Appendix B

Detailed Transportation Data

TRAVEL DEMAND MODELING FOR EXISTING CONDITIONS

Regional Traffic Forecasting Model Development

A responsive Travel Demand Model (TDM) for the Town of Batavia was developed and validated for use in evaluating existing travel conditions and forecasting future travel demand. In order to develop the existing model, both the household and the employment data were used as the input. For this study, Traffic Analysis Zone (TAZ) layers were constructed from census block group level to enable the model to be more focused on a local level. The existing model contains 23 internal (within the study area) and 28 external zones (locations where traffic enters and exits the study area) covering the Town and City of Batavia.

The trip generation variables used in the model are households in three income level (low, mid and high) along with three categories of employment for central business districts (CBD). The trip distribution model uses a gravity model to estimate origin/destination tables. The network included all major roads and some local roads. The model was developed for the PM peak period. The model consists of the following steps: trip generation (how many trips), trip distribution (the flow of trips) and traffic assignment (which roads).

Data Sources, Analysis and Forecasting

In order to conduct the travel demand model process, data was collected from various sources and processed as factors and inputs for the travel model analysis. The travel demand model requires inputs such as regional socioeconomic and demographic data, roadway and land use characteristics, person and vehicle trip data, and travel time and other impedance factors.

Data from several sources were integrated into a common format to be used in Transcad. The data sources included: household data from the U.S Census Bureau, employment data from manta.com and dnb.com and street layer data from **T**opologically **I**ntegrated **G**eographic **E**ncoding and **R**eferencing system (TIGER) Data file and Genesee County Department of Planning. The existing roadway lanes and posted speed limits within the study area were collected by SRF & Associates (SRF) during the field verification.

The employment data obtained from manta.com and dnb.com websites were checked for accuracy and were geocoded using ArcGIS software. For each TAZ, total households in three income level (low, mid and high) and the employment in three groups (retail, service and other) were input into excel for the 2009 base year to estimate the total productions and attractions. The productions (exiting) and attractions (entering) for each TAZ zone were estimated based on the household and employment data using the parameters and formulas contained in the NCHRP Report 365 “Travel Estimation Techniques for Urban Planning”. The total trip productions and attractions were then assigned to the respective zones.

Traffic Analysis Zones (TAZ) & Centroid

TAZ's typically in the size of census data boundaries are geographic areas dividing the planning region into relatively similar areas of land use and land activity. Zones represent the origins and destinations of travel activity within the region. As it is not computationally feasible to represent every household, place of employment, shopping centers, and other activity as a separate origin and destination, these entities are first aggregated into zones and then further simplified into a single node called a centroid.

A centroid is a point that represents all travel origins and destinations in a zone. Each centroid, or loading point, must be connected to the highway systems. For each TAZ, number of household and the total employment in that zone were developed for the base year of 2009. There are a total of 23 internal zones (within the study area) and 28 external stations (locations where traffic enters and exits the study area).

Roadway Network

The network within the study area includes all major and some local roadways within the Town of Batavia. The highway network obtained from Genesee County Department of Planning was imported into Transcad standard format file. Each link in the network was then coded with a facility classification (freeway, major or minor arterial), number of exclusive lanes in the direction of travel, the free-flow speed, and the hourly per-lane capacity of the roadway.

Each intersection, referred to as a "node", is assigned a unique number and is connected to adjacent intersections. The section of street between nodes is referred to as a "link". The connection between TAZs and the road network are represented by special links called "centroid connectors." Total travel time between any pair of traffic zones consists of the sum of the travel times for all links traversed.

Traffic Count Data

SRF & Associates (SRF) conducted weekday PM peak hour traffic counts at most of the high volume intersections (see the Study Area and Existing Highway Conditions section). Traffic volumes at the external cordon points in the Town of Batavia were obtained from the NYSDOT traffic volume report 2007. Traffic count data at some of the local intersections were obtained from projects done by SRF in the past.

Using these collective inputs, a TDM for the study area had been developed that contains transportation network, household and employment data. The demand model was replicated to the existing conditions (i.e. demographics, traffic volumes, and traffic speeds).

Travel Demand Model Development

The development of travel demand models can be divided into four basic steps—trip

generation, trip distribution, mode-choice and traffic assignment. The first step, trip generation, involves estimating the number of trip ends generated in (productions or exiting trips) and attracted to (attractions or entering trips) each traffic analysis zone. Each trip on the street network has both an origin and a destination. In this fashion, each trip is defined by two trip ends, one being a production and one being an attraction.

The second step, trip distribution, involves the distribution of the trip ends between all possible zones, which is accomplished by a mathematical trip distribution (gravity) model. This model suggests that the frequency of trip interchange between zone pairs is directly related to the number of productions and attractions in each zone, and inversely related to the travel time between them.

The third step, traffic assignment, is the assignment of vehicle trips to the roadway network, which is accomplished by selecting the route with the lowest travel time.

Step 1 - Trip Generation

Trip generation models estimate the number of trips that begin or end in a zone without identifying where the other ends of these trips are located, which is the function of the trip distribution model. Trip-generation models consist of two submodels that include trip-production and trip-attraction models. Trip productions are the trip ends associated with the traveler's home. Trip attractions are the trip ends associated with the non-home end of the trip, such as workplace.

These models are stratified into three trip purposes: home-based-work (HBW), home-based-other (HBO), and non-home-based (NHB). For the two types of home-based trips, trip productions refer to the home end of the trip, and trip attractions refer to the non-home end of the trip. For non-home-based trips, trip productions and attractions refers to the non-home end of the trip.

For each internal TAZ, total household and all the employment related information within each zone (either square footage or total driveway trips) were input into a computer spreadsheet for the 2009 base year to estimate the total productions and attractions.

The estimation of trip productions using disaggregate travel-demand models typically uses a cross-classification of household size data with income. For this study, the trip production rates were calculated by using the average value of the region, stratified only by household income. The trip attractions were calculated on the spreadsheet using the type of employment (specifically retail, service and other employment) and the total households for each of the 23 TAZs. For all the internal zones, the total number of internal trip productions and attractions in the region totaled 75,769 and 73,735.

External travel consists of three types of trips, external-external (E-E), internal-external (I-E) and external-internal (E-I). External-external trips are trips that pass through the

entire study area without making a stop. External-internal and internal-external trips are those having one end of the trip inside of the study area and the other end outside of the study area. The trips at these cordon points were obtained from the NYSDOT traffic volume report 2007 and external trips (E-E, I-E, and E-I) were estimated based on parameters and formulas contained in the NCHRP Report 365 "Travel Estimation Techniques for Urban Planning".

Table B.1: Unbalanced Trips

	Productions			Attractions		
	HBW	HBO	NHB	HBW	HBO	NHB
Internal Trips	15,154	43,188	17,427	22,360	30,479	20,895
External Trips	17,390	25,391	10,458	8,539	18,732	10,458
Total	32,544	68,579	27,885	30,899	49,211	31,354

The total numbers of productions and attractions are summarized in Table B.1.
The last step in the trip generation is the balancing of trip productions and attractions. The trip distribution phase of the travel demand requires that the total number of productions equals the total number of attractions for each of the trip purposes.

The balancing process is accomplished y applying a balancing factor to the attraction trips for all internal TAZs. The balancing factor is designed to change the total number of internal attractions so that the total number of attractions, including external stations, equals the total number of productions. After the balancing factors are applied, the total numbers of productions and attractions are summarized in Table B.2.

Table B.2: Balanced Trips

	Productions			Attractions		
	HBW	HBO	NHB	HBW	HBO	NHB
Internal Trips	15,154	43,188	17,427	24,005	49,847	17,427
External Trips	17,390	25,391	10,458	8,539	18,732	10,458
Total	32,544	68,579	27,885	32,544	68,579	27,885

Step 2 - Trip Distribution

Trip Distribution is the second major step in the travel modeling process. Once the number of trips emanating from a zone has been estimated by the trip production models, distribution models must be developed to distribute them among the trip attractions in the other zones. The one used for this study is the gravity model. The gravity model predicts that the relative number of trips made between two TAZs, is

directly proportional to the number of trip ends in each TAZ and inversely proportional to a function of the spatial separation.

The trip-distribution process is usually implemented in two steps. The first step is the estimation of friction factors based on the existing travel times. The second step uses the gravity model to distribute the trip productions and attractions estimated by trip generation.

The free-flow zone-to-zone travel time matrix was constructed using the posted speed limit on each link in the Batavia highway network. The free-flow travel times were calculated based on speed and distance only. TransCAD was used to produce the matrix for travel times based on the minimum time path between each pair of zones. The interzonal travel times, which represent the travel time required to make a trip wholly within a single TAZ, was produced using the nearest-neighbor method and added to the original travel time matrix.

The gamma function was used to calculate the friction factors that represent the travel impedences between zones in the trip distribution gravity model. The friction factors for the three trip purpose used in this study were based on NCHRP Report 365 - Table 14.

Table B.3: Coefficients of Friction Factors used in the model

	a	b	c
HBW	28,507	-0.020	-0.123
HBO	139173	-1.285	-0.094
NHB	219,113	-1.332	-0.100

Source: *NCHRP Report 365 (Table 14 - Page 51)*

The final trips distributed between zones are already in origin-destination format (O-D) during the PM peak hour.

Step 3 - Mode - Choice Analysis

Because Transit usage in the Batavia region is so small, we did not use a mode-choice model component in this study.

Step 4 - Traffic Assignments

The hourly vehicle trip table from the previous step was assigned to the base highway network using an equilibrium assignment. The traffic assignment model determines which route the trips take to get from the origin zone to the destination zone. Traffic

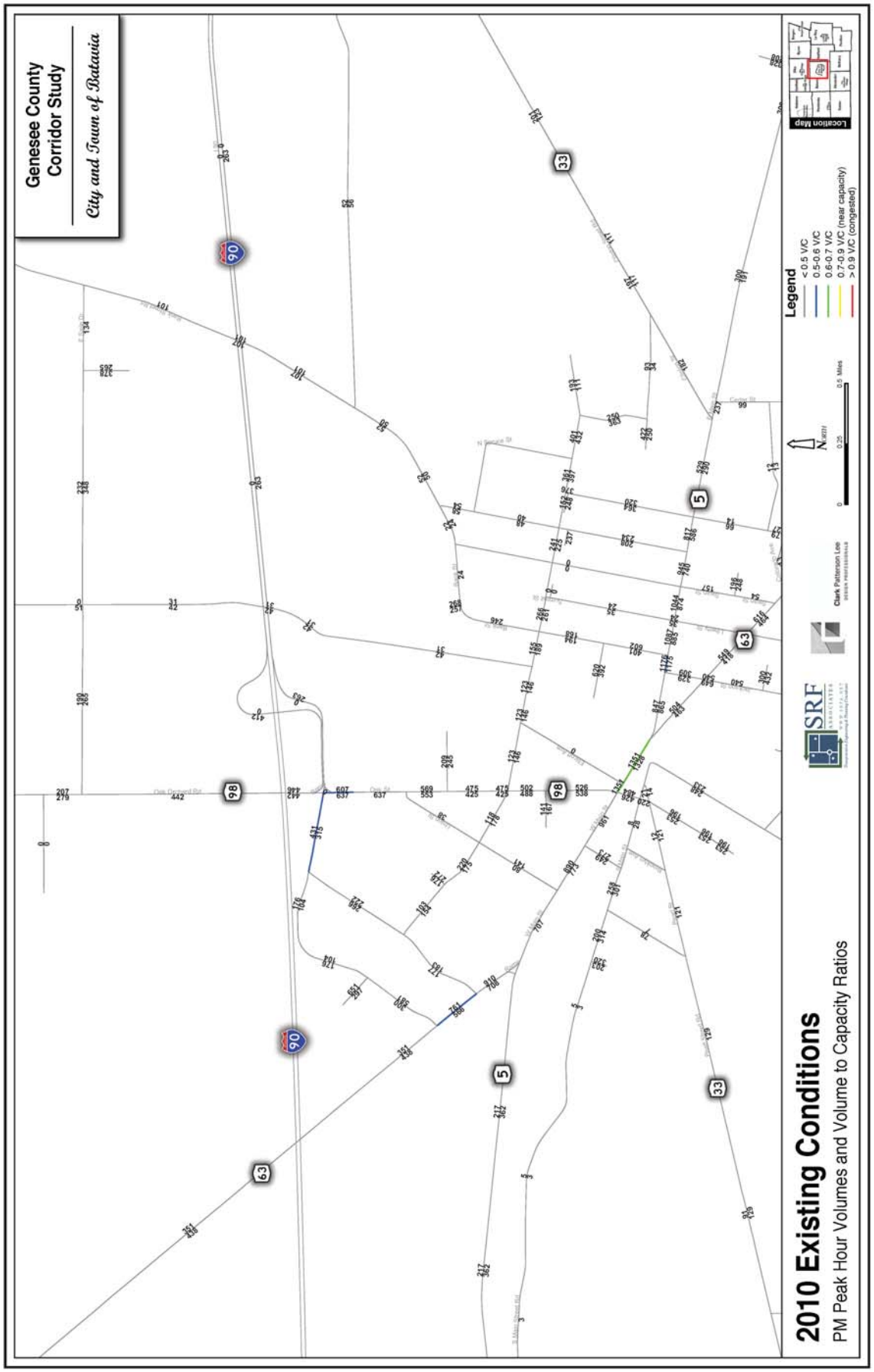
assignments were made using a User Equilibrium (UE) technique.

The behavioral assumption of the User Equilibrium method is that each vehicle travels on the zone-to-zone path that minimizes that vehicle's generalized cost of travel. This choice rule implies that, at equilibrium, the link flow pattern is such that the travel times on all used paths connecting any given Origin-Destination pair will be equal; the travel time on all of these used paths will also be less than or equal to travel time on any of the unused paths. At this point, the network is in user equilibrium. This method is formulated as an optimization program, which converges toward the equilibrium condition through iterative adjustment of link volumes for each vehicle class. UE provides a stable and consistent method for traffic assignment.

The figure at right shows the existing traffic volumes and volume/capacity ratio that is color coded in the study area. The figure clearly illustrates that there are no major deficiencies in any of the street links based on the existing PM peak hour traffic volumes.

Summary and Conclusions

The comparison of estimated trips with observed traffic counts crossing various sections throughout the study area confirms that the model is in close agreement with actual year 2009 conditions, and attests to the ability of the travel demand models to recreate the future travel patterns.


Genesee County
Corridor Study
City and Town of Batavia
2010 Existing Conditions
PM Peak Hour Volumes and Volume to Capacity Ratios
Legend
< 0.5 V/C
0.5-0.6 V/C
0.6-0.7 V/C
0.7-0.9 V/C (near capacity)
> 0.9 V/C (congested)
Location Map
SRF
Clark Patterson Lee
0
0.25
0.5 Miles
90
98
5
63
33

Appendix C

Representative Corridor Images

The following pages highlight the general types of land uses and structures that are found along the various roadways in the corridor. A brief description of the use and condition of the surrounding infrastructure (roadway, sidewalk, drainage, etc.) is also included. Unless indicated otherwise, images are arranged from east to west or north to south.

STATE ROUTE 5

East of the City of Batavia, Route 5 begins as a four lane roadway and is lined with a mixture of residential and agricultural uses. Shoulders are wide (6-10 feet) and are utilized by pedestrians or bicyclists. Pavement is generally in good condition with slight longitudinal cracking observed; drainage is provided by roadside ditches.

(Pictured here: Route 5 near Seven Springs Road)

In the Town, large lot light industrial, public service, and commercial uses are located just outside of the City line. Many of the structures are setback some distance from the road with parking areas primarily along the front. Although no sidewalks exist in this area, properties are buffered from the roadway with greenspace.

(Pictured here: Genesee County Mental Health Services)

STATE ROUTE 5

Another example of a light industrial/public service use that is found in the Town along the eastern section of Route 5.

(Pictured here: National Grid)

Several car dealerships are also found along Route 5 in the Town. Surface parking consumes a significant portion of the lots and there is limited landscaping of buffering from the roadway. Buildings are limited in their design as well.

The Mike Ognibene dealership (shown here) is a large lot that is currently vacant.

The Genesee County Fairgrounds occupies a large section of land off of Route 5 and is a regional draw during the summer months.

The Genesee Valley Agri-Business Technology Park represents one of the larger industrial parks in the study area. No structures are built and utilities are slated to be installed.

The development of this site has the potential to increase traffic volumes and truck traffic. Additional lanes and traffic control devices may be warranted as the project progresses.

Single-family dwellings are predominantly located farther east, with multi-family apartments and other dwellings closer to the City line. Sidewalks, curbing, tree lawns and present approaching and within the City limits. Shoulders are still present, although much narrower in comparison. Drainage is now provided through catch basins and underground piping. The pavement continues to be in generally good shape, with some cracking and sealing evident.

Within the City limits, Route 5 contains continues past Route 33 as a four lane roadway with no shoulder and sidewalks on both sides. The sidewalks are in generally in good condition and are separated from the roadway with a tree lawn of varying width. Properties have smaller setbacks and narrower lots. Pavement continues to be in generally good condition with minimal longitudinal cracking.

STATE ROUTE 5

Some of the structures, although residential in appearance, are converted to commercial uses. Many of the structures, whether residential or commercial, reflect various designs and are much more ornate. Street trees are more prominent where residential structures exist. On-street parking is provided on both sides of the street and a fifth, center lane is provided for dedicated turning.

400 Towers is one of the taller structures found in the City of Batavia; the majority of the structures in the study area are approximately three stories high or less. The Batavia Housing Authority operates this facility for seniors and those with disabilities. Frontage landscaping and vegetation is more prevalent and setbacks are much closer in comparison to sections farther east.

Recent transportation improvements to Route 5 include the installation of curb bumpouts (bottom left, just outside of this image) and mast arms for traffic signals to replace wire spans.

More recent retail strip plazas have incorporated more distinctive color palettes, higher amounts of glazing (windows), and better signage. Site landscaping is sporadic and minimal. Surface parking is still front-loaded and pavement conditions vary.

The center raised, landscaped median was one of the primary improvements that were undertaken during the Main Street (Route 5) roadway improvement project. In addition, new decorative lighting, sidewalks, street trees/landscaping and striping were included to enhance the downtown environment and promote increased pedestrian activity.

Many of the structures within the central business district are two to three stories in height, have a zero front setback, a high percentage of first floor windows, and a lot of architectural detail. Some structures are mixed vertically with offices or residential uses on upper floors. Pavement and infrastructure is still in generally good condition and on-street parking is allowed on both sides of the road.

STATE ROUTE 5

Another example of the style of non-residential buildings that are found in the central business district.

The sidewalks are separated from the roadway with a strip of brick pavers that contain decorative lighting and occasional street trees. Pedestrian amenities, such as trash cans, benches, and bike racks, are included. Sidewalks in this area are much wider than other areas, approximately 10 feet wide, to facilitate greater pedestrian activity.

In some areas of high traffic volumes, such as the intersection of Route 5 and 63, crosswalks have slowly begun to deteriorate and become faded. Pavement conditions continue to be in generally good shape.

West of the central business district, uses become more varied with a mix of single-family residential and commercial structures. Less building massing, deeper setbacks, lower heights give the corridor more of a suburban feel. Roadway improvements beyond the central business district were minimal. Pavement continues to be in good condition, ADA-compliant sidewalks are located on both sides of the street, separated from the roadway by a tree lawn with occasional trees.

Near the Route 5 and 63 split, big box and strip plazas become the predominant commercial style again. Large setbacks, front-loaded parking lots, and minimal landscaping and architectural features are common among many, but not all, of the properties. The roadway through this area expands to five to six lanes to accommodate dedicated turning lanes for high-traffic areas.

Internal circulation of some plazas indicates poor cross access with non-intersecting roadways and various parking configurations.

STATE ROUTE 5

Continuing as a four-lane roadway west of Route 63, Route 5 widens to include a four to six foot wide shoulder. Drainage is still provided through catch basins and underground piping. The sidewalks continue along both sides of the road before ending on the south side approximately 1,000 feet outside of the City line. The pavement continues to be in good condition. Land uses consist of a mix of single-family residential and some commercial properties. Setbacks are much larger, although the amount of vegetation is also greater.

As Tonawanda Creek winds through the area, it limits areas of development due to heavy vegetation and flood-prone areas. In this section of Route 5, development is confined to the north side and consists of sporadic commercial uses.

Where the sidewalks end along Route 5, shoulders become wider (eight to ten feet in width) with larger property setbacks for roadway drainage. Many properties have multiple access points, large amounts of pavement, and vary in setback. The pavement exhibits some longitudinal cracking with sealing and edge cracking along the shoulder.

STATE ROUTE 33

Route 33 begins as a two lane roadway near the Town line with wide shoulders (6-10 feet wide) and no pedestrian facilities. Pavement condition is generally good with cracking observed near the edges.

Uses are mixed, but predominantly commercial, with various setbacks and no distinct style or character noted. Parking is mainly in the front of properties.

(Pictured here: Route 33 near Seven Springs Road/Batavia-Stafford Townline Road)

Some of the newer residential developments consist of townhomes with direct access onto Route 33. Buffering between the roadway and dwellings are limited in this location. Where single-family dwellings are situated, lot sizes are much wider and deeper.

Terry Hills Golf Course occupies a large swath of land on the south side of the roadway and provides recreational opportunities for the region. Large setbacks are typical for most developments along Route 33.

STATE ROUTE 33

Several manufactured home communities are located along Route 33 between Stringham Road and Townline Road. Within the study area this is the only location where mobile/manufactured homes are permitted in accordance with zoning.

Parking areas for commercial businesses contain little, if any, buffering against the roadway and typically include numerous wide access points. The pavement continues to be in generally good condition and no pedestrian facilities exist.

Grandview Cemetery is another large land use along the roadway. The large number of trees and vegetation provides aesthetic and visual interest to motorists. The City line is west of the cemetery.

Within the City limits, residential uses are situated on deep but much narrower lots. The roadway continues to be in good condition and the shoulder narrows significantly to approximately 3 feet wide. Sidewalks begin at the City line, although are limited to one side of the roadway for a short distance.

Commercial businesses and strip plazas become the predominant uses approaching the intersection with Route 5. Tree lawns and sidewalks buffer uses along the roadway. Storm drainage is provided through catch basins and underground piping.

Retail plazas are “strip” style and consist of limited architectural features and wide, expansive parking areas. Pavement conditions within the parcels is in poorer condition in comparison to the corridor roadways.

STATE ROUTE 33

Transportation improvements at the Route 33 and 5 intersection included high-visibility crosswalks, new traffic support poles, and sidewalks and islands with curbing and brickwork. All of these features are in generally good condition.

** From this point, Route 33 continues westward overlapping Route 5. For ease of describing the various roadways in the corridor, this overlap will be highlighted in the Route 5 section. The following images describe Route 33 after the roundabout at Pearl Street, south of Tonawanda Creek.*

The roundabout at the intersection of Route 33, 98 and Pearl Street was completed in 2009. As such, the pavement is in very good condition. The area includes landscaping, decorative lighting, sidewalks, crosswalks, and pedestrian refuges between lanes. Some of the pavement markings, especially the crosswalks, have slowly begun to fade, although they are still visible to motorists. This section of Route 33 is predominantly single-family residential with narrow lots.

The corridor contains few dedicated, public recreational areas. Williams Park, located along Route 33, is one such facility that provides passive and active recreation to residents in the area.

Single-family residential uses are the predominant uses on the north side of the roadway. These homes are in relatively good condition and are situated on narrow lots with smaller setbacks. Lots become larger with deeper setbacks on the outskirts of the City and in the Town. Sidewalks are present on both sides of the street as are tree lawns to buffer the roadway.

As Route 33 leaves the City and enters the Town, commercial or light industrial uses occupy the south side of the roadway, as evident with the Batavia Industrial Park shown here. The locations of the buildings take advantage of the rail spur that bisects the park. Structures are much larger in size with larger parking areas. Little vegetative buffering exists between the properties and adjacent to residential uses.

STATE ROUTE 33

In addition to single-family residential dwellings on single lots, a large apartment complex is also located on the north side of Route 33. The complex includes large amounts of greenspace, but minimal landscaping or dedicated recreational amenities. The buildings are basic concrete block design with some structures that include gabled roofs, siding, and shutters.

STATE ROUTE 63

Route 63 begins in the eastern portion of the study area as a predominantly agricultural area with scattered residential dwellings. Homes are generally part of or subdivided from agricultural lands and are older. Setbacks are deeper and roadside vegetation exists throughout.

A two-lane road with wide shoulders (6-8 feet wide), the pavement is in generally good condition with longitudinal cracking evident along seams. Drainage is accomplished through roadside ditches.

Grassland and brush, as well as forested areas and wetlands flank Route 33. In addition, due to the larger lot sizes, billboards are occasionally found alongside the road.

Bordering and within the City, large commercial and industrial uses line Route 33. Lots are much larger in size, with parking areas of equal size. Setbacks are much greater and buffering against the roadway consists of grass. The structures consist of pole barn-type and concrete block construction.

STATE ROUTE 63

Straddling both sides of the corridor, the O-At-Ka Milk Products Cooperative is a large industry in the Town and City supported by the many dairy farms in the region. Industrial by nature, the complex is expansive and consists of various structures including silos, storage buildings, and processing facilities.

Buffering consists only of grass with few, if any plantings.

Commercial uses mix in with residential uses west of the railroad tracks. Some of the commercial businesses, like this used car dealership, are more suburban styled with large parking lots along the frontage and little to no landscaping.

Residential dwellings are the predominant uses along Route 63 from the railroad tracks to Swan Street. The homes, ranging from rental to owned and single– to multi-family, sit on narrower lots and are set close to the property line. Front porches and gable ends are typically found on the facades. Although sidewalks and tree lawns buffer the homes from the road, the streetscape is made up of overhead power lines and few street trees.

Pavement is generally in good condition.

Commercial uses are the predominant uses between Swan Street and the intersection with Route 5. The structures vary from one to two stories and height and range in style and design. Few properties have street trees or a landscaped buffer along their frontage with the majority having full-width sidewalks between the street and property line. On-street parking is allowed in addition to four travel lanes and a center two -way turn lane. Pavement is generally in good condition, although some longitudinal cracking is observed between travel lanes.

** From this point, Route 63 continues westward overlapping Route 5. For ease of describing the various roadways in the corridor, this overlap will be highlighted in the Route 5 section. The following images describe Route 63 near Batavia Downs and Tops Supermarket.*

Internal circulation of some plazas indicates poor cross access with non-intersecting roadways and various parking configurations. As shown here the travel lane in this interior parking lot does not align with the travel lane farther ahead. The lack of a coordinated access management between properties, coupled with the expansiveness of pavement and lack of internal landscaping, can contribute to accidents.

STATE ROUTE 63

Along Route 63, following the Route 5 split, the roadway becomes two lanes with a center turning lane and narrow shoulders (three to four feet wide). Sidewalks are found only between the roadway split and Park Road, then terminate. Several big box style retail stores are located in the vicinity, with more along Veterans Memorial Drive. Street trees are more prominent as the parcels become larger and less dense. The pavement is in generally decent condition, with some cracking, rutting and patching evident.

Further west from the intersection with Veterans Memorial Drive and outside of the City, Route 63 becomes a two-lane road and predominantly residential and agricultural. Curbing and catch basins are replaced with wide shoulders and sheet drainage. Longitudinal cracking in the pavement along the pavement markings and slight edge cracking is more evident. Vegetation is also more prominent; sidewalks are not found along this stretch of roadway.

VETERANS MEMORIAL DRIVE (OFF OF STATE ROUTE 63)

Although not one of the State Routes, Veterans Memorial Drive is becoming one of the hotbeds of development, especially with big box developments such as Walmart, Lowes, and Target. Lot sizes along the roadway are very large to accommodate uses and setbacks are equally generous. Landscaping and buffering is minimal. Pavement is in generally good condition, with slight edge cracking evident.

Another view of retail businesses along Veterans Memorial Drive. Deteriorating pavement condition along the edge of the road is evident in this view. The orientation of structures to the roadway also varies, as seen with the Office Max property.

Pavement condition is generally good, although significant edge cracking is observed adjacent to the gravel shoulder.

Veterans Memorial Drive intersects with Park Road and continues eastward to intersect with Route 98 across from the Thruway exit. Due to the Federal wetland and pond on the south side of the road, uses are predominantly found along the northern portion. These uses are primarily auto-oriented and geared towards travelers (i.e. gas stations and hotels/motels). The streetscape is made up of freestanding signs on grass lawns with little landscaping. The pavement condition is fair to poor with edge cracking, longitudinal cracking and potholes evident.

STATE ROUTE 98

State Route 98 at West Saile Drive, the northern end of the study area, consists of farmland, few residences, and some commercial uses. The roadway consists of two travel lanes with a wide shoulder. The few commercial uses in this area are pre-fabricated structures and are setback back 50 feet of more from the right-of-way. Pavement is generally in good condition.

Active farmlands are found predominantly between West Saile Drive and the Thurway.

Two industrial parks are also located on Route 98, including Gateway II Corporate Park, which is under development. During the development of this report, the park's access road was the only feature constructed. As highlighted in the Corridor Study's proposal, future development in this park is dependent upon traffic improvements to Route 98.

Gateway Corporate Park I, located just north of the Thruway, is almost completely built-out. Uses in the park range from commercial to industrial to institutional.

Pavement along this section of Route 98 is in good condition with some small transverse of longitudinal cracking observed.

The NYS Thruway occupies a large area near the intersection with Park Road, which includes the offramp, tollbooth, tractor trailer parking lot (shown here), and DOT Highway Maintenance facility. Route 98 remains a two lane road with wide shoulders prior to the Thruway - a center painted median begins south of the bridge. The bridge, guardrail, and topography provide some buffering to the adjacent uses. However, there is little vegetation beyond with the exception of lawn.

Commercial, auto-oriented uses are found south of the Thruway exit. These uses are set back 50 feet or more from the right-of-way and feature frontage parking lots and grassy buffers. Pavement remains in good condition and the roadway becomes a four-lane road with curbing and sidewalks.

STATE ROUTE 98

Between Noonan Drive and Route 5, Route 98 (Oak Street) becomes residential in nature with suburban style homes (longer setbacks and wider frontages) in the northern portion. Continuing south, homes become smaller and set closer to the property line. Sidewalks, tree lawns and some street trees (located in private property) line the sides of the road. Homes vary in style and design. The pavement continues to be in generally good condition.

Route 98 was recently repaved and restriped to two travel lanes and a wide shoulder between Prospect Avenue and ???

Residential uses continue to be the primary use along Route 98 near Prospect Street with an increasing number of street and frontage trees observed. The street trees and streetside tree lawns add to the character of the area and can help to calm traffic speeds. Sidewalks are located on both sides of the street and connect with residential roads located off of Route 98. The pavement continues to be in very good shape, despite the amount of truck traffic that utilizes the corridor.

South of Route 5 & 33, between Route 98 the railroad tracks, residential is the primary use with homes on smaller lots set closer to the street. The proximity of Tonawanda Creek limits the depth of some of the lots, as shown in this photo. Sidewalks and tree lawns line both sides of the road with street trees located in select locations. The pavement is in very good condition as this portion of the road was repaved following the construction of the roundabout further north.

Continuing south, residential dwellings becomes less frequent and the roadway becomes more rural. Homes or commercial uses are set back farther from the right-of-way, vegetation becomes denser, and the sidewalks eventually end. The roadway is now a four-lane road and is in generally good condition.

Commercial uses consist of pre-fabricated structures and are setback farther from the road. Little landscaping or vegetation is found between the property and road, as shown here. Shoulders begin to reappear and the roadway tapers down to a two-lane road. The pavement is in good condition, with some transverse cracking observed.