.1 B/11.0	A/0.1 B/11.5
<b>Route 44 at Lake Amenia Rd.</b>  <b>Unsignalized</b>	<b>AM</b>	WB NB	A/0.2 A/9.2	A/0.1 A/9.3	A/0.1 A/9.5
	<b>PM</b>	WB NB	A/0.3 B/10.5	A/0.3 B/10.7	A/0.3 B/10.9
	<b>Saturday Mid-Day</b>	WB NB	A/0.6 B/10.6	A/0.6 B/10.9	A/0.6 B/11.3
	<b>Sunday PM</b>	WB NB	A/0.3 A/9.0	A/0.3 A/9.1	A/0.3 A/9.2

<b>Table 2:Capacity Summary</b> <b>Level-of-Service/Estimated Delay (Seconds per vehicle)</b>					
<b>INTERSECTION</b>	<b>PEAK</b>	<b>APPROACH</b>	<b>EXISTING VOLUMES 2006</b>	<b>NO BUILD VOLUMES 2012</b>	<b>BUILD VOLUMES 2012</b>
<b>Route 22 at Loop Road</b>  <b>Unsignalized</b>	<b>AM</b>	EB NB	X X	X X	B/10.9 A/0.5
	<b>PM</b>	EB NB	X X	X X	C/15.5 A/0.7
	<b>Saturday Mid-Day</b>	EB NB	X X	X X	C/15.4 A/0.7
	<b>Sunday PM</b>	EB NB	X X	X X	C/15.3 A/0.8
<b>Route44 at Site Access/Area “L”</b>  <b>Unsignalized</b>	<b>AM</b>	EB WB NB SB	X X X X	X X X X	A/0.1 A/0.3 B/11.2 B/11.3
	<b>PM</b>	EB WB NB SB	X X X X	X X X X	A/0.1 A/0.3 B/12.5 B/12.4
	<b>Saturday Mid-Day</b>	EB WB NB SB	X X X X	X X X X	A/0.1 A/0.3 B/11.5 B/11.6
	<b>Sunday PM</b>	EB WB NB SB	X X X X	X X X X	A/0.1 A/0.3 B/11.0 B/11.1
<b>Route 44 at Area “M”</b>  <b>Unsignalized</b>	<b>AM</b>	WB SB	X X	X X	B/10.8 A/0.1
	<b>PM</b>	WB SB	X X	X X	C/16.0 A/8.8
	<b>Saturday Mid-Day</b>	WB SB	X X	X X	B/11.0 A/0.1
	<b>Sunday PM</b>	WB SB	X X	X X	B/10.6 A/0.1

#### Route 44 at Route 22 (Hamlet of Amenia)

The analysis of this four-way signalized intersection indicates a LOS C or better throughout the peak hour periods analyzed. Observations indicate that opposing left-turn movements (eastbound Route 44 and westbound Route 343) require some caution due to the significant numbers of vehicles making these movements on the same green phase and the geometric configuration of the intersection. Although the signal operation is currently providing for safe vehicular and pedestrian movements, at some time in the future increased pedestrian activity may necessitate the provision of a separate exclusive pedestrian phase.

#### Route 22 at Lake Amenia Drive and Dunn Road (CR 81)

The results of the analysis of this unsignalized four-way intersection, indicates acceptable LOS for all movements during the weekday AM and Saturday Mid-Day peak hour periods; LOS D or better. During the weekday (Friday) and Sunday PM and peak periods analyzed it is anticipated that traffic exiting Dunn Road (WB) shall experience LOS E under Build conditions with a maximum delay of 38.4 seconds per vehicle. A review of the computed 95<sup>th</sup> percentile queue length indicates a maximum of 23 feet or approximately two vehicles occurring during the weekday PM. As such, and the impact of the proposed project is not considered significant although we recommend a re-assessment of this location upon project completion.

#### Route 22 at Existing Main Site Access

The results of the capacity analysis reveal that traffic exiting the site shall experience significant delays and associated queues during all peak periods analyzed except for the weekday AM peak hour. It is the intent to formally petition the NYSDOT, via its highway work permit process, that the signalization of this intersection is permitted as part of the overall project.

#### Route 44 at Lake Amenia Drive/West Lake Amenia Drive

The results of the capacity analysis reveal that these intersections will maintain a LOS A in both peak hours for Lake Amenia Road and LOS B for West Lake Amenia Road. These two intersections carry very low volumes which will not change significantly with the proposed development.

#### Route 22 at Proposed Main Site Access (Loop Road Access)

The analysis of this proposed access indicates acceptable LOS for all traffic conditions analyzed; LOS A for left-turns into the site and LOS C or better for exiting traffic. The operation of this access will not adversely affect the flow of traffic on Route 22.

#### Route 44 at Proposed Access to Main Site and to Area “L”

The analysis of this new access, which services both the main site (to the south) and Area L (to the north), indicates an acceptable LOS under all future traffic conditions; LOS A (ingress left-turns) and LOS B for traffic leaving the driveways. For purposes of operational efficiency, it is recommended that left-turn lanes be created on Route 44 in both the eastbound and westbound directions for traffic entering the driveways. This action, in conjunction with placement of the common access at the point of greatest sight lines, will provide safety and efficiency. Therefore, given this cross-section modification, the operation of this new access will be acceptable and will not have any significant impact on traffic flow.

#### Route 44 at Proposed Access to Area “M”

The analysis of this proposed access location on the north side of Route 44 west of the hairpin curve indicated an acceptable LOS for all future traffic conditions. The driveway access is carefully located to maximize sight lines both to and from the drive. This segment of Route 44 is critically affected by alignment and grade; therefore, the degree of new activity at this location is critical. Thus this new site parcel is limited to a small number of townhouse units, resulting in favorable operating conditions. Therefore, the operation of this access will be acceptable and will not have any significant impact on traffic flow.

The details of each of the capacity analyses for the above noted intersections are provided in Appendix E.

## **SECTION 5.2: CONSTRUCTION ACTIVITY/EMERGENCY SERVICES**

The construction activity for the site will be formally presented in a Construction Phasing Plan for approval in the DEIS process. However, the multiple permanent access schemes will accommodate all construction related activity. There will not be a need for separate temporary construction access. The construction activity will be sensitive to the on-going site activities and will minimize interaction between the two. Specific operations will be identified and detailed in the aforementioned Plan.

Further, emergency services will be maintained during the entire construction sequence and all such services will be guided by local oversight and coordination. The Countywide 911 system will be utilized for real-time access to the County Sheriff, the State Police (Troop K), the Town Constable, the Amenia Fire District, and the Wassauc Fire District.

## **SECTION 6.0: TRADITIONAL NEIGHBORHOOD ALTERNATIVE**

This Alternative consists of two separate sites, as compared to three under the Proposed Action. The existing main driveway to the Silo Ridge Country Club on Route 22 will remain the primary site access to the proposed Hotel/Golf Course facilities; however, access to this primary site shall now be limited to Route 22 via this existing driveway and one additional driveway to the south i.e. no direct access shall be provided to Route 44 under this Alternative.

The second site is located on the north side of Route 44 consisting of the combined parcels designated as “L” and “M” under the Proposed Action and now designated as the Vineyard Townhomes (38 units) and Winery/Restaurant (80 seats). The access driveways to parcels “L” and “M” under the Proposed Action shall be retained with an internal connection between the two under this Traditional Neighborhood Alternative.

In addition to the changes in the number and configuration of proposed access driveways, changes in land use specifications require a review of potential traffic impacts.

Table 5 presents the revised trip generation estimates based on the proposed land use schedule under this Alternative plan. The Alternative will generate more trips under all peak periods considered due primarily to the increase in the Hotel (320 vs. 393 Rooms) and Spa/Health/Fitness facilities (15,000 vs. 81,490 sf). In addition, the provision of 18,700 sf. of retail space (Specialty Retail) requires the consideration of trips generated external to the site itself.

It is anticipated that the vast majority of patronage of the project's ancillary facilities; Retail, Spa/Health/Fitness facilities, will be from persons on-site and we have adopted a 50% credit (reduction in generated trips) where appropriate.

Table 5 summarizes the trip generation estimates under the Traditional Neighborhood Alternative based upon information published by the Institute of Transportation Engineers (ITE).<sup>22</sup>

**Table 5: Trip Generation for Traditional Neighborhood Alternative**

Generator	Weekday AM Peak Hour Volumes		Weekday PM Peak Hour Volumes		Saturday Peak Hour Volumes		Sunday Peak Hour Volumes	
	Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit
<b>Land Use # 210</b> Single Family Detached  (60 Units)	13	39	43	25	35	30	31	28
<b>Land Use # 230</b> Townhouse/Condo  (299 Units)	21	103	99	49	70	59	58	61
<b>Land Use # 310</b> Hotel incl. Banquet/Conference facilities, Retail Shops, Restaurants, Cocktail Lounge, etc.  (393 Rooms)	136	87	123	109	158	125	113	132
<b>Land Use # 492<sup>2</sup></b> Spa/Health/Fitness & Health  (81,490 s.f.)	21	25	85	81	85 <sup>1</sup>	81 <sup>1</sup>	85 <sup>1</sup>	81 <sup>1</sup>

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<sup>22</sup> Trip Generation, 7<sup>th</sup> Edition, 2003 by The Institute of Transportation Engineers

Generator	Weekday AM Peak Hour Volumes		Weekday PM Peak Hour Volumes		Saturday Peak Hour Volumes		Sunday Peak Hour Volumes	
	Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit
<b>Land Use # 814<sup>2</sup></b> Specialty Retail Center  (18,700 s.f.)	0	0	15	19	15 <sup>1</sup>	19 <sup>1</sup>	15 <sup>1</sup>	19 <sup>1</sup>
<b>Land Use # 931</b> Quality Restaurant (Winery)  (80 seats)	0	0	14	7	16	11	12	7
<b>Total Site Activity for Traditional Neighborhood Alternative</b>	<b>191</b>	<b>258</b>	<b>379</b>	<b>290</b>	<b>379</b>	<b>325</b>	<b>314</b>	<b>328</b>
<b>Total Site Activity for the Proposed Action</b>	<b>150</b>	<b>221</b>	<b>268</b>	<b>190</b>	<b>260</b>	<b>216</b>	<b>196</b>	<b>211</b>

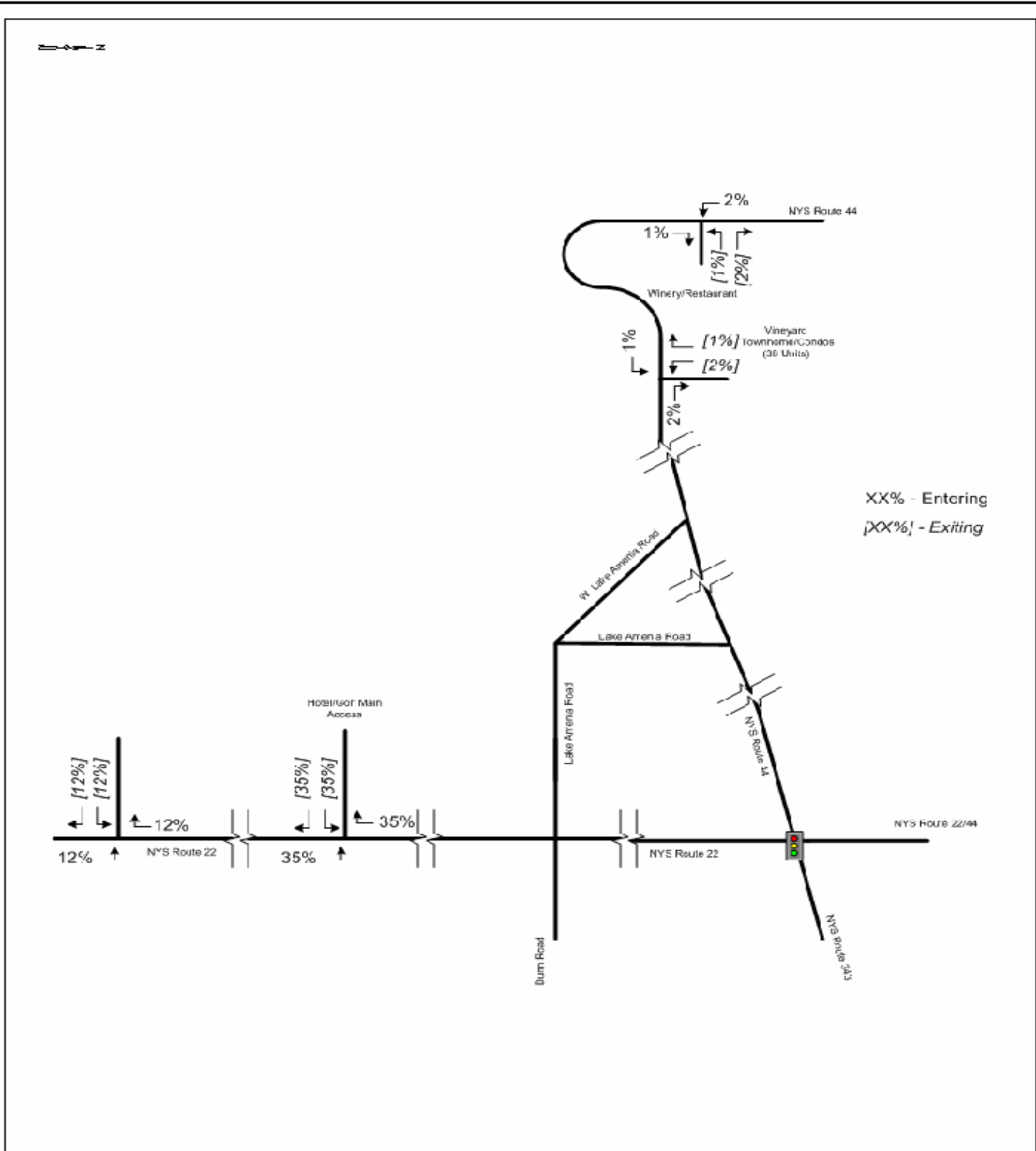
<sup>1</sup> In the absence of published ITE data peak hour trip generation the estimated weekday PM volumes have been used.

<sup>2</sup> Inclusive of a 50% reduction in generated trips to account for anticipated on-site patronage.

The percentage of site generated traffic assigned to the site access driveways is shown in Figure 21 for the AM peak period and Figure 22 for the remaining peak periods evaluated. Figures 23 through 26 depict site generated traffic volumes for the peak periods considered. These volumes were added to the corresponding *No-Build* values resulting in the *Build* traffic volumes shown in Figures 27 through 30.

The *Existing*, *No Build*, and *Build* were used in the assessment of impacts on traffic capacity resulting from the Traditional Neighborhood Alternative.

A capacity analysis for each intersection was undertaken for the Traditional Neighborhood Alternative and the results are presented in Table 6 along side those of the Proposed Action for comparison.



THE  
*Chazen*  
COMPANIES

**Silo Ridge Resort Community**  
**Assigned Percentage of Site Generated**  
**Traffic at Proposed Access Driveways**  
**Week day AM Peak Hour (Traditional Neighborhood Alternative)**

Town of *Armenia*, Dutchess County, New York

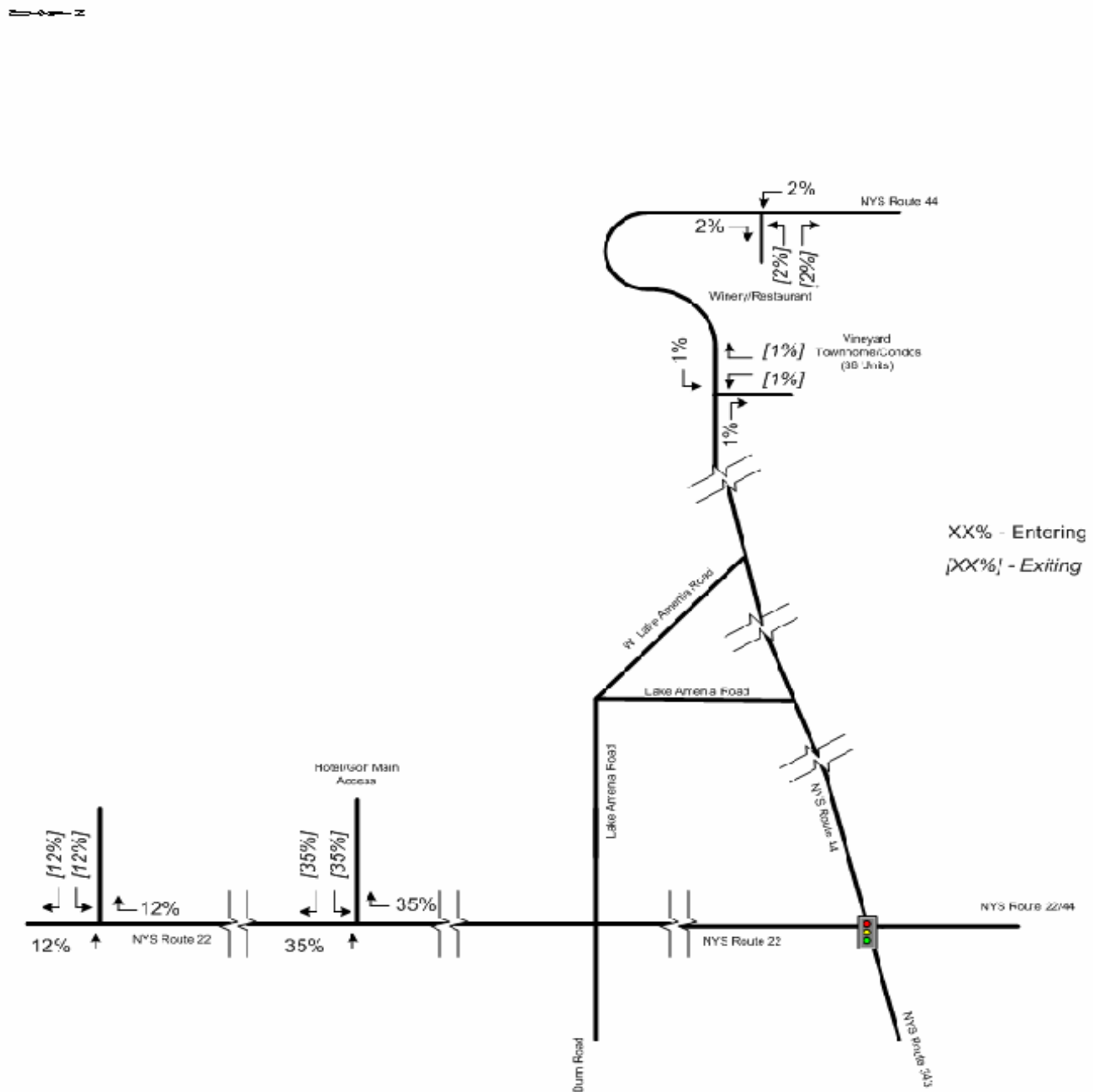
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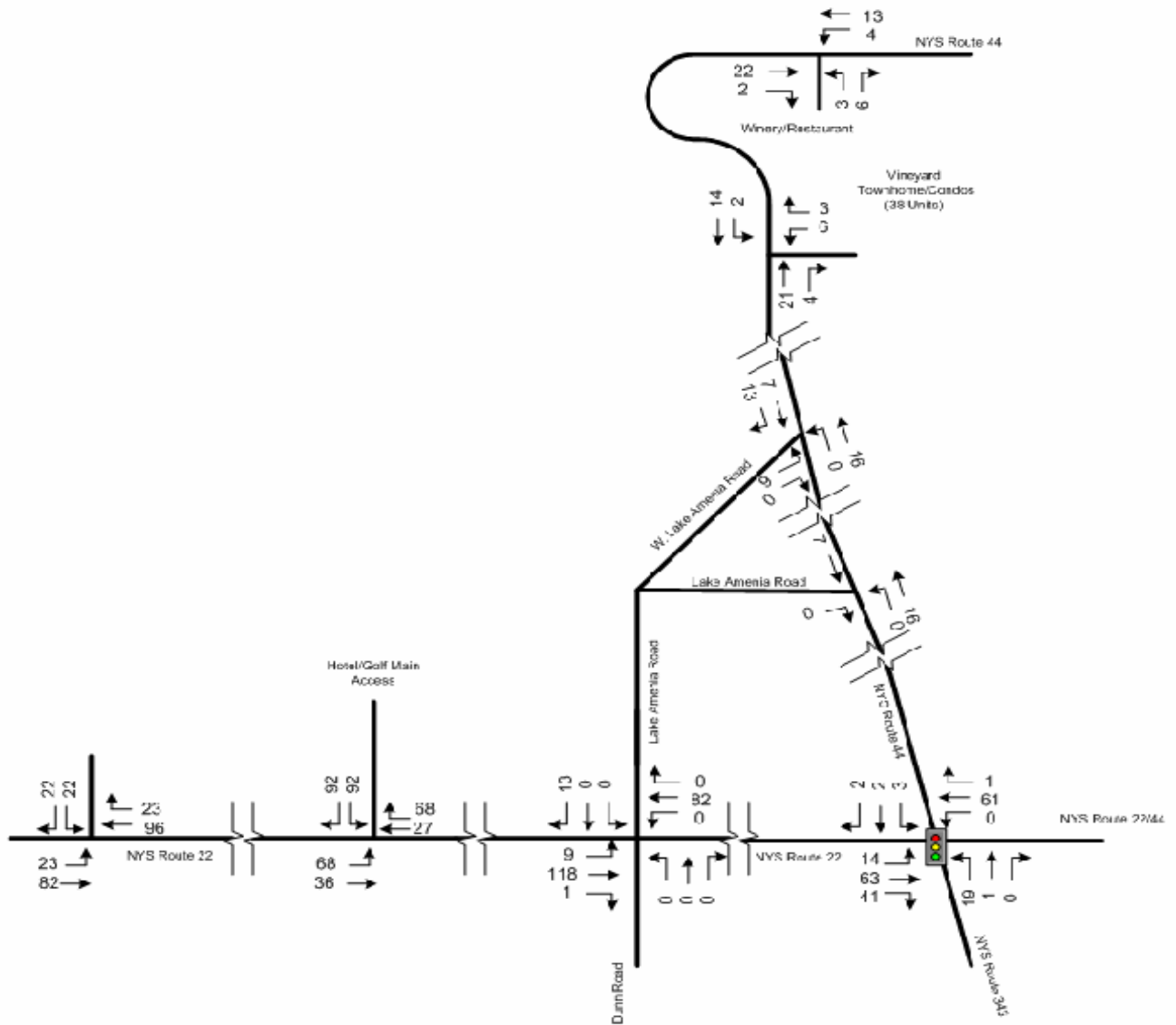
Figure 21

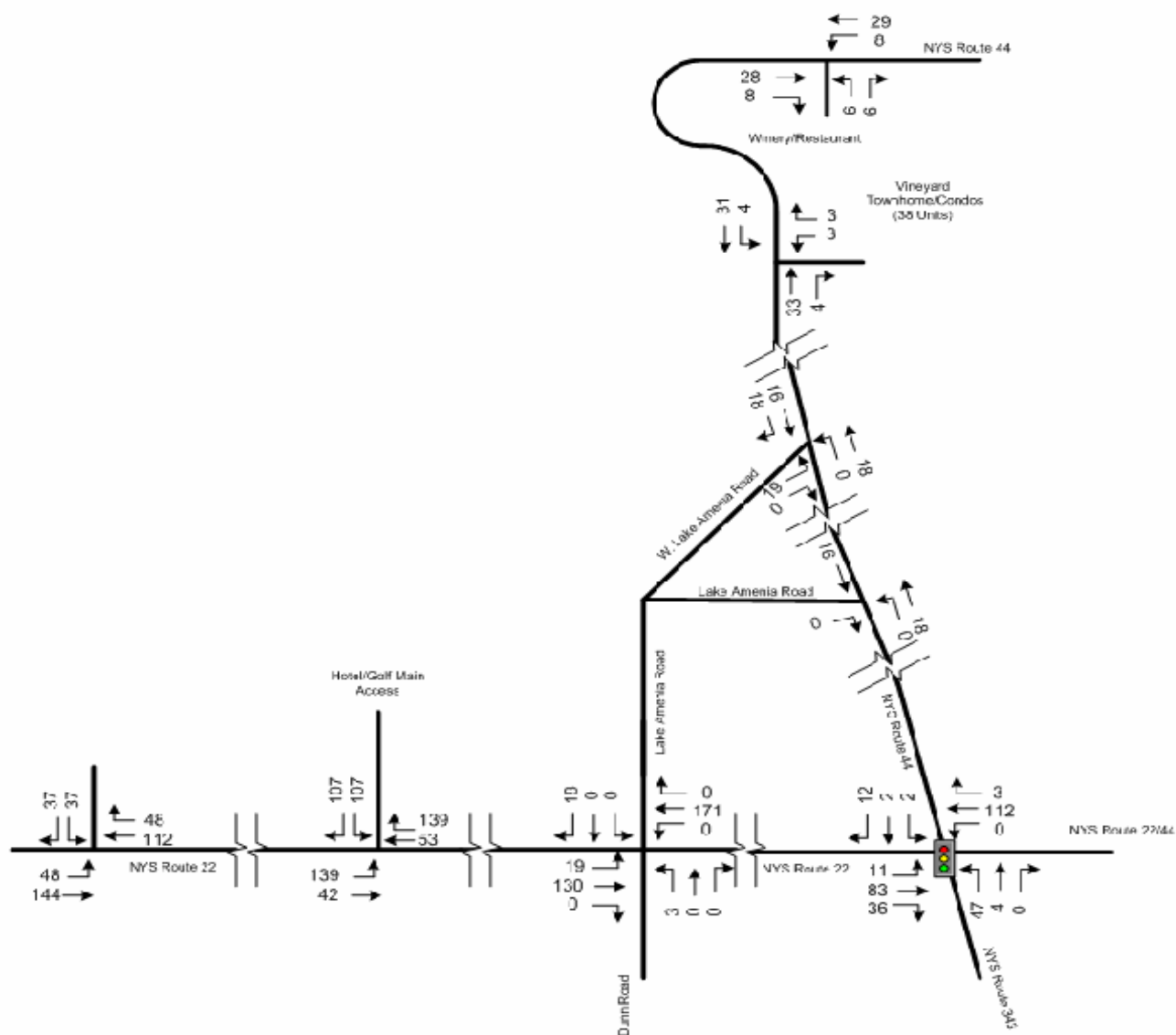
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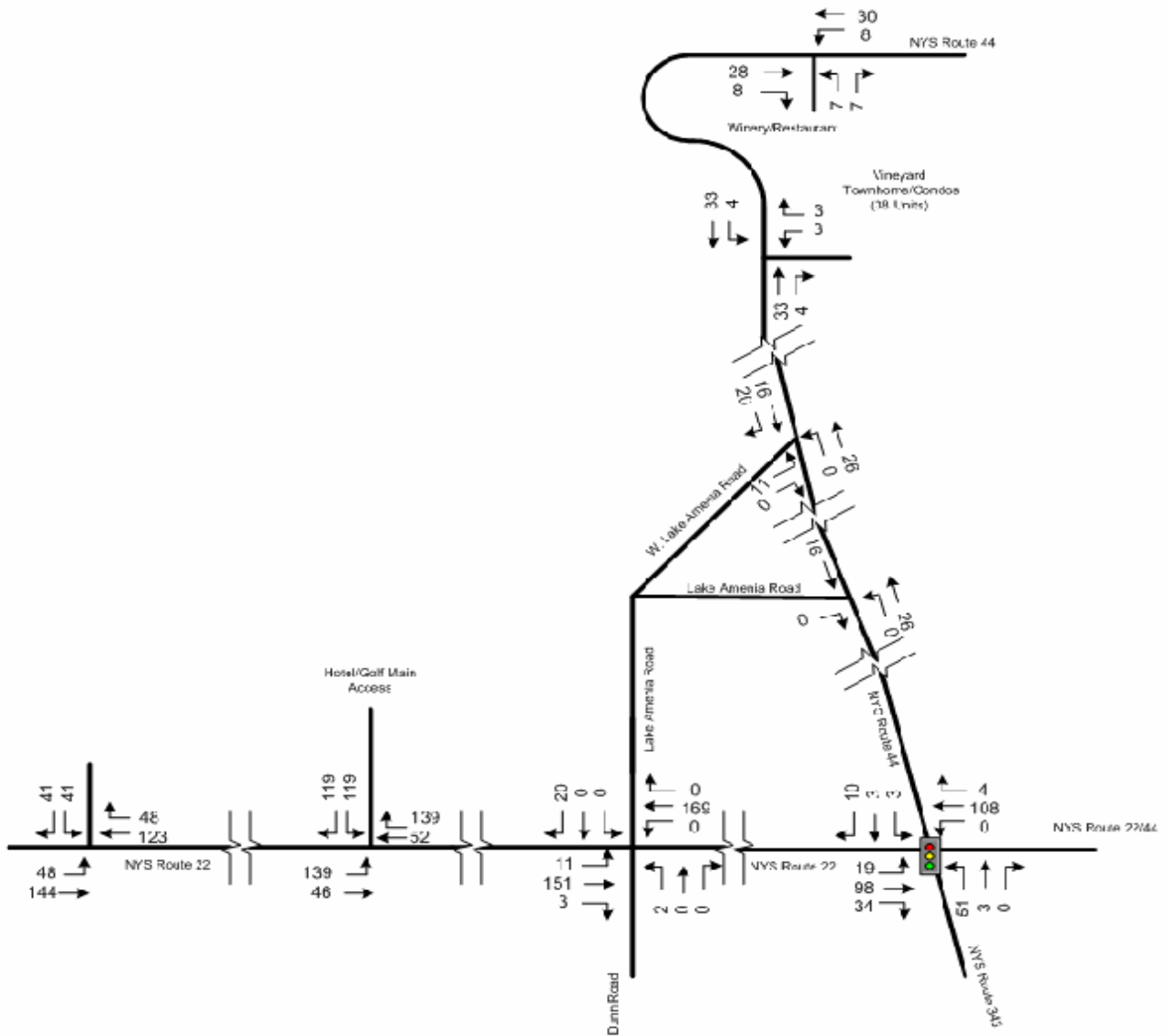
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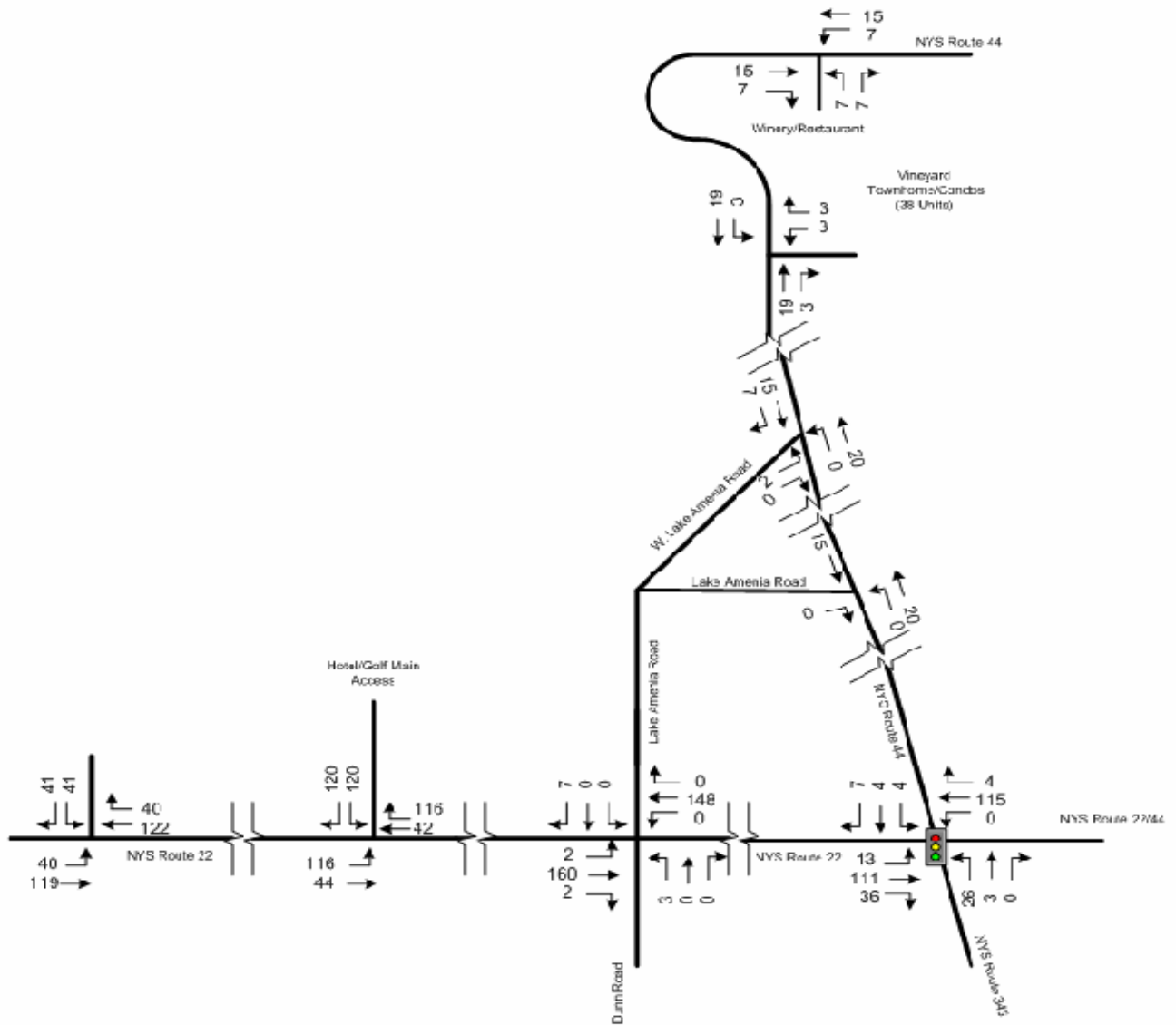


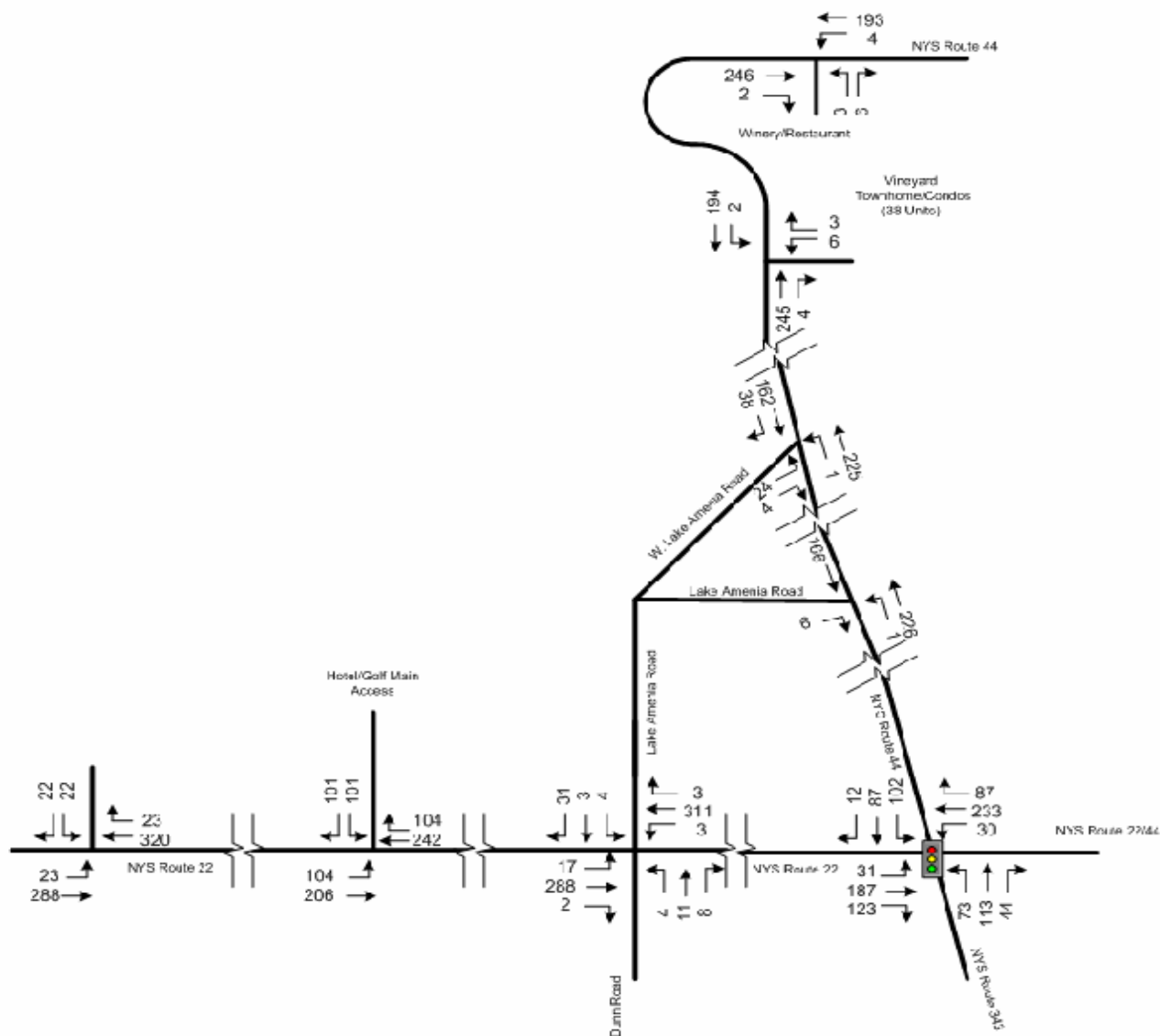


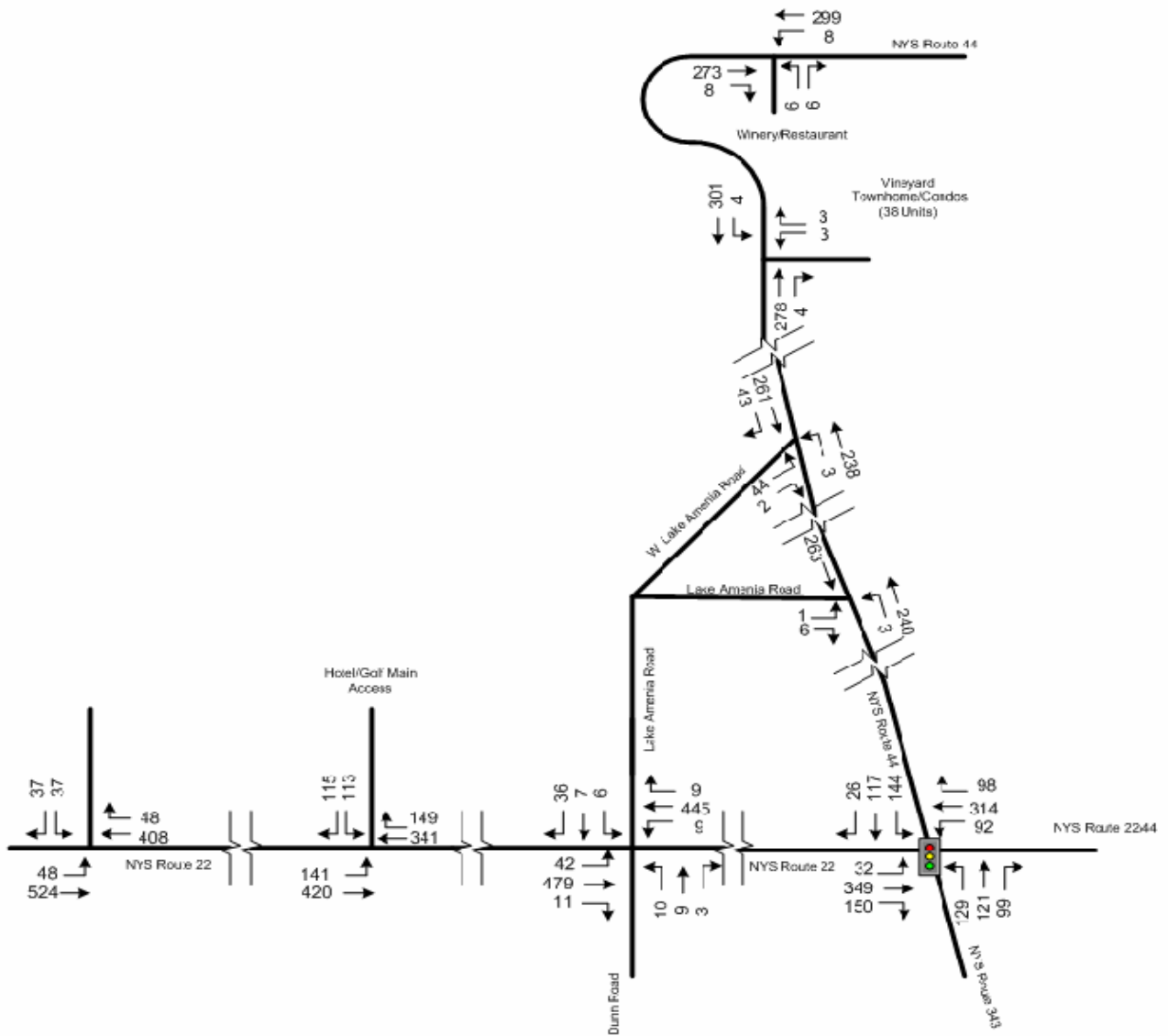


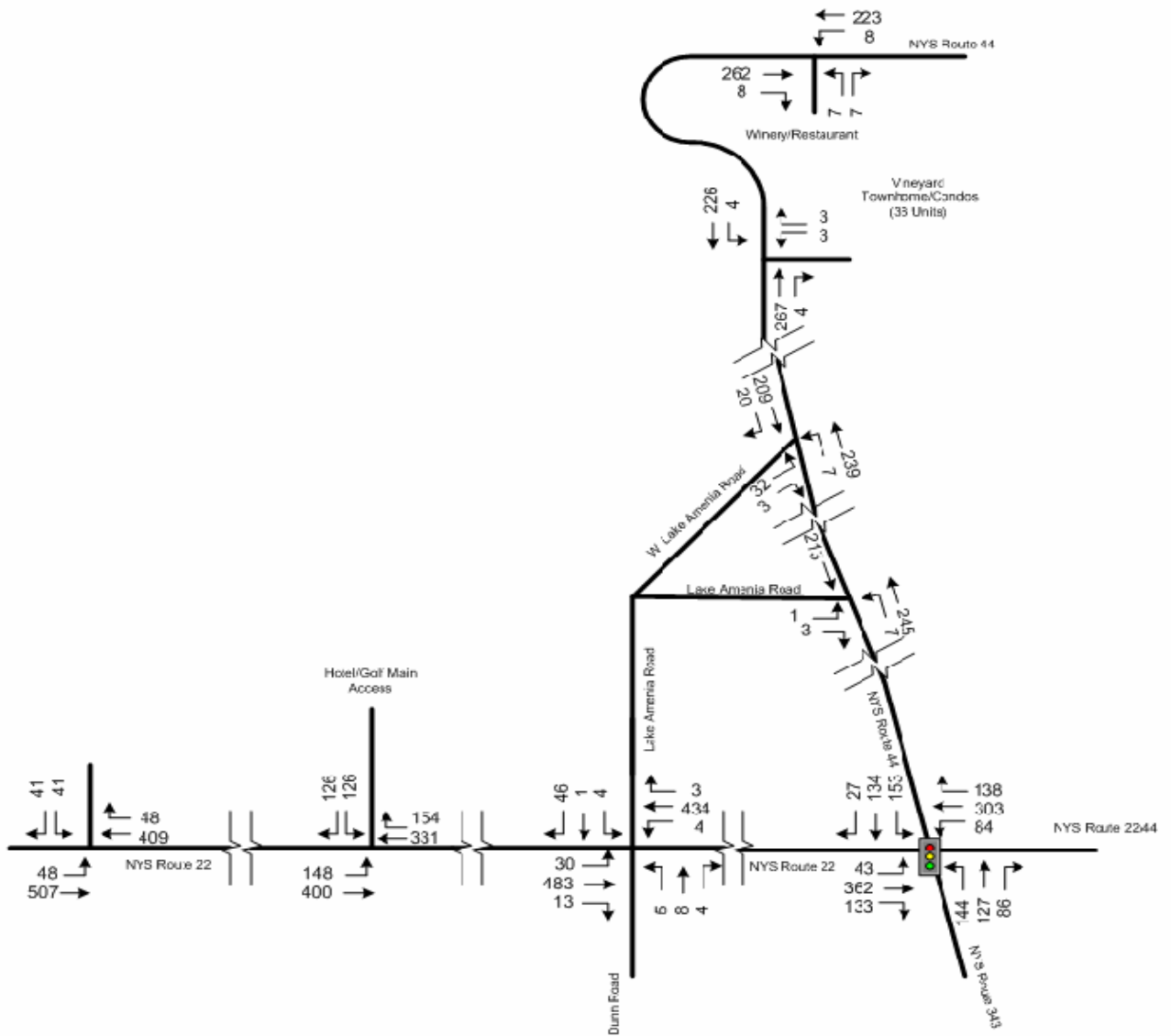














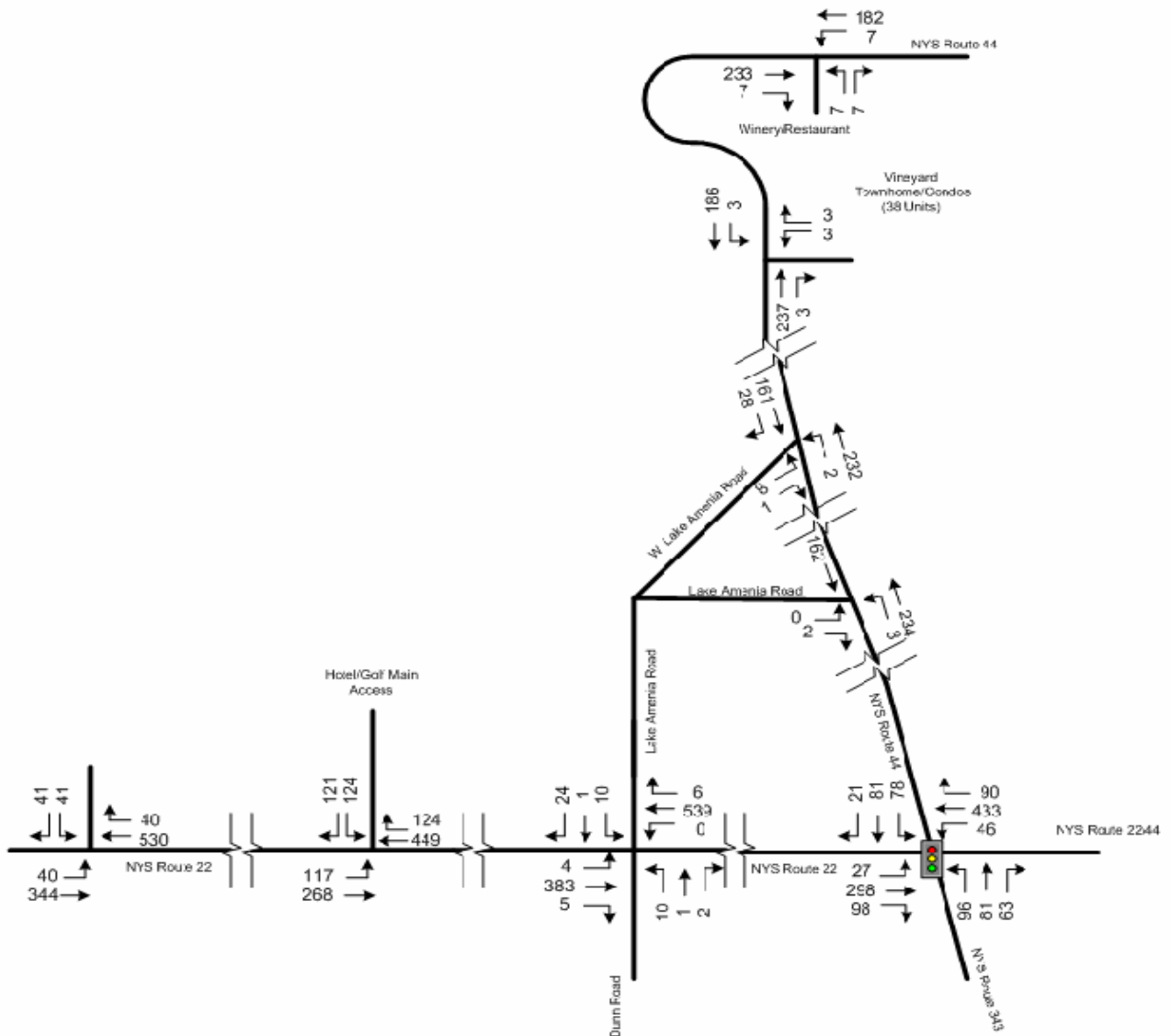


Table 6: Capacity Summary (Traditional Neighborhood Alternative) Level-of-Service/Estimated Delay (Seconds per vehicle)						
INTERSECTION	PEAK	APPROACH	EXISTING VOLUMES 2006	NO BUILD VOLUMES 2012	BUILD VOLUMES 2012 Proposed Action	BUILD VOLUMES 2012
Route 44 at Route 22  Signalized	AM	OVERALL EB WB NB SB	B/10.7 B/12.1 B/11.0 A/9.0 B/10.9	B/11.9 B/13.7 B/12.3 A/9.8 B/12.0	B/14.3 B/16.3 B/14.6 B/13.1 B/13.9	B/15.0 B/17.7 B/16.5 B/13.9 B/13.5
	PM	OVERALL EB WB NB SB	B/17.6 C/21.0 B/16.8 B/14.6 B/19.0	C/21.4 C/27.4 B/19.9 B/16.3 C/24.0	C/27.9 D/37.6 C/28.7 B/18.8 C/30.9	C/32.8 C/34.0 C/32.5 C/22.7 D/43.1
	Saturday Mid-Day	OVERALL EB WB NB SB	B/19.3 C/23.8 B/16.5 B/18.3 B/19.2	C/23.8 C/31.2 B/19.1 C/21.0 C/24.4	C/32.3 D/43.0 C/25.3 C/28.0 C/34.3	D/38.9 D/44.5 C/31.5 D/41.1 D/38.3
	Sunday PM	OVERALL EB WB NB SB	B/14.3 B/15.9 B/17.6 A/9.7 B/14.9	B/16.4 B/17.4 B/19.9 B/11.0 B/17.7	C/21.1 B/19.7 C/25.2 B/14.7 C/24.0	C/24.2 C/20.1 C/30.3 B/17.9 C/27.4
Route 22 at Lake Amenia Rd. and Dunn Rd. (CR 81)  Unsignalized	AM	EB WB NB SB	B/11.1 B/11.8 A/0.5 A/0.3	B/11.4 B/12.3 A/0.6 A/0.3	B/12.8 C/15.4 A/0.7 A/0.2	B/13.1 C/16.3 A/0.8 A/0.2
	PM	EB WB NB SB	C/16.6 C/22.4 A/1.0 A/0.4	C/23.0 D/32.2 A/1.1 A/0.4	C/21.7 E/38.4 A/1.3 A/0.5	E/36.3 F/89.5 A/2.2 A/0.5
	Saturday Mid-Day	EB WB NB SB	B/12.0 C/16.5 A/1.0 A/0.3	B/12.6 C/18.2 A/1.1 A/0.3	B/14.8 D/26.8 A/1.4 A/0.2	C/17.3 E/41.0 A/1.8 A/0.2
	Sunday PM	EB WB NB SB	C/15.7 C/19.5 A/0.3 A/0.0	C/17.3 C/22.0 A/0.3 A/0.0	C/22.5 E/35.6 A/0.4 A/0.0	D/29.3 F/60 A/0.5 A/0.0

Table 6: Capacity Summary (Traditional Neighborhood Alternative) Level-of-Service/Estimated Delay (Seconds per vehicle)						
INTERSECTION	PEAK	APPROACH	EXISTING VOLUMES 2006	NO BUILD VOLUMES 2012	BUILD VOLUMES 2012 Proposed Action	BUILD VOLUMES 2012
Route 22 at Existing Hotel/Golf Course Driveway  Unsignalized	AM	EB(LEFT) EB(RIGHT) NB	B/11.8 A/9.5 A/1.6	B/12.3 A/9.6 A/1.6	C/17.8 B/10.5 A/2.8	B/13.7 B/10.9 A/3.4
	PM	EB(LEFT) EB(RIGHT) NB	C/18.9 B/10.1 A/0.2	C/21.3 B/10.3 A/0.2	F/Undetermined B/12.2 A/7.4	F/Undetermined B/14.3 B/13.8
	Saturday Mid-Day	EB(LEFT) EB(RIGHT) NB	C/15.2 B/10.1 A/0.4	C/16.4 B/10.3 A/0.5	F/87.7 C/15.7 A/4.4	F/Undetermined E/35.8 A/8.0
	Sunday PM	EB(LEFT) EB(RIGHT) NB	C/17.4 B/12.2 A/0.2	C/19.9 B/12.9 A/0.1	F/Undetermined D/30.0 A/7.3	F/Undetermined F/187.5 C/17.1
Route 44 at West Lake Amenia Rd.  Unsignalized	AM	WB NB	A/0.2 B/10.6	A/0.1 B/11.0	A/0.1 B/11.6	A/0.1 B/11.6
	PM	WB NB	A/0.3 B/12.4	A/0.3 B/13.2	A/0.3 B/14.1	A/0.3 B/14.6
	Saturday Mid-Day	WB NB	A/0.6 B/11.6	A/0.6 B/12.2	A/0.6 B/13.0	A/0.6 B/13.2
	Sunday PM	WB NB	A/0.1 B/10.6	A/0.1 B/11.0	A/0.1 B/11.5	A/0.1 B/11.5
Route 44 at Lake Amenia Rd.  Unsignalized	AM	WB NB	A/0.2 A/9.2	A/0.1 A/9.3	A/0.1 A/9.5	A/0.1 A/9.4
	PM	WB NB	A/0.3 B/10.5	A/0.3 B/10.7	A/0.3 B/10.9	A/0.3 B/10.9
	Saturday Mid-Day	WB NB	A/0.6 B/10.6	A/0.6 B/10.9	A/0.6 B/11.3	A/0.6 B/11.2
	Sunday PM	WB NB	A/0.3 A/9.0	A/0.3 A/9.1	A/0.3 A/9.2	A/0.3 A/9.2

Table 6: Capacity Summary (Traditional Neighborhood Alternative) Level-of-Service/Estimated Delay (Seconds per vehicle)						
INTERSECTION	PEAK	APPROACH	EXISTING VOLUMES 2006	NO BUILD VOLUMES 2012	BUILD VOLUMES 2012 Proposed Action	BUILD VOLUMES 2012
Route 22 at Loop Road  Unsignalized	AM	EB NB	X X	X X	B/10.9 A/0.5	B/11.2 A/0.8
	PM	EB NB	X X	X X	C/15.5 A/0.7	C/20.6 A/1.3
	Saturday Mid-Day	EB NB	X X	X X	C/15.4 A/0.7	C/20.8 A/1.3
	Sunday PM	EB NB	X X	X X	C/15.3 A/0.8	C/20.4 A/1.4
Route 44 at Vineyard Townhomes/Condos.  Unsignalized	AM	EB WB NB SB	X X X X	X X X X	A/0.1 A/0.3 B/11.2 B/11.3	A/0.1 X X B/11.1
	PM	EB WB NB SB	X X X X	X X X X	A/0.1 A/0.3 B/12.5 B/12.4	A/0.1 X X B/11.6
	Saturday Mid-Day	EB WB NB SB	X X X X	X X X X	A/0.1 A/0.3 B/11.5 B/11.6	A/0.2 X X B/11.1
	Sunday PM	EB WB NB SB	X X X X	X X X X	A/0.1 A/0.3 B/11.0 B/11.1	A/0.1 X X B/10.6
Route 44 at Winery/Restaurant  Unsignalized	AM	WB SB	X X	X X	B/10.8 A/0.1	B/10.4 A/0.2
	PM	WB SB	X X	X X	C/16.0 A/8.8	C/16.4 A/8.7
	Saturday Mid-Day	WB SB	X X	X X	B/11.0 A/0.1	B/11.2 A/0.3
	Sunday PM	WB SB	X X	X X	B/10.6 A/0.1	B/10.7 A/0.3

#### Route 44 at Route 22 (Hamlet of Amenia)

The analysis of this four-way signalized intersection indicates a slight deterioration in capacity over that of the Proposed Action particularly during the Saturday Mid-Day peak hour period. We recommend that the intersection be monitored with NYSDOT oversight after project completion and signal timing changes implemented, if required, based upon NYSDOT input.

#### Route 22 at Lake Amenia Drive and Dunn Road (CR 81)

The results of the analysis of this unsignalized four-way intersection, indicates deterioration in LOS for the side roads; Lake Amenia Road and Dunn Road (CR 81). However, as was the case under the Proposed Action, the computed 95<sup>th</sup> percentile queue lengths are of the order of one to two vehicles during peak periods. Again, we recommend re-assessment of this location upon project completion in conjunction with oversight and input from NYSDOT.

#### Route 22 at Existing Main Site Access

The results of the capacity analysis are consistent with those of the Proposed Alternative although significant deterioration is observed during the weekend peak periods analyzed. This to be expected given the removal of one access driveway to the primary site and increased off-site traffic activity associated with the provision of ancillary on-site facilities; Retail and Spa/health/Fitness. As was the case under the Proposed Action, it is the intent of the applicant to formally petition the NYSDOT, via its highway work permit process, to include the signalization of this intersection as part of the overall project.

#### Route 44 at Lake Amenia Drive

#### Route 22 at West Lake Amenia Drive

The results of the capacity analysis reveal that these intersections will maintain a LOS A during peak hours considered on Route 44 and LOS B for traffic exiting Lake Amenia Road and West Lake Amenia Road. These two intersections carry very low volumes which will not change significantly with the proposed development.

#### Route 22 at Main Site New Access (Loop Road Access)

The analysis of this proposed access indicates acceptable LOS for all traffic conditions analyzed; LOS A for left-turns into the site and LOS C or better for exiting traffic. The operation of this access will not adversely affect the flow of traffic on Route 22.

#### Route 44 at Vineyard Townhomes/Condos

The analysis of this proposed access indicates an acceptable LOS under all future traffic conditions; LOS A (ingress left-turns) and LOS B for traffic leaving the driveway. For purposes of operational efficiency, it is recommended that a left-turn lane be created on Route 44 in the eastbound direction for traffic entering the driveway. This action, in conjunction with placement of the access at the point of greatest sight lines, will provide safety and efficiency. Therefore, given this cross-section modification, the operation of this new access will be acceptable and will not have any significant impact on traffic flow on Route 44.

#### Route 44 at Winery/Restaurant

The analysis of this proposed access location on the north side of Route 44 west of the hairpin curve indicated an acceptable LOS for all future traffic conditions. The driveway access is carefully located to maximize sight lines both to and from the drive. This segment of Route 44 is critically affected by alignment and grade; therefore, the degree of new activity at this location has been minimized. The operation of this access will be acceptable and will not have any significant impact on traffic flow on Route 44.

The details of each of the capacity analyses for the above noted intersections are provided in Appendix F.

## SECTION 7: CONCLUSIONS/FINDINGS

This Traffic Impact Study has analyzed the impact of traffic generation forecast for the proposed Silo Ridge Resort Community in relationship to the existing highway network for both the Proposed Action and Traditional Neighborhood Alternative. The following findings are the result of this analysis and are meant to provide an informed basis for the local decision making process.

- The analysis of the intersection of Route 44 at Route 22 indicates acceptable *Build* LOS under both the Proposed Action and Traditional Neighborhood Alternative. We recommend that this intersection be reassessed upon project completion in concert with NYSDOT oversight, and modifications to signal timing and/or phasing be implemented as required. The addition of the proposed site generated traffic does not have a significant adverse impact on capacity at this intersection.
- The *Build* LOS at the intersections of Route 44 at Lake Amenia Road and West Lake Amenia Road indicate substantial reserve capacity at both and no significant impact from either the Proposed Action or the Traditional Neighborhood Alternative.
- The analysis of the intersection of Route 22 at Lake Amenia Road/Dunn Road (CR 81) indicate no significant impact to traffic proceeding on Route 22 with increased delays to traffic on the side roads. However, a review of expected queue lengths indicates that only 2 or 3 vehicles (maximum) are impacted during the peak hours. As such, we recommend this intersection be reassessed upon project completion under NYSDOT oversight.
- The applicant shall seek the installation of a three-color traffic signal under the NYSDOT Highway Work Permit process at the intersection of Route 22 and the main site entrance. This application shall include the provision of a “Left Turn” storage lane for traffic entering the site from northbound Route 22 and appurtenances for the safe accommodation of pedestrian traffic.
- All other site access points indicate acceptable LOS as they intersect the adjacent roadway system. The applicant intends to address the inherent safety issue associated with left turns from Route 44 by the provision of storage lanes under the NYSDOT Highway Work Permit process.

- The analyses of the historical accident history for the adjacent roadway network did not show any significant current condition which merits mitigation other than additional warning for motorists approaching, in the eastbound direction, the Route 44 “hairpin” curve near the site. The number of incidents (10) occurring, 90% of which involved eastbound vehicles, suggest that additional advance warning is appropriate. It is recommended that the maintaining agency, NYSDOT, consider flashing beacons and/or other devices which will highlight the significant change in alignment and grade of Route 44. No other locations within the network exhibited patterns of contributing circumstances, location, or weather conditions which would be exacerbated by the new traffic generation from the proposed development.

Given these conclusions resulting from this Traffic Impact Study, the Silo Ridge Resort Community as proposed for completion in 2012 will not have a significant impact upon the traffic and safety operating conditions on the adjacent highway network with the proposed mitigation implemented. Furthermore, the commitment of the Silo Ridge Resort Community development to responsible transportation alternatives, such as transit shuttle services, alternative fuel vehicles, and pedestrian friendly design, linked trails, traffic calming roadways, and visionary, communicative attitudes, proffer a community of excellence relative to traffic engineering and safety.



**APPENDIX A:****TABLE 3: SIGNALIZED LEVEL-OF-SERVICE**

<b>LOS</b>	<b>Control Delay Per Vehicle (seconds)</b>
A	Less than or equal to <b>10</b>
B	Greater than <b>10</b> and less than or equal to <b>20</b>
C	Greater than <b>20</b> and less than or equal to <b>35</b>
D	Greater than <b>35</b> and less than or equal to <b>55</b>
E	Greater than <b>55</b> and less than or equal to <b>80</b>
F	Greater than <b>80</b>

**TABLE 4: UNSIGNALIZED LEVEL-OF-SERVICE**

<b>LOS</b>	<b>Control Delay Per Vehicle (seconds)</b>
A	Less than or equal to <b>10</b>
B	Greater than <b>10</b> and less than or equal to <b>15</b>
C	Greater than <b>15</b> and less than or equal to <b>25</b>
D	Greater than <b>25</b> and less than or equal to <b>35</b>
E	Greater than <b>35</b> and less than or equal to <b>50</b>
F	Greater than <b>50</b>

## APPENDIX B: CURRENT BUS ACTIVITY

The following information is obtained from the Dutchess County Planning Department's web page<sup>23</sup> and includes mass transit opportunities in the vicinity of the Silo Ridge Resort Community site in the Town of Amenia. Loop (bus route) 8 provides service to the site. Dial-A-Ride and Paratransit demand response services are also available.

*“The primary mission of the Division of Mass Transportation (LOOP) is to provide Dutchess County with a safe, efficient, accessible and reliable public transportation system. LOOP provides public transit service to Dutchess County through two modes of service: fixed route service and demand response services like Dial-A-Ride and Paratransit. LOOP runs a Commuter Train Connection bus service in cooperation with the Metro-North railroad. Mass Transportation also coordinates non-emergency Medicaid transportation for the Dutchess County Department of Social Services.*

LOOP Bus Schedules and Maps	
Route Name	Route
<b>LOOP 1</b>	Hyde Park Stop & Shop to Tivoli
<b>LOOP 2</b>	Hyde Park Stop & Shop to South Hills Mall
<b>LOOP 3</b>	Galleria to Beacon -- Beacon to Galleria
<b>LOOP 3-A</b>	Galleria to Route 9/Route 28/Route 104/Route94/Route 82
<b>LOOP 3-B</b>	Galleria to Dutchess Mall to Fishkill Beacon to Fishkill to Galleria
<b>LOOP 4</b>	Hopewell Junction to Dutchess Mall
<b>LOOP 5</b>	LaGrange to Main and Market Streets to Millbrook
<b>LOOP 6</b>	Main and Market to Galleria (Saturday Only)
<b>LOOP 7</b>	Pine Plains to Clinton Hollow to Poughkeepsie
<b>LOOP 8</b>	Millbrook to Amenia to Millerton

<sup>23</sup> [www.co.dutchess.ny.us/countygov/departments/planning/plloopbus.htm](http://www.co.dutchess.ny.us/countygov/departments/planning/plloopbus.htm)

<b>LOOP 9</b>	Poughkeepsie to Dover to Millerton
<b>LOOP 10</b>	Wassaic to Poughkeepsie
<b>LOOP 11</b>	LaGrange to Pawling to Dover to Millbrook to Poughkeepsie
<b>LOOP 13</b>	Poughkeepsie to Lourdes High School to Galleria
<b>EXPRESS A</b>	Poughkeepsie to Tivoli
<b>EXPRESS B</b>	Stops Along Route 9 (Poughkeepsie, Wappingers, Beacon, Fishkill)
<b>EXPRESS C</b>	Millbrook to Galleria
<b>EXPRESS L</b>	Poughkeepsie to Harlem Valley
<b>EXPRESS N</b>	Harlem Valley to Poughkeepsie
<b>BEACON-POUGHKEEPSIE EXPRESS</b>	Beacon to Wappingers to Poughkeepsie
<b>BEACON SHUTTLE SERVICE</b>	Train Station, DIA: Beacon, Main Street
<b>EASTERN EXPRESS</b>	Poughkeepsie to Wassaic
<b>SOUTHWEST SPECIAL EXPRESS</b>	Market Street, Route 9, Route 52, Route 9D, Route 376, Route 44, Overocker Road, ARC
<b>NORTHEAST SPECIAL EXPRESS</b>	Innis Avenue to CR 16/Clinton Corners to Overocker Road, ARC
<b>NORTHWEST SPECIAL EXPRESS</b>	Poughkeepsie to Hyde Park to Staatsburg to Overocker Road, ARC
<b>EVENING MALL SERVICE</b>	Main and Market Streets to South Hills Mall to Galleria

LOOP 8 is a deviated fixed route and will deviate 3/4 mile off route for pick-ups. Advance reservations must be made for service by calling the Travel Information Line at 485-4690 the prior day to make a reservation.

<b>LOOP 8</b> <b>Monday - Friday (Route Deviation)</b>	
<b>POUGHKEEPSIE TO PAWLING TO DOVER TO MILLBROOK TO MILLERTON</b>	
**POUGHKEEPSIE - MAIN & MARKET	8:45 <sup>am</sup>
**MANCHESTER CENTER	8:58
**BILLINGS - RTS. 55/82	9:09
**POUGHQUAG - RT. 55 & RT. 216	9:19
PAWLING - METRO NORTH	9:33
PAWLING - (FORMER) GRAND UNION	9:38
WINGDALE - METRO NORTH (RT. 22 & WHEELER RD.)	9:57
DOVER - GRAND UNION	10:15
MILLBROOK - ALLIANCE CHURCH APTS. (Thursday only. Does not travel past Wassaic)	10:30
WASSAIC - RT. 22 METRO NORTH	10:45
AMENIA - RT. 44 & RT. 22 N AMES/GRAND UNION PLAZA	10:50
MILLERTON - SUPER PLAZA (GRAND UNION)	11:05
<b>MILLERTON TO MILLBROOK TO DOVER TO PAWLING TO POUGHKEEPSIE</b>	
MILLERTON - SUPER PLAZA GRAND UNION	12:25 <sup>pm</sup>
AMENIA - AMES/GRAND UNION (RT. 44 & RT. 22 N)	12:40
WASSAIC - RT. 22 METRO NORTH	12:45
MILLBROOK - ALLIANCE CHURCH APTS. (Thursday only. Does not travel past Wassaic)	1:00
DOVER - GRAND UNION	1:15
WINGDALE - METRO NORTH (RT. 22 & WHEELER RD.)	1:33
PAWLING - (FORMER) GRAND UNION	1:52
PAWLING - METRO NORTH (CHARLES COLEMAN BLVD.)-TOURISM CNTR.	1:57
**POUGHQUAG - RT. 55 & RT. 216	2:11
**BILLINGS - RT. 55 & RT. 82	2:21
**MANCHESTER CENTER	2:33
**POUGHKEEPSIE - MAIN & MARKET	2:45
** Operates as a fixed-route along Route 55	

<b>LOOP 8 Saturday</b>	
<b>AMENIA TO GALLERIA TO 44 PLAZA</b>	
AMENIA - RT. 44 & RT. 22 N AMES/GRAND UNION	9:25 <sup>am</sup>
WASSAIC - RT. 22 METRO NORTH	9:30
DOVER - GRAND UNION	9:45
WINGDALE - METRO NORTH (RT. 22 & WHEELER RD.)	9:55
PAWLING - METRO NORTH (CHARLES COLEMAN BLVD.)- TOURISM CENTER	10:25
**HOPEWELL JUNCTION - PLAZA @ RT. 82 & RT. 376	11:00
**SOUTH HILLS MALL - REAR ENTRANCE	11:22
**GALLERIA MALL - REGAL CINEMA	11:25
**POUGHKEEPSIE - POUGHKEEPSIE PLAZA	11:35
**POUGHKEEPSIE - MAIN & MARKET STREETS	11:45
**POUGHKEEPSIE - 44 PLAZA (K-MART ENTRANCE)	11:53
<b>44 PLAZA TO GALLERIA TO AMENIA</b>	
**POUGHKEEPSIE - 44 PLAZA KMART ENTRANCE	3:37 <sup>pm</sup>
**POUGHKEEPSIE - MAIN & MARKET STS.	3:45
**POUGHKEEPSIE - HUDSON PLAZA	3:55
**GALLERIA MALL - REGAL CINEMA	4:05
**SOUTH HILLS MALL - REAR ENT.	4:08
**HOPEWELL JUNCTION - PLAZA @ RT. 82 & RT. 376	4:30
PAWLING - METRO NORTH (CHARLES COLEMAN BLVD.)- TOURISM CENTER	5:05
WINGDALE - METRO NORTH (RT. 22 & WHEELER RD.)	5:25
DOVER - GRAND UNION	5:35
WASSAIC - RT. 22 METRO NORTH	5:53
AMENIA - RT. 44 & RT. 22 AMES/GRAND UNION	5:58
**Operates as a fixed route between Hopewell Junction and 44 Plaza via Old Hopewell Road & Routes 9 and 44.	

The following is taken directly from the web site<sup>24</sup> and describes the Rural Paratransit service which is available in eastern Dutchess County. This service is available for qualifying individuals and within those constraints will serve the Silo Ridge Resort Community site.

<sup>24</sup> [www.co.dutchess.ny.us/countygov/departments/planning/plloopbus.htm](http://www.co.dutchess.ny.us/countygov/departments/planning/plloopbus.htm)

“The Dutchess County LOOP Bus System operates three (3) types of paratransit services that provide curb-to-curb service: an **ADA Complementary Paratransit Service**, a **Dial-A-Ride** program, and a **Rural Paratransit Service**. Each program has its own specific eligibility criteria and regulations, which can be accessed below.

### **Rural Paratransit Service**

The Rural Paratransit Service is designed to provide bus services to the rural, eastern portion of Dutchess County. The service operates between the hours of 7:00 am and 4:00 pm and is open to the general public. For more information call Dutchess County LOOP at **(845) 473-0813**.

### **ADA Complementary Paratransit Service Details**

#### **Who’s Eligible?**

To be eligible for the ADA Complementary Paratransit Service, users must meet the following three (3) criteria:

1. Passengers must complete an ADA Paratransit Application.
2. Trip starting and end points must be within 3/4 mile of an existing Dutchess County LOOP and/or City of Poughkeepsie bus route.
3. Trip days and times must coincide with an existing fixed route schedule.

#### **Reservations**

- Complementary paratransit service is defined as next day service. Reservations can be scheduled up to seven (7) days in advance by calling the following phone numbers between 8:00 am and 4:00 pm.

Monday through Friday: **(845) 473-0813**

Saturday, Sunday, and Holidays: **(845) 485-4691**

- On Saturday, Sunday and Holidays you will be connected to an answering machine. Please leave your NAME and PHONE NUMBER and someone will contact you within four (4) hours to arrange your transportation.
- When scheduling a reservation, please provide the dispatcher with complete addresses for all pick-up and drop-off locations, and any special needs.
- Dutchess County LOOP may provide the service with any appropriate vehicle.

#### **Fares (Fixed Routes)**

**One Zone: \$.35 (one way); \$1.50 if deviated off route**

**Two Zones: \$.75 (one way); \$2.25 if deviated off route**

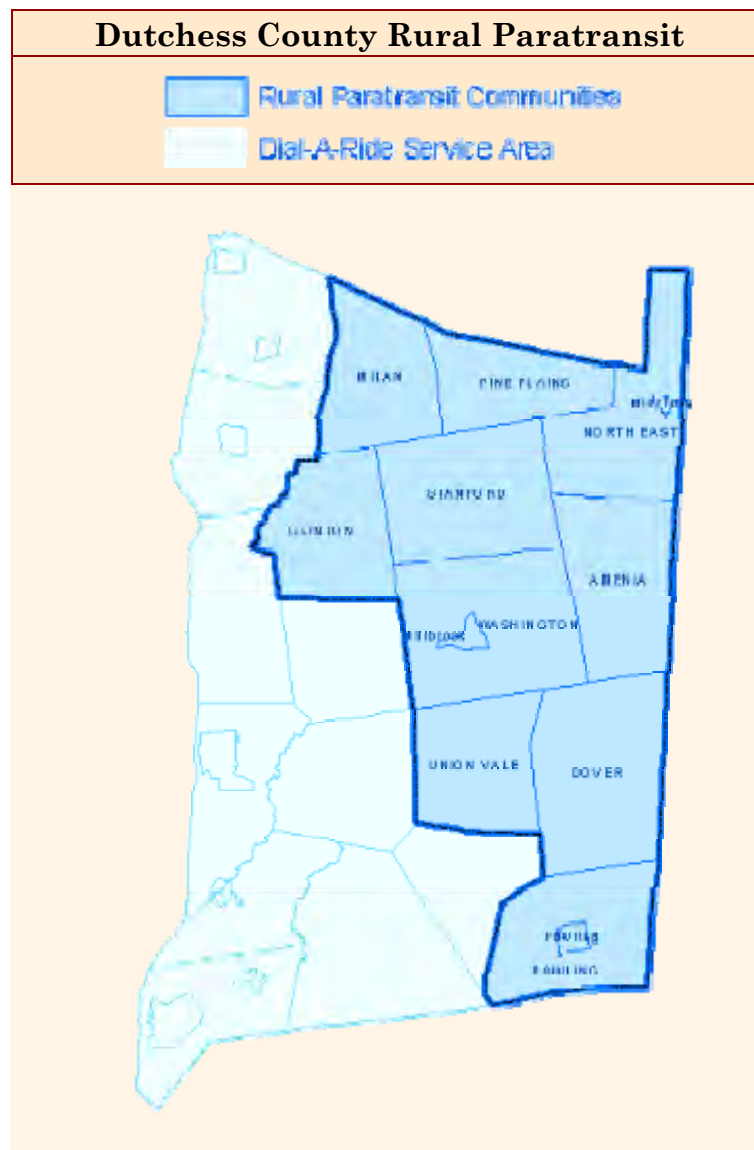
#### **Need More Information?**

If you require more information on the ADA Complementary Paratransit Service or the other paratransit services (Dial-A-Ride and the Rural Paratransit Service), please contact Dutchess County LOOP at (845) 485-4690.

### Rural Paratransit Service Details

#### Who's Eligible?

The Rural Paratransit Service is open to the general public within the Rural Paratransit Service Area (Please see map below). Priority is given to residents of group homes."



## APPENDIX C: CURRENT TRAIN ACTIVITY

The following is taken from the MTA website, [www.mta.nyc.ny.us](http://www.mta.nyc.ny.us). The Wassaic station is the closest available connection to the site, however, as indicated on the map the Hudson line is also available to residents.

MTA Metro-North Railroad, the second largest commuter railroad in the United States, provides approximately 250,000 customer trips each weekday and some 73,000,000 trips per year. A subsidiary of New York State's Metropolitan Transportation Authority, Metro-North was founded in 1983 when the MTA assumed control of Conrail commuter operations in the states of New York and Connecticut.



Metro-North's roots can be traced back to the New York & Harlem Railroad, which began in 1832 as a horse-car line in lower Manhattan. Today, with 384 route miles and 775 miles of track, Metro-North goes to 120 stations distributed in seven counties in New York State--Dutchess, Putnam, Westchester, Bronx, New York (Manhattan),

Rockland, and Orange--and two counties in the state of Connecticut--New Haven and Fairfield. The total population in these counties is 4,797,320. Three main lines east of the Hudson River--the Hudson, the Harlem, and the New Haven -- operate out of Grand Central Terminal in New York City, and two lines west of the Hudson River--the Port Jervis and the Pascack Valley--operate out of New Jersey Transit's terminal in Hoboken, N.J. The Hudson Line extends 74 miles from Grand Central Terminal to Poughkeepsie; the Harlem, 82 miles to Wassaic; and the New Haven, which also has three branch lines--the New Canaan, Danbury, and Waterbury--72 miles to New Haven. The Port Jervis Line runs 95 miles from Hoboken to Port Jervis, with 30 of those miles in New Jersey; the Pascack Valley Line extends 31 miles from Hoboken to Spring Valley, 25 of those miles being in New Jersey. Total square mileage of the service territory is approximately 2,701 miles.

Service intervals vary according to destination and time of day. Weekdays, peak-period trains east of the Hudson River run every 20-30 minutes; off-peak trains run every 30-60 minutes; and weekend trains run hourly. Hours of operation are approximately 4 AM to 3:40 AM.





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g is taken from the MTA website for station information. The convenience of station use and fee structure is conducive to integration into the every day life of residents of the Community.



## WASSAIC Location

Route 22, six-tenths of a mile north of the hamlet of Wassaic  
Amenia, NY, 12501  
(82 miles to Grand Central Terminal)

## Train

HARLEM LINE

SCHEDULES

## Connecting Service

Operator: Shortline Tel.#: (800) 631- 8405  
Route: Great Barrington Bus - Season: June 24-Sept. 5, 2005  
Schedule: [www.mta.info/mnr/html/railink/berkshires.htm](http://www.mta.info/mnr/html/railink/berkshires.htm)  
Fare: Millerton \$6.50; Copake/Hillsdale \$10.00; Great Barrington \$13.00  
Operator: Dutchess LOOP Tel.#: (845) 485- 4690  
Route: Dutchess Loop 9 (Ltd.)  
Schedule: [www.dutchessny.gov/loop.htm#sched](http://www.dutchessny.gov/loop.htm#sched)

## Service



5/23/2002

Fare: \$1.00

**Station Parking**

Operator: [Allright Corp.](#) Tel.#: (888) 682- PARK  
 Free Weekend/Holiday Policy: Yes Commuter Capacity : 318

**Metered Information**

Meter Type: 16-hr, 24-hr.  
 Fee: \$2.25 \$3.75

**Permit Information\****\* Relevant Sales Tax may apply.*

	<u>Resident</u>	<u>Non-Resident</u>
Annual	\$217.00	\$217.00
Semi-Annual	\$136.00	\$136.00
Quarterly	\$76.00	\$76.00
Monthly	\$28.00	\$28.00

Daily Permit Fee:

None

Comments:

Overnight:

24-hr permit upgrade: \$9 monthly surcharge. Also see meter fees.

**Parking Facility/Area Locations**
☐ Station Lot - Off Route 22.

Customers should call the parking operator for the most accurate information. Please note that this information is subject to change without notice.

**Taxis****Accessibility**

Full ADA access for elderly and disabled. Ramp to platform.

[Click here for elevator status at other stations](#)

**Ticket Machines**

Two ticket machines at this station. Ticket machines are located on the platform. Ticket machine accepts cash, credit cards and debit cards.

**Ticket****Office****Hours**

There is no staffed ticket office at this station.

**Get Driving Directions****MAP****Northbound:**

Directions From Route 22 Northbound. Go approximately six-tenths of a mile north of the Hamlet of Wassaic. At the traffic light, make a right turn to Wassaic Station.

**Southbound:**

From Route 22 Southbound. Go south from the Hamlet of Amenias. At traffic light, make a left turn to Wassaic Station.

## APPENDIX D:

### HARLEM VALLEY RAIL TRAIL

#### Section 1: Metro-North Station in Wassaic northward to Mechanic Street in Amenia

**Length:** 2.6 miles

**Present Status:** Paved and open. This is the southern terminus of the rail trail.

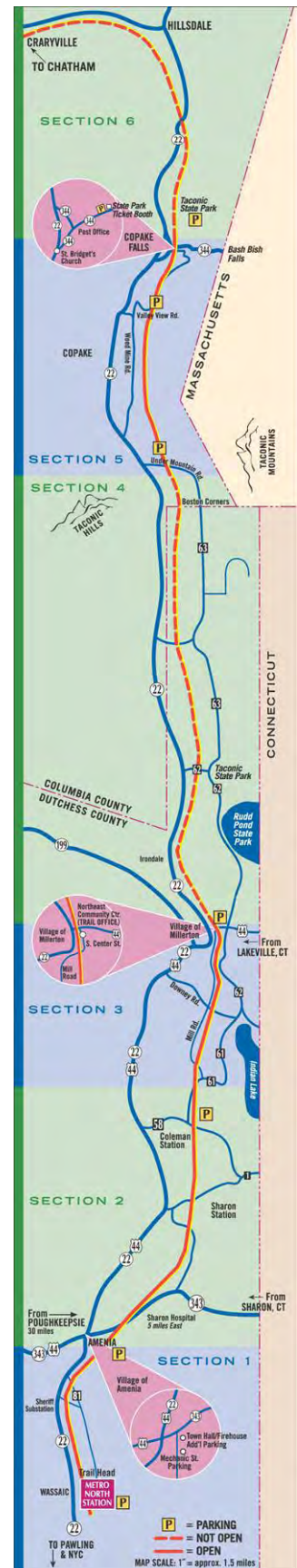
**Natural Features, Flora & Fauna:** The results of a commissioned wildlife survey and the contents of our 4-color Botanical Brochure will be posted at the website soon!

#### Local history

Note: Many thanks to local railroad historians Heyward Cohen, Jack Shufelt, and Lou Grogan (The Coming of the New York and Harlem Railroad, Pawling, NY: Louis V. Grogan, 1989) for much of the railroad history that follows.

**Wassaic:** The Wassaic railroad station was Mile Post 81.33 of the original New York & Harlem Railroad that brought service to Wassaic around 1850. (For more general railroad history, please go to the Railroad History page). Wassaic derives its name from "Washaick," the Indian word for narrow valley. The original railroad station was in the hamlet across from the current post office, not where the current Metro North station is located. As a major customer for the local Gridley Ironworks, the early railroad used iron for railroad construction and equipment as well as transporting pig iron from the ironworks.

Around 1860, Noah Gridley convinced his friend Gail Borden to bring his milk condensery to Wassaic citing good transportation and an agrarian setting perfect for a dairy-related business. Although the area seems very rural now, in the 19th century, it was an industrial center with hills stripped of wood for charcoal and air filled with the smoke of iron production. Gail Borden developed the process of condensing and canning



milk and founded The Borden's Milk Company. In 1861, Mr. Borden established his first large factory for condensed milk in Wassaic. Condensed milk produced here was supplied to the Union Army during the Civil War. It was manufactured under the name "Eagle Brand Condensed Milk" and is still sold today. The Borden plant was a boon to local farmers who converted their farms to dairy production to satisfy the huge demand. The product was shipped nationwide by rail. Coal for the boiler house and tin cans was shipped in to the plant by rail. A portion of the original milk plant has been preserved by its present owner, the Pawling Corporation, which maintains a visitors center in the building.

In the early 1900's, the train also carried children to and from the Amenia and Millerton High Schools. Almost all consumer and retail goods were shipped in by rail. Before the telephone, the Western Union Telegraph was the sole means of fast communications – the railroad agent sent and received the telegrams. US Mail was picked up and received at the station, and newspapers were delivered from the cities by train.

Conrail freight trains used the track in Wassaic until 1993 to deliver freight cars to Maxon Mills and Tri-Wall Container Corporation in the hamlet of Wassaic. Service ended when both businesses closed their doors. The railroad tracks were not removed as they were in 1979-80 when 45.8 miles of track were removed from just north of Wassaic to Chatham, NY. In 2000, Metro North Railroad built a new Wassaic train station north of the hamlet.

**Amenia:** Please see Section 2 Local History.

### **Directions:**

#### **To the Wassaic trailhead (see further below for parking information):**

**From New York City:** Take Saw Mill Parkway (from Manhattan) or the Hutchinson River Parkway (from Queens, Bronx, Brooklyn) north to interstate 684. Take 684 north to Brewster where 684 becomes Route 22. Continue north on Route 22, and after passing through the town of Dover Plains, continue northward about 5 miles to the traffic light at the train station.

**From Poughkeepsie:** Take Route 44 east to Amenia. At the traffic light, turn right and proceed south on Route 22 about 3 miles to the traffic light at the Wassaic train station.

**From Connecticut:** Take Route 4 to Sharon, CT. At the

clock tower in Sharon take Route 343 west heading toward Amenia. At the Amenia traffic light, turn left and proceed south on Route 22 about 3 miles to the traffic light at the Wassaic train station.

**From the north:** Take Route 22 south to the traffic light in Amenia (the junction of Routes 22, 44 and 343). Continue southward on Route 22 for about 3 miles to the traffic light at the Wassaic train station.

**To the Amenia trailhead:**

Please go to the webpage for Section 2 and scroll down the page to “Directions to Amenia trailhead.”

**Parking at the Wassaic Train Station:** Parking at the Wassaic train station is free on weekends and holidays. Parking at the Amenia trailhead is free every day. The trail is open from dawn to dusk. To get on the trail once you’ve parked at the Wassaic train station, cross the tracks where you drove in. The trailhead is on your right. From New York City, you can take Metro-North Railroad’s Harlem Line to Wassaic. For schedules, maps and info, call 800-Metroinfo, NYC (212) 532-4900 or <http://www.mta.nyc.ny.us/>.

## Section 2: Mechanic Street in Amenia to Coleman Station in the Town of North East



**Length:** 4.5 miles

**Present Status:** Paved and open

**Natural Features, Flora & Fauna:** Section 2 contains a marvelous beaver pond near Sharon Station and some other interesting habitat as noted below. The rail trail association's 4-color [Botanical Brochure](#) will be posted at the website soon!



**AN ATTRACTIVE FARM SCENE** (northwestern side of Route 343 intersection)

A hillside pasture and farm pond west of the trail just north of Rt. 343 is an excellent illustration of the ecology of grazing and the vegetational structure of a grazed landscape. The animals select for plants which can survive or resist their grazing: low-growing herbs with terminal buds below the cropping level of the animals' teeth, tall herbs with irritant foliage (e.g. nettles), and prickly shrubs that resist or limit the animals' attempts to eat them. Horses that have been in the pasture feed eagerly on common reed, an invasive plant in wetlands of our area. Of the wetland plants, the horses seemed to prefer reed to native sedges and grasses. Their grazing does not seem to have much effect on the reed, however, which is abundant around the edge of the farm pond. The grazing horses, short-growth meadow and scattered red cedars make an attractive picture. The view is already open, so there is no need to remove any trees or shrubs.

**RED CEDAR SHRUBLAND** (#13 on the botanical brochure map)

A very good example of this shrubland is located a little less than half a mile north of the Route 343 intersection. The shrubland is located just yards north of a short stretch of low wooden fencing installed when the trail was built.

The red cedar shrubland is characterized by eastern red cedar and the near absence of tall trees. This reflects the high calcium content of the soils. The cedar layer may be very dense, with almost no breaks, or fairly sparse with grasses, low shrubs (especially gray dogwood, silky dogwood and northern arrowwood), and broad-leaved herbs in open areas between groups of cedars or individual cedars. Two regionally rare plants are located in the cedar shrubland: common juniper (the squatter and pricklier relative of the red cedar) and the yellow-flowering shrubby cinquefoil (see photo and line drawing in botanical brochure). It is also the home of a regionally rare butterfly, olive hairstreak, which in northern Dutchess County, would be near the northern limit of its range.

**SHARON STATION BEAVERPOND** (#12 on the botanical brochure map).

This marsh-like wetland is home to a variety of semi-aquatic animals and plants. Signs of beaver activity include well-worn grooves in the banks. Three tall herbs – purple loosestrife, common reed, and cattail – dominate the shallow edges of the pond. These invasive plants compete for wetland space and resources; any of the three may gain an edge and supplant the others, or they may coexist for many years before the balance changes.

**CINDER FLORA** (#10 on the botanical brochure map)

The cinder flora habitat is the strip of vegetation located immediately south of Coleman Station between the rail trail and the gravel mine along the trail's western side. Cinders of the rail bed berm have unusual chemical influences which favor particular plant species, some native, some alien. Wet and dry cinder soils have different species of plants. There are "wet" cinder flora and "dry" cinder flora. The habitat here is the latter (dry). Plants here are well adapted to dry conditions. Two grasses, big bluestem and little bluestem line the margins of the path, along with the dry-loving plants such as cypress spurge, sleepy catchfly, lowbush blueberries, clack oak and scrub oak. Big bluestem, the tallest grass here, is regionally rare and may have been transported by trains from the midwest.

**Local History**

Note: Many thanks to local railroad historians Heyward Cohen, Jack Shufelt, and Lou Grogan ([The Coming of the New York and Harlem Railroad](#), Pawling, NY: Louis V. Grogan,

1989) for much of the railroad history that follows.

**Amenia:** *Amenia* was Mile Post 84.59 of the original New York & Harlem Railroad (for more general railroad history, please go to the Railroad History page). In 1762, Dr. Thomas Young named *Amenia* for the Latin word "*Amoena*," which means "pleasing to the eye." The town includes the hamlets of Leedsville,

*Amenia* Union, South *Amenia*, Smithfield, and Wassaic. The original *Amenia* Center, settled in 1742 by Captain S. Hopkins, was located a mile north of the *Amenia* traffic light. When the Dutchess Turnpike (Route 44) was built in 1805 to connect Hartford and Poughkeepsie, the town grew to its present location.

After the Revolutionary War, abolitionists were active in the area. They were led by Ezra Reed, who freed his slaves in 1788. Then in 1794, Jacob Bockee introduced a bill to the New York legislature for the abolition of slavery. The bill was passed on July 4, 1827.

*Amenia* had local industries and manufacturing. This included iron ore mining, carriage and wagon makers, a marble works, wood finishing mill, brickyard, and manufacture of tin ware and household utensils. *Amenia* also had a cattle pen to ship livestock to New York City slaughterhouses. In the opinion of one local historian, "The industrial, manufacturing and commercial activities of the Harlem Valley towns are often minimized with today's Grandma Moses bucolic view of past history."

Noted *Amenia* residents included Decost Smith, author, and Ammi Phillips, the noted colonial "borderline painter" of primitive portraits in New York and Connecticut. James Bockee, Ephraim Paine, and Elisha Barlow were early politicians from *Amenia*. Lewis Mumford, twentieth century architectural historian and city planner, was a resident of Leedsville.

North of Mechanic Street, the *Amenia* railroad station was located on the west side of the trailhead opposite the rail trail parking lot. The former train station located here had a ticket office, waiting room for passengers, telegraph office, freight platform, and a Railway Express Agency office. There were spur tracks for unloading the contents of freight cars on to horse wagons, and later, trucks. A spur used to run west near Broadway Avenue to an iron ore bed behind Dill's Best Hardware Store on Route 44 west of the current traffic light. Along Railroad Avenue (which the rail trail parallels as you approach the *Amenia* trailhead from the south), another spur serviced a brickyard on the west side of the tracks. The brickyard later became a feed mill operated by the Wilson & Eaton Company which the railroad also served. Wilson & Eaton Company had a large warehouse for bagged feed, building supplies, and other commodities on one of the rail spurs. The company also had a coal unloading facility for home and business heating needs until oil replaced coal in the 1950's. The mill closed in the 1960's.

The rail trail parking lot in *Amenia* was the site of the "Barton House," also known as the "Colony House," a large hotel serving travelers and businessmen. Summer vacationers from New York City de-trained in *Amenia* to stay at Lake *Amenia* resorts and several other bungalow colonies and camps.

**Sheffield Road:** As you head north, at the first road crossing is the former Sheffield Farms milk plant located on the west side of the trail (the large white concrete structure). Unprocessed milk in cans was shipped by rail to Sheffield Farms bottling plants in New York City. The building is one of the few remaining "creameries," or "milk plants." The

building is now an artist's residence.

**Route 343:** The second road crossing north of the Amenia trailhead is Route 343, or Sharon Road (Sharon, Connecticut is the next town to the east). The agribusiness complex on the east side received carloads of fertilizer by rail until rail service ended in 1980. Fertilizer is now trucked in from bulk distribution terminals on the railroad trunk lines located upstate.

**Sharon Station:** There is an old restored railroad station in Sharon Station. It was severely damaged by fire in 1997. A local family purchased it and restored to its original 1870's appearance. The station now is a private residence. You might have difficulty knowing exactly where it is located without the following information.

In Section 2, the trail is intersected by two different roads each named Sharon Station Road. When traveling north on the rail trail from the Amenia trailhead, the third road intersection is with Amenia's Sharon Station Road. As you continue northward another 7/10's of a mile, you cross into the Town of North East. The next intersection you encounter traveling north is with North East's Sharon Station Road. The two Sharon Station Roads eventually merge to the west, just a few hundred feet from an intersection with Route 22. To the east, both roads remain separate but bring motorists into Sharon, Connecticut. The restored train station is located at the intersection in the town of North East.

The Sharon Station railroad station was both a passenger and freight station. The south end of the restored station was the warehouse-like freight section. It had an apartment upstairs for the railroad agent. Sharon Station was a busy facility as it served patrons from Sharon, Connecticut and other nearby Connecticut towns.

Besides having a train station, Sharon Station was the site of the huge Manhattan Mining Company mine. Large quantities of iron ore were shipped to local and regional iron furnaces via the railroad until the late 1890's. The company also operated a blast furnace that produced "pig iron" that was shipped out to foundries to make cast iron products. In the 1960's, Agway constructed a modern fertilizer plant on the north side of Sharon Station Road with a rail spur. It was dismantled after rail service ended in 1980.

**Coleman Station:** Before the railroad came to Coleman Station in 1851, farm goods were taken by oxen to the Hudson River and shipped south to New York City by barge. Amasa D. Coleman successfully petitioned the New York & Harlem Railroad for a depot stop, thus the name Coleman Station. Once the stop was established, local goods were shipped to New York City by rail, traveling faster and arriving fresher than ever before. By 1911, Coleman Station had its own commercial dairy, Sheffield Farms. Sheffield Farms was one of the model commercial farms in Dutchess County and one of the largest suppliers of milk to New York City.

On September 30, 1993, the Coleman Station Historic District was placed on the National Register of Historic Places. Coleman Station is one of the last areas in Dutchess County to retain its original historic and architectural integrity. Still in use today are early homes, Sheffield Farms' row houses, and Hiddenhurst Mansion.

On the east side of the Coleman Station parking lot, some remnants of the foundation from a large Sheffield Farms milk bottling plant can be seen. Carloads of bottled milk for New



York City were shipped out via daily milk trains. Coal for the boiler house and empty glass bottles were shipped in by rail. The workers' frame houses are still standing on Sheffield Hill Road which runs east from the Coleman Station parking lot. Ice was harvested in the winter at local ponds and lakes, stored in large ice houses, and used to keep the milk chilled when shipped in warm weather. Ice harvesting was a source of extra income for farmers and working men.

On March 16, 1888 five locomotives pushing the snowplow, "Old Eli", derailed while clearing the first large rock cut north of Coleman Station. Five employees were killed and four others were injured. The locomotives, traveling at 40 mph or faster, hit the hard-packed snow causing the deadly wreck. The rail rrail passes through the rock cut which was dug before the advent of power tools. The cut was made with hand drills and black powder before the days of TNT and pneumatic drills. The rock was taken away with wagons pulled by horses and mules. Men with sledgehammers had to break it up small enough to be carted away.

### **Directions to the Amenia trailhead:**

**Note:** Please be sure to see the note further below about parking at the trailhead.

**From New York City:** Take Saw Mill Parkway (from Manhattan) or the Hutchinson River Parkway (from Queens, Bronx, Brooklyn) north to interstate 684. Take 684 north to Brewster where 684 becomes Route 22. Continue north on Route 22 to the traffic light in Amenia. Turn right on to Route 343 heading east for about a quarter of a mile. Make a right on to Mechanic Street just before the Cumberland Farms Store on the left. Proceed about a quarter of a mile and the trailhead is on your left.

**From Poughkeepsie:** Take Route 44 east to Amenia. At the traffic light, continue east (i.e. go straight through the intersection). Continue for about a quarter of a mile. Make a right turn on to Mechanic Street just before the Cumberland Farms Store on the left. Proceed about a quarter of a mile and the trailhead is on your left.

**From Connecticut:** Take Route 4 to Sharon, CT. At the clock tower in Sharon take Route 343 west heading toward Amenia. When the speed limit drops to 35 mph as you approach the hamlet of Amenia, begin watching for a Cumberland Farms Store on the right-hand side. You will need to turn left on to the street immediately past the entrance to the store. The street is Mechanic Street. The trailhead is about one-quarter mile in on Mechanic Street on the left.

**From the north:** Take Route to the traffic light in Amenia (the junction of Routes 22, 44 and 343). Turn left on to Route 343 heading east for about a quarter of a mile. Make a right turn on to Mechanic Street just before the Cumberland Farms Store on the left. Proceed about a quarter of a mile and the trailhead is on your left.

**Parking:** If the parking lot at the Amenia trailhead is full, please backtrack towards Route 343 a few blocks and park in the Amenia town hall parking lot on your right (which is also next to the firehouse).

### **Section 3: Coleman Station in the Town of North East to Main Street in the village**

## of Millerton



**Length:** 3.6 miles

**Present Status:** Paved and open.

**Natural Features, Flora & Fauna:** Section 3 has six bridges, all of them fully and tastefully reconstructed. There are three picturesque rock cuts which in the summer feel many degrees cooler than anywhere else on the trail. The Webatuck Creek and Ten-Mile River periodically run alongside and cross underneath this section. The rail trail association's 4-color [Botanical Brochure](#) will be posted at the website soon!

Many stretches of trail in this section are built atop "pyramided" rail bed. This means that the rail bed was built up higher than the adjacent land by the original railroad builders, in some instances as much as fifty feet higher. This pyramiding affords impressive views of farmland and Indian Mountain to the east on the border of New York and Connecticut. At the same time, the pyramiding also makes for very steep drop offs on either side of the trail, so don't gaze at the views for too long while riding your bike, or you may wind up down the embankment!

ROCK-CUT ABOUT A MILE NORTH OF COLEMAN STATION ([#8 on the botanical brochure map](#)).

Railroad companies blasted rock cuts to allow their train tracks to remain level despite hilly terrain. The water that trickles from a rock cut face during most of the year forms a "vertical wetland," which supports a few plants that can survive in this unusual habitat. Two of the most successful plants here are Herb Robert and Marginal Wood Fern.

### WEBATUCK FLOODPLAIN

The Webatuck Creek floodplain, on the east side of the rail trail about 1.5 miles south of Millerton (just north of the Downey Road bridge), has very rich, deep soil deposited by the stream over hundreds of years. This stretch of stream has large, old silver maples, eastern cottonwoods, and sycamores. The several-hundred year old trees in this floodplain make it a fine example of the floodplain habitat. This area retains its serene timelessness through a century of development. This habitat is too fragile to permit public access." The sycamores are off the trail a bit and have huge white splotches on their bark.

### Local History

Note: Many thanks to local railroad historians Heyward Cohen, Jack Shufelt, and Lou Grogan ([The Coming of the New York and Harlem Railroad](#), Pawling, NY: Louis V. Grogan, 1989) for much of the railroad history that follows.

**Coleman Station:** Please see the history for Section 2. Click here: [Section](#)

## 2

**Millerton:** Millerton was founded in 1851 when the New York & Harlem Railroad was built through the area. The village was named for the railroad's chief engineer, Sidney Miller. In 1873, Commodore Vanderbilt acquired the New York & Harlem Railroad, and it became the Harlem Division of the New York Central & Hudson River Railroad (later shortened to the New York Central Railroad).

By 1875, **three additional train lines** came to Millerton: the Poughkeepsie and Eastern; the Dutchess and Columbia; and the Connecticut Western. These three lines had their own station separate from the Harlem Division line. It was located on Century Boulevard ("the post office street") in Millerton. These three additional rail lines were eventually incorporated into a single railroad in 1907 called The Central New England Railroad.

As part of the Vanderbilt empire, The New York Central's Hudson Division superseded the Harlem Division as part of the primary route between New York City, Albany, Buffalo and Chicago. The Harlem Division, however, served as an important rail corridor for eastern New York and western Connecticut and Massachusetts. It had connections to Vermont, northern New York, and Canada. Until the 1950's, it was the primary means of transportation for milk, raw materials, farm supplies, industrial products, consumer goods, mail, express and inter-city passenger travel.

The New York Central Railroad's Harlem Division **passenger station** built in Millerton in 1912 is remarkably well preserved. It stands on the east side of the rail bed just north of the main street intersection. The original New York & Harlem Railroad station built in 1851 still exists, too. It stands on the west side of the railroad right-of-way, opposite the New York Central one, and is occupied by a florist. Both stations are still used by local businesses.

The Millerton station was open 24 hours a day for many years to facilitate the movement of milk and freight trains that operated mainly at night. All trains, with few exceptions, stopped at Millerton to fill the locomotive tender with water until steam operations ended in 1952. The passenger station was closed in March, 1972. The freight agent's office closed in 1974, although freight service continued until 1981. The **freight station** is now a beauty salon located at the north end of the current parking lot in between to two former railroad stations. Until the railroad shut down in 1980, several agribusinesses and a propane distributor received rail shipments.

North of the passenger station is the old Borden's Milk plant located on the east side of the rail bed. Borden's is visible on the smokestack. This plant

was either a processing plant that shipped fresh, refrigerated bottled milk or a shipping station to New York City for raw, chilled milk in large cans. South of Main Street in Millerton, a spur track on the east side of the rail bed served a fuel oil and gasoline distributor. On the west side stood the famous Brick Block Hotel, an archetypal railroad hotel. Millerton is now a thriving village of just under 1,000 residents and is part of the Town of North East. The trailhead for the rail trail is in the heart of the village business district.

### **Directions:**

#### **Millerton trailhead:**

**From the South:** Take Route 22 north to the traffic light in Millerton. Turn east on to Route 44. Designated parking areas for rail trail users are planned, but for now please park on side streets, and avoid parking in the parking lot of Taro's Restaurant immediately next to the trailhead. Actually, if you don't mind, after turning east on to Rt. 44 (Main Street) at the Route 22 traffic light, travel up Main Street to the big orange building on your left called Saperstein's. Turn left on to Dutchess Ave. and then turn right on to Century Blvd. There is a lot of parking on Century Blvd. and you are only a few hundred feet from the trailhead. Thanks for your patience and cooperation.

**From the North:** Take Route 22 south to the traffic light in Millerton. Turn east on to Route 44. Please read notes about parking under "From the South."

**For a longer bike ride:** To continue onward to completed Section 5 of the trail and its parking lot on Under Mountain Road, make a right as you exit the trail in Millerton coming from the south. Proceed uphill through the village about a half mile to the traffic light by Cumberland Farms at the intersection of Main Street and County Route 62. Turn left on to County Route 62 also known locally as Rudd Pond Rd. About 2.5 miles from the traffic light, you will pass the entrance to Rudd Pond (Taconic State Park). Six-tenths of a mile past the park entrance is the intersection with Kaye Road. Proceed straight (do not veer left). You are now on Dutchess County Route 63, also known as Boston Corners Road. Continue 4.3 miles to the intersection with Under Mountain Road. At this intersection, go straight. You are now on Under Mountain Road. It is 1.6 miles to the parking lot on Under Mountain Road for Section 5 of the trail.

**An alternative hiking trail:** Between Kaye Road and Under Mountain Road on Dutchess County Route 63 is Whitehouse Crossing Road. It's 2.4 miles north of Kaye Road. A few hundred yards north of Whitehouse Crossing Road is a road on the right called Deer Run/Quarry Drive. It leads to a parking lot for the South Taconic Hiking Trail which runs parallel to the Harlem Valley Rail Trail along the western ridge of the Taconic Mountains. A "South Taconic Trails" map is available at Oblong Books and Music in downtown Millerton. The South Taconic Hiking Trail travels north from Deer Run/Quarry Road to Bash Bish Falls and Copake Falls. It offers a steep 1000 foot vertical ascent with the reward of spectacular views of the Harlem Valley, Columbia County and the Catskill

Mountains to the west. The Tri-State New York-Connecticut-Massachusetts boarder is located on the side trail to Mount Frissell.

#### **Section 4: Main Street in the village of Millerton to Under Mountain Road in the Town of Ancram**



**Length:** About 8 miles. CLOSED to the public.

**Present Status:** The official word from Dutchess County is that design of this section will be done in 2005 and construction will be in 2006. The County secured federal funds for this work in 2002.

**Status Details:** The Harlem Valley Rail Trail Association is continually inquiring to ascertain the most current information about design and construction schedules.

**Natural Features, Flora & Fauna:** Wetlands are the dominant feature of this portion of the trail. It travels through a valley considered by many to be the most beautiful valley in eastern New York. The trail will run along the Taconic Hills to the west and the Taconic Range of the Berkshires to the east. The long-term goal for this section includes a side trail to Rudd Pond State Park and a walkway looping off the trail into the wetlands. There are several hiking trails nearby that ascend the 2,000-foot peaks of the Taconics. One of these trails is the Alander Mountain Trail about a half-mile east of the rail trail's Under Mountain Road parking lot.. The Appalachian Trail also traverses the Taconic Range.

#### **Local history**

The trail will parallel Route 22 which is to the west, however the trail is only near the highway briefly near Millerton. The very northern end of Section 4 is in Boston Corners, once a busy railroad junction for three railroads: the Harlem Division, the Central New England Railroad, and the Poughkeepsie & Eastern Railroad.

Near the Eddie Collins ball field between Millerton and Irondale along Route 22 was the crossing of the Newburgh, Dutchess & Connecticut Railroad (ND&C), later part of the Central New England Railroad. A connecting track

allowed the interchange of railroad cars between the Harlem Division and the ND&C Railroad which ran west from Millerton to Pine Plains and Beacon, NY. Hall of Fame baseball legend Eddie Collins was born in Millerton on May 2, 1887.

**Irondale:** Located just north of Millerton along Route 22, this was the site of the Millerton Iron Works furnace. It shipped pig iron to regional foundries and forges via the Harlem Division and connections with the Central New England Railroad.

**Mount Riga Station:** From Mount Riga Station, located about four miles north of Millerton, to Boston Corners a few miles further north, the Harlem Division and the Central New England Railroad (CNE) ran side by side. The CNE right-of-way is clearly visible on the east side of the rail trail. The CNE ran east-west from Hartford, Connecticut to Campbell Hall, New York via the Poughkeepsie Railroad Bridge.

**Boston Corners:** This area has a very interesting political and social history. It was the site of a world championship heavyweight bare knuckles boxing match on October 12, 1853. A few hundred feet north after Dutchess County Route 63 becomes Under Mountain Road, there is an historical marker (a blue metal sign) on the west side of the road describing the *thirty-seven* round fight. The fight was witnessed by 3000 people, evidence that Boston Corners was a hub of activity more than one hundred years ago.

At Boston Corners, the Harlem Division and the Central New England Railroad crossed each other and shared one station. Until the 1930's, it was possible to transfer from a Harlem Division train to a CNE train to go east through Connecticut or west to Poughkeepsie and Middletown, New York. At an earlier time, the Poughkeepsie & Eastern Railroad also passed through Boston Corners on its way to the Ancram lead mines near Ancramdale, and then on to Pine Plains. The Poughkeepsie & Eastern Railroad became part of the CNE after 1900.

**Directions:** Parking and access will be in the village of Millerton and other places yet to be determined.

## **Section 5: Under Mountain Road in Ancram to the Taconic State Park entrance in Copake Falls**





**Length:** 4.0 miles

**Present Status:** Paved and open (a 0.4 mile section is along a fairly smooth, scenic dirt road)

**Status Details:** From the parking lot at Under Mountain Road, the trail is paved for 2.9 miles going northward. Then the trail detours on to a scenic dirt road for 0.4 miles to bypass the only privately held parcel of rail bed between Copake Falls and Wassaic. The dirt road rejoins the paved rail trail which then continues for another half mile to Route 344 and the entrance to Taconic State Park.

**Natural Features, Flora & Fauna:** Section 5 is more of a deep woods trail, although it is by no means closed in by trees. It almost hugs the base of the South Taconic Mountains to the east and is bordered by agricultural lands at times on either side. Near the northern end, there are wonderful views of the Catskill Mountains to the west. Also at the northern end, you are only about a mile away from historic and scenic Bash Bish Falls. The falls are located just about a mile east of the trailhead in Copake Falls, just over the Massachusetts state border.

This segment crosses over two streams, and rattlesnakes and black bears are occasionally reported. The rail trail association's 4-color [Botanical Brochure](#) will be posted at the website soon.

### UNDER MOUNTAIN ROCK CUT

The single rock cut north of Millerton, about 300 feet north of Under Mountain Road and 5-6 feet high, has mossy seeps and an abundance of ferns, including marginal woodfern, hayscented fern, lady fern, rock polypody, fragile fern and sensitive fern. Other unusual plants here include hazelnut, skunk cabbage (very unusual on rock) and purple-stemmed aster. It is unusual to see wetland plants like skunk cabbage growing on the walls of a rock-cut. Sometimes botanists refer to these rock-cuts and their assemblage of wetland flora as "vertical wetlands."

### UNDER MOUNTAIN FERN BANK

About 120 feet north of the rock cut north of Under Mountain Road is a steep bank on the east side of the trail covered with hayscented fern, a lovely stand of a single species. Such single-species stands are helpful in teaching recognition of a particular plant, because they lack the visual confusion of a multi-species community. The juxtaposition of the multi-

species fern community on the rock cut and the single-species stand on the bank is especially serendipitous for teaching or learning ferns.

## BUTTERFLY WEED GARDEN

Immediately north of farm crossing #4 (counting north from the Under Mountain Road Parking lot) is where the butterfly weed garden is located. There are 5 farm crossings, all south of the intersection with the dirt road, Valley View Road. At the garden location, there are high weedy wildflowers attracting butterflies. A partial list includes knapweed, bouncing bet, white sweet clover, mullein, queen-Anne's lace, birdfoot trefoil, bladder campion, milkweed, daisy fleabane, vipers bugloss, common burdock, ox-eye daisy, evening primrose, spotted St. Johnswort, Norway cinquefoil. Possibly these plants (common along the trail, but only here found all together) could be enhanced with plantings of other good butterfly attractants (butterfly bush, butterfly weed, bachelor's button, etc.) to form a Rail Trail butterfly garden. A rest and snack at the bench would be supplemented by the treat of dancing, nectaring butterflies.

## Local history

Note: Many thanks to local railroad historians Heyward Cohen, Jack Shufelt, and Lou Grogan (The Coming of the New York and Harlem Railroad, Pawling, NY: Louis V. Grogan, 1989) for much of the railroad history that follows.

**Copake Falls:** This hamlet, originally called Copake Iron Works, established a post office in 1853. In 1909, it was briefly known as Berkshire Pass and finally became Copake Falls in 1910. The Episcopal Church of St. John in the Wilderness, adjacent to the Taconic State Park entrance, was built in 1852 by owners of the iron works. Irish workers built St. Bridget's Catholic Church in 1867. It was demolished and replaced by a new building in 1959 at the present location on Route 22.

Copake Falls is also the base of operations for the staff of **Taconic State Park**. Bash Bish Brook, which passes under the bridge just south of here, flows south from legendary and scenic Bash Bish Falls in nearby Massachusetts. The brook joins the Roeliff Jansen Kill in nearby Copake.

Taconic State Park was formed in 1925 by a five-man commission, which included **Franklin D. Roosevelt**. The park is situated at a once very active iron foundry, the Copake Iron Works. The first parcels acquired for the park included the iron works and the Bash Bish Inn property, formerly the Douglas estate, located along Bash Bish Brook. An ironworks museum is currently located at the blast furnace site, about a half mile east of the rail trail trailhead. There was a spur off of the Harlem Division rail line to serve the Copake Iron Works.

Taconic State Park now includes 5,000 acres stretching 15 miles from Catamount Ski Area south to Rudd Pond. The Harlem Valley Rail Trail is a recent (1997) addition to the park. The railroad station in Copake Falls was



originally named "Copake Iron Works," but the name was later changed to "Copake Falls" when the iron works closed. The former train station is located at the rail trail trailhead and is currently occupied by the Depot Deli.

There was a milk plant south of the train station which probably was a shipping plant for raw milk in bulk cans. The plant was operated by either Borden's Milk or Sheffield Farms. Most residents of the village worked at the iron works or on dairy farms that prospered in the rich bottomlands of the valley. The community also prospered from tourists and seasonal homeowners who were attracted to the picturesque mountain scenery and rural countryside dotted with farms. Until rail service ended in 1976, freight carloads of farm machinery and lumber were unloaded on to trucks at Copake Falls for distribution to local dealers.

### **Directions:**

**Under Mountain Road trailhead** (Under Mountain Road is exactly halfway between Millerton and Hillsdale along Route 22):

**From the south:** Take Route 22 north from Millerton for 8.6 miles. At 8.1 miles, you will pass a blue "parking area" sign for a scenic pull-off along Route 22. Exactly one-half mile past the scenic pull-off is Under Mountain Road. There is a bright blue sign just before Under Mountain Road directing motorists to the trail. Turn right on to Under Mountain Road. The trailhead and parking lot are three-tenths of a mile on the left.

**From the north:** Take Route 22 south from Hillsdale 8.6 miles to Under Mountain Road. Under Mountain Road is on your left, five-tenths of a mile past the Citgo gas station located at the intersection of Route 22 and Columbia County Route 3. There is a bright blue sign just before Under Mountain Road directing motorists to the trail. Turn left on to Under Mountain Road (if you pass the scenic pull-off along Route 22, you've missed the turn for Under Mountain Road). Proceed three-tenths of a mile to the trail parking lot on your left.

### **Valley View Road parking lots:**

On Route 22, travel 11.4 miles north from Millerton (or 5.8 miles south from Hillsdale traffic light) and watch for a blue Harlem Valley Rail Trail sign that marks the intersection of Valley View Road with Route 22. This parking lot accommodates only 2-3 vehicles.

Turn east (the only way you can turn) on to Valley View Road. Proceed six-tenths of a mile to a triangular intersection (a red farm building on your left). Turn left and travel five-tenths of a mile to the dirt parking lot on your left.

Halfway from the triangular intersection to the parking lot, the road becomes dirt and you might think you are lost and driving right through someone's farm. Don't worry. Proceed uphill and the parking lot is two-tenths of a mile along the dirt portion of the road on your left.

A small portion of Section 5 is not paved. Four-tenths of a mile of it detours on to the dirt portion of Valley View Road (this is because New York State was unsuccessful in purchasing a privately owned parcel of rail bed).

If you proceed north four-tenths of a mile past the first Valley View Road parking area, there is a second parking area (again, limited to 2-3 vehicles). From this parking area, the trail is then paved again as it continues northward for a little more than one-half mile to the entrance to Taconic State Park in Copake Falls.

### **Taconic State Park parking lot:**

**From the south:** Take Route 22 northward. At the traffic light in Millerton, proceed northward 12.5 miles to the intersection of Routes 22 and 344. Route 344 intersects Route 22 from the right immediately past St. Bridget's Church on your right. There are also signs at the intersection for Taconic State Park and the rail trail.

Turn right on to Route 344 and proceed three-tenths of a mile to the triangular green in the center of Copake Falls. Bear to your right and proceed about three-tenths of a mile to the entrance of Taconic State Park. Please ask the park attendant where to park.

**From the north:** Take Route 22 southward. Travel 4.2 miles to the intersection of Routes 22 and 344. Route 344 intersects Route 22 from the left. You'll see signs on your right at this intersection for Taconic State Park and the Depot Deli.

Turn left on to Route 344 and proceed four-tenths of a mile to the triangular green in the center of Copake Falls. Bear to your left AND STOP AT THE STOP SIGN. Proceed straight and go about three-tenths of a mile to the entrance of Taconic State Park. Please ask the park attendant where to park.

## **Section 6: Taconic State Park entrance in Copake Falls to Chatham, NY**



**Length:** About 23 miles

**Present Status:** Undeveloped. CLOSED to the public.

**Status Details:** This section of the trail is not done and is still in private ownership. An effort is underway to use federal and local matching dollars to begin acquiring the rail bed. We hope that with the success of the trail between Wassaic and Copake Falls, the construction of this long segment of trail will eventually be achieved.

**Natural Features, Flora & Fauna:** To be determined.

### **Local history**

**Hillsdale:** The poet Edna St. Vincent Millay, who lived in Austerlitz, used the Hillsdale Station frequently. Hillsdale was the site of a 19th century iron works, and after 1900, the town had a Sheffield Farms milk plant. After the milk plant closed, it was used by a wholesale produce distributor.

Hillsdale had a cattle pen for shipping cattle by rail. Herrington's Lumber received building supply products by rail until service ended in 1976. Hillsdale was an important station for vacationers and weekenders from Columbia County and nearby Massachusetts. Children traveling to summer camps in the Berkshires took special camp trains and got off at Hillsdale. Copake Falls Station served the many camps in West Copake.

**Craryville:** The site of a passenger and freight station and a Borden's Milk plant. It had a spur to Copake Lake for ice harvesting and a cattle pen for shipping livestock to New York City slaughterhouses. Vacationers going to cottages and the former Copake Country Club at Copake Lake got off the train here.

**Martindale:** The site of a passenger station.

**Philmont:** This town was named for George Phillips who developed an industrial town there including textile mills. "Swiss Farms" received carloads of Canadian peat moss until the end of rail service in 1976.

**Ghent:** The site of the junction between the New York City Harlem Division and Boston & Albany Railroad's Hudson-Chatham Branch.

**Chatham:** A major railroad junction for the Boston & Albany Railroad's main line and a terminal for the Harlem Division, the Boston & Albany Railroad's Hudson-Chatham Branch, and the Rutland Railroad's Bennington Branch. The town had a large railroad yard and engine service facilities.

Chatham is still a railroad town in spite of the new weekenders and touristy redevelopment taking place. Until the early 1950's, milk produced in Vermont and shipped on the Rutland Railroad was transferred to the Harlem Division for New York City destinations.

This former Boston & Albany Railroad main line is a heavy-duty freight main line for the Conrail system which was just acquired by the mega-giant CSX Railroad Corporation. Amtrak also uses this railroad for its Boston-Albany passenger trains. As many as twenty long, heavy freight trains a day rumble through the village.

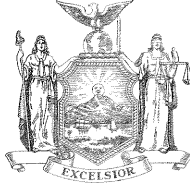
Chatham has a yearly Railroad Heritage Festival at the firehouse located on a vestige of the Harlem Division track. Chatham has converted about one mile of former Harlem Line track running south from the village along Route 66 to a rail trail. The trail goes through a residential part of the village. Residents use it to walk to the Grand Union shopping center.

A large Blue Seal Feeds distribution center is located in the former Harlem Division property at Chatham. Feed and grain from the midwest is unloaded from rail cars and delivered to farms in the tri-state region by truck. This replaced direct rail shipment to the small towns that lost rail services during the massive downsizing of the regional rail system in the 1970's and 1980's.

### **Directions**

Parking and access yet to be determined.

**APPENDIX    E:**  
**ACCIDENT HISTORY**



STATE OF NEW YORK  
DEPARTMENT OF TRANSPORTATION  
REGION EIGHT  
4 BURNETT BOULEVARD  
POUGHKEEPSIE, NEW YORK 12603  
[www.dot.state.ny.us](http://www.dot.state.ny.us)

ROBERT A. DENNISON III, P.E.  
REGIONAL DIRECTOR

THOMAS J. MADISON, JR.  
COMMISSIONER

February 9, 2006

Deborah S. Hubbard  
Chazen Engineering & Land Surveying Co., P.C.  
21 Fox Street  
Poughkeepsie, NY 12601

**RE: Freedom of Information Law Request FR8-06-000354  
Accident Data  
Route 44, T/ Amenia, Dutchess County  
& Route 22, T/ Amenia, Dutchess County  
Your Project No. 10454.00**

Dear Ms. Hubbard:

This correspondence is in reference to your January 12, 2006 Freedom of Information Law (FOIL) request and will acknowledge receipt of your check in the amount of \$60.00.

Transmitted herewith is the information you requested.

Please indicate the FOIL request number when corresponding on this subject.

Sincerely,

  
Angela K. Aiello  
Administrative Services Director

AKA:jjr

Attachment

# NYSDOT Safety Information Management System Summary Report By Segment And/Or Intersection

Date: 02/08/06 11:35  
Page: 1

## Intersection & Non-Intersection Accidents Complete Accident Data Only Available thru 31-MAY-2002

ROUTE:	44	HIGHWAY LOCATION:	44 82022224	-	44 82022245	DATES:	01-JUN-1999	-	31-MAY-2002										
REFERENCE MARKER	INT. #	DESCRIPTION	TOTAL	FTL	INJ	PDO	N/R	WET ROAD **	FIXED OBJ **	PED& BIKE **	TRUCK ***	LIGHT DWN/DSK **	CONDITION DAY	NIGHT					
44 8202 2224			3	0	1	1	1	0	1	0	0	0	1	0					
44 8202 2224	16	JCT OLD NY 82A, CO 83	2	0	1	1	0	0	0	0	0	0	2	0					
44 8202 2227			1	0	1	0	0	0	1	0	0	0	1	0					
44 8202 2228			1	0	1	0	0	0	0	0	0	0	1	0					
44 8202 2229			1	0	0	1	0	1	0	0	0	0	1	0					
44 8202 2231			4	0	1	3	0	1	2	0	1	0	3	1					
44 8202 2231	00	INVALID INTERSECTION NUMBER	1	0	0	1	0	1	0	0	0	0	1	0					
44 8202 2232			3	0	2	1	0	1	2	0	0	0	1	2					
44 8202 2233			5	0	2	2	1	3	3	0	1	0	3	1					
44 8202 2236			1	0	0	0	1	0	0	0	0	0	0	0					
44 8202 2239			1	0	1	0	0	0	0	0	0	0	1	0					
44 8202 2243	25	BROADWAY	3	0	2	1	0	0	0	0	0	0	2	1					
44 8202 2244			1	0	0	0	1	0	0	0	0	0	0	0					
44 8202 2245			5	0	3	2	0	1	0	0	0	0	1	2					
22 8204 1245	09	JCT NY 44 END ROUTE 343 OVERLAP	2	0	1	0	1	0	0	0	0	0	0	1					
44 8202 2245	00	INVALID INTERSECTION NUMBER	1	0	0	1	0	0	0	0	0	0	1	0					
44 8202 2245	09	INVALID INTERSECTION NUMBER	1	0	0	0	1	0	0	0	0	0	0	0					
ROUTE TOTAL EXCLUDES 999 RMS			36	0	16	14	6	8	9	0	2	0	18	9					

\*\* EXCLUDES PARTIALLY CODED NON-REPORTABLES

\*\*\* EXCLUDES PICKUPS &amp; VANS

## Accident Verbal Description Report

### Intersection & Non-Intersection Accidents

#### Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 44 8202 2224 NON-INTERSECTION ACCIDENTS \*\*\*

JAN-09-2000 SUN

Accident Class:NON-REPORTABLE

Police Agency:

Case: 2000-0555693  
Num Of Veh:UNKNOWN

NOV-08-2000 WED 06:00PM Persons Killed 0 Persons Injured: 0 Extent of Injuries:  
Accident Class:PROPERTY DAMAGE Police Agency:  
Type of Accident: COLLISION WITH ANIMAL Traffic Control:NONE  
Manner of Collision: OTHER Weather:CLEAR  
Road Surface Condition: DRY Road Char:STRAIGHT/ GRADE Light Condition:UNKNOWN  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Case: 2000-0443699  
Num Of Veh:1

Veh: 1 OTHER

Registered Weight: UNKNOWN

State of Registration: UNKNOWN

Num of Occupants:1

Drivers Age:67

Citation Issued: NO

Direction of Travel:WEST

Public Property Damage:NO

Sex:UNKNOWN

School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD

Apparent Factors: UNKNOWN

UNKNOWN

MAR-21-2002

THU Persons Killed 0

Persons Injured: 6

Extent of Injuries: AAAAB

Case: 2002-30439147

Accident Class:INJURY

Police Agency:DUTCHESS CO SHERIFF DEPT

Num Of Veh:1

Type of Accident: COLL. W/EARTH ELE./ROCK CUT/DITCH

Traffic Control:OTHER

Manner of Collision: OTHER

Weather:CLEAR

Road Surface Condition: SNOW/ICE

Road Char:CURVE AND GRADE

Light Condition:DAYLIGHT

Loc. of Ped/Bicycle: NOT APPLICABLE

Action of Ped/Bicycle:NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP

Registered Weight: 4071

State of Registration: NY

Num of Occupants:6

Drivers Age:48

Citation Issued: NO

Direction of Travel:WEST

Public Property Damage:NO

Sex:FEMALE

School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD

Apparent Factors: PAVEMENT SLIPPERY

UNKNOWN

\*\*\* Ref Mrkr: 44 8202 2224 INTERSECTION ACCIDENTS - JCT OLD NY 82A, CO 83 \*\*\*



# Accident Verbal Description Report

## Intersection & Non-Intersection Accidents

### Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 44 8202 2224 INTERSECTION ACCIDENTS - JCT OLD NY 82A, CO 83 \*\*\* (Continued)

JUN-12-1999 SAT04:00PM Persons Killed 0 Persons Injured: 2 Extent of Injuries: BA Case: 1999-9385209  
Accident Class: INJURY Police Agency: Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE  
Manner of Collision: RIGHT ANGLE Weather: CLEAR

Road Surface Condition: DRY Road Char: CURVE AND GRADE Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 2 Drivers Age: 39 Citations Issued: NO  
Direction of Travel: WEST Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNKNOWN UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 4210 State of Registration: UNKNOWN  
Num of Occupants: 2 Drivers Age: 16 Citations Issued: YES  
Direction of Travel: NORTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO

Pre-Accd Action: MAKING LEFT TURN  
Apparent Factors: FAILURE TO YIELD RIGHT OF WAY DRIVER INEXPERIENCE

JUL-07-2000 FRI02:00PM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2000-0306376  
Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE  
Manner of Collision: LEFT TURN (AGAINST OTHER CAR) Weather: CLEAR

Road Surface Condition: DRY Road Char: CURVE AND LEVEL Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2878 State of Registration: UNKNOWN  
Num of Occupants: 3 Drivers Age: 17 Citations Issued: NO  
Direction of Travel: WEST Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNKNOWN UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 3289 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 55 Citations Issued: NO  
Direction of Travel: EAST Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO

Pre-Accd Action: MAKING LEFT TURN  
Apparent Factors: FAILURE TO YIELD RIGHT OF WAY UNKNOWN

\*\*\* Ref Mrkr: 44 8202 2227 NON-INTERSECTION ACCIDENTS \*\*\*

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 44 8202 2227 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

JAN-07-2002 MON 11:40AM Persons Killed 0 Persons Injured: 1 Extent of Injuries: B Case: 2002-30352613  
Accident Class: INJURY Police Agency: DUTCHESS CO SHERIFF DEPT Num Of Veh: 1

Type of Accident: COLL. W/LIGHT SUPPORT/UTILITY POLE Traffic Control: NO PASSING ZONE  
Manner of Collision: OTHER Weather: SNOW

Road Surface Condition: SNOW/ICE Road Char: CURVE AND GRADE Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3269 State of Registration: NY  
Num of Occupants: 1 Drivers Age: 22 Citation Issued: NO  
Direction of Travel: WEST Public Property Damage: NO Sex: MALE School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNSAFE SPEED OTHER (VEHICLE)

\*\*\* Ref Mrkr: 44 8202 2228 NON-INTERSECTION ACCIDENTS \*\*\*

SEP-17-1999 FRI 08:00AM Persons Killed 0 Persons Injured: 1 Extent of Injuries: B Case: 1999-9543270  
Accident Class: INJURY Police Agency: Num Of Veh: 1

Type of Accident: COLLISION WITH OTHER Traffic Control: NO PASSING ZONE  
Manner of Collision: OTHER Weather: INVALID CODE

Road Surface Condition: DRY Road Char: STRAIGHT/ GRADE Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 4250 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 29 Citation Issued: NO  
Direction of Travel: NORTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: OBSTRUCTION/DEBRIS UNKNOWN

\*\*\* Ref Mrkr: 44 8202 2229 NON-INTERSECTION ACCIDENTS \*\*\*

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 44 8202 2229 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

FEB-09-2001 FRI 06:00PM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2001-1147058  
 Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh:1  
 Type of Accident: OTHER NON-COLLISION Traffic Control:NO PASSING ZONE  
 Manner of Collision: OTHER Weather:RAIN  
 Road Surface Condition: WET Road Char:CURVE AND GRADE Light Condition:DARK-ROAD UNLIGHTED  
 Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3380 State of Registration: UNKNOWN  
 Num of Occupants: 1 Drivers Age:24 Citation Issued: NO  
 Direction of Travel:EAST Public Property Damage:NO Sex:UNKNOWN School Bus Involved: NO  
 Pre-Accd Action: GOING STRAIGHT AHEAD UNKNOWN  
 Apparent Factors: ANIMAL'S ACTION

\*\*\* Ref Mrkr: 44 8202 2231 INVALID INTERSECTION NUMBER \*\*\*

SEP-15-2000 FRI 10:00AM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2000-0382965  
 Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh:2  
 Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control:NO PASSING ZONE  
 Manner of Collision: REAR END Weather:RAIN  
 Road Surface Condition: WET Road Char:STRAIGHT AND LEVEL Light Condition:DAYLIGHT  
 Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 6309 State of Registration: UNKNOWN  
 Num of Occupants: 1 Drivers Age:49 Citation Issued: NO  
 Direction of Travel:WEST Public Property Damage:NO Sex:UNKNOWN School Bus Involved: NO  
 Pre-Accd Action: STOPPED IN TRAFFIC UNKNOWN  
 Apparent Factors: UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 3084 State of Registration: UNKNOWN  
 Num of Occupants: 1 Drivers Age:27 Citation Issued: NO  
 Direction of Travel:WEST Public Property Damage:NO Sex:UNKNOWN School Bus Involved: NO  
 Pre-Accd Action: GOING STRAIGHT AHEAD UNKNOWN  
 Apparent Factors: OTHER (HUMAN)

\*\*\* Ref Mrkr: 44 8202 2231 NON-INTERSECTION ACCIDENTS \*\*\*

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 44 8202 2231 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

JUL-10-1999 SAT 04:00PM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 1999-9439188  
 Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh: 1

Type of Accident: COLLISION WITH GUIDE RAIL Traffic Control: NO PASSING ZONE

Manner of Collision: OTHER Weather: CLEAR

Road Surface Condition: DRY Road Char: CURVE AND GRADE Light Condition: DAYLIGHT

Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3925 State of Registration: UNKNOWN

Num of Occupants: 2 Drivers Age: 90 Citation Issued: NO

Direction of Travel: EAST Public Property Damage: YES Sex: UNKNOWN School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD

Apparent Factors: TIRE FAILURE/INADEQUATE UNKNOWN

SEP-01-2000 FRI 10:00PM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 2000-0366521  
 Accident Class: INJURY Police Agency: Num Of Veh: 1

Type of Accident: COLLISION WITH GUIDERAIL - END Traffic Control: NO PASSING ZONE

Manner of Collision: OTHER Weather: RAIN

Road Surface Condition: WET Road Char: CURVE AND GRADE Light Condition: DARK-ROAD UNLIGHTED

Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN

Num of Occupants: 2 Drivers Age: 42 Citation Issued: NO

Direction of Travel: EAST Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD

Apparent Factors: PAVEMENT SLIPPERY UNKNOWN

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 44 8202 2231 NON-INTERSECTION ACCIDENTS \*\*\*

(Continued)

OCT-28-2000 SAT 12:00PM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2000-0430696  
Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: STOP SIGN

Manner of Collision: LEFT TURN (AGAINST OTHER CAR) Weather: CLEAR

Road Surface Condition: DRY Road Char: CURVE AND GRADE Light Condition: DAYLIGHT

Loc. of Ped/Bicycle: NOT ENTERED

Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP

Registered Weight: UNKNOWN

State of Registration: UNKNOWN

Num of Occupants: 2

Drivers Age: 39

Sex: UNKNOWN

Citation Issued: NO

Direction of Travel: NORTH

Public Property Damage: NO

School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD

Apparent Factors: FAILURE TO YIELD RIGHT OF WAY

UNKNOWN

Veh: 2 TRUCK

Registered Weight: UNKNOWN

State of Registration: UNKNOWN

Num of Occupants: 2

Drivers Age: 33

Sex: UNKNOWN

Citation Issued: NO

Direction of Travel: SOUTH-EAST

Public Property Damage: NO

School Bus Involved: NO

Pre-Accd Action: MAKING LEFT TURN

Apparent Factors: UNKNOWN

UNKNOWN

Truck/Bus Clsf: UNKNOWN

JAN-28-2001 SUN 09:00AM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2001-1133491

Accident Class: PROPERTY DAMAGE

Police Agency:

Num Of Veh: 1

Type of Accident: COLLISION WITH ANIMAL

Traffic Control: NO PASSING ZONE

Manner of Collision: OTHER

Weather: CLEAR

Road Surface Condition: DRY

Road Char: CURVE AND GRADE

Light Condition: DAYLIGHT

Loc. of Ped/Bicycle: NOT ENTERED

Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP

Registered Weight: 3415

State of Registration: UNKNOWN

Num of Occupants: 1

Drivers Age: 37

Sex: UNKNOWN

Citation Issued: NO

Direction of Travel: EAST

Public Property Damage: NO

School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD

Apparent Factors: ANIMAL'S ACTION

UNKNOWN

\*\*\* Ref Mrkr: 44 8202 2232 NON-INTERSECTION ACCIDENTS \*\*\*

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 44 8202 2232 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

JUN-15-1999 TUE 11:00AM Persons Killed 0 Persons Injured: 1 Extent of Injuries: B Case: 1999-9390167  
 Accident Class: INJURY Police Agency: Num Of Veh: 1

Type of Accident: RAN OFF ROAD ONLY

Traffic Control: NO PASSING ZONE

Manner of Collision: OTHER

Weather: CLEAR

Road Surface Condition: DRY

Road Char: CURVE AND GRADE

Light Condition: DAYLIGHT

Loc. of Ped/Bicycle: NOT ENTERED

Action of Ped/Bicycle: NOT ENTERED

Veh: 1 MOTORCYCLE

Registered Weight: UNKNOWN

State of Registration: UNKNOWN

Num of Occupants: 1

Drivers Age: 51

Sex: UNKNOWN

Citation Issued: NO

Direction of Travel: EAST

Public Property Damage: NO

School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD

Apparent Factors: UNSAFE SPEED UNKNOWN

MAY-21-2000 SUN

Persons Killed 0

Extent of Injuries:

Case: 2000-0253970

Accident Class: PROPERTY DAMAGE

Police Agency:

Num Of Veh: 1

Type of Accident: COLLISION WITH GUIDE RAIL

Traffic Control: NO PASSING ZONE

Manner of Collision: OTHER

Weather: RAIN

Road Surface Condition: WET

Road Char: CURVE AND GRADE

Light Condition: DARK-ROAD UNLIGHTED

Loc. of Ped/Bicycle: NOT ENTERED

Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP

Registered Weight: UNKNOWN

State of Registration: UNKNOWN

Num of Occupants: 2

Drivers Age: 58

Sex: UNKNOWN

Citation Issued: NO

Direction of Travel: EAST

Public Property Damage: YES

School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD

Apparent Factors: UNSAFE SPEED

PAVEMENT SLIPPERY

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 44 8202 2232 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

DEC-04-2001 TUE 05:15AM Persons Killed 0 Persons Injured: 1 Extent of Injuries: B Case: 2001-30256383  
Accident Class: INJURY Police Agency: DOVER PLAINS SP Num Of Veh: 1

Type of Accident: COLLISION WITH GUIDERAIL - END Traffic Control: NO PASSING ZONE  
Manner of Collision: OTHER Weather: CLOUDY

Road Surface Condition: DRY Road Char: CURVE AND GRADE Light Condition: DARK-ROAD UNLIGHTED

Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: MA  
Num of Occupants: 1 Drivers Age: 23 Sex: MALE Citation Issued: NO  
Direction of Travel: EAST Public Property Damage: NO School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD Second Event: COLL. W/EARTH ELE./ROCK CUT/DITCH  
Apparent Factors: UNSAFE SPEED ALCOHOL INVOLVEMENT

\*\*\* Ref Mrkr: 44 8202 2233 NON-INTERSECTION ACCIDENTS \*\*\*

NOV-10-2000 FRI 10:00AM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 2000-0450125  
Accident Class: INJURY Police Agency: Num Of Veh: 1

Type of Accident: COLL. W/EARTH ELE./ROCK CUT/DITCH Traffic Control: OTHER  
Manner of Collision: OTHER Weather: RAIN

Road Surface Condition: WET Road Char: CURVE AND GRADE Light Condition: DAYLIGHT

Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 43 Sex: UNKNOWN Citation Issued: NO  
Direction of Travel: WEST Public Property Damage: NO School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD Second Event: COLL. W/EARTH ELE./ROCK CUT/DITCH  
Apparent Factors: UNSAFE SPEED PAVEMENT SLIPPERY

# Accident Verbal Description Report

## Intersection & Non-Intersection Accidents

### Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999- MAY-31-2002

(Continued)

\*\*\* Ref Mrkr: 44 8202 2233 NON-INTERSECTION ACCIDENTS \*\*\*

NOV-11-2000 SAT 01:00PM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 2000-0453072  
Accident Class: INJURY Police Agency: Num Of Veh:1

Type of Accident: COLLISION WITH GUIDE RAIL Traffic Control:NO PASSING ZONE  
Manner of Collision: OTHER Weather:CLOUDY

Road Surface Condition: WET Road Char:CURVE AND GRADE Light Condition:DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Veh: 1 TRUCK Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 2 Drivers Age:34 Citation Issued: NO  
Direction of Travel:EAST Public Property Damage:YES Sex:UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: ANIMAL'S ACTION PAVEMENT SLIPPERY  
Truck/Bus Clsf: UNKNOWN

NOV-15-2000 WED 12:00AM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2000-0462114  
Accident Class:PROPERTY DAMAGE Police Agency: Num Of Veh:1  
Type of Accident: COLLISION WITH GUIDERAIL - END Traffic Control:NO PASSING ZONE  
Manner of Collision: OTHER Weather:CLOUDY  
Road Surface Condition: WET Road Char:CURVE AND GRADE Light Condition:DARK-ROAD UNLIGHTED  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3241 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age:23 Citation Issued: NO  
Direction of Travel:SOUTH Public Property Damage:YES Sex:UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD Second Event: COLLISION WITH GUIDE RAIL  
Apparent Factors: UNSAFE SPEED PAVEMENT SLIPPERY



## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 44 8202 2233 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

JUL-25-2001 WED Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2001-1380045  
Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh:1  
Type of Accident: OTHER NON-COLLISION Traffic Control: UNKNOWN  
Manner of Collision: OTHER Weather: CLEAR  
Road Surface Condition: DRY Road Char: CURVE AND GRADE Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 27 Citation Issued: NO  
Direction of Travel: EAST Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: TIRE FAILURE/INADEQUATE UNKNOWN

SEP-22-2001 SAT

Accident Class: NON-REPORTABLE Police Agency: DUTCHESS CO SHERIFF DEPT Case: 2001-30090075  
Num Of Veh: 1

\*\*\* Ref Mrkr: 44 8202 2236 NON-INTERSECTION ACCIDENTS \*\*\*

MAY-13-2002 MON 02:20PM

Accident Class: NON-REPORTABLE Police Agency: NYSP LAFAYETTE Case: 2002-30577964  
Num Of Veh: 2

\*\*\* Ref Mrkr: 44 8202 2239 NON-INTERSECTION ACCIDENTS \*\*\*

Accident Verbal Description Report

Intersection & Non-Intersection Accidents

Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 44 8202 2239 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

NOV-24-2000 FRI 10:00AM Persons Killed 0 Persons Injured: 2 Extent of Injuries: CC Case: 2000-0473521  
Accident Class: INJURY Police Agency: Num Of Veh:2  
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control:NO PASSING ZONE  
Manner of Collision: REAR END Weather:CLEAR  
Road Surface Condition: DRY Road Char:CURVE AND GRADE Light Condition:DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 5 State of Registration: UNKNOWN  
Num of Occupants: 3 Drivers Age:35 Citation Issued: NO  
Direction of Travel:EAST Public Property Damage:NO Sex:UNKNOWN School Bus Involved: NO  
Pre-Accd Action: MAKING LEFT TURN  
Apparent Factors: UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 3279 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age:78 Citation Issued: NO  
Direction of Travel:EAST Public Property Damage:NO Sex:UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: DRIVER INATTENTION

\*\*\* Ref Mrkr: 44 8202 2243 INTERSECTION ACCIDENTS - BROADWAY \*\*\*

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 44 8202 2243 INTERSECTION ACCIDENTS - BROADWAY \*\*\*

(Continued)

AUG-16-2000 WED02:00PM Persons Killed 0 Persons Injured: 2 Extent of Injuries: CC Case: 2000-0350087  
 Accident Class: INJURY Police Agency: Num Of Veh: 3

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: STOP SIGN  
 Manner of Collision: OTHER Weather: CLEAR

Road Surface Condition: DRY Road Char: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3191 State of Registration: UNKNOWN  
 Num of Occupants: 2 Drivers Age: 33 Citations Issued: NO  
 Direction of Travel: NORTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
 Pre-Accd Action: MAKING LEFT TURN  
 Apparent Factors: FAILURE TO YIELD RIGHT OF WAY UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
 Num of Occupants: 1 Drivers Age: 27 Citations Issued: NO  
 Direction of Travel: EAST Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
 Pre-Accd Action: GOING STRAIGHT AHEAD Second Event: COLLISION WITH CURBING  
 Apparent Factors: UNKNOWN UNKNOWN

Veh: 3 CAR/VAN/PICKUP Registered Weight: 4591 State of Registration: UNKNOWN  
 Num of Occupants: UNKNOWN Drivers Age: UNKNOWN Citations Issued: NO  
 Direction of Travel: UNKNOWN Sex: UNKNOWN School Bus Involved: NO  
 Pre-Accd Action: PARKED  
 Apparent Factors: OTHER (VEHICLE) UNKNOWN

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999 - MAY-31-2002

\*\*\* Ref Mrkr: 44 8202 2243 INTERSECTION ACCIDENTS - BROADWAY \*\*\*

(Continued)

MAY-10-2001 THU01:05PM Persons Killed 0 Persons Injured: 0 Extent of Injuries:  
Accident Class: PROPERTY DAMAGE Police Agency:DUTCHESS CO SHERIFF DEPT Case: 2001-30025817  
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE Num Of Veh:2  
Manner of Collision: REAR END Weather: CLEARRoad Surface Condition: DRY Road Char: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLEVeh: 1 CAR/VAN/PICKUP Registered Weight: 3045 State of Registration: NY  
Num of Occupants: 2 Drivers Age: 53 Citations Issued: NO  
Direction of Travel: WEST Public Property Damage: NO Sex: MALE School Bus Involved: NO  
Pre-Accd Action: MAKING LEFT TURN  
Apparent Factors: UNKNOWNVeh: 2 CAR/VAN/PICKUP Registered Weight: 4645 State of Registration: NY  
Num of Occupants: 1 Drivers Age: 21 Citations Issued: NO  
Direction of Travel: WEST Public Property Damage: NO Sex: MALE School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: DRIVER INATTENTION  
FOLLOWING TOO CLOSELYSEP-08-2001 SAT08:42PM Persons Killed 0 Persons Injured: 3 Extent of Injuries: CCC Case: 2001-30083847  
Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: DUTCHESS CO SHERIFF DEPT Num Of Veh: 2  
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE  
Manner of Collision: UNKNOWN Weather: CLEAR  
Road Surface Condition: DRY Road Char: STRAIGHT AND LEVEL Light Condition: DARK-ROAD LIGHTED  
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLEVeh: 1 CAR/VAN/PICKUP Registered Weight: 3432 State of Registration: NY  
Num of Occupants: 2 Drivers Age: 18 Citations Issued: NO  
Direction of Travel: WEST Public Property Damage: NO Sex: MALE School Bus Involved: NO  
Pre-Accd Action: MAKING LEFT TURN Second Event: COLL. W/LIGHT SUPPORT/UTILITY POLE  
Apparent Factors: NOT APPLICABLE UNKNOWNVeh: 2 CAR/VAN/PICKUP Registered Weight: 2529 State of Registration: NY  
Num of Occupants: 1 Drivers Age: 36 Citations Issued: YES  
Direction of Travel: WEST Public Property Damage: NO Sex: MALE School Bus Involved: NO  
Pre-Accd Action: OVERTAKING Second Event: OVERTURNED  
Apparent Factors: PASSING OR LANE USAGE IMPROPERLY TRAFFIC CONTROL DEVICES DISREGARDED

\*\*\* Ref Mrkr: 44 8202 2244 NON-INTERSECTION ACCIDENTS \*\*\*

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 44 8202 2244 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

JAN-14-2002 MON 06:25PM

Accident Class:NON-REPORTABLE

Police Agency:DOVER PLAINS SP

Case: 2002-30351507  
Num Of Veh:1

\*\*\* Ref Mrkr: 44 8202 2245 INVALID INTERSECTION NUMBER \*\*\*

JAN-16-2000 SUN

Accident Class:NON-REPORTABLE

Police Agency:

Case: 2000-0561351  
Num Of Veh:UNKNOWN

APR-24-2000 MON 02:00PM Persons Killed 0 Persons Injured: 0 Extent of Injuries:

Accident Class:PROPERTY DAMAGE

Police Agency:

Case: 2000-0225121  
Num Of Veh:2

Type of Accident: COLLISION WITH MOTOR VEHICLE

Traffic Control:NO PASSING ZONE

Manner of Collision: LEFT TURN (WITH OTHER CAR)

Weather:CLEAR

Road Surface Condition: DRY

Road Char:STRAIGHT AND LEVEL

Light Condition:DAYLIGHT

Loc. of Ped/Bicycle: NOT ENTERED

Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP

Num of Occupants: UNKNOWN

Direction of Travel:WEST

Pre-Accd Action: PARKED

Apparent Factors: UNKNOWN

Registered Weight: UNKNOWN

Drivers Age:UNKNOWN

Public Property Damage:NO

Sex:UNKNOWN

School Bus Involved: NO

State of Registration: UNKNOWN

Citation Issued: NO

Veh: 2 CAR/VAN/PICKUP

Num of Occupants: 1

Direction of Travel:EAST

Pre-Accd Action: BACKING

Apparent Factors: BACKING UNSAFELY

Registered Weight: 3125

Drivers Age:72

Public Property Damage:NO

Sex:UNKNOWN

School Bus Involved: NO

State of Registration: UNKNOWN

Citation Issued: NO

\*\*\* Ref Mrkr: 44 8202 2245 NON-INTERSECTION ACCIDENTS \*\*\*

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 44 8202 2245 NON-INTERSECTION ACCIDENTS \*\*\*

(Continued)

JUN-01-2000 THU 01:00AM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 2000-0265074  
Accident Class: INJURY Police Agency: Num Of Veh:2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control:NO PASSING ZONE  
Manner of Collision: OVERTAKING Weather:CLEAR

Road Surface Condition: DRY Road Char:STRAIGHT AND LEVEL Light Condition:DARK-ROAD LIGHTED  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2705 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age:20 Citation Issued: YES  
Direction of Travel:EAST Public Property Damage: YES Sex:UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD Second Event: COLL. W/LIGHT SUPPORT/UTILITY POLE  
Apparent Factors: UNSAFE SPEED ALCOHOL INVOLVEMENT

Veh: 2 CAR/VAN/PICKUP Registered Weight: 3355 State of Registration: UNKNOWN  
Num of Occupants: UNKNOWN Drivers Age:UNKNOWN Citation Issued: NO  
Direction of Travel:EAST Public Property Damage:NO Sex:UNKNOWN School Bus Involved: NO  
Pre-Accd Action: PARKED  
Apparent Factors: UNKNOWN

DEC-23-2000 SAT 05:00PM Persons Killed 0 Persons Injured: 2 Extent of Injuries: CC Case: 2000-0519555  
Accident Class: INJURY Police Agency: Num Of Veh:2  
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control:TRAFFIC SIGNAL  
Manner of Collision: OVERTAKING Weather:CLEAR  
Road Surface Condition: WET Road Char:STRAIGHT AND LEVEL Light Condition:DARK-ROAD LIGHTED  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2691 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age:37 Citation Issued: NO  
Direction of Travel:WEST Public Property Damage:NO Sex:UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: DRIVER INATTENTION

Veh: 2 CAR/VAN/PICKUP Registered Weight: 2767 State of Registration: UNKNOWN  
Num of Occupants: 4 Drivers Age:37 Citation Issued: NO  
Direction of Travel:WEST Public Property Damage:NO Sex:UNKNOWN School Bus Involved: NO  
Pre-Accd Action: STARTING FROM PARKING  
Apparent Factors: DRIVER INATTENTION

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999- MAY-31-2002

(Continued)

\*\*\* Ref Mrkr: 44 8202 2245 NON-INTERSECTION ACCIDENTS \*\*\*

JAN-22-2002 TUE 06:50PM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2002-30384880  
 Accident Class:PROPERTY DAMAGE Police Agency:NOT ENTERED Num Of Veh:1

Type of Accident: COLLISION WITH ANIMAL Traffic Control:NONE  
 Manner of Collision: OTHER Weather:CLEAR

Road Surface Condition: DRY Road Char:CURVE AND LEVEL Light Condition:UNKNOWN  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle:NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3022 State of Registration: NY  
 Num of Occupants:1 Drivers Age:68 Citation Issued: NO  
 Direction of Travel:NORTH-EAST Public Property Damage:NO Sex:FEMALE School Bus Involved: NO  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: UNKNOWN

FEB-13-2002 WED 07:00PM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2002-30393388  
 Accident Class:PROPERTY DAMAGE Police Agency:NOT ENTERED Num Of Veh:1

Type of Accident: COLLISION WITH ANIMAL Traffic Control:NONE  
 Manner of Collision: OTHER Weather:OTHER

Road Surface Condition: DRY Road Char:CURVE AND GRADE Light Condition:UNKNOWN  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle:NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 4413 State of Registration: NY  
 Num of Occupants:1 Drivers Age:57 Citation Issued: NO  
 Direction of Travel:WEST Public Property Damage:NO Sex:FEMALE School Bus Involved: NO  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: NOT APPLICABLE

UNKNOWN

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 44 8202 2245 NON-INTERSECTION ACCIDENTS \*\*\*

(Continued)

IAR-30-2002 SAT 11:20AM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 2002-30434323

Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: DOVER PLAINS SP Traffic Control: NONE Num Of Veh: 4

Type of Accident: COLLISION WITH MOTOR VEHICLE Manner of Collision: OTHER Weather: CLEAR

Road Surface Condition: DRY Road Char: STRAIGHT AND LEVEL Light Condition: DAYLIGHT

Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2523 State of Registration: NY

Num of Occupants: 1 Drivers Age: 38 Citation Issued: NO

Direction of Travel: SOUTH Public Property Damage: NO Sex: MALE School Bus Involved: NO

Pre-Accd Action: MAKING LEFT TURN

Apparent Factors: FAILURE TO YIELD RIGHT OF WAY UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: CT

Num of Occupants: 1 Drivers Age: 28 Citation Issued: NO

Direction of Travel: WEST Public Property Damage: NO Sex: MALE School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD

Apparent Factors: NOT APPLICABLE UNKNOWN

Veh: 3 CAR/VAN/PICKUP Registered Weight: 3269 State of Registration: NY

Num of Occupants: 1 Drivers Age: 76 Citation Issued: NO

Direction of Travel: EAST Public Property Damage: NO Sex: FEMALE School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD

Apparent Factors: NOT APPLICABLE UNKNOWN

Veh: 4 CAR/VAN/PICKUP Registered Weight: 2337 State of Registration: NY

Num of Occupants: 1 Drivers Age: UNKNOWN Citation Issued: NO

Direction of Travel: UNKNOWN Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO

Pre-Accd Action: PARKED

Apparent Factors: UNKNOWN UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1245 INTERSECTION ACCIDENTS - JCT NY 44 END ROUTE 343 OVERLAP \*\*\*



## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mrkr Range: 44 8202 2224- 44 8202 2245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1245 INTERSECTION ACCIDENTS - JCT NY 44 END ROUTE 343 OVERLAP \*\*\* (Continued)

APR-08-2002 MON07:45PM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 2002-30522235  
Accident Class: INJURY Police Agency: DOVER PLAINS SP Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL

Manner of Collision: RIGHT ANGLE Weather: CLEAR

Road Surface Condition: DRY Road Char: STRAIGHT AND LEVEL Light Condition: DARK-ROAD LIGHTED

Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 6300 State of Registration: NY  
Num of Occupants: 1 Drivers Age: 44 Citations Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO Sex: MALE School Bus Involved: NO  
Pre-Accd Action: MAKING LEFT TURN  
Apparent Factors: NOT APPLICABLE UNKNOWNVeh: 2 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: CT  
Num of Occupants: 2 Drivers Age: 17 Citations Issued: YES  
Direction of Travel: EAST Public Property Damage: NO Sex: FEMALE School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: TRAFFIC CONTROL DEVICES DISREGARDED UNKNOWN

MAY-04-2002 SAT05:20PM

Accident Class: NON-REPORTABLE

Police Agency: RHINEBECK SP

Case: 2002-30591728  
Num Of Veh: 2

# NYSDOT Safety Information Management System

## Accident Verbal Description Report

### Intersection & Non-Intersection Accidents

#### Complete Accident Data Only Available thru MAY-31-2002

Route: 44 Highway Location Ref Mkr Range: 44 82022224 - 44 82022245 Dates: JUN-01-1999 - MAY-31-2002

Total Number of Accidents Printed 36

Absence of Reference Marker or Intersection within a specified roadway section & time period indicates no accidents found

\*\*\* End of Report \*\*\*

# NYSDOT Safety Information Management System Summary Report By Segment And/Or Intersection

## Intersection & Non-Intersection Accidents

Complete Accident Data Only Available thru 31-MAY-2002

ROUTE:	22	HIGHWAY LOCATION:	22 82041190	-	22 82041245	DATES:	01-JUN-1999	-	31-MAY-2002										
REFERENCE MARKER	INT. #	DESCRIPTION	TOTAL	FTL	INJ	PDO	N/R	WET ROAD **	FIXED OBJ **	PED& BIKE **	TRUCK *** **	LIGHT DWN/DSK **	CONDITION DAY **	NIGHT **					
22 8204 1190			2	0	0	2	0	0	0	0	1	0	1	1					
22 8204 1191			1	0	1	0	0	0	0	0	0	0	1	0					
22 8204 1192	00	INVALID INTERSECTION NUMBER	1	0	1	0	0	0	0	0	0	0	1	0					
22 8204 1193	91	INVALID INTERSECTION NUMBER	2	0	1	1	0	0	0	0	0	0	2	0					
22 8204 1196			1	0	0	0	1	0	0	0	0	0	0	0					
22 8204 1197			2	0	0	1	1	0	0	0	0	0	1	0					
22 8204 1198			1	0	0	1	0	0	0	0	0	1	0	0					
22 8204 1200			3	0	1	1	1	0	1	0	1	0	2	0					
22 8204 1201			2	0	1	1	0	1	1	0	0	0	1	1					
22 8204 1201	95	INVALID INTERSECTION NUMBER	2	0	1	1	0	1	0	0	0	0	2	0					
22 8204 1203			1	0	1	0	0	0	0	0	0	0	1	0					
22 8204 1204			2	0	2	0	0	0	0	0	0	1	1	0					
22 8204 1206			1	0	0	1	0	0	0	0	0	0	1	0					
22 8204 1207			2	0	2	0	0	0	2	0	0	0	1	1					
22 8204 1208			1	0	0	1	0	1	0	0	0	0	0	1					
22 8204 1209			3	0	1	2	0	1	3	0	1	0	0	3					
22 8204 1210			1	0	1	0	0	0	1	0	0	1	0	0					
22 8204 1212			2	0	1	0	1	0	0	0	1	0	1	0					
22 8204 1213			2	0	1	0	1	0	0	0	0	1	0	0					
22 8204 1214			3	0	0	2	1	1	0	0	0	1	1	0					
22 8204 1219			2	0	1	1	0	0	0	0	1	0	1	1					
22 8204 1223			1	0	0	0	1	0	0	0	0	0	0	0					
22 8204 1227			1	0	0	0	1	0	0	0	0	0	0	0					
22 8204 1228			2	0	1	1	0	0	1	0	0	1	1	0					
22 8204 1229			2	0	0	1	1	0	0	0	0	0	0	1					
22 8204 1233			2	0	0	1	1	0	0	0	0	1	0	0					
22 8204 1234			1	0	1	0	0	0	1	0	0	1	0	0					

\*\* EXCLUDES PARTIALLY CODED NON-REPORTABLES

\*\*\* EXCLUDES PICKUPS & VANS

NYSDOT Safety Information Management System  
 Summary Report By Segment And/Or Intersection  
 Intersection & Non-Intersection Accidents  
 Complete Accident Data Only Available thru 31-MAY-2002

ROUTE:	22	HIGHWAY LOCATION:	22 82041190	-	22 82041245	DATES:	01-JUN-1999	-	31-MAY-2002
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REFERENCE MARKER	INT. #	DESCRIPTION	TOTAL	FTL	INJ	PDO	N/R	WET ROAD **	FIXED OBJ **	PED& BIKE **	TRUCK *** **	LIGHT DWN/DSK **	CONDITION DAY **	NIGHT **
22 8204 1235			3	0	0	3	0	0	1	0	0	0	1	2
22 8204 1236			1	0	1	0	0	0	0	0	0	0	0	1
22 8204 1237			1	0	1	0	0	0	0	0	0	0	0	1
22 8204 1238			2	0	0	2	0	2	0	0	0	0	1	0
22 8204 1239	02	INVALID INTERSECTION NUMBER	1	0	0	0	1	0	0	0	0	0	0	0
22 8204 1241			1	0	0	0	1	0	0	0	0	0	0	0
22 8204 1242	04	INVALID INTERSECTION NUMBER	1	0	1	0	0	0	0	0	0	0	1	0
22 8204 1243			2	0	1	0	1	0	1	0	0	0	0	1
22 8204 1243	05	INVALID INTERSECTION NUMBER	2	0	1	1	0	0	0	1	0	0	2	0
22 8204 1245			5	0	1	3	1	0	0	0	0	0	1	1
22 8204 1245	09	JCT NY 44 END ROUTE 343 OVERLAP	2	0	1	0	1	0	0	0	0	0	0	1
ROUTE TOTAL EXCLUDES 999 RMS			67	0	25	27	15	7	12	1	5	8	25	16

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1190 NON-INTERSECTION ACCIDENTS \*\*\*

NOV-19-1999 FRI 07:00PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 1999-9616858  
Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh: 1Type of Accident: COLLISION WITH ANIMAL Traffic Control: NO PASSING ZONE  
Manner of Collision: OTHER Weather: CLEAR  
Road Surface Condition: DRY Road Char: STRAIGHT/ GRADE Light Condition: DARK-ROAD UNLIGHTED  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTEREDVeh: 1 CAR/VAN/PICKUP Registered Weight: 4942 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 42 Sex: UNKNOWN Citation Issued: NO  
Direction of Travel: NORTH Public Property Damage: NO School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD UNKNOWN  
Apparent Factors: ANIMAL'S ACTIONMAR-27-2000 MON 03:00PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2000-0197515  
Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh: 2  
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE  
Manner of Collision: SIDESWIPE Weather: CLOUDY  
Road Surface Condition: DRY Road Char: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTEREDVeh: 1 TRUCK Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 4 Drivers Age: 25 Sex: UNKNOWN Citation Issued: YES  
Direction of Travel: SOUTH Public Property Damage: NO School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD ANIMAL'S ACTION  
Apparent Factors: FAILURE TO YIELD RIGHT OF WAY  
Truck/Bus Clsf: 2 AX SINGLE UNIT BOXVeh: 2 TRUCK Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 27 Sex: UNKNOWN Citation Issued: NO  
Direction of Travel: NORTH Public Property Damage: NO School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD UNKNOWN  
Apparent Factors: UNKNOWN  
Truck/Bus Clsf: 2 AX SINGLE UNIT BOX

\*\*\* Ref Mrkr: 22 8204 1191 NON-INTERSECTION ACCIDENTS \*\*\*

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1191 NON-INTERSECTION ACCIDENTS \*\*\*

(Continued)

DEC-17-1999 FRI 04:00PM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 1999-9651535  
Accident Class: INJURY Police Agency: Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE  
Manner of Collision: OVERTAKING Weather: CLEAR  
Road Surface Condition: DRY Road Char: CURVE AND LEVEL Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2926 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 85 Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 3405 State of Registration: UNKNOWN  
Num of Occupants: 3 Drivers Age: 23 Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: FOLLOWING TOO CLOSELY DRIVER INATTENTION

\*\*\* Ref Mrkr: 22 8204 1192 INVALID INTERSECTION NUMBER \*\*\*

MAY-26-2000 FRI 10:00AM Persons Killed 0 Persons Injured: 2 Extent of Injuries: BC Case: 2000-0259240  
Accident Class: INJURY Police Agency: Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: STOP SIGN  
Manner of Collision: HEAD ON Weather: CLEAR  
Road Surface Condition: DRY Road Char: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3941 State of Registration: UNKNOWN  
Num of Occupants: 2 Drivers Age: 47 Citation Issued: NO  
Direction of Travel: NORTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 21 Citation Issued: YES  
Direction of Travel: SOUTH-WEST Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: MAKING LEFT TURN  
Apparent Factors: FAILURE TO YIELD RIGHT OF WAY UNKNOWN

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1193 INVALID INTERSECTION NUMBER \*\*\*

AUG-06-1999 FRI 04:00PM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 1999-9484488  
Accident Class: INJURY Police Agency: Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NONE  
Manner of Collision: RIGHT ANGLE Weather: CLEAR  
Road Surface Condition: DRY Road Char: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2745 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 56 Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 2564 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 25 Citation Issued: YES  
Direction of Travel: WEST Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: MAKING LEFT TURN  
Apparent Factors: FAILURE TO YIELD RIGHT OF WAY UNKNOWN

OCT-04-2000 WED 04:00PM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2000-0403928  
Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh: 2  
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: STOP SIGN  
Manner of Collision: HEAD ON Weather: CLOUDY  
Road Surface Condition: DRY Road Char: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 40 Citation Issued: NO  
Direction of Travel: NORTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 5526 State of Registration: UNKNOWN  
Num of Occupants: 11 Drivers Age: 37 Citation Issued: NO  
Direction of Travel: WEST Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: MAKING LEFT TURN  
Apparent Factors: PASSENGER DISTRACTION FAILURE TO YIELD RIGHT OF WAY

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1196 NON-INTERSECTION ACCIDENTS \*\*\*

JUN-18-2000 SUN

Accident Class:NON-REPORTABLE

Police Agency:

Case: 2000-0680528  
Num Of Veh:UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1197 NON-INTERSECTION ACCIDENTS \*\*\*

JUN-07-1999 MON

Accident Class:NON-REPORTABLE

Police Agency:

Case: 1999-9375535  
Num Of Veh:UNKNOWN

OCT-12-1999 TUE 11:00AM Persons Killed 0 Persons Injured: 0 Extent of Injuries:

Accident Class:PROPERTY DAMAGE

Police Agency:

Case: 1999-9570710  
Num Of Veh:1

Type of Accident: COLLISION WITH ANIMAL

Traffic Control:NONE

Manner of Collision: OTHER

Weather:CLEAR

Road Surface Condition: DRY

Road Char:STRAIGHT AND LEVEL Light Condition:DAYLIGHT

Loc. of Ped/Bicycle: NOT ENTERED

Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP

Registered Weight: 3167

State of Registration: UNKNOWN

Num of Occupants: 1

Drivers Age:82

Sex:UNKNOWN

Citation Issued: NO

Direction of Travel:SOUTH

Public Property Damage:NO

School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD

UNKNOWN

Apparent Factors: ANIMAL'S ACTION

\*\*\* Ref Mrkr: 22 8204 1198 NON-INTERSECTION ACCIDENTS \*\*\*

NOV-01-1999

MON 05:00AM Persons Killed 0 Persons Injured: 0 Extent of Injuries:

Accident Class:PROPERTY DAMAGE

Police Agency:

Case: 1999-9594089  
Num Of Veh:1

Type of Accident: COLLISION WITH ANIMAL

Traffic Control:NONE

Manner of Collision: OTHER

Weather:CLEAR

Road Surface Condition: DRY

Road Char:STRAIGHT AND LEVEL Light Condition:DAWN

Loc. of Ped/Bicycle: NOT ENTERED

Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP

Registered Weight: 2970

State of Registration: UNKNOWN

Num of Occupants: 1

Drivers Age:31

Sex:UNKNOWN

Citation Issued: NO

Direction of Travel:SOUTH

Public Property Damage:NO

School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD

UNKNOWN

Apparent Factors: ANIMAL'S ACTION



Accident Verbal Description Report

Intersection & Non-Intersection Accidents

Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1200 NON-INTERSECTION ACCIDENTS \*\*\*

DEC-17-1999 FRI 01:00PM Persons Killed 0 Persons Injured: 2 Extent of Injuries: CB Case: 1999-9437181  
Accident Class: INJURY Police Agency: Num Of Veh: 3  
Type of Accident: COLL. W/EARTH ELE./ROCK CUT/DITCH Traffic Control: NO PASSING ZONE  
Manner of Collision: OTHER Weather: CLEAR  
Road Surface Condition: DRY Road Char: CURVE AND LEVEL Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 TRUCK Registered Weight: 80000 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 52 Sex: UNKNOWN Citation Issued: NO  
Direction of Travel: NORTH Public Property Damage: NO School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD Second Event: COLLISION WITH MOTOR VEHICLE  
Apparent Factors: OTHER (HUMAN) UNKNOWN  
Truck/Bus Clsf: 2 AX TRAILER, 3 AX TRACTOR PLATFORM

Veh: 2 CAR/VAN/PICKUP Registered Weight: 3813 State of Registration: UNKNOWN  
Num of Occupants: 2 Drivers Age: 72 Sex: UNKNOWN Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNKNOWN UNKNOWN

Veh: 3 CAR/VAN/PICKUP Registered Weight: 9500 State of Registration: UNKNOWN  
Num of Occupants: 2 Drivers Age: 38 Sex: UNKNOWN Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNKNOWN UNKNOWN

JUL-10-2000 MON  
Accident Class: NON-REPORTABLE Police Agency: Case: 2000-0698078  
Num Of Veh: UNKNOWN

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999 - MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1200 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

OCT-24-2000 TUE 07:00AM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2000-0426126  
Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh: 2Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE  
Manner of Collision: LEFT TURN (WITH OTHER CAR) Weather: CLOUDY  
Road Surface Condition: DRY Road Char: CURVE AND GRADE Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTEREDVeh: 1 CAR/VAN/PICKUP Registered Weight: 3910 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 50 Citation Issued: NO  
Direction of Travel: NORTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNKNOWNVeh: 2 CAR/VAN/PICKUP Registered Weight: 3200 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 49 Citation Issued: NO  
Direction of Travel: NORTH-EAST Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: MAKING LEFT TURN  
Apparent Factors: FAILURE TO YIELD RIGHT OF WAY VIEW OBSTRUCTED/LIMITED

\*\*\* Ref Mrkr: 22 8204 1201 INVALID INTERSECTION NUMBER \*\*\*

APR-01-2000 SAT 02:00PM Persons Killed 0 Persons Injured: 2 Extent of Injuries: CC Case: 2000-0202005  
Accident Class: INJURY Police Agency: Num Of Veh: 2Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: STOP SIGN  
Manner of Collision: LEFT TURN (AGAINST OTHER CAR) Weather: CLEAR  
Road Surface Condition: DRY Road Char: CURVE AND GRADE Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTEREDVeh: 1 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 53 Citation Issued: NO  
Direction of Travel: NORTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNKNOWNVeh: 2 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 75 Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: MAKING LEFT TURN  
Apparent Factors: GLARE DRIVER INATTENTION

# Accident Verbal Description Report

## Intersection & Non-Intersection Accidents

### Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999 - MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1201 INVALID INTERSECTION NUMBER \*\*\* (Continued)

MAY-12-2000 FRI 09:00AM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2000-0243043  
Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE  
Manner of Collision: LEFT TURN (AGAINST OTHER CAR) Weather: RAIN  
Road Surface Condition: WET Road Char: STRAIGHT/ GRADE Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2847 State of Registration: UNKNOWN  
Num of Occupants: 4 Drivers Age: 31 Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 3393 State of Registration: UNKNOWN  
Num of Occupants: 2 Drivers Age: 77 Citation Issued: NO  
Direction of Travel: NORTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: MAKING LEFT TURN  
Apparent Factors: TURNING IMPROPER UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1201 NON-INTERSECTION ACCIDENTS \*\*\*

FEB-25-2000 FRI 11:00AM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2000-0167359  
Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh: 2  
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE  
Manner of Collision: OVERTAKING Weather: RAIN  
Road Surface Condition: WET Road Char: CURVE AND GRADE Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 5199 State of Registration: UNKNOWN  
Num of Occupants: 2 Drivers Age: 77 Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: SLOWED OR STOPPING  
Apparent Factors: UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 3839 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 37 Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: SLOWED OR STOPPING  
Apparent Factors: FOLLOWING TOO CLOSELY OTHER (VEHICLE)

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1201 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

SEP-04-2000 MON 09:00PM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 2000-0369149  
Accident Class: INJURY Police Agency: Num Of Veh:1  
Type of Accident: COLLISION WITH TREE Traffic Control:NO PASSING ZONE  
Manner of Collision: OTHER Weather:CLOUDY  
Road Surface Condition: DRY Road Char:STRAIGHT/ GRADE Light Condition:DARK-ROAD UNLIGHTED  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 5260 State of Registration: UNKNOWN  
Num of Occupants:1 Drivers Age:39 Citation Issued: NO  
Direction of Travel:SOUTH Public Property Damage:YES Sex:UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD Second Event: COLLISION WITH GUIDE RAIL  
Apparent Factors: OBSTRUCTION/DEBRIS UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1203 NON-INTERSECTION ACCIDENTS \*\*\*

JAN-13-2000 THU 12:00PM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 2000-0114974  
Accident Class: INJURY Police Agency: Num Of Veh:2  
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control:NO PASSING ZONE  
Manner of Collision: SIDESWIPE Weather:SNOW  
Road Surface Condition: SNOW/ICE Road Char:CURVE AND GRADE Light Condition:DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2644 State of Registration: UNKNOWN  
Num of Occupants: 2 Drivers Age:23 Citation Issued: NO  
Direction of Travel:NORTH Public Property Damage:NO Sex:UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNSAFE SPEED PAVEMENT SLIPPERY

Veh: 2 CAR/VAN/PICKUP Registered Weight: 4370 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age:64 Citation Issued: NO  
Direction of Travel:SOUTH Public Property Damage:NO Sex:UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNKNOWN UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1204 NON-INTERSECTION ACCIDENTS \*\*\*

Accident Verbal Description Report

Intersection & Non-Intersection Accidents

Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1204 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

OCT-20-2000 FRI 06:00PM Persons Killed 0 Persons Injured: 1 Extent of Injuries: A Case: 2000-0350004  
Accident Class: INJURY Police Agency: Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE  
Manner of Collision: REAR END Weather: CLEAR  
Road Surface Condition: DRY Road Char: STRAIGHT AND LEVEL Light Condition: DUSK  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3701 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 29 Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNKNOWN

Veh: 2 OTHER Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 18 Citation Issued: YES  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: OTHER (VEHICLE) UNKNOWN

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1204 NON-INTERSECTION ACCIDENTS \*\*\*

(Continued)

JUN-15-2001 FRI 05:00PM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 2001-1288189  
Accident Class: INJURY Police Agency: Num Of Veh: 3Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: UNKNOWN  
Manner of Collision: OTHER Weather: CLEAR  
Road Surface Condition: DRY Road Char: STRAIGHT/ GRADE Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTEREDVeh: 1 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: UNKNOWN Drivers Age: UNKNOWN Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: STOPPED IN TRAFFIC  
Apparent Factors: UNKNOWNVeh: 2 CAR/VAN/PICKUP Registered Weight: 3239 State of Registration: UNKNOWN  
Num of Occupants: 2 Drivers Age: 32 Citation Issued: YES  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: STOPPED IN TRAFFIC  
Apparent Factors: UNKNOWNVeh: 3 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 27 Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: FOLLOWING TOO CLOSELY UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1206 NON-INTERSECTION ACCIDENTS \*\*\*

OCT-28-1999 THU 07:00AM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 1999-9589499  
Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh: 1Type of Accident: COLLISION WITH ANIMAL Traffic Control: NO PASSING ZONE  
Manner of Collision: OTHER Weather: CLEAR  
Road Surface Condition: DRY Road Char: STRAIGHT/ GRADE Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTEREDVeh: 1 CAR/VAN/PICKUP Registered Weight: 3764 State of Registration: UNKNOWN  
Num of Occupants: 2 Drivers Age: 46 Citation Issued: NO  
Direction of Travel: NORTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: ANIMAL'S ACTION UNKNOWN

Accident Verbal Description Report

Intersection & Non-Intersection Accidents

Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1207 NON-INTERSECTION ACCIDENTS \*\*\*

NOV-18-1999 THU 12:00PM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 1999-9615715  
Accident Class: INJURY Police Agency: Num Of Veh: 1  
Type of Accident: COLLISION WITH GUIDE RAIL Traffic Control: NO PASSING ZONE  
Manner of Collision: OTHER Weather: CLEAR  
Road Surface Condition: DRY Road Char: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3096 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 24 Citation Issued: YES  
Direction of Travel: SOUTH Public Property Damage: YES Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNSAFE SPEED OTHER (VEHICLE)

JAN-11-2000 TUE 03:00AM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 2000-0112606  
Accident Class: INJURY Police Agency: Num Of Veh: 1  
Type of Accident: COLL. W/EARTH ELE./ROCK CUT/DITCH Traffic Control: NO PASSING ZONE  
Manner of Collision: OTHER Weather: CLOUDY  
Road Surface Condition: SNOW/ICE Road Char: CURVE AND GRADE Light Condition: DARK-ROAD UNLIGHTED  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 OTHER Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 27 Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: PAVEMENT SLIPPERY UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1208 NON-INTERSECTION ACCIDENTS \*\*\*

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1208 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

DEC-14-2000 THU 05:00PM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2000-0502566  
Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh:1Type of Accident: COLLISION WITH ANIMAL Traffic Control: NONE  
Manner of Collision: OTHER Weather: CLOUDY  
Road Surface Condition: WET Road Char: STRAIGHT AND LEVEL Light Condition: DARK-ROAD UNLIGHTED  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTEREDVeh: 1 CAR/VAN/PICKUP Registered Weight: 3052 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 49 Citation Issued: NO  
Direction of Travel: NORTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: ANIMAL'S ACTION UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1209 NON-INTERSECTION ACCIDENTS \*\*\*

JUL-22-1999 THU 10:00PM Persons Killed 0 Persons Injured: 2 Extent of Injuries: BC Case: 1999-9203287  
Accident Class: INJURY Police Agency: Num Of Veh:1Type of Accident: COLLISION WITH GUIDE RAIL Traffic Control: NO PASSING ZONE  
Manner of Collision: OTHER Weather: RAIN  
Road Surface Condition: WET Road Char: CURVE AND GRADE Light Condition: DARK-ROAD UNLIGHTED  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTEREDVeh: 1 TRUCK Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 2 Drivers Age: 23 Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: YES Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: AVOIDING OBJECT IN ROADWAY  
Apparent Factors: PAVEMENT SLIPPERY UNKNOWN  
Truck/Bus Clsf: 3 AX SINGLE UNIT BOX



Accident Verbal Description Report

Intersection & Non-Intersection Accidents

Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1209 NON-INTERSECTION ACCIDENTS \*\*\*

(Continued)

JAN-30-2001 TUE 09:00PM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2001-1135205  
Accident Class:PROPERTY DAMAGE Police Agency: Num Of Veh:1

Type of Accident: COLLISION WITH GUIDE RAIL Traffic Control:NO PASSING ZONE  
Manner of Collision: OTHER Weather:FOG/SMOG/SMOKE  
Road Surface Condition: SNOW/ICE Road Char:CURVE AND GRADE Light Condition:DARK-ROAD UNLIGHTED  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2950 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age:42 Citation Issued: NO  
Direction of Travel:SOUTH Public Property Damage: YES Sex:UNKNOWN School Bus Involved: NO  
Pre-Accd Action: OTHER  
Apparent Factors:UNSAFE SPEED PAVEMENT SLIPPERY

JAN-30-2001 TUE 09:00PM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2001-1135218  
Accident Class:PROPERTY DAMAGE Police Agency: Num Of Veh:1  
Type of Accident: COLLISION WITH SNOW EMBANKMENT Traffic Control:NO PASSING ZONE  
Manner of Collision: OTHER Weather:RAIN  
Road Surface Condition: SNOW/ICE Road Char:CURVE AND GRADE Light Condition:DARK-ROAD UNLIGHTED  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age:62 Citation Issued: NO  
Direction of Travel:SOUTH Public Property Damage: NO Sex:UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors:UNSAFE SPEED PAVEMENT SLIPPERY

\*\*\* Ref Mrkr: 22 8204 1210 NON-INTERSECTION ACCIDENTS \*\*\*

Accident Verbal Description Report

Intersection & Non-Intersection Accidents

Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999 - MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1210 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

JUN-14-2000 WED 07:00PM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 2000-0280863  
Accident Class: INJURY Police Agency: Num Of Veh:1

Type of Accident: COLLISION WITH TREE Traffic Control:NO PASSING ZONE  
Manner of Collision: OTHER Weather:CLOUDY  
Road Surface Condition: DRY Road Char:CURVE AND GRADE Light Condition:DUSK  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 2 Drivers Age:29 Sex:UNKNOWN Citation Issued: NO  
Direction of Travel:NORTH Public Property Damage:NO School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: ANIMAL'S ACTION UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1212 NON-INTERSECTION ACCIDENTS \*\*\*

APR-18-2001 WED 12:00PM Persons Killed 0 Persons Injured: 2 Extent of Injuries: BC Case: 2001-1160046  
Accident Class: INJURY Police Agency: Num Of Veh:2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control:NONE  
Manner of Collision: UNKNOWN Weather:CLEAR  
Road Surface Condition: DRY Road Char:CURVE AND GRADE Light Condition:DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Veh: 1 TRUCK Registered Weight: 80000 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age:37 Sex:UNKNOWN Citation Issued: NO  
Direction of Travel:SOUTH Public Property Damage:NO School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNSAFE SPEED  
Truck/Bus Clsf: 2 AX TRAILER, 3 AX TRACTOR BOX PASSING OR LANE USAGE IMPROPERLY

Veh: 2 CAR/VAN/PICKUP Registered Weight: 2830 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age:17 Sex:UNKNOWN Citation Issued: YES  
Direction of Travel:NORTH Public Property Damage:NO School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: PASSING OR LANE USAGE IMPROPERLY UNKNOWN

FEB-06-2002 WED 06:30PM  
Accident Class:NON-REPORTABLE

Police Agency:DUTCHESS CO SHERIFF DEPT

Case: 2002-30417341  
Num Of Veh:1

Accident Verbal Description Report

Intersection & Non-Intersection Accidents

Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999 - MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1213 NON-INTERSECTION ACCIDENTS \*\*\*

SEP-10-2000 SUN 07:00PM Persons Killed 0 Persons Injured: 1 Extent of Injuries: A Case: 2000-0377802  
Accident Class: INJURY Police Agency: Num Of Veh:1  
Type of Accident: COLLISION WITH ANIMAL Traffic Control: NO PASSING ZONE  
Manner of Collision: OTHER Weather: CLEAR  
Road Surface Condition: DRY Road Char: STRAIGHT/ GRADE Light Condition: DUSK  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 MOTORCYCLE Registered Weight: 702 State of Registration: UNKNOWN  
Num of Occupants: 2 Drivers Age: 64 Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: ANIMAL'S ACTION UNKNOWN

OCT-02-2001 TUE 02:26AM Case: 2001-30142429  
Accident Class: NON-REPORTABLE Police Agency: DOVER PLAINS SP Num Of Veh:1

\*\*\* Ref Mrkr: 22 8204 1214 NON-INTERSECTION ACCIDENTS \*\*\*

JUL-09-1999 FRI Case: 1999-9438374  
Accident Class: NON-REPORTABLE Police Agency: Num Of Veh: UNKNOWN

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1214 NON-INTERSECTION ACCIDENTS \*\*\*

(Continued)

NOV-23-2000 THU Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2000-0472645  
Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh: 2Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE  
Manner of Collision: UNKNOWN Weather: CLEAR  
Road Surface Condition: DRY Road Char: STRAIGHT/ GRADE Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTEREDVeh: 1 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 42 Citation Issued: NO  
Direction of Travel: NORTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: MAKING LEFT TURN  
Apparent Factors: UNKNOWNVeh: 2 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 2 Drivers Age: 80 Citation Issued: NO  
Direction of Travel: NORTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: FOLLOWING TOO CLOSELY UNKNOWNMAR-22-2001 THU 05:00AM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2001-1192455  
Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh: 1  
Type of Accident: COLLISION WITH ANIMAL Traffic Control: NONE  
Manner of Collision: OTHER Weather: CLOUDY  
Road Surface Condition: WET Road Char: STRAIGHT AT HILLCREST Light Condition: DAWN  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTEREDVeh: 1 CAR/VAN/PICKUP Registered Weight: 3472 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 45 Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: ANIMAL'S ACTION UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1219 NON-INTERSECTION ACCIDENTS \*\*\*

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1219 NON-INTERSECTION ACCIDENTS \*\*\*

(Continued)

JUN-22-1999 TUE 07:00AM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 1999-9402894  
 Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NONE

Manner of Collision: SIDESWIPE Weather: CLEAR

Road Surface Condition: DRY

Road Char: STRAIGHT AND LEVEL

Light Condition: DAYLIGHT

Loc. of Ped/Bicycle: NOT ENTERED

Action of Ped/Bicycle: NOT ENTERED

Veh: 1 TRUCK Registered Weight: 12000 State of Registration: UNKNOWN

Num of Occupants: 1

Drivers Age: 27

Sex: UNKNOWN

Citation Issued: NO

Pre-Accd Action: BACKING

Public Property Damage: NO

School Bus Involved: NO

Apparent Factors: BACKING UNSAFELY

Truck/Bus Clsf: 3 AX TRAILER, 3 AX TRACTOR BOX UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 2328 State of Registration: UNKNOWN

Num of Occupants: UNKNOWN

Drivers Age: UNKNOWN

Sex: UNKNOWN

Citation Issued: NO

Direction of Travel: NORTH

Public Property Damage: NO

School Bus Involved: NO

Pre-Accd Action: PARKED

Apparent Factors: UNKNOWN

AUG-11-2001 SAT 09:00PM Persons Killed 0 Persons Injured: 3 Extent of Injuries: CCC Case: 2001-1411326  
 Accident Class: INJURY Police Agency: Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE

Traffic Control: TRAFFIC SIGNAL

Manner of Collision: REAR END

Weather: CLOUDY

Road Surface Condition: DRY

Road Char: STRAIGHT AND LEVEL

Light Condition: DARK-ROAD LIGHTED

Loc. of Ped/Bicycle: NOT ENTERED

Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2671 State of Registration: UNKNOWN

Num of Occupants: 2

Drivers Age: 48

Sex: UNKNOWN

Citation Issued: NO

Direction of Travel: SOUTH

Public Property Damage: NO

School Bus Involved: NO

Pre-Accd Action: STOPPED IN TRAFFIC

Apparent Factors: UNKNOWN

UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 4827 State of Registration: UNKNOWN

Num of Occupants: 1

Drivers Age: 51

Sex: UNKNOWN

Citation Issued: NO

Direction of Travel: SOUTH

Public Property Damage: NO

School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD

Apparent Factors: FATIGUED/DROWSY

PASSING OR LANE USAGE IMPROPERLY

Accident Verbal Description Report

Intersection & Non-Intersection Accidents

Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1223 NON-INTERSECTION ACCIDENTS \*\*\*

FEB-25-2001 SUN

Accident Class:NON-REPORTABLE

Police Agency:

Case: 2001-0876768  
Num Of Veh:UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1227 NON-INTERSECTION ACCIDENTS \*\*\*

AUG-03-1999 TUE

Accident Class:NON-REPORTABLE

Police Agency:

Case: 1999-9480036  
Num Of Veh:UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1228 NON-INTERSECTION ACCIDENTS \*\*\*

JAN-13-2000

THU 11:00AM Persons Killed 0 Persons Injured: 0

Extent of Injuries:

Case: 2000-0115018

Accident Class:PROPERTY DAMAGE

Police Agency:

Num Of Veh:1

Type of Accident: COLLISION WITH GUIDE RAIL

Traffic Control:NO PASSING ZONE

Manner of Collision: OTHER

Weather:SNOW

Road Surface Condition: SNOW/ICE

Road Char:STRAIGHT/ GRADE

Light Condition:DAYLIGHT

Loc. of Ped/Bicycle: NOT ENTERED

Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP

Registered Weight: 3204

State of Registration: UNKNOWN

Num of Occupants: 1

Drivers Age:57

Sex:UNKNOWN

Citation Issued: NO

Direction of Travel:SOUTH

Public Property Damage:YES

School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD

Apparent Factors: PAVEMENT SLIPPERY

UNKNOWN

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999 - MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1228 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

DEC-22-2000 FRI 04:00PM Persons Killed 0 Persons Injured: 2 Extent of Injuries: BC Case: 2000-0517410  
Accident Class: INJURY Police Agency: Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NONE  
Manner of Collision: SIDESWIPE Weather: SNOW  
Road Surface Condition: SNOW/ICE Road Char: STRAIGHT/ GRADE Light Condition: DUSK  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3250 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 74 Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: YES Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD Second Event: COLLISION WITH GUIDE RAIL  
Apparent Factors: PASSING OR LANE USAGE IMPROPERLY PAVEMENT SLIPPERY

Veh: 2 CAR/VAN/PICKUP Registered Weight: 3187 State of Registration: UNKNOWN  
Num of Occupants: 3 Drivers Age: 75 Citation Issued: NO  
Direction of Travel: NORTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1229 NON-INTERSECTION ACCIDENTS \*\*\*

JUN-13-2000 TUE Case: 2000-0676314  
Accident Class: NON-REPORTABLE Police Agency: Num Of Veh: UNKNOWN

NOV-02-2000 THU 05:00PM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2000-0436321  
Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh: 1  
Type of Accident: COLLISION WITH ANIMAL Traffic Control: NONE  
Manner of Collision: OTHER Weather: CLEAR  
Road Surface Condition: DRY Road Char: STRAIGHT/ GRADE Light Condition: DARK-ROAD UNLIGHTED  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2677 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 46 Citation Issued: NO  
Direction of Travel: NORTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: ANIMAL'S ACTION UNKNOWN

Accident Verbal Description Report

Intersection & Non-Intersection Accidents

Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999 - MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1233 NON-INTERSECTION ACCIDENTS \*\*\*

NOV-05-1999 FRI 06:00AM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 1999-9599495  
Accident Class:PROPERTY DAMAGE Police Agency: Num Of Veh:1  
Type of Accident: COLLISION WITH ANIMAL Traffic Control:UNKNOWN  
Manner of Collision: OTHER Weather:CLEAR  
Road Surface Condition: DRY Road Char:STRAIGHT AND LEVEL Light Condition:DAWN  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3184 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age:34 Sex:UNKNOWN Citation Issued: NO  
Direction of Travel:NORTH Public Property Damage:NO School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: ANIMAL'S ACTION UNKNOWN

JAN-29-2000 SAT

Accident Class:NON-REPORTABLE

Police Agency:

Case: 2000-0572908  
Num Of Veh:UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1234 NON-INTERSECTION ACCIDENTS \*\*\*

AUG-10-2001 FRI 04:00AM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 2001-1409104  
Accident Class:INJURY Police Agency: Num Of Veh:1  
Type of Accident: COLL. W/EARTH ELE./ROCK CUT/DITCH Traffic Control:NONE  
Manner of Collision: OTHER Weather:CLEAR  
Road Surface Condition: DRY Road Char:STRAIGHT AND LEVEL Light Condition:DAWN  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2009 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age:39 Sex:UNKNOWN Citation Issued: NO  
Direction of Travel:NORTH Public Property Damage:YES School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD Second Event: COLLISION WITH GUIDE RAIL  
Apparent Factors: FATIGUED/DROWSY UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1235 NON-INTERSECTION ACCIDENTS \*\*\*



Accident Verbal Description Report

Intersection & Non-Intersection Accidents

Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1235 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

SEP-15-1999 WED 06:00AM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 1999-9540733  
Accident Class:PROPERTY DAMAGE Police Agency: Num Of Veh:1

Type of Accident: COLLISION WITH ANIMAL Traffic Control:NO PASSING ZONE  
Manner of Collision: OTHER Weather:CLOUDY  
Road Surface Condition: DRY Road Char:CURVE AND LEVEL Light Condition:DARK-ROAD UNLIGHTED  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age:39 Sex:UNKNOWN Citation Issued: NO  
Direction of Travel:SOUTH Public Property Damage:NO School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD UNKNOWN  
Apparent Factors: ANIMAL'S ACTION

APR-18-2000 TUE 02:00PM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2000-0219496  
Accident Class:PROPERTY DAMAGE Police Agency: Num Of Veh:1  
Type of Accident: COLLISION WITH ANIMAL Traffic Control:NO PASSING ZONE  
Manner of Collision: OTHER Weather:CLOUDY  
Road Surface Condition: DRY Road Char:CURVE AND LEVEL Light Condition:DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2824 State of Registration: UNKNOWN  
Num of Occupants: 3 Drivers Age:32 Sex:UNKNOWN Citation Issued: NO  
Direction of Travel:SOUTH Public Property Damage:NO School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD UNKNOWN  
Apparent Factors: ANIMAL'S ACTION

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1235 NON-INTERSECTION ACCIDENTS \*\*\*

(Continued)

FEB-02-2001 FRI 09:00PM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2001-1138542  
Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh:1

Type of Accident: COLLISION WITH GUIDE RAIL Traffic Control:NO PASSING ZONE

Manner of Collision: OTHER Weather:SNOW

Road Surface Condition: SNOW/ICE

Road Char:STRAIGHT AND LEVEL

Light Condition:DARK-ROAD UNLIGHTED

Loc. of Ped/Bicycle: NOT ENTERED

Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP

Registered Weight: 5150

State of Registration: UNKNOWN

Num of Occupants: 1

Drivers Age:36

Citation Issued: NO

Direction of Travel:SOUTH

Public Property Damage:YES

Sex:UNKNOWN

School Bus Involved: NO

Pre-Accd Action: MAKING LEFT TURN

Apparent Factors: OTHER (VEHICLE)

PAVEMENT SLIPPERY

\*\*\* Ref Mrkr: 22 8204 1236 NON-INTERSECTION ACCIDENTS \*\*\*

JAN-19-2000 WED 05:00PM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 2000-0122810  
Accident Class: INJURY Police Agency: Num Of Veh:1

Type of Accident: COLLISION WITH ANIMAL

Traffic Control:NONE

Manner of Collision: OTHER Weather:CLEAR

Road Surface Condition: DRY

Road Char:STRAIGHT AND LEVEL

Light Condition:DARK-ROAD UNLIGHTED

Loc. of Ped/Bicycle: NOT ENTERED

Action of Ped/Bicycle:NOT ENTERED

Veh: 1 CAR/VAN/PICKUP

Registered Weight: 3500

State of Registration: UNKNOWN

Num of Occupants: 1

Drivers Age:39

Citation Issued: NO

Direction of Travel:NORTH

Public Property Damage:NO

Sex:UNKNOWN

School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD

Apparent Factors: ANIMAL'S ACTION

UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1237 NON-INTERSECTION ACCIDENTS \*\*\*

# Accident Verbal Description Report

## Intersection & Non-Intersection Accidents

### Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1237 NON-INTERSECTION ACCIDENTS \*\*\*

(Continued)

SEP-06-1999 MON 01:00AM Persons Killed 0 Persons Injured: 1 Extent of Injuries: B Case: 1999-9531490  
 Accident Class: INJURY Police Agency: Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE  
 Manner of Collision: SIDESWIPE Weather: CLEAR  
 Road Surface Condition: DRY Road Char: STRAIGHT AND LEVEL Light Condition: DARK-ROAD UNLIGHTED  
 Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2083 State of Registration: UNKNOWN  
 Num of Occupants: 1 Drivers Age: 62 Citation Issued: NO  
 Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: PASSING OR LANE USAGE IMPROPERLY UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
 Num of Occupants: 1 Drivers Age: 27 Citation Issued: NO  
 Direction of Travel: NORTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: PASSING OR LANE USAGE IMPROPERLY UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1238 NON-INTERSECTION ACCIDENTS \*\*\*

OCT-18-1999 MON 07:00AM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 1999-9577747  
 Accident Class: PROPERTY DAMAGE Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE  
 Manner of Collision: REAR END Weather: CLOUDY  
 Road Surface Condition: WET Road Char: CURVE AND LEVEL Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
 Num of Occupants: 1 Drivers Age: 46 Citation Issued: NO  
 Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: DRIVER INATTENTION PAVEMENT SLIPPERY

Veh: 2 CAR/VAN/PICKUP Registered Weight: 4343 State of Registration: UNKNOWN  
 Num of Occupants: 1 Drivers Age: 35 Citation Issued: NO  
 Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
 Pre-Accd Action: SLOWED OR STOPPING Second Event: COLL. W/EARTH ELE./ROCK CUT/DITCH  
 Apparent Factors: UNKNOWN

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1238 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

APR-17-2000 MON 07:00AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2000-0218940  
Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh:1Type of Accident: COLLISION WITH ANIMAL Traffic Control:NONE  
Manner of Collision: OTHER Weather:CLOUDY  
Road Surface Condition: WET Road Char:STRAIGHT AND LEVEL Light Condition:UNKNOWN  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle:NOT ENTEREDVeh: 1 CAR/VAN/PICKUP Registered Weight: 2250 State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age:43 Sex:UNKNOWN Citation Issued: NO  
Direction of Travel:SOUTH Public Property Damage:NO School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD UNKNOWN  
Apparent Factors: UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1239 INVALID INTERSECTION NUMBER \*\*\*

JUL-03-2000 MON Accident Class:NON-REPORTABLE Police Agency: Case: 2000-0692664  
Num Of Veh:UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1241 NON-INTERSECTION ACCIDENTS \*\*\*

OCT-25-2001 THU 01:55PM Police Agency:DUTCHESS CO SHERIFF DEPT Case: 2001-30175163  
Accident Class:NON-REPORTABLE Num Of Veh:2

\*\*\* Ref Mrkr: 22 8204 1242 INVALID INTERSECTION NUMBER \*\*\*

# Accident Verbal Description Report

## Intersection & Non-Intersection Accidents

### Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1242 INVALID INTERSECTION NUMBER \*\*\* (Continued)

AUG-19-2001 SUN 02:00PM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 2001-1429694  
Accident Class: INJURY Police Agency: Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NONE  
Manner of Collision: REAR END Weather: CLEAR  
Road Surface Condition: DRY Road Char: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 4 Drivers Age: 16 Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: STOPPED IN TRAFFIC  
Apparent Factors: UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 45 Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: DRIVER INATTENTION FOLLOWING TOO CLOSELY

\*\*\* Ref Mrkr: 22 8204 1243 INVALID INTERSECTION NUMBER \*\*\*

OCT-21-2000 SAT 12:00PM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2000-0424160  
Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE  
Manner of Collision: LEFT TURN (AGAINST OTHER CAR) Weather: CLEAR  
Road Surface Condition: DRY Road Char: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 34 Citation Issued: YES  
Direction of Travel: NORTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: MAKING LEFT TURN  
Apparent Factors: FAILURE TO YIELD RIGHT OF WAY UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
Num of Occupants: 1 Drivers Age: 65 Citation Issued: NO  
Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: UNKNOWN

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1243 INVALID INTERSECTION NUMBER \*\*\* (Continued)

JAN-02-2001 TUE 12:00PM Persons Killed 0 Persons Injured: 2 Extent of Injuries: AA Case: 2001-1102168  
 Accident Class: INJURY Police Agency: Num Of Veh: 1  
 Type of Accident: COLLISION WITH PEDESTRIAN Traffic Control: NO PASSING ZONE  
 Manner of Collision: OTHER Weather: CLEAR  
 Road Surface Condition: DRY Road Char: STRAIGHT/ GRADE Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: PED/BICYCLIST AT INTERSECTION Action of Ped/Bicycle: CROSSING, NO SIGNAL OR CROSSWALK

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2026 State of Registration: UNKNOWN  
 Num of Occupants: 1 Drivers Age: 42 Citation Issued: NO  
 Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: VIEW OBSTRUCTED/LIMITED GLARE

Veh: 2 PEDESTRIAN Registered Weight: UNKNOWN State of Registration: UNKNOWN  
 Num of Occupants: N/A Pedestrian Age: 75 Citation Issued: NO  
 Direction of Travel: UNKNOWN Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
 Pre-Accd Action: UNKNOWN  
 Apparent Factors: VIEW OBSTRUCTED/LIMITED PEDESTRIAN'S ERROR/CONFUSION

Veh: 3 PEDESTRIAN Registered Weight: UNKNOWN State of Registration: UNKNOWN  
 Num of Occupants: N/A Pedestrian Age: 88 Citation Issued: NO  
 Direction of Travel: UNKNOWN Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
 Pre-Accd Action: UNKNOWN  
 Apparent Factors: UNKNOWN UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1243 NON-INTERSECTION ACCIDENTS \*\*\*

MAR-04-2001 SUN 06:00PM Persons Killed 0 Persons Injured: 4 Extent of Injuries: CXCB Case: 2001-1172071  
 Accident Class: INJURY Police Agency: Num Of Veh: 1  
 Type of Accident: COLLISION WITH CURBING Traffic Control: NO PASSING ZONE  
 Manner of Collision: OTHER Weather: SNOW  
 Road Surface Condition: SNOW/ICE Road Char: STRAIGHT AND LEVEL Light Condition: DARK-ROAD LIGHTED  
 Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3895 State of Registration: UNKNOWN  
 Num of Occupants: 5 Drivers Age: 25 Citation Issued: YES  
 Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
 Pre-Accd Action: GOING STRAIGHT AHEAD Second Event: OVERTURNED  
 Apparent Factors: UNSAFE SPEED OTHER (HUMAN)

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1243 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

JAN-20-2002 SUN 10:55AM

Accident Class:NON-REPORTABLE

Police Agency:DOVER PLAINS SP

Case: 2002-30353818  
Num Of Veh:2

\*\*\* Ref Mrkr: 22 8204 1245 NON-INTERSECTION ACCIDENTS \*\*\*

MAR-18-2000 SAT 11:00AM Persons Killed 0 Persons Injured: 0 Extent of Injuries:

Accident Class:PROPERTY DAMAGE

Police Agency:

Type of Accident: COLLISION WITH MOTOR VEHICLE

Traffic Control:UNKNOWN

Manner of Collision: OVERTAKING

Weather:CLEAR

Road Surface Condition: DRY

Road Char:STRAIGHT AND LEVEL

Light Condition:UNKNOWN

Loc. of Ped/Bicycle: NOT ENTERED

Action of Ped/Bicycle:NOT ENTERED

Case: 2000-0189983  
Num Of Veh:2

Veh: 1 CAR/VAN/PICKUP

Registered Weight: 3185

State of Registration: UNKNOWN

Num of Occupants: 1

Drivers Age:49

Sex:UNKNOWN

Citation Issued: NO

Direction of Travel:SOUTH

Public Property Damage: NO

School Bus Involved: NO

Pre-Accd Action: GOING STRAIGHT AHEAD

Apparent Factors: UNKNOWN

UNKNOWN

Veh: 2 CAR/VAN/PICKUP

Registered Weight: 2238

State of Registration: UNKNOWN

Num of Occupants: 1

Drivers Age:18

Sex:UNKNOWN

Citation Issued: NO

Direction of Travel:SOUTH

Public Property Damage: NO

School Bus Involved: NO

Pre-Accd Action: MERGING

Apparent Factors: UNKNOWN

UNKNOWN

## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1245 NON-INTERSECTION ACCIDENTS \*\*\* (Continued)

OCT-08-2000 SUN 03:00PM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2000-0409041  
 Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: UNKNOWN  
 Manner of Collision: SIDESWIPE Weather: UNKNOWN  
 Road Surface Condition: UNKNOWN Road Char: UNKNOWN Light Condition: UNKNOWN  
 Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2893 State of Registration: UNKNOWN  
 Num of Occupants: 1 Drivers Age: 31 Citation Issued: NO  
 Direction of Travel: NORTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: UNKNOWN UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 3500 State of Registration: UNKNOWN  
 Num of Occupants: 3 Drivers Age: 59 Citation Issued: NO  
 Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: UNKNOWN UNKNOWN

MAR-14-2001 WED 08:00PM Persons Killed 0 Persons Injured: 0 Extent of Injuries: Case: 2001-1182741  
 Accident Class: PROPERTY DAMAGE Police Agency: Num Of Veh: 1  
 Type of Accident: COLLISION WITH ANIMAL Traffic Control: NO PASSING ZONE  
 Manner of Collision: OTHER Weather: CLOUDY  
 Road Surface Condition: DRY Road Char: STRAIGHT AND LEVEL Light Condition: DARK-ROAD LIGHTED  
 Loc. of Ped/Bicycle: NOT ENTERED Action of Ped/Bicycle: NOT ENTERED

Veh: 1 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: UNKNOWN  
 Num of Occupants: 1 Drivers Age: 56 Citation Issued: NO  
 Direction of Travel: SOUTH Public Property Damage: NO Sex: UNKNOWN School Bus Involved: NO  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: ANIMAL'S ACTION UNKNOWN

APR-18-2001 WED Accident Class: NON-REPORTABLE Police Agency: Case: 2001-1250512  
 Num Of Veh: UNKNOWN



## Accident Verbal Description Report

## Intersection &amp; Non-Intersection Accidents

## Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1245 NON-INTERSECTION ACCIDENTS \*\*\*

(Continued)

MAY-24-2002 FRI 02:25PM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 2002-30563401  
 Accident Class: INJURY Police Agency: DUTCHESS CO SHERIFF DEPT Num Of Veh: 2

Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE  
 Manner of Collision: REAR END Weather: CLEAR  
 Road Surface Condition: DRY Road Char: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 4073 State of Registration: NY  
 Num of Occupants: 1 Drivers Age: 48 Citation Issued: NO  
 Direction of Travel: SOUTH Public Property Damage: NO Sex: FEMALE School Bus Involved: NO  
 Pre-Accd Action: STOPPED IN TRAFFIC  
 Apparent Factors: NOT APPLICABLE UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: CT  
 Num of Occupants: 1 Drivers Age: 50 Citation Issued: NO  
 Direction of Travel: SOUTH Public Property Damage: NO Sex: MALE School Bus Involved: NO  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: FOLLOWING TOO CLOSELY UNKNOWN

\*\*\* Ref Mrkr: 22 8204 1245 INTERSECTION ACCIDENTS - JCT NY 44 END ROUTE 343 OVERLAP \*\*\*

APR-08-2002 MON 07:45PM Persons Killed 0 Persons Injured: 1 Extent of Injuries: C Case: 2002-30522235  
 Accident Class: INJURY Police Agency: DOVER PLAINS SP Num Of Veh: 2  
 Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: RIGHT ANGLE Weather: CLEAR  
 Road Surface Condition: DRY Road Char: STRAIGHT AND LEVEL Light Condition: DARK-ROAD LIGHTED  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 6300 State of Registration: NY  
 Num of Occupants: 1 Drivers Age: 44 Citation Issued: NO  
 Direction of Travel: SOUTH Public Property Damage: NO Sex: MALE School Bus Involved: NO  
 Pre-Accd Action: MAKING LEFT TURN  
 Apparent Factors: NOT APPLICABLE UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: CT  
 Num of Occupants: 2 Drivers Age: 17 Citation Issued: YES  
 Direction of Travel: EAST Public Property Damage: NO Sex: FEMALE School Bus Involved: NO  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: TRAFFIC CONTROL DEVICES DISREGARDED UNKNOWN

Accident Verbal Description Report

Intersection & Non-Intersection Accidents

Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 8204 1190- 22 8204 1245 Dates: JUN-01-1999- MAY-31-2002

\*\*\* Ref Mrkr: 22 8204 1245 INTERSECTION ACCIDENTS - JCT NY 44 END ROUTE 343 OVERLAP \*\*\* (Continued)

MAY-04-2002 SAT05:20PM

Accident Class: NON-REPORTABLE

Police Agency RHINEBECK SP

Case: 2002-30591728  
Num Of Veh: 2

Accident Verbal Description Report

Intersection & Non-Intersection Accidents

Complete Accident Data Only Available thru MAY-31-2002

Route: 22 Highway Location Ref Mrkr Range: 22 82041190 - 22 82041245 Dates: JUN-01-1999- MAY-31-2002

Total Number of Accidents Printed 67

Absence of Reference Marker or Intersection within a specified roadway section & time period indicates no accidents found

Reference Markers

The following were not active for the entire date range requested:

Intersection Reference Marker and Intersection Numbers									
22	8204	1214	01	22	8204	1218	01		

\*\*\* End of Report \*\*\*

















## **APPENDIX F: CAPACITY ANALYSES**

## **1. PROPOSED ACTION**

Lanes, Volumes, Timings  
1: Route 44 & Route 22















2007-Existing AM Peak Hour

5/30/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	77	9	49	101	40	15	112	74	27	156	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.969			0.946			0.961	
Flt Protected		0.976			0.986			0.995			0.993	
Satd. Flow (prot)	0	1805	0	0	1780	0	0	1753	0	0	1778	0
Flt Permitted		0.776			0.851			0.942			0.921	
Satd. Flow (perm)	0	1435	0	0	1536	0	0	1660	0	0	1649	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			23			53			33	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			2173			2614			1552	
Travel Time (s)		12.8			42.3			50.9			30.2	
Peak Hour Factor	0.79	0.75	0.75	0.71	0.85	0.70	0.54	0.83	0.68	0.59	0.85	0.83
Adj. Flow (vph)	114	103	12	69	119	57	28	135	109	46	184	94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	229	0	0	245	0	0	272	0	0	324	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (ft)	50	76		50	76		50	76		50	76	
Trailing Detector (ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Position(ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Size(ft)	50	40		50	40		50	40		50	40	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		36			36			36			36	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		3			3			1			1	
Permitted Phases	3			3			1			1		
Detector Phase	3	3		3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	8.0	8.0		8.0	8.0		16.0	16.0		16.0	16.0	

















Lanes, Volumes, Timings  
1: Route 44 & Route 22

2007-Existing AM Peak Hour  
5/30/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	41.0	41.0	0.0	41.0	41.0	0.0	43.0	43.0	0.0	43.0	43.0	0.0
Total Split (%)	48.8%	48.8%	0.0%	48.8%	48.8%	0.0%	51.2%	51.2%	0.0%	51.2%	51.2%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		14.5			14.5			15.8			15.8	
Actuated g/C Ratio		0.37			0.37			0.41			0.41	
v/c Ratio		0.42			0.42			0.38			0.47	
Control Delay		12.1			11.0			9.0			10.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		12.1			11.0			9.0			10.9	
LOS		B			B			A			B	
Approach Delay		12.1			11.0			9.0			10.9	
Approach LOS		B			B			A			B	
Queue Length 50th (ft)		30			29			27			38	
Queue Length 95th (ft)		73			85			82			111	
Internal Link Dist (ft)		575			2093			2534			1472	
Turn Bay Length (ft)												
Base Capacity (vph)		878			947			1073			1059	
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		0.26			0.26			0.25			0.31	
Intersection Summary												
Area Type:	Other											
Cycle Length: 84												
Actuated Cycle Length: 38.7												
Natural Cycle: 40												
Control Type: Actuated-Uncoordinated												
Maximum v/c Ratio: 0.47												
Intersection Signal Delay: 10.7						Intersection LOS: B						
Intersection Capacity Utilization 45.3%						ICU Level of Service A						
Analysis Period (min) 15												
Splits and Phases: 1: Route 44 & Route 22												
 ø1						 ø3						
43 s						41 s						

Lanes, Volumes, Timings  
1: Route 44 & Route 22















2012-No Build AM Peak Hour  
5/30/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	85	10	54	112	44	17	124	82	30	172	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.969			0.946			0.961	
Flt Protected		0.976			0.986			0.995			0.993	
Satd. Flow (prot)	0	1805	0	0	1780	0	0	1753	0	0	1778	0
Flt Permitted		0.756			0.853			0.938			0.916	
Satd. Flow (perm)	0	1398	0	0	1540	0	0	1653	0	0	1640	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			23			54			33	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			2173			2614			1552	
Travel Time (s)		12.8			42.3			50.9			30.2	
Peak Hour Factor	0.79	0.75	0.75	0.71	0.85	0.70	0.54	0.83	0.68	0.59	0.85	0.83
Adj. Flow (vph)	125	113	13	76	132	63	31	149	121	51	202	104
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	251	0	0	271	0	0	301	0	0	357	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (ft)	50	76		50	76		50	76		50	76	
Trailing Detector (ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Position(ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Size(ft)	50	40		50	40		50	40		50	40	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		36			36			36			36	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		3			3			1			1	
Permitted Phases	3			3			1			1		
Detector Phase	3	3		3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	8.0	8.0		8.0	8.0		16.0	16.0		16.0	16.0	



Lanes, Volumes, Timings  
1: Route 44 & Route 22

















2012-No Build AM Peak Hour  
5/30/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	41.0	41.0	0.0	41.0	41.0	0.0	43.0	43.0	0.0	43.0	43.0	0.0
Total Split (%)	48.8%	48.8%	0.0%	48.8%	48.8%	0.0%	51.2%	51.2%	0.0%	51.2%	51.2%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		16.0			16.0			17.5			17.5	
Actuated g/C Ratio		0.38			0.38			0.42			0.42	
v/c Ratio		0.47			0.45			0.42			0.51	
Control Delay		13.7			12.3			9.8			12.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		13.7			12.3			9.8			12.0	
LOS		B			B			A			B	
Approach Delay		13.7			12.3			9.8			12.0	
Approach LOS		B			B			A			B	
Queue Length 50th (ft)		38			38			34			48	
Queue Length 95th (ft)		90			105			95			129	
Internal Link Dist (ft)		575			2093			2534			1472	
Turn Bay Length (ft)												
Base Capacity (vph)		833			925			1045			1029	
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		0.30			0.29			0.29			0.35	
Intersection Summary												
Area Type:	Other											
Cycle Length: 84												
Actuated Cycle Length: 42												
Natural Cycle: 40												
Control Type: Actuated-Uncoordinated												
Maximum v/c Ratio: 0.51												
Intersection Signal Delay: 11.9						Intersection LOS: B						
Intersection Capacity Utilization 49.2%						ICU Level of Service A						
Analysis Period (min) 15												
Splits and Phases: 1: Route 44 & Route 22												
 ø1				 ø3								
43 s				41 s								

Lanes, Volumes, Timings  
1: Route 44 & Route 22















2012-Build AM Peak Hour

5/30/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	107	91	13	67	118	44	26	185	82	30	214	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992			0.971			0.958			0.964	
Flt Protected		0.976			0.984			0.994			0.994	
Satd. Flow (prot)	0	1803	0	0	1780	0	0	1774	0	0	1785	0
Flt Permitted		0.731			0.838			0.914			0.915	
Satd. Flow (perm)	0	1351	0	0	1516	0	0	1631	0	0	1643	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			21			36			29	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			2173			2614			1552	
Travel Time (s)		12.8			42.3			50.9			30.2	
Peak Hour Factor	0.79	0.75	0.75	0.71	0.85	0.70	0.54	0.83	0.68	0.59	0.85	0.83
Adj. Flow (vph)	135	121	17	94	139	63	48	223	121	51	252	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	273	0	0	296	0	0	392	0	0	413	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (ft)	50	76		50	76		50	76		50	76	
Trailing Detector (ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Position(ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Size(ft)	50	40		50	40		50	40		50	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		36			36			36			36	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		3			3			1			1	
Permitted Phases	3			3			1			1		
Detector Phase	3	3		3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	8.0	8.0		8.0	8.0		16.0	16.0		16.0	16.0	

Lanes, Volumes, Timings  
1: Route 44 & Route 22

















2012-Build AM Peak Hour  
5/30/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	41.0	41.0	0.0	41.0	41.0	0.0	43.0	43.0	0.0	43.0	43.0	0.0
Total Split (%)	48.8%	48.8%	0.0%	48.8%	48.8%	0.0%	51.2%	51.2%	0.0%	51.2%	51.2%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		18.4			18.4			20.6			20.6	
Actuated g/C Ratio		0.38			0.38			0.43			0.43	
v/c Ratio		0.52			0.49			0.54			0.57	
Control Delay		16.3			14.6			13.1			13.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		16.3			14.6			13.1			13.9	
LOS		B			B			B			B	
Approach Delay		16.3			14.6			13.1			13.9	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		49			49			60			66	
Queue Length 95th (ft)		115			136			157			177	
Internal Link Dist (ft)		575			2093			2534			1472	
Turn Bay Length (ft)												
Base Capacity (vph)		770			870			992			996	
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		0.35			0.34			0.40			0.41	
Intersection Summary												
Area Type:	Other											
Cycle Length: 84												
Actuated Cycle Length: 47.8												
Natural Cycle: 40												
Control Type: Actuated-Uncoordinated												
Maximum v/c Ratio: 0.57												
Intersection Signal Delay: 14.3							Intersection LOS: B					
Intersection Capacity Utilization 50.8%							ICU Level of Service A					
Analysis Period (min) 15												
Splits and Phases: 1: Route 44 & Route 22												
 ø1				 ø3								
43 s				41 s								

Lanes, Volumes, Timings  
1: Route 44 & Route 22

2007-Existing PM Peak Hour













5/30/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	129	104	13	74	106	90	19	241	103	83	183	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.958			0.955			0.969	
Flt Protected		0.974			0.986			0.998			0.987	
Satd. Flow (prot)	0	1798	0	0	1760	0	0	1775	0	0	1782	0
Flt Permitted		0.664			0.847			0.974			0.775	
Satd. Flow (perm)	0	1226	0	0	1511	0	0	1733	0	0	1399	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			34			39			24	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			2173			2614			1552	
Travel Time (s)		12.8			42.3			50.9			30.2	
Peak Hour Factor	0.83	0.93	0.65	0.80	0.80	0.90	0.95	0.84	0.68	0.69	0.83	0.86
Adj. Flow (vph)	155	112	20	92	132	100	20	287	151	120	220	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	287	0	0	324	0	0	458	0	0	440	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (ft)	50	76		50	76		50	76		50	76	
Trailing Detector (ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Position(ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Size(ft)	50	40		50	40		50	40		50	40	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		36			36			36			36	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		3			3			1			1	
Permitted Phases	3			3			1			1		
Detector Phase	3	3		3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	8.0	8.0		8.0	8.0		16.0	16.0		16.0	16.0	









Lanes, Volumes, Timings  
1: Route 44 & Route 22

2007-Existing PM Peak Hour  
5/30/2007

















												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	41.0	41.0	0.0	41.0	41.0	0.0	43.0	43.0	0.0	43.0	43.0	0.0
Total Split (%)	48.8%	48.8%	0.0%	48.8%	48.8%	0.0%	51.2%	51.2%	0.0%	51.2%	51.2%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		22.4			22.4			26.3			26.3	
Actuated g/C Ratio		0.39			0.39			0.46			0.46	
v/c Ratio		0.60			0.53			0.56			0.68	
Control Delay		21.0			16.8			14.6			19.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		21.0			16.8			14.6			19.0	
LOS		C			B			B			B	
Approach Delay		21.0			16.8			14.6			19.0	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)		72			71			90			97	
Queue Length 95th (ft)		181			147			217			235	
Internal Link Dist (ft)		575			2093			2534			1472	
Turn Bay Length (ft)												
Base Capacity (vph)		647			810			999			803	
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		0.44			0.40			0.46			0.55	
Intersection Summary												
Area Type:	Other											
Cycle Length: 84												
Actuated Cycle Length: 57.6												
Natural Cycle: 40												
Control Type: Actuated-Uncoordinated												
Maximum v/c Ratio: 0.68												
Intersection Signal Delay: 17.6						Intersection LOS: B						
Intersection Capacity Utilization 73.9%						ICU Level of Service D						
Analysis Period (min) 15												

Splits and Phases: 1: Route 44 & Route 22

					
ø1			ø3		
43 s			41 s		













Lanes, Volumes, Timings  
1: Route 44 & Route 22

2012-No Build PM Peak Hour  
5/30/2007



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	142	115	14	82	117	99	21	266	114	92	202	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.959			0.955			0.969	
Flt Protected		0.974			0.986			0.998			0.987	
Satd. Flow (prot)	0	1798	0	0	1761	0	0	1775	0	0	1782	0
Flt Permitted		0.618			0.829			0.971			0.734	
Satd. Flow (perm)	0	1141	0	0	1481	0	0	1727	0	0	1325	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			34			40			23	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			2173			2614			1552	
Travel Time (s)		12.8			42.3			50.9			30.2	
Peak Hour Factor	0.83	0.93	0.65	0.80	0.80	0.90	0.95	0.84	0.68	0.69	0.83	0.86
Adj. Flow (vph)	171	124	22	102	146	110	22	317	168	133	243	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	317	0	0	358	0	0	507	0	0	486	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (ft)	50	76		50	76		50	76		50	76	
Trailing Detector (ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Position(ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Size(ft)	50	40		50	40		50	40		50	40	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		36			36			36			36	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		3			3			1			1	
Permitted Phases	3			3			1			1		
Detector Phase	3	3		3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	8.0	8.0		8.0	8.0		16.0	16.0		16.0	16.0	

Lanes, Volumes, Timings  
1: Route 44 & Route 22

2012-No Build PM Peak Hour  
5/30/2007

















												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	41.0	41.0	0.0	41.0	41.0	0.0	43.0	43.0	0.0	43.0	43.0	0.0
Total Split (%)	48.8%	48.8%	0.0%	48.8%	48.8%	0.0%	51.2%	51.2%	0.0%	51.2%	51.2%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		25.8			25.8			31.6			31.6	
Actuated g/C Ratio		0.39			0.39			0.48			0.48	
v/c Ratio		0.70			0.60			0.60			0.75	
Control Delay		27.4			19.9			16.3			24.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		27.4			19.9			16.3			24.0	
LOS		C			B			B			C	
Approach Delay		27.4			19.9			16.3			24.0	
Approach LOS		C			B			B			C	
Queue Length 50th (ft)		114			112			134			150	
Queue Length 95th (ft)		215			168			248			284	
Internal Link Dist (ft)		575			2093			2534			1472	
Turn Bay Length (ft)												
Base Capacity (vph)		561			741			950			725	
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		0.57			0.48			0.53			0.67	
Intersection Summary												
Area Type:	Other											
Cycle Length: 84												
Actuated Cycle Length: 66.1												
Natural Cycle: 45												
Control Type: Actuated-Uncoordinated												
Maximum v/c Ratio: 0.75												
Intersection Signal Delay: 21.4						Intersection LOS: C						
Intersection Capacity Utilization 80.5%						ICU Level of Service D						
Analysis Period (min) 15												

Splits and Phases: 1: Route 44 & Route 22

	
ø1	ø3
43 s	41 s

Lanes, Volumes, Timings  
1: Route 44 & Route 22













2012-Build PM Peak Hour  
5/30/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	149	121	20	111	127	99	26	314	135	92	272	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.964			0.955			0.972	
Flt Protected		0.974			0.983			0.998			0.989	
Satd. Flow (prot)	0	1793	0	0	1765	0	0	1775	0	0	1791	0
Flt Permitted		0.593			0.770			0.963			0.730	
Satd. Flow (perm)	0	1091	0	0	1383	0	0	1713	0	0	1322	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			28			40			21	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			2173			2614			1552	
Travel Time (s)		12.8			42.3			50.9			30.2	
Peak Hour Factor	0.83	0.93	0.65	0.80	0.80	0.90	0.95	0.84	0.68	0.69	0.83	0.86
Adj. Flow (vph)	180	130	31	139	159	110	27	374	199	133	328	120
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	341	0	0	408	0	0	600	0	0	581	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (ft)	50	76		50	76		50	76		50	76	
Trailing Detector (ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Position(ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Size(ft)	50	40		50	40		50	40		50	40	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		36			36			36			36	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		3			3			1			1	
Permitted Phases	3			3			1			1		
Detector Phase	3	3		3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	8.0	8.0		8.0	8.0		16.0	16.0		16.0	16.0	







Lanes, Volumes, Timings  
1: Route 44 & Route 22

2012-Build PM Peak Hour  
5/30/2007

















												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	41.0	41.0	0.0	41.0	41.0	0.0	43.0	43.0	0.0	43.0	43.0	0.0
Total Split (%)	48.8%	48.8%	0.0%	48.8%	48.8%	0.0%	51.2%	51.2%	0.0%	51.2%	51.2%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		28.7			28.7			39.4			39.4	
Actuated g/C Ratio		0.38			0.38			0.52			0.52	
v/c Ratio		0.82			0.76			0.66			0.84	
Control Delay		37.6			28.7			18.8			30.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		37.6			28.7			18.8			30.9	
LOS		D			C			B			C	
Approach Delay		37.6			28.7			18.8			30.9	
Approach LOS		D			C			B			C	
Queue Length 50th (ft)		138			152			192			224	
Queue Length 95th (ft)		#246			210			320			#424	
Internal Link Dist (ft)		575			2093			2534			1472	
Turn Bay Length (ft)												
Base Capacity (vph)		485			625			906			694	
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		0.70			0.65			0.66			0.84	
Intersection Summary												
Area Type:	Other											
Cycle Length: 84												
Actuated Cycle Length: 76.2												
Natural Cycle: 50												
Control Type: Actuated-Uncoordinated												
Maximum v/c Ratio: 0.84												
Intersection Signal Delay: 27.9						Intersection LOS: C						
Intersection Capacity Utilization 87.3%						ICU Level of Service E						
Analysis Period (min) 15												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												

Splits and Phases: 1: Route 44 & Route 22

			
ø1		ø3	
43 s		41 s	

Lanes, Volumes, Timings  
11: Route 44 & Route 22













2007-Existing Sat. Peak Hour  
5/30/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	136	119	15	84	112	78	22	239	90	76	177	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.962			0.969			0.947	
Flt Protected		0.974			0.987			0.996			0.991	
Satd. Flow (prot)	0	1794	0	0	1769	0	0	1798	0	0	1748	0
Flt Permitted		0.639			0.838			0.939			0.847	
Satd. Flow (perm)	0	1177	0	0	1502	0	0	1695	0	0	1494	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			29			24			52	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			2173			2614			1552	
Travel Time (s)		12.8			42.3			50.9			30.2	
Peak Hour Factor	0.72	0.85	0.54	0.88	0.68	0.78	0.55	0.77	0.87	0.90	0.96	0.69
Adj. Flow (vph)	189	140	28	95	165	100	40	310	103	84	184	175
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	357	0	0	360	0	0	453	0	0	443	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (ft)	50	76		50	76		50	76		50	76	
Trailing Detector (ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Position(ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Size(ft)	50	40		50	40		50	40		50	40	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		36			36			36			36	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		3			3			1			1	
Permitted Phases	3			3			1			1		
Detector Phase	3	3		3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	8.0	8.0		8.0	8.0		16.0	16.0		16.0	16.0	







Lanes, Volumes, Timings  
11: Route 44 & Route 22

2007-Existing Sat. Peak Hour

5/30/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	41.0	41.0	0.0	41.0	41.0	0.0	43.0	43.0	0.0	43.0	43.0	0.0
Total Split (%)	48.8%	48.8%	0.0%	48.8%	48.8%	0.0%	51.2%	51.2%	0.0%	51.2%	51.2%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		26.3			26.3			25.6			25.6	
Actuated g/C Ratio		0.43			0.43			0.42			0.42	
v/c Ratio		0.70			0.54			0.62			0.67	
Control Delay		23.8			16.5			18.3			19.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.8			16.5			18.3			19.2	
LOS		C			B			B			B	
Approach Delay		23.8			16.5			18.3			19.2	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)		98			84			118			110	
Queue Length 95th (ft)		224			134			195			247	
Internal Link Dist (ft)		575			2093			2534			1472	
Turn Bay Length (ft)												
Base Capacity (vph)		626			809			923			828	
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		0.57			0.44			0.49			0.54	
Intersection Summary												
Area Type:	Other											
Cycle Length: 84												
Actuated Cycle Length: 60.8												
Natural Cycle: 40												
Control Type: Actuated-Uncoordinated												
Maximum v/c Ratio: 0.70												
Intersection Signal Delay: 19.3					Intersection LOS: B							
Intersection Capacity Utilization 74.6%					ICU Level of Service D							
Analysis Period (min) 15												

















Splits and Phases: 11: Route 44 & Route 22

					
ø1			ø3		
43 s			41 s		

Lanes, Volumes, Timings  
11: Route 44 & Route 22

2012-No Build Sat. Peak Hour













5/30/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	131	17	93	124	86	24	264	99	84	195	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.963			0.969			0.947	
Flt Protected		0.974			0.987			0.996			0.991	
Satd. Flow (prot)	0	1794	0	0	1771	0	0	1798	0	0	1748	0
Flt Permitted		0.607			0.818			0.936			0.809	
Satd. Flow (perm)	0	1118	0	0	1467	0	0	1689	0	0	1427	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			29			24			52	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			2173			2614			1552	
Travel Time (s)		12.8			42.3			50.9			30.2	
Peak Hour Factor	0.72	0.85	0.54	0.88	0.68	0.78	0.55	0.77	0.87	0.90	0.96	0.69
Adj. Flow (vph)	208	154	31	106	182	110	44	343	114	93	203	194
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	393	0	0	398	0	0	501	0	0	490	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (ft)	50	76		50	76		50	76		50	76	
Trailing Detector (ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Position(ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Size(ft)	50	40		50	40		50	40		50	40	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		36			36			36			36	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		3			3			1			1	
Permitted Phases	3			3			1			1		
Detector Phase	3	3		3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	8.0	8.0		8.0	8.0		16.0	16.0		16.0	16.0	







Lanes, Volumes, Timings  
11: Route 44 & Route 22

2012-No Build Sat. Peak Hour  
5/30/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	41.0	41.0	0.0	41.0	41.0	0.0	43.0	43.0	0.0	43.0	43.0	0.0
Total Split (%)	48.8%	48.8%	0.0%	48.8%	48.8%	0.0%	51.2%	51.2%	0.0%	51.2%	51.2%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		30.5			30.5			29.5			29.5	
Actuated g/C Ratio		0.44			0.44			0.43			0.43	
v/c Ratio		0.78			0.60			0.68			0.76	
Control Delay		31.2			19.1			21.0			24.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		31.2			19.1			21.0			24.4	
LOS		C			B			C			C	
Approach Delay		31.2			19.1			21.0			24.4	
Approach LOS		C			B			C			C	
Queue Length 50th (ft)		143			120			176			171	
Queue Length 95th (ft)		#295			153			223			298	
Internal Link Dist (ft)		575			2093			2534			1472	
Turn Bay Length (ft)												
Base Capacity (vph)		563			749			869			750	
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		0.70			0.53			0.58			0.65	
Intersection Summary												
Area Type:	Other											
Cycle Length:	84											
Actuated Cycle Length:	68.7											
Natural Cycle:	40											
Control Type:	Actuated-Uncoordinated											
Maximum v/c Ratio:	0.78											
Intersection Signal Delay:	23.8					Intersection LOS: C						
Intersection Capacity Utilization	81.3%					ICU Level of Service D						
Analysis Period (min) 15												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												

















Splits and Phases: 11: Route 44 & Route 22

			
ø1		ø3	
43 s		41 s	

Lanes, Volumes, Timings  
11: Route 44 & Route 22

2012-Build Sat. Peak Hour

5/30/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	159	139	22	123	133	86	31	321	121	84	258	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987			0.967			0.969			0.951	
Flt Protected		0.975			0.985			0.995			0.992	
Satd. Flow (prot)	0	1793	0	0	1774	0	0	1796	0	0	1757	0
Flt Permitted		0.589			0.764			0.913			0.787	
Satd. Flow (perm)	0	1083	0	0	1376	0	0	1648	0	0	1394	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			25			24			46	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			2173			2614			1552	
Travel Time (s)		12.8			42.3			50.9			30.2	
Peak Hour Factor	0.72	0.85	0.54	0.88	0.68	0.78	0.55	0.77	0.87	0.90	0.96	0.69
Adj. Flow (vph)	221	164	41	140	196	110	56	417	139	93	269	209
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	426	0	0	446	0	0	612	0	0	571	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (ft)	50	76		50	76		50	76		50	76	
Trailing Detector (ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Position(ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Size(ft)	50	40		50	40		50	40		50	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		36			36			36			36	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		3			3			1			1	
Permitted Phases	3			3			1			1		
Detector Phase	3	3		3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	8.0	8.0		8.0	8.0		16.0	16.0		16.0	16.0	

Lanes, Volumes, Timings  
11: Route 44 & Route 22

2012-Build Sat. Peak Hour  
5/30/2007



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	41.0	41.0	0.0	41.0	41.0	0.0	43.0	43.0	0.0	43.0	43.0	0.0
Total Split (%)	48.8%	48.8%	0.0%	48.8%	48.8%	0.0%	51.2%	51.2%	0.0%	51.2%	51.2%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Lead/Lag

Lead-Lag Optimize?

Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		34.3			34.3			35.2			35.2	
Actuated g/C Ratio		0.44			0.44			0.45			0.45	
v/c Ratio		0.88			0.72			0.81			0.87	
Control Delay		43.0			25.3			28.0			34.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		43.0			25.3			28.0			34.3	
LOS		D			C			C			C	
Approach Delay		43.0			25.3			28.0			34.3	
Approach LOS		D			C			C			C	
Queue Length 50th (ft)		196			176			252			238	
Queue Length 95th (ft)		#344			183			298			#442	
Internal Link Dist (ft)		575			2093			2534			1472	
Turn Bay Length (ft)												
Base Capacity (vph)		507			651			806			695	
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		0.84			0.69			0.76			0.82	

Intersection Summary

















Area Type:	Other
Cycle Length: 84	
Actuated Cycle Length: 77.7	
Natural Cycle: 50	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 32.3	Intersection LOS: C
Intersection Capacity Utilization 83.3%	ICU Level of Service E
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 11: Route 44 & Route 22

ø1	ø3
43 s	41 s

Lanes, Volumes, Timings  
111: Route 44 & Route 22

2007-Existing Sun. Peak Hour  
5/30/2007













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	70	13	63	71	57	13	169	56	42	288	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.969			0.960			0.975	
Flt Protected		0.981			0.980			0.997			0.995	
Satd. Flow (prot)	0	1807	0	0	1769	0	0	1783	0	0	1807	0
Flt Permitted		0.813			0.821			0.958			0.936	
Satd. Flow (perm)	0	1498	0	0	1482	0	0	1713	0	0	1700	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			23			34			18	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			2173			2614			1552	
Travel Time (s)		12.8			42.3			50.9			30.2	
Peak Hour Factor	0.88	0.70	0.81	0.56	0.71	0.89	0.65	0.78	0.56	0.75	0.73	0.78
Adj. Flow (vph)	76	100	16	112	100	64	20	217	100	56	395	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	192	0	0	276	0	0	337	0	0	551	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (ft)	50	76		50	76		50	76		50	76	
Trailing Detector (ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Position(ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Size(ft)	50	40		50	40		50	40		50	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		36			36			36			36	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		3			3			1			1	
Permitted Phases	3			3			1			1		
Detector Phase	3	3		3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	8.0	8.0		8.0	8.0		16.0	16.0		16.0	16.0	









Lanes, Volumes, Timings  
111: Route 44 & Route 22

2007-Existing Sun. Peak Hour

5/30/2007

















												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	41.0	41.0	0.0	41.0	41.0	0.0	43.0	43.0	0.0	43.0	43.0	0.0
Total Split (%)	48.8%	48.8%	0.0%	48.8%	48.8%	0.0%	51.2%	51.2%	0.0%	51.2%	51.2%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		17.7			17.7			24.4			24.4	
Actuated g/C Ratio		0.35			0.35			0.48			0.48	
v/c Ratio		0.37			0.52			0.40			0.67	
Control Delay		15.9			17.6			9.7			14.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		15.9			17.6			9.7			14.9	
LOS		B			B			A			B	
Approach Delay		15.9			17.6			9.7			14.9	
Approach LOS		B			B			A			B	
Queue Length 50th (ft)		38			55			49			103	
Queue Length 95th (ft)		81			112			106			183	
Internal Link Dist (ft)		575			2093			2534			1472	
Turn Bay Length (ft)												
Base Capacity (vph)		809			807			1051			1037	
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		0.24			0.34			0.32			0.53	
Intersection Summary												
Area Type:	Other											
Cycle Length:	84											
Actuated Cycle Length:	50.8											
Natural Cycle:	40											
Control Type:	Actuated-Uncoordinated											
Maximum v/c Ratio:	0.67											
Intersection Signal Delay:	14.3					Intersection LOS: B						
Intersection Capacity Utilization	53.5%					ICU Level of Service A						
Analysis Period (min)	15											

Splits and Phases: 111: Route 44 & Route 22

					
ø1			ø3		
43 s			41 s		













Lanes, Volumes, Timings  
111: Route 44 & Route 22

2012-No Build Sun. Peak Hour  
5/30/2007





												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	74	77	14	70	78	63	14	187	62	46	318	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.969			0.960			0.976	
Flt Protected		0.980			0.980			0.997			0.995	
Satd. Flow (prot)	0	1805	0	0	1769	0	0	1783	0	0	1809	0
Flt Permitted		0.789			0.802			0.954			0.931	
Satd. Flow (perm)	0	1454	0	0	1448	0	0	1706	0	0	1693	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			23			34			18	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			2173			2614			1552	
Travel Time (s)		12.8			42.3			50.9			30.2	
Peak Hour Factor	0.88	0.70	0.81	0.56	0.71	0.89	0.65	0.78	0.56	0.75	0.73	0.78
Adj. Flow (vph)	84	110	17	125	110	71	22	240	111	61	436	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	211	0	0	306	0	0	373	0	0	607	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (ft)	50	76		50	76		50	76		50	76	
Trailing Detector (ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Position(ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Size(ft)	50	40		50	40		50	40		50	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		36			36			36			36	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		3			3			1			1	
Permitted Phases	3			3			1			1		
Detector Phase	3	3		3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	8.0	8.0		8.0	8.0		16.0	16.0		16.0	16.0	

Lanes, Volumes, Timings  
111: Route 44 & Route 22

2012-No Build Sun. Peak Hour  
5/30/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	41.0	41.0	0.0	41.0	41.0	0.0	43.0	43.0	0.0	43.0	43.0	0.0
Total Split (%)	48.8%	48.8%	0.0%	48.8%	48.8%	0.0%	51.2%	51.2%	0.0%	51.2%	51.2%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		20.0			20.0			27.6			27.6	
Actuated g/C Ratio		0.36			0.36			0.49			0.49	
v/c Ratio		0.40			0.58			0.44			0.72	
Control Delay		17.4			19.9			11.0			17.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		17.4			19.9			11.0			17.7	
LOS		B			B			B			B	
Approach Delay		17.4			19.9			11.0			17.7	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		49			73			64			138	
Queue Length 95th (ft)		88			125			131			230	
Internal Link Dist (ft)		575			2093			2534			1472	
Turn Bay Length (ft)												
Base Capacity (vph)		752			757			1012			998	
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		0.28			0.40			0.37			0.61	
Intersection Summary												
Area Type:	Other											
Cycle Length: 84												
Actuated Cycle Length: 56.3												
Natural Cycle: 40												
Control Type: Actuated-Uncoordinated												
Maximum v/c Ratio: 0.72												
Intersection Signal Delay: 16.4						Intersection LOS: B						
Intersection Capacity Utilization 58.5%						ICU Level of Service B						
Analysis Period (min) 15												

















Splits and Phases: 111: Route 44 & Route 22

			
ø1		ø3	
43 s		41 s	

Lanes, Volumes, Timings  
111: Route 44 & Route 22

2012-Build Sun. Peak Hour













5/30/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	85	17	84	85	63	20	249	82	46	380	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.972			0.960			0.977	
Flt Protected		0.981			0.978			0.997			0.996	
Satd. Flow (prot)	0	1805	0	0	1771	0	0	1783	0	0	1813	0
Flt Permitted		0.760			0.750			0.939			0.925	
Satd. Flow (perm)	0	1399	0	0	1358	0	0	1679	0	0	1683	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			20			33			17	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			2173			2614			1552	
Travel Time (s)		12.8			42.3			50.9			30.2	
Peak Hour Factor	0.88	0.70	0.81	0.56	0.71	0.89	0.65	0.78	0.56	0.75	0.73	0.78
Adj. Flow (vph)	93	121	21	150	120	71	31	319	146	61	521	121
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	235	0	0	341	0	0	496	0	0	703	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (ft)	50	76		50	76		50	76		50	76	
Trailing Detector (ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Position(ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Size(ft)	50	40		50	40		50	40		50	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		36			36			36			36	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		3			3			1			1	
Permitted Phases	3			3			1			1		
Detector Phase	3	3		3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	8.0	8.0		8.0	8.0		16.0	16.0		16.0	16.0	







Lanes, Volumes, Timings  
111: Route 44 & Route 22

2012-Build Sun. Peak Hour  
5/30/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	41.0	41.0	0.0	41.0	41.0	0.0	43.0	43.0	0.0	43.0	43.0	0.0
Total Split (%)	48.8%	48.8%	0.0%	48.8%	48.8%	0.0%	51.2%	51.2%	0.0%	51.2%	51.2%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		23.9			23.9			34.2			34.2	
Actuated g/C Ratio		0.36			0.36			0.51			0.51	
v/c Ratio		0.46			0.68			0.56			0.81	
Control Delay		19.7			25.2			14.7			24.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		19.7			25.2			14.7			24.0	
LOS		B			C			B			C	
Approach Delay		19.7			25.2			14.7			24.0	
Approach LOS		B			C			B			C	
Queue Length 50th (ft)		77			121			114			206	
Queue Length 95th (ft)		96			143			221			333	
Internal Link Dist (ft)		575			2093			2534			1472	
Turn Bay Length (ft)												
Base Capacity (vph)		665			651			943			938	
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		0.35			0.52			0.53			0.75	
Intersection Summary												
Area Type:	Other											
Cycle Length: 84												
Actuated Cycle Length: 66.5												
Natural Cycle: 45												
Control Type: Actuated-Uncoordinated												
Maximum v/c Ratio: 0.81												
Intersection Signal Delay: 21.1					Intersection LOS: C							
Intersection Capacity Utilization 63.1%					ICU Level of Service B							
Analysis Period (min) 15												

















Splits and Phases: 111: Route 44 & Route 22

			
ø1		ø3	
43 s		41 s	

HCM Unsignalized Intersection Capacity Analysis  
2: Lake Amenia Rd. & Route 22

2007-Existing AM Peak Hour

















5/30/2007

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	4	3	16	4	10	7	7	154	1	3	207	3
Sign Control		Stop			Stop			Free			Free	
Grade		7%			0%			0%			0%	
Peak Hour Factor	0.50	0.38	0.57	0.50	0.63	0.44	0.58	0.80	0.25	0.38	0.86	0.25
Hourly flow rate (vph)	8	8	28	8	16	16	12	192	4	8	241	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	505	483	247	513	487	194	253			196		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	505	483	247	513	487	194	253			196		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	98	96	98	97	98	99			99		
cM capacity (veh/h)	451	475	792	444	474	847	1313			1376		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	44	40	209	261								
Volume Left	8	8	12	8								
Volume Right	28	16	4	12								
cSH	630	566	1313	1376								
Volume to Capacity	0.07	0.07	0.01	0.01								
Queue Length 95th (ft)	6	6	1	0								
Control Delay (s)	11.1	11.8	0.5	0.3								
Lane LOS	B	B	A	A								
Approach Delay (s)	11.1	11.8	0.5	0.3								
Approach LOS	B	B										
Intersection Summary												
Average Delay			2.1									
Intersection Capacity Utilization			22.2%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis  
2: Lake Amenia Rd. & Route 22

2012-No Build AM Peak Hour

















5/30/2007

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	4	3	18	4	11	8	8	170	1	3	229	3
Sign Control		Stop			Stop			Free			Free	
Grade		7%			0%			0%			0%	
Peak Hour Factor	0.50	0.38	0.57	0.50	0.63	0.44	0.58	0.80	0.25	0.38	0.86	0.25
Hourly flow rate (vph)	8	8	32	8	17	18	14	212	4	8	266	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	557	532	272	566	536	214	278			216		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	557	532	272	566	536	214	278			216		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	98	96	98	96	98	99			99		
cM capacity (veh/h)	412	445	766	406	443	825	1284			1353		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	47	44	230	286								
Volume Left	8	8	14	8								
Volume Right	32	18	4	12								
cSH	606	538	1284	1353								
Volume to Capacity	0.08	0.08	0.01	0.01								
Queue Length 95th (ft)	6	7	1	0								
Control Delay (s)	11.4	12.3	0.6	0.3								
Lane LOS	B	B	A	A								
Approach Delay (s)	11.4	12.3	0.6	0.3								
Approach LOS	B	B										
Intersection Summary												
Average Delay			2.1									
Intersection Capacity Utilization			23.8%	ICU Level of Service						A		
Analysis Period (min)			15									

# HCM Unsignalized Intersection Capacity Analysis 2: Lake Amenia Rd. & Route 22

2012-Build AM Peak Hour

5/30/2007

















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	4	3	25	5	11	8	14	280	2	3	287	3
Sign Control		Stop			Stop			Free			Free	
Grade		7%			0%			0%			0%	
Peak Hour Factor	0.50	0.38	0.57	0.50	0.63	0.44	0.58	0.80	0.25	0.38	0.86	0.25
Hourly flow rate (vph)	8	8	44	10	17	18	24	350	8	8	334	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	785	762	340	806	764	354	346			358		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	785	762	340	806	764	354	346			358		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	98	94	96	95	97	98			99		
cM capacity (veh/h)	283	325	702	271	325	690	1213			1201		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	60	46	382	354								
Volume Left	8	10	24	8								
Volume Right	44	18	8	12								
cSH	520	390	1213	1201								
Volume to Capacity	0.12	0.12	0.02	0.01								
Queue Length 95th (ft)	10	10	2	0								
Control Delay (s)	12.8	15.4	0.7	0.2								
Lane LOS	B	C	A	A								
Approach Delay (s)	12.8	15.4	0.7	0.2								
Approach LOS	B	C										
Intersection Summary												
Average Delay			2.2									
Intersection Capacity Utilization			33.7%	ICU Level of Service					A			
Analysis Period (min)			15									



# HCM Unsignalized Intersection Capacity Analysis

## 2: Lake Amenia Rd. & Route 22

















2007-Existing PM Peak Hour  
5/30/2007

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	6	16	6	8	3	21	316	10	8	248	8
Sign Control		Stop			Stop			Free			Free	
Grade		7%			0%			0%			0%	
Peak Hour Factor	0.42	0.75	0.67	0.50	0.67	0.75	0.48	0.56	0.83	0.67	0.85	0.50
Hourly flow rate (vph)	12	8	24	12	12	4	44	564	12	12	292	16
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	991	987	300	1009	989	570	308			576		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	991	987	300	1009	989	570	308			576		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	97	97	94	95	99	97			99		
cM capacity (veh/h)	206	235	739	199	235	521	1253			997		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	44	28	620	320								
Volume Left	12	12	44	12								
Volume Right	24	4	12	16								
cSH	353	235	1253	997								
Volume to Capacity	0.12	0.12	0.03	0.01								
Queue Length 95th (ft)	11	10	3	1								
Control Delay (s)	16.6	22.4	1.0	0.4								
Lane LOS	C	C	A	A								
Approach Delay (s)	16.6	22.4	1.0	0.4								
Approach LOS	C	C										
Intersection Summary												
Average Delay			2.1									
Intersection Capacity Utilization			36.6%		ICU Level of Service					A		
Analysis Period (min)			15									

# HCM Unsignalized Intersection Capacity Analysis 2: Lake Amenia Rd. & Route 22

2012-No Build PM Peak Hour

















5/30/2007

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	7	18	7	9	3	23	349	11	9	379	9
Sign Control		Stop			Stop			Free			Free	
Grade		7%			0%			0%			0%	
Peak Hour Factor	0.42	0.75	0.67	0.50	0.67	0.75	0.48	0.56	0.83	0.67	0.85	0.50
Hourly flow rate (vph)	14	9	27	14	13	4	48	623	13	13	446	18
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1218	1214	455	1239	1216	630	464			636		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1218	1214	455	1239	1216	630	464			636		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	90	95	96	90	92	99	96			99		
cM capacity (veh/h)	140	170	605	133	171	482	1097			947		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	50	31	684	477								
Volume Left	14	14	48	13								
Volume Right	27	4	13	18								
cSH	251	164	1097	947								
Volume to Capacity	0.20	0.19	0.04	0.01								
Queue Length 95th (ft)	18	17	3	1								
Control Delay (s)	23.0	32.2	1.1	0.4								
Lane LOS	C	D	A	A								
Approach Delay (s)	23.0	32.2	1.1	0.4								
Approach LOS	C	D										
Intersection Summary												
Average Delay			2.5									
Intersection Capacity Utilization			40.6%	ICU Level of Service					A			
Analysis Period (min)			15									

# HCM Unsignalized Intersection Capacity Analysis

## 2: Lake Amenia Rd. & Route 22

















2012-Build PM Peak Hour  
5/30/2007

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	7	27	9	9	3	30	423	13	9	274	18
Sign Control		Stop			Stop			Free			Free	
Grade		7%			0%			0%			0%	
Peak Hour Factor	0.42	0.75	0.67	0.50	0.67	0.75	0.48	0.56	0.83	0.67	0.85	0.50
Hourly flow rate (vph)	14	9	40	18	13	4	62	755	16	13	322	36
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1266	1263	340	1300	1273	763	358			771		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1266	1263	340	1300	1273	763	358			771		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	89	94	94	85	91	99	95			98		
cM capacity (veh/h)	127	157	702	118	156	404	1200			844		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	64	35	834	372								
Volume Left	14	18	62	13								
Volume Right	40	4	16	36								
cSH	279	143	1200	844								
Volume to Capacity	0.23	0.25	0.05	0.02								
Queue Length 95th (ft)	22	23	4	1								
Control Delay (s)	21.7	38.4	1.3	0.5								
Lane LOS	C	E	A	A								
Approach Delay (s)	21.7	38.4	1.3	0.5								
Approach LOS	C	E										
Intersection Summary												
Average Delay			3.1									
Intersection Capacity Utilization			46.5%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis  
22: Lake Amenia Rd. & Route 22

2007-Existing Sat. Peak Hour

















5/30/2007

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	4	1	24	3	7	4	17	301	9	4	240	3
Sign Control		Stop			Stop			Free			Free	
Grade		7%			0%			0%			0%	
Peak Hour Factor	0.50	0.25	0.50	0.38	0.58	0.50	0.41	0.76	0.58	0.50	0.86	0.38
Hourly flow rate (vph)	8	4	48	8	12	8	41	396	16	8	279	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	800	794	283	836	790	404	287			412		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	800	794	283	836	790	404	287			412		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	99	94	97	96	99	97			99		
cM capacity (veh/h)	281	307	755	258	310	647	1275			1147		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	60	28	453	295								
Volume Left	8	8	41	8								
Volume Right	48	8	16	8								
cSH	571	341	1275	1147								
Volume to Capacity	0.11	0.08	0.03	0.01								
Queue Length 95th (ft)	9	7	3	1								
Control Delay (s)	12.0	16.5	1.0	0.3								
Lane LOS	B	C	A	A								
Approach Delay (s)	12.0	16.5	1.0	0.3								
Approach LOS	B	C										
Intersection Summary												
Average Delay			2.1									
Intersection Capacity Utilization			35.9%	ICU Level of Service					A			
Analysis Period (min)			15									



















HCM Unsignalized Intersection Capacity Analysis  
22: Lake Amenia Rd. & Route 22

2012-No Build Sat. Peak Hour  
5/30/2007

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	4	1	26	3	8	4	19	332	10	4	265	3
Sign Control		Stop			Stop			Free			Free	
Grade		7%			0%			0%			0%	
Peak Hour Factor	0.50	0.25	0.50	0.38	0.58	0.50	0.41	0.76	0.58	0.50	0.86	0.38
Hourly flow rate (vph)	8	4	52	8	14	8	46	437	17	8	308	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	881	875	312	920	870	445	316			454		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	881	875	312	920	870	445	316			454		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	99	93	96	95	99	96			99		
cM capacity (veh/h)	244	274	728	223	277	613	1244			1107		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	64	30	500	324								
Volume Left	8	8	46	8								
Volume Right	52	8	17	8								
cSH	539	302	1244	1107								
Volume to Capacity	0.12	0.10	0.04	0.01								
Queue Length 95th (ft)	10	8	3	1								
Control Delay (s)	12.6	18.2	1.1	0.3								
Lane LOS	B	C	A	A								
Approach Delay (s)	12.6	18.2	1.1	0.3								
Approach LOS	B	C										
Intersection Summary												
Average Delay			2.2									
Intersection Capacity Utilization			39.1%	ICU Level of Service						A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis  
22: Lake Amenia Rd. & Route 22

















2012-Build Sat. Peak Hour  
5/30/2007

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	4	1	36	4	8	4	24	418	12	4	363	3
Sign Control		Stop			Stop			Free			Free	
Grade		7%			0%			0%			0%	
Peak Hour Factor	0.50	0.25	0.50	0.38	0.58	0.50	0.41	0.76	0.58	0.50	0.86	0.38
Hourly flow rate (vph)	8	4	72	11	14	8	59	550	21	8	422	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1134	1130	426	1193	1123	560	430			571		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1134	1130	426	1193	1123	560	430			571		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	95	98	89	92	93	98	95			99		
cM capacity (veh/h)	159	191	628	136	193	528	1129			1002		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	84	32	629	438								
Volume Left	8	11	59	8								
Volume Right	72	8	21	8								
cSH	452	197	1129	1002								
Volume to Capacity	0.19	0.16	0.05	0.01								
Queue Length 95th (ft)	17	14	4	1								
Control Delay (s)	14.8	26.8	1.4	0.2								
Lane LOS	B	D	A	A								
Approach Delay (s)	14.8	26.8	1.4	0.2								
Approach LOS	B	D										
Intersection Summary												
Average Delay			2.6									
Intersection Capacity Utilization			47.8%	ICU Level of Service						A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis  
222: Lake Amenia Rd. & Route 22

















2007-Existing Sun. Peak Hour

5/30/2007

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	1	15	7	1	2	2	202	3	0	354	5
Sign Control		Stop			Stop			Free			Free	
Grade		7%			0%			0%			0%	
Peak Hour Factor	0.75	0.25	0.75	0.35	0.25	0.50	0.25	0.62	0.38	1.00	0.67	0.63
Hourly flow rate (vph)	12	4	20	20	4	4	8	326	8	0	528	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	884	882	532	900	882	330	536			334		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	884	882	532	900	882	330	536			334		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	95	99	96	92	99	99	99			100		
cM capacity (veh/h)	259	282	547	246	283	712	1032			1226		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	36	28	342	536								
Volume Left	12	20	8	0								
Volume Right	20	4	8	8								
cSH	371	277	1032	1226								
Volume to Capacity	0.10	0.10	0.01	0.00								
Queue Length 95th (ft)	8	8	1	0								
Control Delay (s)	15.7	19.5	0.3	0.0								
Lane LOS	C	C	A									
Approach Delay (s)	15.7	19.5	0.3	0.0								
Approach LOS	C	C										
Intersection Summary												
Average Delay			1.3									
Intersection Capacity Utilization			28.9%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis  
222: Lake Amenia Rd. & Route 22

2012-No Build Sun. Peak Hour  
5/30/2007

















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	1	17	7	1	2	2	223	3	0	391	6
Sign Control		Stop			Stop			Free			Free	
Grade		7%			0%			0%			0%	
Peak Hour Factor	0.75	0.25	0.75	0.35	0.25	0.50	0.25	0.62	0.38	1.00	0.67	0.63
Hourly flow rate (vph)	13	4	23	20	4	4	8	360	8	0	584	10
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	974	972	588	993	973	364	593			368		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	974	972	588	993	973	364	593			368		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	98	96	90	98	99	99			100		
cM capacity (veh/h)	225	250	508	211	250	681	983			1191		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	40	28	376	593								
Volume Left	13	20	8	0								
Volume Right	23	4	8	10								
cSH	333	240	983	1191								
Volume to Capacity	0.12	0.12	0.01	0.00								
Queue Length 95th (ft)	10	10	1	0								
Control Delay (s)	17.3	22.0	0.3	0.0								
Lane LOS	C	C	A									
Approach Delay (s)	17.3	22.0	0.3	0.0								
Approach LOS	C	C										
Intersection Summary												
Average Delay			1.4									
Intersection Capacity Utilization			30.9%	ICU Level of Service						A		
Analysis Period (min)			15									



HCM Unsignalized Intersection Capacity Analysis  
222: Lake Amenia Rd. & Route 22

2012-Build Sun. Peak Hour

5/30/2007

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	1	20	9	1	2	3	311	4	0	470	6
Sign Control		Stop			Stop			Free			Free	
Grade		7%			0%			0%			0%	
Peak Hour Factor	0.75	0.25	0.75	0.35	0.25	0.50	0.25	0.62	0.38	1.00	0.67	0.63
Hourly flow rate (vph)	13	4	27	26	4	4	12	502	11	0	701	10
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1243	1242	706	1266	1242	507	711			512		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1243	1242	706	1266	1242	507	711			512		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	91	98	94	81	98	99	99			100		
cM capacity (veh/h)	145	171	435	133	172	566	888			1053		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	44	34	524	711								
Volume Left	13	26	12	0								
Volume Right	27	4	11	10								
cSH	249	151	888	1053								
Volume to Capacity	0.18	0.22	0.01	0.00								
Queue Length 95th (ft)	16	20	1	0								
Control Delay (s)	22.5	35.6	0.4	0.0								
Lane LOS	C	E	A									
Approach Delay (s)	22.5	35.6	0.4	0.0								
Approach LOS	C	E										
Intersection Summary												
Average Delay			1.8									
Intersection Capacity Utilization			35.1%	ICU Level of Service					A			
Analysis Period (min)			15									





# HCM Unsignalized Intersection Capacity Analysis

## 3: Hotel/Golf Course Access & Route 22

2007-Existing AM Peak Hour

5/30/2007



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	8	8	33	154	195	33
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	9	36	167	212	36
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	469	230	248			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	469	230	248			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	99	97			
cM capacity (veh/h)	538	809	1318			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	9	9	203	248		
Volume Left	9	0	36	0		
Volume Right	0	9	0	36		
cSH	538	809	1318	1700		
Volume to Capacity	0.02	0.01	0.03	0.15		
Queue Length 95th (ft)	1	1	2	0		
Control Delay (s)	11.8	9.5	1.6	0.0		
Lane LOS	B	A	A			
Approach Delay (s)	10.7		1.6	0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			1.1			
Intersection Capacity Utilization			35.5%	ICU Level of Service		A
Analysis Period (min)			15			





# HCM Unsignalized Intersection Capacity Analysis

## 3: Hotel/Golf Course Access & Route 22

2012-No Build AM Peak Hour

5/30/2007













Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	9	9	36	170	215	36
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	10	39	185	234	39
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	516	253	273			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	516	253	273			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	99	97			
cM capacity (veh/h)	503	785	1290			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	10	10	224	273		
Volume Left	10	0	39	0		
Volume Right	0	10	0	39		
cSH	503	785	1290	1700		
Volume to Capacity	0.02	0.01	0.03	0.16		
Queue Length 95th (ft)	1	1	2	0		
Control Delay (s)	12.3	9.6	1.6	0.0		
Lane LOS	B	A	A			
Approach Delay (s)	11.0		1.6	0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			1.1			
Intersection Capacity Utilization			37.8%	ICU Level of Service		A
Analysis Period (min)			15			

# HCM Unsignalized Intersection Capacity Analysis

## 3: Hotel/Golf Course Access & Route 22

2012-Build AM Peak Hour

5/30/2007











						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	80	80	84	216	233	84
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	87	87	91	235	253	91
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	716	299	345			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	716	299	345			
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	88	92			
cM capacity (veh/h)	367	741	1214			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	87	87	326	345		
Volume Left	87	0	91	0		
Volume Right	0	87	0	91		
cSH	367	741	1214	1700		
Volume to Capacity	0.24	0.12	0.08	0.20		
Queue Length 95th (ft)	23	10	6	0		
Control Delay (s)	17.8	10.5	2.8	0.0		
Lane LOS	C	B	A			
Approach Delay (s)	14.2		2.8	0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			4.0			
Intersection Capacity Utilization			47.8%	ICU Level of Service		A
Analysis Period (min)			15			



HCM Unsignalized Intersection Capacity Analysis  
3: Hotel/Golf Course Access & Route 22

2007-Existing PM Peak Hour

5/30/2007





						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	7	5	2	342	261	9
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.44	0.63	0.25	0.53	0.83	0.75
Hourly flow rate (vph)	16	8	8	645	314	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	982	320	326			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	982	320	326			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	94	99	99			
cM capacity (veh/h)	275	720	1233			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	16	8	653	326		
Volume Left	16	0	8	0		
Volume Right	0	8	0	12		
cSH	275	720	1233	1700		
Volume to Capacity	0.06	0.01	0.01	0.19		
Queue Length 95th (ft)	5	1	0	0		
Control Delay (s)	18.9	10.1	0.2	0.0		
Lane LOS	C	B	A			
Approach Delay (s)	16.0		0.2	0.0		
Approach LOS	C					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			29.6%	ICU Level of Service		A
Analysis Period (min)			15			

# HCM Unsignalized Intersection Capacity Analysis 3: Hotel/Golf Course Access & Route 22

2012-No Build PM Peak Hour

5/30/2007













Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	8	6	2	378	288	10
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.44	0.63	0.25	0.53	0.83	0.75
Hourly flow rate (vph)	18	10	8	713	347	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1083	354	360			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1083	354	360			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	92	99	99			
cM capacity (veh/h)	239	690	1198			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	18	10	721	360		
Volume Left	18	0	8	0		
Volume Right	0	10	0	13		
cSH	239	690	1198	1700		
Volume to Capacity	0.08	0.01	0.01	0.21		
Queue Length 95th (ft)	6	1	1	0		
Control Delay (s)	21.3	10.3	0.2	0.0		
Lane LOS	C	B	A			
Approach Delay (s)	17.5		0.2	0.0		
Approach LOS	C					
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization			31.5%	ICU Level of Service	A	
Analysis Period (min)			15			

# HCM Unsignalized Intersection Capacity Analysis

## 3: Hotel/Golf Course Access & Route 22











2012-Build PM Peak Hour  
5/30/2007

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	67	69	88	400	318	96
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.44	0.63	0.25	0.53	0.83	0.75
Hourly flow rate (vph)	152	110	352	755	383	128
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1906	447	511			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1906	447	511			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	82	67			
cM capacity (veh/h)	50	611	1054			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	152	110	1107	511		
Volume Left	152	0	352	0		
Volume Right	0	110	0	128		
cSH	50	611	1054	1700		
Volume to Capacity	3.03	0.18	0.33	0.30		
Queue Length 95th (ft)	Err	16	37	0		
Control Delay (s)	Err	12.2	7.4	0.0		
Lane LOS	F	B	A			
Approach Delay (s)	5821.0		7.4	0.0		
Approach LOS	F					
Intersection Summary						
Average Delay			815.1			
Intersection Capacity Utilization			62.2%	ICU Level of Service		B
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
33: Hotel/Golf Course Access & Route 22

2007-Existing Sat. Peak Hour

5/30/2007











						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	6	6	8	321	253	14
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.75	0.30	0.50	0.74	0.87	0.39
Hourly flow rate (vph)	8	20	16	434	291	36
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	775	309	327			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	775	309	327			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	97	99			
cM capacity (veh/h)	362	731	1233			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	8	20	450	327		
Volume Left	8	0	16	0		
Volume Right	0	20	0	36		
cSH	362	731	1233	1700		
Volume to Capacity	0.02	0.03	0.01	0.19		
Queue Length 95th (ft)	2	2	1	0		
Control Delay (s)	15.2	10.1	0.4	0.0		
Lane LOS	C	B	A			
Approach Delay (s)	11.5		0.4	0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization			33.3%	ICU Level of Service		A
Analysis Period (min)			15			



HCM Unsignalized Intersection Capacity Analysis  
33: Hotel/Golf Course Access & Route 22

2012-No Build Sat. Peak Hour

5/30/2007





						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	7	7	9	354	279	15
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.75	0.30	0.50	0.74	0.87	0.39
Hourly flow rate (vph)	9	23	18	478	321	38
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	854	340	359			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	854	340	359			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	97	98			
cM capacity (veh/h)	324	702	1199			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	9	23	496	359		
Volume Left	9	0	18	0		
Volume Right	0	23	0	38		
cSH	324	702	1199	1700		
Volume to Capacity	0.03	0.03	0.02	0.21		
Queue Length 95th (ft)	2	3	1	0		
Control Delay (s)	16.4	10.3	0.5	0.0		
Lane LOS	C	B	A			
Approach Delay (s)	12.1		0.5	0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			35.9%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
33: Hotel/Golf Course Access & Route 22

2012-Build Sat. Peak Hour

5/30/2007













Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	76	76	92	378	305	98
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.75	0.30	0.50	0.74	0.87	0.39
Hourly flow rate (vph)	101	253	184	511	351	251
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1355	476	602			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1355	476	602			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	24	57	81			
cM capacity (veh/h)	134	589	976			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	101	253	695	602		
Volume Left	101	0	184	0		
Volume Right	0	253	0	251		
cSH	134	589	976	1700		
Volume to Capacity	0.76	0.43	0.19	0.35		
Queue Length 95th (ft)	112	54	17	0		
Control Delay (s)	87.7	15.7	4.4	0.0		
Lane LOS	F	C	A			
Approach Delay (s)	36.2		4.4	0.0		
Approach LOS	E					
Intersection Summary						
Average Delay			9.6			
Intersection Capacity Utilization			61.2%	ICU Level of Service		B
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
333: Hotel/Golf Course Access & Route 22

2007-Existing Sun. Peak Hour

5/30/2007





						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	4	1	1	191	364	7
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.33	0.25	0.25	0.61	0.62	0.58
Hourly flow rate (vph)	12	4	4	313	587	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	914	593	599			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	914	593	599			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	99	100			
cM capacity (veh/h)	302	505	978			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	12	4	317	599		
Volume Left	12	0	4	0		
Volume Right	0	4	0	12		
cSH	302	505	978	1700		
Volume to Capacity	0.04	0.01	0.00	0.35		
Queue Length 95th (ft)	3	1	0	0		
Control Delay (s)	17.4	12.2	0.2	0.0		
Lane LOS	C	B	A			
Approach Delay (s)	16.1		0.2	0.0		
Approach LOS	C					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			29.6%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
333: Hotel/Golf Course Access & Route 22

2012-No Build Sun. Peak Hour

5/30/2007







Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	4	1	1	224	407	8
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.33	0.25	0.25	0.61	0.62	0.58
Hourly flow rate (vph)	12	4	4	367	656	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1039	663	670			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1039	663	670			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	95	99	100			
cM capacity (veh/h)	254	461	920			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	12	4	371	670		
Volume Left	12	0	4	0		
Volume Right	0	4	0	14		
cSH	254	461	920	1700		
Volume to Capacity	0.05	0.01	0.00	0.39		
Queue Length 95th (ft)	4	1	0	0		
Control Delay (s)	19.9	12.9	0.1	0.0		
Lane LOS	C	B	A			
Approach Delay (s)	18.1		0.1	0.0		
Approach LOS	C					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			31.9%	ICU Level of Service		A
Analysis Period (min)			15			



HCM Unsignalized Intersection Capacity Analysis  
333: Hotel/Golf Course Access & Route 22

2012-Build Sun. Peak Hour  
5/30/2007












Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	72	69	64	246	428	71
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.33	0.25	0.25	0.61	0.62	0.58
Hourly flow rate (vph)	218	276	256	403	690	122
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1667	752	813			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1667	752	813			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	33	69			
cM capacity (veh/h)	73	410	814			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	218	276	659	813		
Volume Left	218	0	256	0		
Volume Right	0	276	0	122		
cSH	73	410	814	1700		
Volume to Capacity	3.00	0.67	0.31	0.48		
Queue Length 95th (ft)	548	120	34	0		
Control Delay (s)	1023.2	30.0	7.3	0.0		
Lane LOS	F	D	A			
Approach Delay (s)	468.5		7.3	0.0		
Approach LOS	F					
Intersection Summary						
Average Delay			120.2			
Intersection Capacity Utilization			57.3%	ICU Level of Service		B
Analysis Period (min)			15			

# HCM Unsignalized Intersection Capacity Analysis

## 4: Route 44 & West Lake Amenia Rd.

2007-Existing AM Peak Hour

5/30/2007

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	140	23	1	189	14	4
Sign Control	Free			Free	Stop	
Grade	4%			4%	5%	
Peak Hour Factor	0.88	0.82	0.25	0.83	0.70	0.38
Hourly flow rate (vph)	159	28	4	228	20	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			187		409	173
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			187		409	173
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		97	99
cM capacity (veh/h)			1387		596	870
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	187	232	31			
Volume Left	0	4	20			
Volume Right	28	0	11			
cSH	1700	1387	669			
Volume to Capacity	0.11	0.00	0.05			
Queue Length 95th (ft)	0	0	4			
Control Delay (s)	0.0	0.2	10.6			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.2	10.6			
Approach LOS			B			
Intersection Summary						
Average Delay			0.8			
Intersection Capacity Utilization		20.7%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis  
4: Route 44 & West Lake Amenia Rd.

2012-No Build AM Peak Hour

5/30/2007

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↗	↘
Volume (veh/h)	155	25	1	209	15	4
Sign Control	Free			Free	Stop	
Grade	4%			4%	5%	
Peak Hour Factor	0.88	0.82	0.25	0.83	0.70	0.38
Hourly flow rate (vph)	176	30	4	252	21	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			207		451	191
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			207		451	191
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		96	99
cM capacity (veh/h)			1365		564	850
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	207	256	32			
Volume Left	0	4	21			
Volume Right	30	0	11			
cSH	1700	1365	634			
Volume to Capacity	0.12	0.00	0.05			
Queue Length 95th (ft)	0	0	4			
Control Delay (s)	0.0	0.1	11.0			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.1	11.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.8			
Intersection Capacity Utilization		21.8%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis  
4: Route 44 & West Lake Amenia Rd.

2012-Build AM Peak Hour

5/30/2007



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↵			↵↵	↵↵	
Volume (veh/h)	172	32	1	229	21	4
Sign Control	Free			Free	Stop	
Grade	4%			4%	5%	
Peak Hour Factor	0.88	0.82	0.25	0.83	0.70	0.38
Hourly flow rate (vph)	195	39	4	276	30	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			234		499	215
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			234		499	215
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		94	99
cM capacity (veh/h)			1333		529	825
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	234	280	41			
Volume Left	0	4	30			
Volume Right	39	0	11			
cSH	1700	1333	583			
Volume to Capacity	0.14	0.00	0.07			
Queue Length 95th (ft)	0	0	6			
Control Delay (s)	0.0	0.1	11.6			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.1	11.6			
Approach LOS			B			
Intersection Summary						
Average Delay			0.9			
Intersection Capacity Utilization			22.8%	ICU Level of Service	A	
Analysis Period (min)			15			



# HCM Unsignalized Intersection Capacity Analysis

## 4: Route 44 & West Lake Amenia Rd.










2007-Existing PM Peak Hour  
5/30/2007



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	
Volume (veh/h)	222	23	3	199	23	2
Sign Control	Free			Free	Stop	
Grade	4%			4%	5%	
Peak Hour Factor	0.88	0.64	0.38	0.86	0.58	0.50
Hourly flow rate (vph)	252	36	8	231	40	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			288		517	270
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			288		517	270
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		92	99
cM capacity (veh/h)			1274		514	768
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	288	239	44			
Volume Left	0	8	40			
Volume Right	36	0	4			
cSH	1700	1274	530			
Volume to Capacity	0.17	0.01	0.08			
Queue Length 95th (ft)	0	0	7			
Control Delay (s)	0.0	0.3	12.4			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.3	12.4			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			1.1			
Intersection Capacity Utilization			23.1%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
4: Route 44 & West Lake Amenia Rd.










2012-No Build PM Peak Hour  
5/30/2007

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	245	25	3	229	25	2
Sign Control	Free			Free	Stop	
Grade	4%			4%	5%	
Peak Hour Factor	0.88	0.64	0.38	0.86	0.58	0.50
Hourly flow rate (vph)	278	39	8	266	43	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			317	580		298
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			317	580		298
tC, single (s)			4.1	6.4		6.2
tC, 2 stage (s)						
tF (s)			2.2	3.5		3.3
p0 queue free %			99	91		99
cM capacity (veh/h)			1243	473		741
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	317	274	47			
Volume Left	0	8	43			
Volume Right	39	0	4			
cSH	1700	1243	488			
Volume to Capacity	0.19	0.01	0.10			
Queue Length 95th (ft)	0	0	8			
Control Delay (s)	0.0	0.3	13.2			
Lane LOS			A B			
Approach Delay (s)	0.0	0.3	13.2			
Approach LOS			B			
Intersection Summary						
Average Delay			1.1			
Intersection Capacity Utilization			24.4%		ICU Level of Service A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
4: Route 44 & West Lake Amenia Rd.

2012-Build PM Peak Hour

5/30/2007

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	264	34	3	243	32	2
Sign Control	Free			Free	Stop	
Grade	4%			4%	5%	
Peak Hour Factor	0.88	0.64	0.38	0.86	0.58	0.50
Hourly flow rate (vph)	300	53	8	283	55	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			353		625	327
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			353		625	327
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		88	99
cM capacity (veh/h)			1206		445	714
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	353	290	59			
Volume Left	0	8	55			
Volume Right	53	0	4			
cSH	1700	1206	457			
Volume to Capacity	0.21	0.01	0.13			
Queue Length 95th (ft)	0	0	11			
Control Delay (s)	0.0	0.3	14.1			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.3	14.1			
Approach LOS			B			
Intersection Summary						
Average Delay			1.3			
Intersection Capacity Utilization			26.0%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
44: Route 44 & West Lake Amenia Rd.

2007-Existing Sat. Peak Hour

5/30/2007

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↘↙	
Volume (veh/h)	175	0	6	193	19	3
Sign Control	Free			Free	Stop	
Grade	4%			4%	5%	
Peak Hour Factor	0.85	1.00	0.38	0.82	0.79	0.75
Hourly flow rate (vph)	206	0	16	235	24	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			206		473	206
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			206		473	206
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		96	100
cM capacity (veh/h)			1365		543	834
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	206	251	28			
Volume Left	0	16	24			
Volume Right	0	0	4			
cSH	1700	1365	571			
Volume to Capacity	0.12	0.01	0.05			
Queue Length 95th (ft)	0	1	4			
Control Delay (s)	0.0	0.6	11.6			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.6	11.6			
Approach LOS			B			
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization		25.0%		ICU Level of Service		A
Analysis Period (min)		15				



HCM Unsignalized Intersection Capacity Analysis  
44: Route 44 & West Lake Amenia Rd.

2012-No Build Sat. Peak Hour

5/30/2007

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↗	
Volume (veh/h)	193	0	7	213	21	3
Sign Control	Free			Free	Stop	
Grade	4%			4%	5%	
Peak Hour Factor	0.85	1.00	0.38	0.82	0.79	0.75
Hourly flow rate (vph)	227	0	18	260	27	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			227		524	227
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			227		524	227
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		95	100
cM capacity (veh/h)			1341		506	812
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	227	278	31			
Volume Left	0	18	27			
Volume Right	0	0	4			
cSH	1700	1341	532			
Volume to Capacity	0.13	0.01	0.06			
Queue Length 95th (ft)	0	1	5			
Control Delay (s)	0.0	0.6	12.2			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.6	12.2			
Approach LOS			B			
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			26.9%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
44: Route 44 & West Lake Amenia Rd.

2012-Build Sat. Peak Hour

5/30/2007



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	
Volume (veh/h)	215	10	7	239	26	3
Sign Control	Free			Free	Stop	
Grade	4%			4%	5%	
Peak Hour Factor	0.85	1.00	0.38	0.82	0.79	0.75
Hourly flow rate (vph)	253	10	18	291	33	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			263		586	258
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			263		586	258
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		93	99
cM capacity (veh/h)			1301		465	780
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	263	310	37			
Volume Left	0	18	33			
Volume Right	10	0	4			
cSH	1700	1301	486			
Volume to Capacity	0.15	0.01	0.08			
Queue Length 95th (ft)	0	1	6			
Control Delay (s)	0.0	0.6	13.0			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.6	13.0			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			1.1			
Intersection Capacity Utilization			28.2%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
444: Route 44 & West Lake Amenia Rd.

2007-Existing Sun. Peak Hour  
5/30/2007






Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↕			↕	↕	
Volume (veh/h)	132	19	2	192	5	1
Sign Control	Free			Free	Stop	
Grade	4%			4%	5%	
Peak Hour Factor	0.83	0.79	0.50	0.79	0.63	0.25
Hourly flow rate (vph)	159	24	4	243	8	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			183		422	171
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			183		422	171
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		99	100
cM capacity (veh/h)			1392		586	872
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	183	247	12			
Volume Left	0	4	8			
Volume Right	24	0	4			
cSH	1700	1392	658			
Volume to Capacity	0.11	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.1	10.6			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.1	10.6			
Approach LOS			B			
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization		21.7%		ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
444: Route 44 & West Lake Amenia Rd.

2012-No Build Sun. Peak Hour  
5/30/2007



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	146	21	2	212	6	1
Sign Control	Free			Free	Stop	
Grade	4%			4%	5%	
Peak Hour Factor	0.83	0.79	0.50	0.79	0.63	0.25
Hourly flow rate (vph)	176	27	4	268	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			202		466	189
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			202		466	189
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		98	100
cM capacity (veh/h)			1369		553	852
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	202	272	14			
Volume Left	0	4	10			
Volume Right	27	0	4			
cSH	1700	1369	617			
Volume to Capacity	0.12	0.00	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.1	11.0			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.1	11.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			22.8%	ICU Level of Service	A	
Analysis Period (min)			15			



HCM Unsignalized Intersection Capacity Analysis  
444: Route 44 & West Lake Amenia Rd.

2012-Build Sun. Peak Hour










5/30/2007



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	
Volume (veh/h)	165	24	2	233	7	1
Sign Control	Free			Free	Stop	
Grade	4%			4%	5%	
Peak Hour Factor	0.83	0.79	0.50	0.79	0.63	0.25
Hourly flow rate (vph)	199	30	4	295	11	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			229		517	214
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			229		517	214
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		98	100
cM capacity (veh/h)			1339		516	826
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	229	299	15			
Volume Left	0	4	11			
Volume Right	30	0	4			
cSH	1700	1339	573			
Volume to Capacity	0.13	0.00	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.1	11.5			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.1	11.5			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			0.4			
Intersection Capacity Utilization			23.9%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
5: Route 44 & Lake Amenia Rd.










2007-Existing AM Peak Hour  
5/30/2007

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	144	0	1	190	0	5
Sign Control	Free			Free	Stop	
Grade	4%			4%	6%	
Peak Hour Factor	0.80	0.25	0.25	0.87	0.25	0.42
Hourly flow rate (vph)	180	0	4	218	0	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			180		406	180
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			180		406	180
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		100	99
cM capacity (veh/h)			1396		598	862
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	180	222	12			
Volume Left	0	4	0			
Volume Right	0	0	12			
cSH	1700	1396	862			
Volume to Capacity	0.11	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.2	9.2			
Lane LOS		A	A			
Approach Delay (s)	0.0	0.2	9.2			
Approach LOS			A			
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			20.8%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
5: Route 44 & Lake Amenia Rd.










2012-No Build AM Peak Hour

5/30/2007

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	159	0	1	210	0	6
Sign Control	Free			Free	Stop	
Grade	4%			4%	6%	
Peak Hour Factor	0.80	0.25	0.25	0.87	0.25	0.42
Hourly flow rate (vph)	199	0	4	241	0	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			199	448		199
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			199	448		199
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	100		98
cM capacity (veh/h)			1374	566		842
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	199	245	14			
Volume Left	0	4	0			
Volume Right	0	0	14			
cSH	1700	1374	842			
Volume to Capacity	0.12	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.1	9.3			
Lane LOS			A			
Approach Delay (s)	0.0	0.1	9.3			
Approach LOS			A			
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			21.8%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
5: Route 44 & Lake Amenia Rd.

2012-Build AM Peak Hour  
5/30/2007

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	176	0	1	230	0	6
Sign Control	Free			Free	Stop	
Grade	4%			4%	6%	
Peak Hour Factor	0.80	0.25	0.25	0.87	0.25	0.42
Hourly flow rate (vph)	220	0	4	264	0	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			220		492	220
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			220		492	220
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		100	98
cM capacity (veh/h)			1349		533	819
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	220	268	14			
Volume Left	0	4	0			
Volume Right	0	0	14			
cSH	1700	1349	819			
Volume to Capacity	0.13	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.1	9.5			
Lane LOS		A	A			
Approach Delay (s)	0.0	0.1	9.5			
Approach LOS			A			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			22.9%	ICU Level of Service		A
Analysis Period (min)			15			



# HCM Unsignalized Intersection Capacity Analysis 5: Route 44 & Lake Amenia Rd.










2007-Existing PM Peak Hour  
5/30/2007

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↕			↕	↖↗	
Volume (veh/h)	224	0	3	209	1	5
Sign Control	Free			Free	Stop	
Grade	4%			4%	6%	
Peak Hour Factor	0.89	1.00	0.38	0.83	0.25	0.63
Hourly flow rate (vph)	252	0	8	252	4	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			252		519	252
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			252		519	252
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		99	99
cM capacity (veh/h)			1314		513	787
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	252	260	12			
Volume Left	0	8	4			
Volume Right	0	0	8			
cSH	1700	1314	667			
Volume to Capacity	0.15	0.01	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.3	10.5			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.3	10.5			
Approach LOS			B			
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			23.4%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
5: Route 44 & Lake Amenia Rd.

2012-No Build PM Peak Hour







5/30/2007

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	247	0	3	231	1	6
Sign Control	Free			Free	Stop	
Grade	4%			4%	6%	
Peak Hour Factor	0.89	1.00	0.38	0.83	0.25	0.63
Hourly flow rate (vph)	278	0	8	278	4	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			278		572	278
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			278		572	278
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		99	99
cM capacity (veh/h)			1285		478	761
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	278	286	14			
Volume Left	0	8	4			
Volume Right	0	0	10			
cSH	1700	1285	648			
Volume to Capacity	0.16	0.01	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.3	10.7			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.3	10.7			
Approach LOS			B			
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		24.6%	ICU Level of Service	A		
Analysis Period (min)		15				

# HCM Unsignalized Intersection Capacity Analysis

## 5: Route 44 & Lake Amenia Rd.

2012-Build PM Peak Hour  
5/30/2007

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	↩
Volume (veh/h)	266	0	3	245	1	6
Sign Control	Free			Free	Stop	
Grade	4%			4%	6%	
Peak Hour Factor	0.89	1.00	0.38	0.83	0.25	0.63
Hourly flow rate (vph)	299	0	8	295	4	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			299		610	299
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			299		610	299
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		99	99
cM capacity (veh/h)			1262		454	740
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	299	303	14			
Volume Left	0	8	4			
Volume Right	0	0	10			
cSH	1700	1262	624			
Volume to Capacity	0.18	0.01	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.3	10.9			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.3	10.9			
Approach LOS			B			
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			25.3%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
55: Route 44 & Lake Amenia Rd.

2007-Existing Sat. Peak Hour  
5/30/2007










	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↕			↕	↘↙	
Volume (veh/h)	178	0	6	198	1	3
Sign Control	Free			Free	Stop	
Grade	4%			4%	6%	
Peak Hour Factor	0.86	1.00	0.38	0.83	0.25	0.75
Hourly flow rate (vph)	207	0	16	239	4	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			207		477	207
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			207		477	207
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		99	100
cM capacity (veh/h)			1364		540	833
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	207	254	8			
Volume Left	0	16	4			
Volume Right	0	0	4			
cSH	1700	1364	655			
Volume to Capacity	0.12	0.01	0.01			
Queue Length 95th (ft)	0	1	1			
Control Delay (s)	0.0	0.6	10.6			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.6	10.6			
Approach LOS			B			
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		25.3%	ICU Level of Service	A		
Analysis Period (min)		15				



HCM Unsignalized Intersection Capacity Analysis  
55: Route 44 & Lake Amenia Rd.

2012-No Build Sat. Peak Hour

5/30/2007

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	197	0	7	219	1	3
Sign Control	Free			Free	Stop	
Grade	4%			4%	6%	
Peak Hour Factor	0.86	1.00	0.38	0.83	0.25	0.75
Hourly flow rate (vph)	229	0	18	264	4	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			229		530	229
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			229		530	229
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		99	100
cM capacity (veh/h)			1339		502	810
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	229	282	8			
Volume Left	0	18	4			
Volume Right	0	0	4			
cSH	1700	1339	620			
Volume to Capacity	0.13	0.01	0.01			
Queue Length 95th (ft)	0	1	1			
Control Delay (s)	0.0	0.6	10.9			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.6	10.9			
Approach LOS			B			
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization		27.2%		ICU Level of Service	A	
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis  
55: Route 44 & Lake Amenia Rd.

2012-Build Sat. Peak Hour

5/30/2007

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↶	↷
Volume (veh/h)	219	0	7	245	1	3
Sign Control	Free			Free	Stop	
Grade	4%			4%	6%	
Peak Hour Factor	0.86	1.00	0.38	0.83	0.25	0.75
Hourly flow rate (vph)	255	0	18	295	4	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			255		587	255
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			255		587	255
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		99	99
cM capacity (veh/h)			1310		465	784
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	255	314	8			
Volume Left	0	18	4			
Volume Right	0	0	4			
cSH	1700	1310	583			
Volume to Capacity	0.15	0.01	0.01			
Queue Length 95th (ft)	0	1	1			
Control Delay (s)	0.0	0.6	11.3			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.6	11.3			
Approach LOS			B			
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization		28.5%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis  
555: Route 44 & Lake Amenia Rd.

2007-Existing Sun. Peak Hour










5/30/2007

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↶	
Volume (veh/h)	133	0	3	194	0	2
Sign Control	Free			Free	Stop	
Grade	4%			4%	6%	
Peak Hour Factor	0.90	1.00	0.38	0.82	1.00	0.50
Hourly flow rate (vph)	148	0	8	237	0	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			148		400	148
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			148		400	148
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	100
cM capacity (veh/h)			1434		602	899
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	148	244	4			
Volume Left	0	8	0			
Volume Right	0	0	4			
cSH	1700	1434	899			
Volume to Capacity	0.09	0.01	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.3	9.0			
Lane LOS		A	A			
Approach Delay (s)	0.0	0.3	9.0			
Approach LOS			A			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			22.6%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
555: Route 44 & Lake Amenia Rd.

2012-No Build Sun. Peak Hour

5/30/2007

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	147	0	3	214	0	2
Sign Control	Free			Free	Stop	
Grade	4%			4%	6%	
Peak Hour Factor	0.90	1.00	0.38	0.82	1.00	0.50
Hourly flow rate (vph)	163	0	8	261	0	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			163		440	163
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			163		440	163
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	100
cM capacity (veh/h)			1415		570	881
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	163	269	4			
Volume Left	0	8	0			
Volume Right	0	0	4			
cSH	1700	1415	881			
Volume to Capacity	0.10	0.01	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.3	9.1			
Lane LOS		A	A			
Approach Delay (s)	0.0	0.3	9.1			
Approach LOS			A			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			23.7%		ICU Level of Service	
Analysis Period (min)			15		A	



HCM Unsignalized Intersection Capacity Analysis  
555: Route 44 & Lake Amenia Rd.

2012-Build Sun. Peak Hour  
5/30/2007












Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↕			↕	↕	
Volume (veh/h)	166	0	3	235	0	2
Sign Control	Free			Free	Stop	
Grade	4%			4%	6%	
Peak Hour Factor	0.90	1.00	0.38	0.82	1.00	0.50
Hourly flow rate (vph)	184	0	8	287	0	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			184		487	184
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			184		487	184
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	100
cM capacity (veh/h)			1390		536	858
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	184	294	4			
Volume Left	0	8	0			
Volume Right	0	0	4			
cSH	1700	1390	858			
Volume to Capacity	0.11	0.01	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.3	9.2			
Lane LOS		A	A			
Approach Delay (s)	0.0	0.3	9.2			
Approach LOS			A			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			24.8%	ICU Level of Service		A
Analysis Period (min)			15			

# HCM Unsignalized Intersection Capacity Analysis

## 6: Loop Road & Route 22










2012-Build AM Peak Hour  
5/30/2007

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	22	22	15	278	298	15
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	24	24	16	302	324	16
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	TWLTL	
Median storage (veh)					2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	667	332	340			
vC1, stage 1 conf vol	332					
vC2, stage 2 conf vol	335					
vCu, unblocked vol	667	332	340			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	97	99			
cM capacity (veh/h)	605	710	1219			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	48	318	340			
Volume Left	24	16	0			
Volume Right	24	0	16			
cSH	653	1219	1700			
Volume to Capacity	0.07	0.01	0.20			
Queue Length 95th (ft)	6	1	0			
Control Delay (s)	10.9	0.5	0.0			
Lane LOS	B	A				
Approach Delay (s)	10.9	0.5	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization		36.9%		ICU Level of Service		A
Analysis Period (min)		15				

# HCM Unsignalized Intersection Capacity Analysis

## 6: Loop Road & Route 22

2012-Build PM Peak Hour  
5/30/2007

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	19	19	27	469	360	27
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	21	29	510	391	29
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	974	406	421			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	974	406	421			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	92	97	97			
cM capacity (veh/h)	272	645	1138			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	41	539	421			
Volume Left	21	29	0			
Volume Right	21	0	29			
cSH	383	1138	1700			
Volume to Capacity	0.11	0.03	0.25			
Queue Length 95th (ft)	9	2	0			
Control Delay (s)	15.5	0.7	0.0			
Lane LOS	C	A				
Approach Delay (s)	15.5	0.7	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		1.0				
Intersection Capacity Utilization		56.8%		ICU Level of Service		B
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis  
6: Loop Road & Route 22

2012-Build Sat. Peak Hour  
5/30/2007



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰			↱	↱	
Volume (veh/h)	22	22	26	448	355	26
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	24	24	28	487	386	28
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	943	400	414			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	943	400	414			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	92	96	98			
cM capacity (veh/h)	284	650	1145			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	48	515	414			
Volume Left	24	28	0			
Volume Right	24	0	28			
cSH	395	1145	1700			
Volume to Capacity	0.12	0.02	0.24			
Queue Length 95th (ft)	10	2	0			
Control Delay (s)	15.4	0.7	0.0			
Lane LOS	C	A				
Approach Delay (s)	15.4	0.7	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay			1.1			
Intersection Capacity Utilization		54.8%		ICU Level of Service		A
Analysis Period (min)		15				



# HCM Unsignalized Intersection Capacity Analysis 6: Loop Road & Route 22

















2012-Build Sun. Peak Hour  
5/30/2007



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			↑	↑	
Volume (veh/h)	21	21	20	289	477	20
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	23	23	22	314	518	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	887	529	540			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	887	529	540			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	93	96	98			
cM capacity (veh/h)	308	549	1028			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	46	336	540			
Volume Left	23	22	0			
Volume Right	23	0	22			
cSH	395	1028	1700			
Volume to Capacity	0.12	0.02	0.32			
Queue Length 95th (ft)	10	2	0			
Control Delay (s)	15.3	0.8	0.0			
Lane LOS	C	A				
Approach Delay (s)	15.3	0.8	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		1.0				
Intersection Capacity Utilization		41.6%		ICU Level of Service		A
Analysis Period (min)		15				

















HCM Unsignalized Intersection Capacity Analysis  
7: Route 44 & Site Access/Area "L"

2012-Build AM Peak Hour  
5/30/2007

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	189	8	8	239	3	11	0	11	4	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	205	9	9	260	3	12	0	12	4	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	263			214			499	497	210	507	499	261
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	263			214			499	497	210	507	499	261
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			97	100	99	99	100	99
cM capacity (veh/h)	1301			1356			476	470	830	466	469	777
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	217	272	24	9								
Volume Left	3	9	12	4								
Volume Right	9	3	12	4								
cSH	1301	1356	605	583								
Volume to Capacity	0.00	0.01	0.04	0.01								
Queue Length 95th (ft)	0	0	3	1								
Control Delay (s)	0.1	0.3	11.2	11.3								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.1	0.3	11.2	11.3								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			27.3%		ICU Level of Service					A		
Analysis Period (min)			15									

















HCM Unsignalized Intersection Capacity Analysis  
7: Route 44 & Site Access/Area "L"

2012-Build PM Peak Hour  
5/30/2007

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	283	8	8	273	3	11	0	11	4	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	308	9	9	297	3	12	0	12	4	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	300			316			639	636	312	646	639	298
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	300			316			639	636	312	646	639	298
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			97	100	98	99	100	99
cM capacity (veh/h)	1261			1244			384	392	728	375	390	741
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	320	309	24	9								
Volume Left	3	9	12	4								
Volume Right	9	3	12	4								
cSH	1261	1244	503	498								
Volume to Capacity	0.00	0.01	0.05	0.02								
Queue Length 95th (ft)	0	1	4	1								
Control Delay (s)	0.1	0.3	12.5	12.4								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.1	0.3	12.5	12.4								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.8									
Intersection Capacity Utilization			29.5%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis  
7: Route 44 & Site Access/Area "L"

















2012-Build Sat. Peak Hour  
5/30/2007

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	210	8	8	254	3	11	0	11	4	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	228	9	9	276	3	12	0	12	4	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	279			237			539	536	233	546	539	278
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	279			237			539	536	233	546	539	278
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			97	100	99	99	100	99
cM capacity (veh/h)	1283			1330			448	447	807	439	445	761
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	240	288	24	9								
Volume Left	3	9	12	4								
Volume Right	9	3	12	4								
cSH	1283	1330	576	557								
Volume to Capacity	0.00	0.01	0.04	0.02								
Queue Length 95th (ft)	0	0	3	1								
Control Delay (s)	0.1	0.3	11.5	11.6								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.1	0.3	11.5	11.6								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			28.2%		ICU Level of Service					A		
Analysis Period (min)			15									












# HCM Unsignalized Intersection Capacity Analysis 7: Route 44 & Site Access/Area "L"

2012-Build Sun. Peak Hour  
5/30/2007

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	176	8	8	229	3	11	0	11	4	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	191	9	9	249	3	12	0	12	4	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	252			200			474	472	196	482	474	251
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	252			200			474	472	196	482	474	251
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			98	100	99	99	100	99
cM capacity (veh/h)	1313			1372			494	486	846	484	484	788
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	203	261	24	9								
Volume Left	3	9	12	4								
Volume Right	9	3	12	4								
cSH	1313	1372	624	600								
Volume to Capacity	0.00	0.01	0.04	0.01								
Queue Length 95th (ft)	0	0	3	1								
Control Delay (s)	0.1	0.3	11.0	11.1								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.1	0.3	11.0	11.1								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			26.7%	ICU Level of Service								
Analysis Period (min)			15	A								










# HCM Unsignalized Intersection Capacity Analysis 8: Area"M" & Route 44

2012-Build AM Peak Hour  
5/30/2007

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	2	2	252	2	2	198
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	2	274	2	2	215
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	495	275			276	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	495	275			276	
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	100			100	
cM capacity (veh/h)	533	764			1287	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	4	276	217			
Volume Left	2	0	2			
Volume Right	2	2	0			
cSH	628	1700	1287			
Volume to Capacity	0.01	0.16	0.00			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	10.8	0.0	0.1			
Lane LOS	B		A			
Approach Delay (s)	10.8	0.0	0.1			
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization		23.4%		ICU Level of Service		A
Analysis Period (min)		15				

# HCM Unsignalized Intersection Capacity Analysis 8: Area"M" & Route 44










2012-Build PM Peak Hour  
5/30/2007

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	2	2	286	2	292	2
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	2	311	2	317	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	949	312			313	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	949	312			313	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	100			75	
cM capacity (veh/h)	216	728			1247	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	4	313	320			
Volume Left	2	0	317			
Volume Right	2	2	0			
cSH	333	1700	1247			
Volume to Capacity	0.01	0.18	0.25			
Queue Length 95th (ft)	1	0	25			
Control Delay (s)	16.0	0.0	8.8			
Lane LOS	C		A			
Approach Delay (s)	16.0	0.0	8.8			
Approach LOS	C					
Intersection Summary						
Average Delay			4.5			
Intersection Capacity Utilization		44.8%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis  
8: Area"M" & Route 44

2012-Build Sat. Peak Hour

5/30/2007

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	2	2	267	2	2	219
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	2	290	2	2	238
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	534	291			292	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	534	291			292	
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	100			100	
cM capacity (veh/h)	506	748			1269	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	4	292	240			
Volume Left	2	0	2			
Volume Right	2	2	0			
cSH	604	1700	1269			
Volume to Capacity	0.01	0.17	0.00			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	11.0	0.0	0.1			
Lane LOS	B		A			
Approach Delay (s)	11.0	0.0	0.1			
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization		24.2%		ICU Level of Service		A
Analysis Period (min)		15				






HCM Unsignalized Intersection Capacity Analysis  
8: Area"M" & Route 44

2012-Build Sun. Peak Hour

5/30/2007



















Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	2	2	242	2	2	185
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	2	263	2	2	201
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	470	264			265	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	470	264			265	
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	100			100	
cM capacity (veh/h)	551	775			1299	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	4	265	203			
Volume Left	2	0	2			
Volume Right	2	2	0			
cSH	644	1700	1299			
Volume to Capacity	0.01	0.16	0.00			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	10.6	0.0	0.1			
Lane LOS	B		A			
Approach Delay (s)	10.6	0.0	0.1			
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			22.9%	ICU Level of Service		A
Analysis Period (min)			15			

## **2. TRADITIONAL NEIGHBORHOOD ALTERNATIVE**

Lanes, Volumes, Timings  
1: Route 44 & Route 22

2012-Build AM Peak Hour Traditional Neighborhood Alt.













6/4/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	102	87	12	73	113	44	31	187	123	30	233	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992			0.972			0.947			0.967	
Flt Protected		0.976			0.983			0.994			0.994	
Satd. Flow (prot)	0	1803	0	0	1780	0	0	1753	0	0	1790	0
Flt Permitted		0.726			0.826			0.910			0.911	
Satd. Flow (perm)	0	1342	0	0	1496	0	0	1605	0	0	1641	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			20			51			26	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			2173			2614			1552	
Travel Time (s)		12.8			42.3			50.9			30.2	
Peak Hour Factor	0.79	0.75	0.75	0.71	0.85	0.70	0.54	0.83	0.68	0.59	0.85	0.83
Adj. Flow (vph)	129	116	16	103	133	63	57	225	181	51	274	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	261	0	0	299	0	0	463	0	0	430	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (ft)	50	76		50	76		50	76		50	76	
Trailing Detector (ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Position(ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Size(ft)	50	40		50	40		50	40		50	40	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		36			36			36			36	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		3			3			1			1	
Permitted Phases	3			3			1			1		
Detector Phase	3	3		3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	8.0	8.0		8.0	8.0		16.0	16.0		16.0	16.0	







Lanes, Volumes, Timings  
1: Route 44 & Route 22

2012-Build AM Peak Hour Traditional Neighborhood Alt.

6/4/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	41.0	41.0	0.0	41.0	41.0	0.0	43.0	43.0	0.0	43.0	43.0	0.0
Total Split (%)	48.8%	48.8%	0.0%	48.8%	48.8%	0.0%	51.2%	51.2%	0.0%	51.2%	51.2%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		18.4			18.4			22.3			22.3	
Actuated g/C Ratio		0.37			0.37			0.45			0.45	
v/c Ratio		0.52			0.53			0.62			0.57	
Control Delay		17.7			16.5			13.9			13.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		17.7			16.5			13.9			13.5	
LOS		B			B			B			B	
Approach Delay		17.7			16.5			13.9			13.5	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)		51			55			74			71	
Queue Length 95th (ft)		121			153			186			183	
Internal Link Dist (ft)		575			2093			2534			1472	
Turn Bay Length (ft)												
Base Capacity (vph)		747			839			983			995	
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		0.35			0.36			0.47			0.43	
Intersection Summary												
Area Type:	Other											
Cycle Length: 84												
Actuated Cycle Length: 49.5												
Natural Cycle: 40												
Control Type: Actuated-Uncoordinated												
Maximum v/c Ratio: 0.62												
Intersection Signal Delay: 15.0						Intersection LOS: B						
Intersection Capacity Utilization 50.0%						ICU Level of Service A						
Analysis Period (min) 15												

















Splits and Phases: 1: Route 44 & Route 22

					
ø1			ø3		
43 s			41 s		

Lanes, Volumes, Timings  
1: Route 44 & Route 22

2012-Build PM Peak Hour Traditional Neighborhood Alt.

6/4/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	144	117	26	129	121	99	32	349	150	92	314	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984			0.965			0.955			0.975		
Flt Protected	0.975			0.981			0.997			0.989		
Satd. Flow (prot)	0	1787	0	0	1763	0	0	1774	0	0	1796	0
Flt Permitted	0.609			0.739			0.953			0.710		
Satd. Flow (perm)	0	1116	0	0	1328	0	0	1695	0	0	1289	0
Right Turn on Red	Yes			Yes			Yes			Yes		
Satd. Flow (RTOR)	10			27			39			18		
Link Speed (mph)	35			35			35			35		
Link Distance (ft)	655			2173			2614			1552		
Travel Time (s)	12.8			42.3			50.9			30.2		
Peak Hour Factor	0.83	0.93	0.65	0.80	0.80	0.90	0.95	0.84	0.68	0.69	0.83	0.86
Adj. Flow (vph)	173	126	40	161	151	110	34	415	221	133	378	114
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	339	0	0	422	0	0	670	0	0	625	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			0			0			0		
Link Offset(ft)	0			0			0			0		
Crosswalk Width(ft)	16			16			16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Thru			Thru			Thru			Thru		
Leading Detector (ft)	50	76		50	76		50	76		50	76	
Trailing Detector (ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Position(ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Size(ft)	50	40		50	40		50	40		50	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	36			36			36			36		
Detector 2 Size(ft)	40			40			40			40		
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0			0.0		
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases	3			3			1			1		
Permitted Phases	3			3			1			1		
Detector Phase	3	3		3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	8.0	8.0		8.0	8.0		16.0	16.0		16.0	16.0	



Lanes, Volumes, Timings  
1: Route 44 & Route 22

2012-Build PM Peak Hour Traditional Neighborhood Alt.

6/4/2007



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	41.0	41.0	0.0	41.0	41.0	0.0	43.0	43.0	0.0	43.0	43.0	0.0
Total Split (%)	48.8%	48.8%	0.0%	48.8%	48.8%	0.0%	51.2%	51.2%	0.0%	51.2%	51.2%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Lead/Lag

Lead-Lag Optimize?

Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		29.2			29.2			39.4			39.4	
Actuated g/C Ratio		0.38			0.38			0.51			0.51	
v/c Ratio		0.79			0.81			0.75			0.93	
Control Delay		34.0			32.5			22.7			43.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		34.0			32.5			22.7			43.1	
LOS		C			C			C			D	
Approach Delay		34.0			32.5			22.7			43.1	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)		134			163			235			266	
Queue Length 95th (ft)		237			224			385			#485	
Internal Link Dist (ft)		575			2093			2534			1472	
Turn Bay Length (ft)												
Base Capacity (vph)		497			600			890			671	
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		0.68			0.70			0.75			0.93	

Intersection Summary

Area Type: Other

Cycle Length: 84

Actuated Cycle Length: 76.6

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 32.8

Intersection LOS: C

Intersection Capacity Utilization 84.7%



ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 44 & Route 22

 ø1	 ø3
43 s	41 s

Lanes, Volumes, Timings  
11: Route 44 & Route 22

2012-Build Sat. Peak Hour Traditional Neighborhood Alt.

6/4/2007















Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↔			↔			↔			↔			
Volume (vph)	153	134	27	144	127	86	43	362	133	84	303	138	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	0.984			0.968			0.971			0.956			
Flt Protected	0.975			0.983			0.994			0.992			
Satd. Flow (prot)	0	1787	0	0	1772	0	0	1798	0	0	1767	0	
Flt Permitted	0.596			0.731			0.870			0.779			
Satd. Flow (perm)	0	1092	0	0	1318	0	0	1574	0	0	1387	0	
Right Turn on Red	Yes			Yes			Yes			Yes			
Satd. Flow (RTOR)	10			24			22			39			
Link Speed (mph)	35			35			35			35			
Link Distance (ft)	655			2173			2614			1552			
Travel Time (s)	12.8			42.3			50.9			30.2			
Peak Hour Factor	0.72	0.85	0.54	0.88	0.68	0.78	0.55	0.77	0.87	0.90	0.96	0.69	
Adj. Flow (vph)	212	158	50	164	187	110	78	470	153	93	316	200	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	420	0	0	461	0	0	701	0	0	609	0	
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right	
Median Width(ft)	0			0			0			0			
Link Offset(ft)	0			0			0			0			
Crosswalk Width(ft)	16			16			16			16			
Two way Left Turn Lane													
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15	9		15	9		15	9		15	9		
Number of Detectors	1	2	1		2	1		2	1		2	1	
Detector Template	Thru			Thru			Thru			Thru			
Leading Detector (ft)	50	76	50		76	50		76	50		76	50	
Trailing Detector (ft)	0	-10	0		-10	0		-10	0		-10	0	
Detector 1 Position(ft)	0	-10	0		-10	0		-10	0		-10	0	
Detector 1 Size(ft)	50	40	50		40	50		40	50		40	50	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel													
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	36			36			36			36			
Detector 2 Size(ft)	40			40			40			40			
Detector 2 Type	CI+Ex			CI+Ex			CI+Ex			CI+Ex			
Detector 2 Channel													
Detector 2 Extend (s)	0.0			0.0			0.0			0.0			
Turn Type	Perm			Perm			Perm			Perm			
Protected Phases	3			3			1			1			
Permitted Phases	3			3			1			1			
Detector Phase	3	3	3		3	1		1	1		1	1	
Switch Phase													
Minimum Initial (s)	2.0	2.0	2.0		2.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	8.0	8.0	8.0		8.0	16.0		16.0	16.0		16.0	16.0	







Lanes, Volumes, Timings  
11: Route 44 & Route 22

2012-Build Sat. Peak Hour Traditional Neighborhood Alt.

6/4/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	41.0	41.0	0.0	41.0	41.0	0.0	43.0	43.0	0.0	43.0	43.0	0.0
Total Split (%)	48.8%	48.8%	0.0%	48.8%	48.8%	0.0%	51.2%	51.2%	0.0%	51.2%	51.2%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		34.3			34.3			38.0			38.0	
Actuated g/C Ratio		0.43			0.43			0.47			0.47	
v/c Ratio		0.89			0.80			0.93			0.90	
Control Delay		44.5			31.5			41.1			38.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		44.5			31.5			41.1			38.3	
LOS		D			C			D			D	
Approach Delay		44.5			31.5			41.1			38.3	
Approach LOS		D			C			D			D	
Queue Length 50th (ft)		189			190			330			273	
Queue Length 95th (ft)		#334			197			#403			#498	
Internal Link Dist (ft)		575			2093			2534			1472	
Turn Bay Length (ft)												
Base Capacity (vph)		493			602			768			686	
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		0.85			0.77			0.91			0.89	
Intersection Summary												
Area Type:	Other											
Cycle Length:	84											
Actuated Cycle Length:	80.4											
Natural Cycle:	65											
Control Type:	Actuated-Uncoordinated											
Maximum v/c Ratio:	0.93											
Intersection Signal Delay:	38.9					Intersection LOS: D						
Intersection Capacity Utilization	79.2%					ICU Level of Service D						
Analysis Period (min)	15											
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												

Splits and Phases: 11: Route 44 & Route 22

















					
ø1			ø3		
43 s			41 s		



Lanes, Volumes, Timings  
111: Route 44 & Route 22

2012-Build Sun. Peak Hour Traditional Neighborhood Alt.

6/4/2007

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	81	21	96	81	63	27	298	98	46	433	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985			0.973			0.961			0.980	
Flt Protected		0.981			0.977			0.997			0.996	
Satd. Flow (prot)	0	1800	0	0	1771	0	0	1785	0	0	1818	0
Flt Permitted		0.760			0.720			0.921			0.922	
Satd. Flow (perm)	0	1394	0	0	1305	0	0	1649	0	0	1683	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			19			33			14	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		655			2173			2614			1552	
Travel Time (s)		12.8			42.3			50.9			30.2	
Peak Hour Factor	0.88	0.70	0.81	0.56	0.71	0.89	0.65	0.78	0.56	0.75	0.73	0.78
Adj. Flow (vph)	89	116	26	171	114	71	42	382	175	61	593	115
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	231	0	0	356	0	0	599	0	0	769	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (ft)	50	76		50	76		50	76		50	76	
Trailing Detector (ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Position(ft)	0	-10		0	-10		0	-10		0	-10	
Detector 1 Size(ft)	50	40		50	40		50	40		50	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		36			36			36			36	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		3			3			1			1	
Permitted Phases	3			3			1			1		
Detector Phase	3	3		3	3		1	1		1	1	
Switch Phase												
Minimum Initial (s)	2.0	2.0		2.0	2.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	8.0	8.0		8.0	8.0		16.0	16.0		16.0	16.0	

Lanes, Volumes, Timings  
111: Route 44 & Route 22

2012-Build Sun. Peak Hour Traditional Neighborhood Alt.

6/4/2007



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	41.0	41.0	0.0	41.0	41.0	0.0	43.0	43.0	0.0	43.0	43.0	0.0
Total Split (%)	48.8%	48.8%	0.0%	48.8%	48.8%	0.0%	51.2%	51.2%	0.0%	51.2%	51.2%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		25.5			25.5			38.9			38.9	
Actuated g/C Ratio		0.35			0.35			0.54			0.54	
v/c Ratio		0.47			0.76			0.67			0.85	
Control Delay		20.1			30.3			17.9			27.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		20.1			30.3			17.9			27.4	
LOS		C			C			B			C	
Approach Delay		20.1			30.3			17.9			27.4	
Approach LOS		C			C			B			C	
Queue Length 50th (ft)		75			131			166			263	
Queue Length 95th (ft)		94			154			291			386	
Internal Link Dist (ft)		575			2093			2534			1472	
Turn Bay Length (ft)												
Base Capacity (vph)		624			589			906			915	
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		0.37			0.60			0.66			0.84	

Intersection Summary

Area Type: Other

Cycle Length: 84

Actuated Cycle Length: 72.5

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 24.2

Intersection LOS: C

Intersection Capacity Utilization 65.7%

ICU Level of Service C

Analysis Period (min) 15

















Splits and Phases: 111: Route 44 & Route 22

 ø1	 ø3
43 s	41 s

HCM Unsignalized  
2: Lake Amenia Rd. & Route 22

2012-Build AM Peak Hour Traditional Neighborhood Alt.

















6/4/2007

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	4	3	31	5	11	8	17	288	2	3	311	3
Sign Control		Stop			Stop			Free			Free	
Grade		7%			0%			0%			0%	
Peak Hour Factor	0.50	0.38	0.57	0.50	0.63	0.44	0.58	0.80	0.25	0.38	0.86	0.25
Hourly flow rate (vph)	8	8	54	10	17	18	29	360	8	8	362	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	833	810	368	864	812	364	374			368		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	833	810	368	864	812	364	374			368		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	97	92	96	94	97	98			99		
cM capacity (veh/h)	261	303	677	241	303	681	1185			1191		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	70	46	397	382								
Volume Left	8	10	29	8								
Volume Right	54	18	8	12								
cSH	513	363	1185	1191								
Volume to Capacity	0.14	0.13	0.02	0.01								
Queue Length 95th (ft)	12	11	2	1								
Control Delay (s)	13.1	16.3	0.8	0.2								
Lane LOS	B	C	A	A								
Approach Delay (s)	13.1	16.3	0.8	0.2								
Approach LOS	B	C										
Intersection Summary												
Average Delay			2.3									
Intersection Capacity Utilization			36.3%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized  
2: Lake Amenia Rd. & Route 22

2012-Build PM Peak Hour Traditional Neighborhood Alt.

6/4/2007

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	7	36	10	9	3	42	479	11	9	445	9
Sign Control		Stop			Stop			Free			Free	
Grade		7%			0%			0%			0%	
Peak Hour Factor	0.42	0.75	0.67	0.50	0.67	0.75	0.48	0.56	0.83	0.67	0.85	0.50
Hourly flow rate (vph)	14	9	54	20	13	4	88	855	13	13	524	18
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1607	1603	533	1655	1605	862	542			869		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1607	1603	533	1655	1605	862	542			869		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	79	90	90	67	86	99	91			98		
cM capacity (veh/h)	68	94	547	60	95	355	1027			776		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	77	37	956	555								
Volume Left	14	20	88	13								
Volume Right	54	4	13	18								
cSH	190	77	1027	776								
Volume to Capacity	0.41	0.49	0.09	0.02								
Queue Length 95th (ft)	45	50	7	1								
Control Delay (s)	36.3	89.5	2.2	0.5								
Lane LOS	E	F	A	A								
Approach Delay (s)	36.3	89.5	2.2	0.5								
Approach LOS	E	F										
Intersection Summary												
Average Delay			5.2									
Intersection Capacity Utilization			58.5%		ICU Level of Service					B		
Analysis Period (min)			15									



















HCM Unsignalized  
22: Lake Amenia Rd. & Route 22

2012-Build Sat. Peak Hour Traditional Neighborhood Alt.

6/4/2007



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	4	1	46	5	8	4	30	483	13	4	434	3
Sign Control		Stop			Stop			Free			Free	
Grade		7%			0%			0%			0%	
Peak Hour Factor	0.50	0.25	0.50	0.38	0.58	0.50	0.41	0.76	0.58	0.50	0.86	0.38
Hourly flow rate (vph)	8	4	92	13	14	8	73	636	22	8	505	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1333	1329	509	1412	1322	647	513					658
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1333	1329	509	1412	1322	647	513					658
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1					4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2					2.2
p0 queue free %	93	97	84	85	90	98	93					99
cM capacity (veh/h)	112	142	564	89	144	471	1053					930
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	104	35	731	521								
Volume Left	8	13	73	8								
Volume Right	92	8	22	8								
cSH	396	134	1053	930								
Volume to Capacity	0.26	0.26	0.07	0.01								
Queue Length 95th (ft)	26	24	6	1								
Control Delay (s)	17.3	41.0	1.8	0.2								
Lane LOS	C	E	A	A								
Approach Delay (s)	17.3	41.0	1.8	0.2								
Approach LOS	C	E										
Intersection Summary												
Average Delay			3.3									
Intersection Capacity Utilization			55.8%	ICU Level of Service					B			
Analysis Period (min)			15									





												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	1	24	10	1	2	4	383	5	0	539	6
Sign Control		Stop			Stop			Free			Free	
Grade		7%			0%			0%			0%	
Peak Hour Factor	0.75	0.25	0.75	0.35	0.25	0.50	0.25	0.62	0.38	1.00	0.67	0.63
Hourly flow rate (vph)	13	4	32	29	4	4	16	618	13	0	804	10
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1472	1472	809	1500	1470	624	814			631		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1472	1472	809	1500	1470	624	814			631		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	87	97	92	68	97	99	98			100		
cM capacity (veh/h)	100	124	380	88	125	485	813			952		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	49	37	647	814								
Volume Left	13	29	16	0								
Volume Right	32	4	13	10								
cSH	197	101	813	952								
Volume to Capacity	0.25	0.36	0.02	0.00								
Queue Length 95th (ft)	24	36	2	0								
Control Delay (s)	29.3	60.0	0.5	0.0								
Lane LOS	D	F	A									
Approach Delay (s)	29.3	60.0	0.5	0.0								
Approach LOS	D	F										
Intersection Summary												
Average Delay			2.6									
Intersection Capacity Utilization			38.7%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized  
3: Hotel/Golf Course Access & Route 22

2012-Build AM Peak Hour Traditional Neighborhood Alt.

6/4/2007







Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	101	101	104	206	242	104
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	110	110	113	224	263	113
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLT	None	
Median storage veh				2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	770	320	376			
vC1, stage 1 conf vol	320					
vC2, stage 2 conf vol	450					
vCu, unblocked vol	770	320	376			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.2			
p0 queue free %	79	85	90			
cM capacity (veh/h)	521	721	1182			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	110	110	337	376		
Volume Left	110	0	113	0		
Volume Right	0	110	0	113		
cSH	521	721	1182	1700		
Volume to Capacity	0.21	0.15	0.10	0.22		
Queue Length 95th (ft)	20	13	8	0		
Control Delay (s)	13.7	10.9	3.4	0.0		
Lane LOS	B	B	A			
Approach Delay (s)	12.3		3.4	0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			4.1			
Intersection Capacity Utilization			51.3%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized  
3: Hotel/Golf Course Access & Route 22

2012-Build PM Peak Hour Traditional Neighborhood Alt.





6/4/2007







Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	115	113	141	420	341	149
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.44	0.63	0.25	0.53	0.83	0.75
Hourly flow rate (vph)	261	179	564	792	411	199
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2431	510	610			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2431	510	610			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	68	42			
cM capacity (veh/h)	15	563	969			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	261	179	1356	610		
Volume Left	261	0	564	0		
Volume Right	0	179	0	199		
cSH	15	563	969	1700		
Volume to Capacity	17.80	0.32	0.58	0.36		
Queue Length 95th (ft)	Err	34	97	0		
Control Delay (s)	Err	14.3	13.8	0.0		
Lane LOS	F	B	B			
Approach Delay (s)	5935.5		13.8	0.0		
Approach LOS	F					
Intersection Summary						
Average Delay			1094.7			
Intersection Capacity Utilization			73.3%	ICU Level of Service	D	
Analysis Period (min)			15			





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	126	126	148	400	331	154
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.75	0.30	0.50	0.74	0.87	0.39
Hourly flow rate (vph)	168	420	296	541	380	395
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1710	578	775			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1710	578	775			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	19	65			
cM capacity (veh/h)	65	516	841			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	168	420	837	775		
Volume Left	168	0	296	0		
Volume Right	0	420	0	395		
cSH	65	516	841	1700		
Volume to Capacity	2.60	0.81	0.35	0.46		
Queue Length 95th (ft)	417	198	40	0		
Control Delay (s)	862.2	35.8	8.0	0.0		
Lane LOS	F	E	A			
Approach Delay (s)	271.9		8.0	0.0		
Approach LOS	F					
Intersection Summary						
Average Delay			75.7			
Intersection Capacity Utilization			73.0%	ICU Level of Service		D
Analysis Period (min)			15			

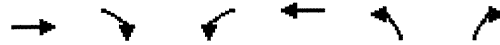


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	124	121	117	268	449	124
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.33	0.25	0.25	0.61	0.62	0.58
Hourly flow rate (vph)	376	484	468	439	724	214
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2206	831	938			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2206	831	938			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	0	36			
cM capacity (veh/h)	18	369	730			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	376	484	907	938		
Volume Left	376	0	468	0		
Volume Right	0	484	0	214		
cSH	18	369	730	1700		
Volume to Capacity	21.44	1.31	0.64	0.55		
Queue Length 95th (ft)	Err	560	117	0		
Control Delay (s)	Err	187.5	17.1	0.0		
Lane LOS	F	F	C			
Approach Delay (s)	4475.6		17.1	0.0		
Approach LOS	F					
Intersection Summary						
Average Delay			1428.2			
Intersection Capacity Utilization			68.6%	ICU Level of Service		C
Analysis Period (min)			15			

HCM Unsignalized  
4: Route 44 & West Lake Amenia Rd.

2012-Build AM Peak Hour Traditional Neighborhood Alt.

6/4/2007












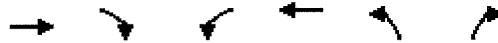
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↰	↰	
Volume (veh/h)	162	38	1	225	24	4
Sign Control	Free			Free	Stop	
Grade	4%			4%	5%	
Peak Hour Factor	0.88	0.82	0.25	0.83	0.70	0.38
Hourly flow rate (vph)	184	46	4	271	34	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			230		486	207
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			230		486	207
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		94	99
cM capacity (veh/h)			1337		538	833
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	230	275	45			
Volume Left	0	4	34			
Volume Right	46	0	11			
cSH	1700	1337	587			
Volume to Capacity	0.14	0.00	0.08			
Queue Length 95th (ft)	0	0	6			
Control Delay (s)	0.0	0.1	11.6			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.1	11.6			
Approach LOS			B			
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization		22.6%		ICU Level of Service	A	
Analysis Period (min)		15				



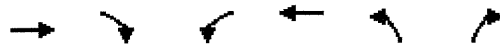
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	
Volume (veh/h)	261	43	3	238	44	2
Sign Control	Free			Free	Stop	
Grade	4%			4%	5%	
Peak Hour Factor	0.88	0.64	0.38	0.86	0.58	0.50
Hourly flow rate (vph)	297	67	8	277	76	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			364		623	330
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			364		623	330
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		83	99
cM capacity (veh/h)			1195		446	711
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	364	285	80			
Volume Left	0	8	76			
Volume Right	67	0	4			
cSH	1700	1195	455			
Volume to Capacity	0.21	0.01	0.18			
Queue Length 95th (ft)	0	0	16			
Control Delay (s)	0.0	0.3	14.6			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.3	14.6			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			1.7			
Intersection Capacity Utilization			26.3%	ICU Level of Service		A
Analysis Period (min)			15			



						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	209	20	7	239	32	3
Sign Control	Free			Free	Stop	
Grade	4%			4%	5%	
Peak Hour Factor	0.85	1.00	0.38	0.82	0.79	0.75
Hourly flow rate (vph)	246	20	18	291	41	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			266		584	256
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			266		584	256
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		91	99
cM capacity (veh/h)			1298		466	782
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	266	310	45			
Volume Left	0	18	41			
Volume Right	20	0	4			
cSH	1700	1298	484			
Volume to Capacity	0.16	0.01	0.09			
Queue Length 95th (ft)	0	1	8			
Control Delay (s)	0.0	0.6	13.2			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.6	13.2			
Approach LOS			B			
Intersection Summary						
Average Delay			1.2			
Intersection Capacity Utilization			28.2%	ICU Level of Service		A
Analysis Period (min)			15			












Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↰↱	↰↱	
Volume (veh/h)	161	28	2	232	8	1
Sign Control	Free			Free	Stop	
Grade	4%			4%	5%	
Peak Hour Factor	0.83	0.79	0.50	0.79	0.63	0.25
Hourly flow rate (vph)	194	35	4	294	13	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			229		513	212
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			229		513	212
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		98	100
cM capacity (veh/h)			1339		519	828
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	229	298	17			
Volume Left	0	4	13			
Volume Right	35	0	4			
cSH	1700	1339	570			
Volume to Capacity	0.13	0.00	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.1	11.5			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.1	11.5			
Approach LOS			B			
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			23.8%	ICU Level of Service		A
Analysis Period (min)			15			












Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	
Volume (veh/h)	166	0	1	226	0	6
Sign Control	Free			Free	Stop	
Grade	4%			4%	6%	
Peak Hour Factor	0.80	0.25	0.25	0.87	0.25	0.42
Hourly flow rate (vph)	208	0	4	260	0	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			208		475	208
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			208		475	208
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		100	98
cM capacity (veh/h)			1364		546	833
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	208	264	14			
Volume Left	0	4	0			
Volume Right	0	0	14			
cSH	1700	1364	833			
Volume to Capacity	0.12	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.1	9.4			
Lane LOS		A	A			
Approach Delay (s)	0.0	0.1	9.4			
Approach LOS			A			
<b>Intersection Summary</b>						
Average Delay			0.4			
Intersection Capacity Utilization			22.7%	ICU Level of Service		A
Analysis Period (min)			15			



						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	263	0	3	240	1	6
Sign Control	Free			Free	Stop	
Grade	4%			4%	6%	
Peak Hour Factor	0.89	1.00	0.38	0.83	0.25	0.63
Hourly flow rate (vph)	296	0	8	289	4	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			296		600	296
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			296		600	296
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		99	99
cM capacity (veh/h)			1266		460	743
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	296	297	14			
Volume Left	0	8	4			
Volume Right	0	0	10			
cSH	1700	1266	629			
Volume to Capacity	0.17	0.01	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.3	10.9			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.3	10.9			
Approach LOS			B			
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		25.0%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↰	↰	
Volume (veh/h)	213	0	7	245	1	3
Sign Control	Free			Free	Stop	
Grade	4%			4%	6%	
Peak Hour Factor	0.86	1.00	0.38	0.83	0.25	0.75
Hourly flow rate (vph)	248	0	18	295	4	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			248		580	248
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			248		580	248
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		99	99
cM capacity (veh/h)			1318		469	791
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	248	314	8			
Volume Left	0	18	4			
Volume Right	0	0	4			
cSH	1700	1318	589			
Volume to Capacity	0.15	0.01	0.01			
Queue Length 95th (ft)	0	1	1			
Control Delay (s)	0.0	0.6	11.2			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.6	11.2			
Approach LOS			B			
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization		28.5%		ICU Level of Service		A
Analysis Period (min)		15				

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	162	0	3	234	0	2
Sign Control	Free			Free	Stop	
Grade	4%			4%	6%	
Peak Hour Factor	0.90	1.00	0.38	0.82	1.00	0.50
Hourly flow rate (vph)	180	0	8	285	0	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			180		481	180
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			180		481	180
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	100
cM capacity (veh/h)			1396		540	862
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	180	293	4			
Volume Left	0	8	0			
Volume Right	0	0	4			
cSH	1700	1396	862			
Volume to Capacity	0.11	0.01	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.3	9.2			
Lane LOS		A	A			
Approach Delay (s)	0.0	0.3	9.2			
Approach LOS			A			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization		24.7%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			↑	↑	
Volume (veh/h)	22	22	23	288	320	23
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	24	24	25	313	348	25
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	TWLTL	
Median storage veh					2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	723	360	373			
vC1, stage 1 conf vol	360					
vC2, stage 2 conf vol	363					
vCu, unblocked vol	723	360	373			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	97	98			
cM capacity (veh/h)	579	684	1186			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	48	338	373			
Volume Left	24	25	0			
Volume Right	24	0	25			
cSH	627	1186	1700			
Volume to Capacity	0.08	0.02	0.22			
Queue Length 95th (ft)	6	2	0			
Control Delay (s)	11.2	0.8	0.0			
Lane LOS	B	A				
Approach Delay (s)	11.2	0.8	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay			1.1			
Intersection Capacity Utilization		44.1%		ICU Level of Service		A
Analysis Period (min)			15			





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	37	37	48	524	408	48
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	40	52	570	443	52
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1143	470	496			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1143	470	496			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	81	93	95			
cM capacity (veh/h)	210	594	1068			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	80	622	496			
Volume Left	40	52	0			
Volume Right	40	0	52			
cSH	311	1068	1700			
Volume to Capacity	0.26	0.05	0.29			
Queue Length 95th (ft)	25	4	0			
Control Delay (s)	20.6	1.3	0.0			
Lane LOS	C	A				
Approach Delay (s)	20.6	1.3	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		2.1				
Intersection Capacity Utilization		68.9%		ICU Level of Service		C
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			↕	↕	
Volume (veh/h)	41	41	48	507	409	48
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	45	45	52	551	445	52
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1126	471	497			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1126	471	497			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	79	92	95			
cM capacity (veh/h)	215	593	1067			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	89	603	497			
Volume Left	45	52	0			
Volume Right	45	0	52			
cSH	316	1067	1700			
Volume to Capacity	0.28	0.05	0.29			
Queue Length 95th (ft)	28	4	0			
Control Delay (s)	20.8	1.3	0.0			
Lane LOS	C	A				
Approach Delay (s)	20.8	1.3	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		2.2				
Intersection Capacity Utilization		68.6%		ICU Level of Service		C
Analysis Period (min)		15				



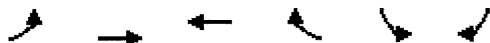
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	LT	RT	LT	TH	TH	LT
Volume (veh/h)	41	41	40	344	530	40
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	45	45	43	374	576	43
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1059	598	620			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1059	598	620			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	81	91	95			
cM capacity (veh/h)	237	502	961			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	89	417	620			
Volume Left	45	43	0			
Volume Right	45	0	43			
cSH	322	961	1700			
Volume to Capacity	0.28	0.05	0.36			
Queue Length 95th (ft)	28	4	0			
Control Delay (s)	20.4	1.4	0.0			
Lane LOS	C	A				
Approach Delay (s)	20.4	1.4	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		2.1				
Intersection Capacity Utilization		63.0%		ICU Level of Service		B
Analysis Period (min)		15				



HCM Unsignalized  
7: Route 44 & Vineyard Townhomes/Condos

2012-Build AM Peak Hour Traditional Neighborhood Alt.

6/4/2007



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Volume (veh/h)	2	194	245	4	6	3
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	211	266	4	7	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	271				484	268
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	271				484	268
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				99	100
cM capacity (veh/h)	1293				541	770
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	213	271	10			
Volume Left	2	0	7			
Volume Right	0	4	3			
cSH	1293	1700	601			
Volume to Capacity	0.00	0.16	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.1	0.0	11.1			
Lane LOS	A		B			
Approach Delay (s)	0.1	0.0	11.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization		23.1%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized  
7: Route 44 & Vineyard Townhomes/Condos.

2012-Build PM Peak Hour Traditional Neighborhood Alt.

6/4/2007



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Volume (veh/h)	4	301	278	4	3	3
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	327	302	4	3	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	307				640	304
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	307				640	304
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				99	100
cM capacity (veh/h)	1254				438	735
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	332	307	7			
Volume Left	4	0	3			
Volume Right	0	4	3			
cSH	1254	1700	549			
Volume to Capacity	0.00	0.18	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.1	0.0	11.6			
Lane LOS	A		B			
Approach Delay (s)	0.1	0.0	11.6			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			29.0%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized  
7: Route 44 & Vineyard Townhomes/Condos.

2012-Build Sat. Peak Hour Traditional Neighborhood Alt.

6/4/2007



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Volume (veh/h)	4	226	267	4	3	3
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	246	290	4	3	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	295				547	292
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	295				547	292
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				99	100
cM capacity (veh/h)	1267				497	747
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	250	295	7			
Volume Left	4	0	3			
Volume Right	0	4	3			
cSH	1267	1700	596			
Volume to Capacity	0.00	0.17	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.2	0.0	11.1			
Lane LOS	A		B			
Approach Delay (s)	0.2	0.0	11.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			25.1%	ICU Level of Service		A
Analysis Period (min)			15			











Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Volume (veh/h)	3	186	237	3	3	3
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	202	258	3	3	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	261				468	259
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	261				468	259
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				99	100
cM capacity (veh/h)	1304				552	779
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	205	261	7			
Volume Left	3	0	3			
Volume Right	0	3	3			
cSH	1304	1700	646			
Volume to Capacity	0.00	0.15	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.1	0.0	10.6			
Lane LOS	A		B			
Approach Delay (s)	0.1	0.0	10.6			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization		22.7%		ICU Level of Service		A
Analysis Period (min)		15				














Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	3	6	246	2	4	193
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	7	267	2	4	210
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	487	268			270	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	487	268			270	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	538	770			1294	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	10	270	214			
Volume Left	3	0	4			
Volume Right	7	2	0			
cSH	673	1700	1294			
Volume to Capacity	0.01	0.16	0.00			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	10.4	0.0	0.2			
Lane LOS	B		A			
Approach Delay (s)	10.4	0.0	0.2			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			0.3			
Intersection Capacity Utilization			23.4%	ICU Level of Service		A
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	6	6	273	8	299	8
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	7	297	9	325	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	960	301			305	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	960	301			305	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	99			74	
cM capacity (veh/h)	211	739			1255	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	13	305	334			
Volume Left	7	0	325			
Volume Right	7	9	0			
cSH	328	1700	1255			
Volume to Capacity	0.04	0.18	0.26			
Queue Length 95th (ft)	3	0	26			
Control Delay (s)	16.4	0.0	8.7			
Lane LOS	C		A			
Approach Delay (s)	16.4	0.0	8.7			
Approach LOS	C					
Intersection Summary						
Average Delay			4.8			
Intersection Capacity Utilization		45.2%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	7	262	8	8	223
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	8	285	9	9	242
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	549	289			293	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	549	289			293	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	99			99	
cM capacity (veh/h)	493	750			1268	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	15	293	251			
Volume Left	8	0	9			
Volume Right	8	9	0			
cSH	595	1700	1268			
Volume to Capacity	0.03	0.17	0.01			
Queue Length 95th (ft)	2	0	1			
Control Delay (s)	11.2	0.0	0.3			
Lane LOS	B		A			
Approach Delay (s)	11.2	0.0	0.3			
Approach LOS	B					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			28.2%	ICU Level of Service	A	
Analysis Period (min)			15			



						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	7	233	7	7	182
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	8	253	8	8	198
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	470	257			261	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	470	257			261	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			99	
cM capacity (veh/h)	549	782			1304	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	15	261	205			
Volume Left	8	0	8			
Volume Right	8	8	0			
cSH	645	1700	1304			
Volume to Capacity	0.02	0.15	0.01			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	10.7	0.0	0.3			
Lane LOS	B		A			
Approach Delay (s)	10.7	0.0	0.3			
Approach LOS	B					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization		25.2%		ICU Level of Service		A
Analysis Period (min)			15			