

MONMOUTH COUNTY COASTAL EVACUATION ROUTES STUDY



Prepared for:
Monmouth County Planning Board

By:
Jacobs Engineering, Inc.

In cooperation with
Reichman Frankle, Inc.
and
Techniquet Engineering

6/19/2009

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MONMOUTH COUNTY COASTAL EVACUATION ROUTES STUDY



Executive Summary

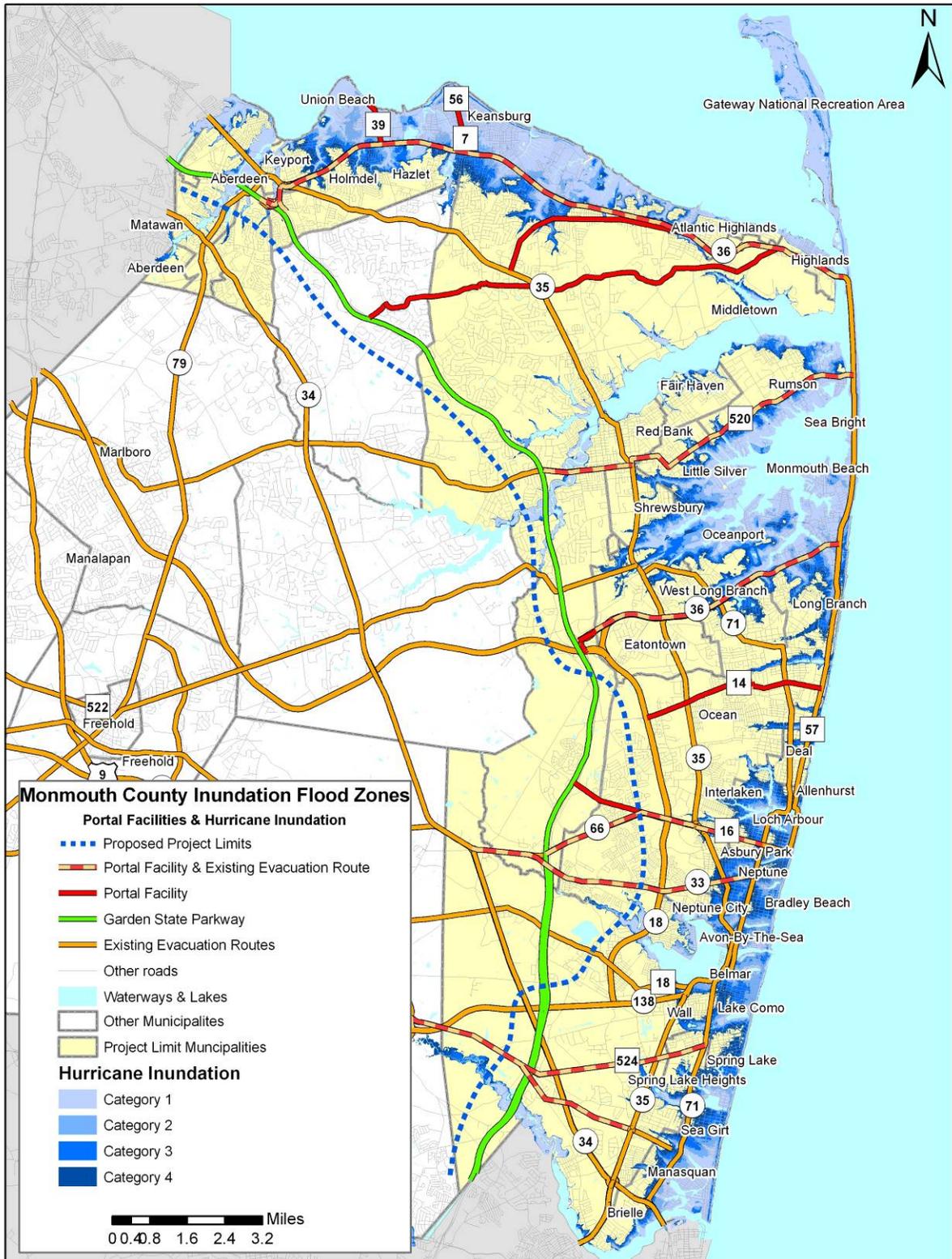
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Monmouth County Inundation Flood Zones

Executive Summary

Study Purpose:

One of Monmouth County's finest assets, its 27 miles of sand beaches and 26 miles of bay coastline, is also a potential liability as low-lying coastal areas are subject to flooding from wave action and weather, particularly during hurricane events. In recent years, Monmouth County has taken several measures to mitigate the harm from coastal flooding. These efforts have been based on existing flood records as well the possibility of increased flooding caused by climate change. For example, The County's Office of Emergency Management is working with state, federal, and other municipal agencies to coordinate responses and to plan for emergencies.

As part of its overall effort to further protect residents and visitors from the hazards of coastal flooding, Monmouth County's Planning Board undertook a one-year study (see Figure E-1). Its purpose: to evaluate how the current coastal evacuation route system can be improved and possibly expanded to help move people away from the flood zones. This work involved the following:

1. Identifying a set of routes - roadways whose purpose is to bring people from a hazardous (flood) zone to a safe area;
2. Examining physical and operational problem areas and spots that could be targeted for improvements; and
3. Proposing near-term, intermediate, and long- range solutions.

The objectives, experience and recommendations of municipalities and other involved stakeholders were incorporated into the project. Many of the final project recommendations will rely on these agencies for implementation.

The report will be used by the County and Municipalities to plan and program operations and system improvements that will make evacuation from flood areas safer and more efficient. The specific roadway sections show what problems can be expected during a flood evacuation, and what projects and actions can be taken to reduce those problems. The information allows Government agencies to consider implementation or programming. Each suggested improvement covers the problem (flooding or capacity), the specific location, the improvement type, an estimated cost, an estimated time frame, and the lead agency. Improvements range from showing where police might be dispatched to control a specific intersection during an evacuation, to reconstruction of bridges and widening of roadways to make them more flood-proof or to handle increased evacuating traffic. The information need not be used to initiate new projects. It can also be used to supplement the background data for projects that are already under consideration.

Definition of technical terms and acronyms may be found directly following this executive summary.

Portal Selection:

Twelve portal routes were selected based on a two-step process. The initial screening process generally eliminated roads with a functional classification no higher than minor collector. These arteries constitute most of the County's roadway mileage and simply can not handle the kind of volumes needed for an evacuation route.

As a result, the portal candidates that passed the initial screening were largely part of the County or State roadway system. The County roadway system generally incorporates the higher classification roadways, such as major collectors and arterials, which are typically more conducive to efficient movement of relatively higher traffic volumes. These facilities provide interconnected and continuous travel corridors. They can handle higher travel speeds. The State Route (SR) system, a portion of which already forms the core of Monmouth County's Evacuation Route network, has already been designed to effectively function as portal corridors for hurricane evacuation. Other thoroughfares with the potential to function as a portal corridor given capital improvement upgrades were also considered as valued assets and were advanced for further study.

A matrix format was used to score, rank, and select the final 12 candidates. Cumulative scores, based on physical, operational, and geographical criteria, were weighted to an index for each candidate route. Seven key criteria are summarized below:

1. Roadway Alignment: How directly does it lead away from Flood Zones?
2. Supplement the Existing Portal Network: Does the route improve connections with the existing evacuation network?
3. Provide Area-wide Coverage. Are there gaps in the network? Each portal was evaluated based on its spacing relative to other portals.
4. Have Potential for Improved Capacity: A portal candidate that meets the three aforementioned criteria but has limited capacity, a narrow cross section, and poor alignment should be given a preference.
5. Reach Isolated Areas: does the route to provide alternative access for departing an isolated area such as a peninsula or barrier spit?
6. Avoid Merging of Traffic Streams: Merging traffic streams could result in an over-capacity condition, generating a choke point where traffic flow would be constrained. Therefore, the evaluation of routes with parallel alignments to
7. Make Use of the County System: As a County project, consideration was given to selecting County Routes.

Input from the Technical Advisory Committee (TAC) provided the final adjustments to the final 12-portal list.

The Portal Routes selected were as follows:

1. CR 39 between Florence Avenue and SR 36,
2. CR 7/CR 56 between Beachway, Campview Point and SR 36,
3. SR 36 between Highlands Bridge Over Shrewsbury River and the GSP,
4. CR 516/CR 50 between SR 36 and SR 35,
5. CR 8A/12A/12
6. CR 520 between Ocean Avenue and GSP,
7. SR 36 (near Oceanport) between the SR 36/CR 57 junction and GSP,
8. Park Avenue between SR 71 and SR 18,
9. CR 16 between SR 71 and GSP and SR 66 between CR 16 and SR 33,
10. SR 33 between SR 71 and SR 34,
11. CR 524 between SR 71 and I-195 and
12. CR 524 Spur between SR 71 and I-CR 524.

The Portal Routes are illustrated in Figure E- 1, below.

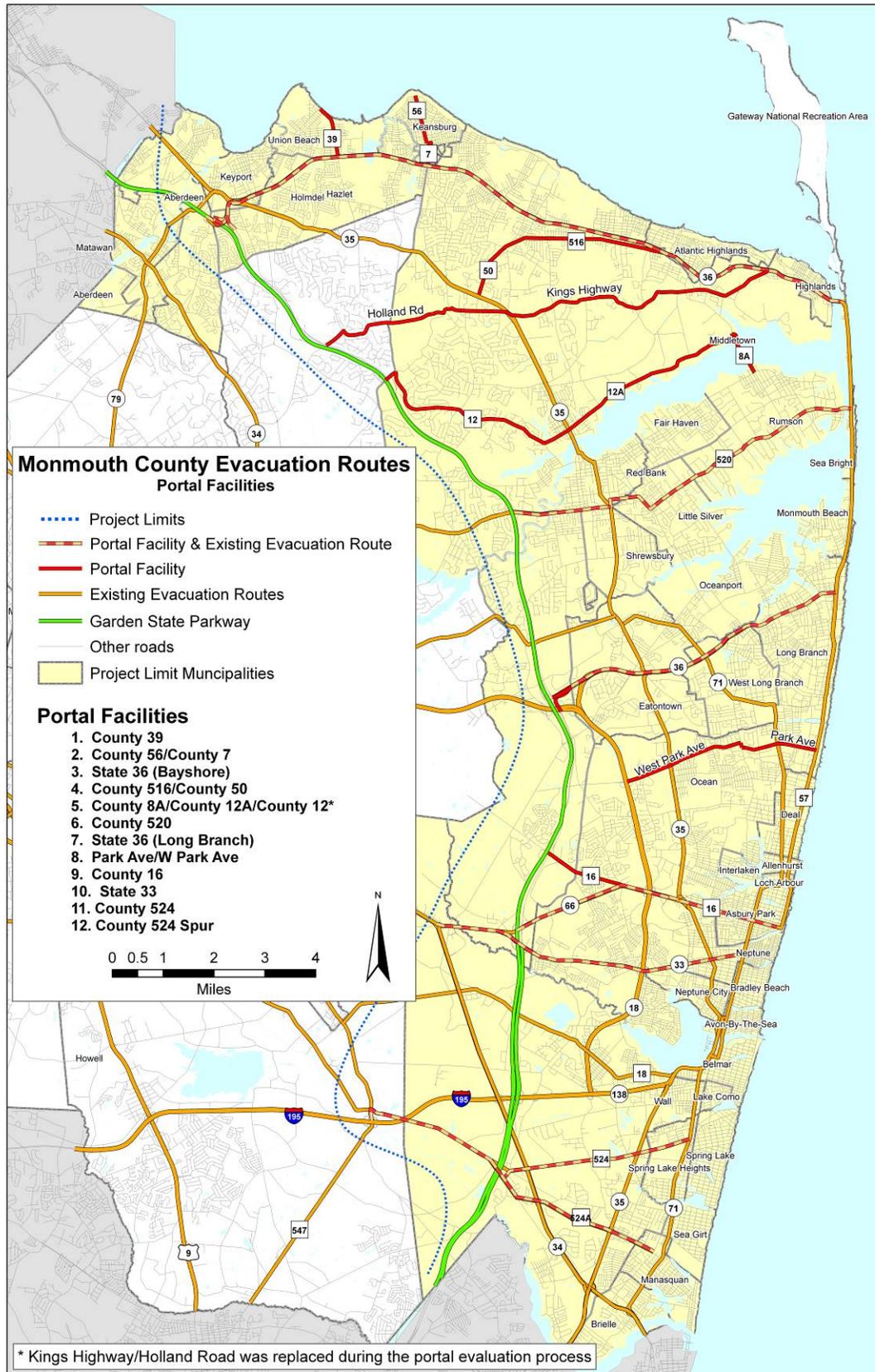


Figure E- 1, Evacuation Routes

Existing and Future Conditions:

A wide range of physical information was collected that described the corridor infrastructure both within the roadbed as well as adjacent to the roadway. Pavement widths, available mainline travel lanes, turning lanes, shoulder widths, medians, at-grade railroad crossings, interchanges, bridges, aerial utilities and driveways were documented for every roadway section. Operational aspects that were documented included posted travel speeds, signalized intersection locations, on-street parking lanes, presence of evacuation signage and adjacent land uses. Proposed Transportation Improvement Program (TIP) improvements throughout the County were also examined to identify if any actions were targeted for any portal candidate.

These data provided the background for undertaking two critical tasks:

- Highlighting locations where roadway capacities could be insufficient to process volumes generated under an evacuation scenario or where disruptions in traffic flow could occur, and
- Identifying roadway elements that could limit the range of potential improvements.

In addition to the above, data included the functioning of anticipated entry points and exit points between the surrounding local street system and the portal corridor. Alternative travel paths that include roads already on the State evacuation roadway network and other nearby portal candidates were identified for use by evacuees in the event a diversion is necessary to avoid a blockage that interrupts traffic flow. Some portals exhibit flooding – even under minor storm conditions. Locations of minor flooding are also noted.

Volume and distribution of traffic across the twelve portal routes were estimated for the evacuation condition based on a number of volume adjustment and loading source factors, and a scenario under which an advanced six-hour evacuation order would be implemented.

Portal volumes were estimated based on a methodology that applied Monmouth County Planning Board’s Municipality population growth rates at the census tract level, automobile ownership and auto occupancy characteristics, the presence of competing routes, and an hourly distribution that assumed that the affected population cohort would leave the flood inundation zones in a pattern similar to a normal distribution, resulting in a peak hour of travel occurring within the six-hour evacuation order. These variables were converted into factors for estimating number of vehicles at different points along each portal route.

Portal Routes – Physical and Operating Characteristics:

Three of the twelve portal finalists, including State Route (SR) 36 north, SR 36 central corridor (Joline Avenue) and SR 33, are state roads that function as principal arterials in the County. They are high capacity arteries typically carrying four travel lanes along their mainline with full shoulders. Their alignments enhance sight lines and also provide direct

paths away from the flood zone. Travel constraints are associated with active driveways that line these arteries and one-lane exit ramps connecting to other regional facilities where congestion develops under high demand conditions.

Operationally, the state roads provide excellent travel conditions with well-defined pavement marking and signage. However, they also attract higher traffic volumes which can result in congested conditions along approaches to signalized intersections, particularly along roadway sections that cross higher density areas near the coast where signals are more numerous.

Seven of the portals are part of the County roadway system and include County Road (CR) 39, combined 7/56, 520, 516, 16, 524, and 524 Spur. These roads generally provide continuous east-west or north-south movement with fewer locations where conflicting traffic movements are significant. The alignments of these roads are typically well marked and generally provide connections to the state highway system. However, capacity is generally limited to one travel lane in each direction and only partial shoulders are provided for emergencies. In addition, limited sections along these roads are curved and require the placement of “reduce speed” warning signs.

The remaining two initial portals, Park Avenue and Kings Highway, are collector roads and are not part of the County system. They both provide continuous east-west service and lead to regional roadway facilities. However, capacities and shoulder areas are limited. Flooding, severe curves and reverse curves in particular, affect travel conditions along certain sections of Kings Highway. The number and seriousness of problems along Kings Highway were such that it was decided to remove Kings Highway from this study, and to substitute County Routes 8A, 12A, and 12, providing a path from Rumson to the Garden State Parkway.

Evacuation Scenario Issues:

Travel conditions along each portal candidate were evaluated using a variety of investigative tools including field surveys, photo log inventories, state straight line diagrams, and transportation evaluation methodologies such as the Highway Capacity Manual (HCM) Software procedures. This work resulted in the identification of Initial Priority Locations within each portal, which would be considered for advanced study.

Under an evacuation scenario for 2007, traffic operations would reach saturated conditions along most of the proposed new portals given an evacuation order with a six hour clearance time in the peak period. Volumes along the north and central corridors of SR 36, CR 520, CR 16, and CR 33 would exceed 2000 vehicles per hour and result in breakdown travel conditions along these arteries. Traffic traveling south along CR 39 and CR 7 would be unable to enter the SR 36 due to Level of Service (LOS) F conditions that would occur on SR 36’s westbound travel lanes. LOS F describes poor traffic operations where there are frequent drops in speed to nearly zero mph as a result of stop-and-go conditions, high travel delays within queues, and the ability to pass or change lanes is difficult. Acceptable traffic flow conditions would still occur along CR 516, Kings Highway (which would later be removed as a Portal Route), Park Avenue, CR 524

(Allaire Road) and CR 524 Alternate (Atlantic Avenue). Under a year 2030 evacuation event, travel conditions would deteriorate throughout the system. Travel speeds would decline significantly along all proposed portals and significant delays and congestion would occur at signalized intersections and along road segments with physical alignment constraints.

The above problems were determined to be caused by physical, geometric, operational, or traffic demand conditions. Examples include poor horizontal curvature, awkward intersection angles, and numerous traffic signals, absence of shoulders, restricted sight lines, or significant traffic generators such as active commercial areas or freeway entrance locations. Each initial priority location list was refined to a group of sites, where, it was estimated that targeting improvements would likely result in substantial benefits. Benefits would include increased roadway capacity, balanced travel demand, and improved safety along the length of each portal route. Those locations recommended for further investigation are detailed in Parts 1 and 2 and summarized in Table E-1 below.

Toolbox Approach:

After studying the evacuation issues associated with the twelve portal routes, it became clear that certain treatments would be applicable to most if not all routes, but at different points. A set of treatments were developed –a “toolbox”- that could be applied in a fairly consistent manner. The toolbox approach allowed the team to work efficiently, and helped assure that some treatments would not be overlooked. This set of improvements is listed in Table E-2 below.

Portal Listings:

Each of the twelve portals is discussed in detail in Part 2, along with maps, photographs, diagrams, and treatment tables. With a clear set of problems for each portal route, treatments were developed, explained, and listed. A complete data listing is included in Appendix E, including the general problem addressed, the treatment, unique ID (for spot improvements), cost estimate, coordinating agency, and coordinates for Geographic Reference purposes.

Community Outreach:

Meetings were held with each of three Stakeholder groups, representing the north, central, and southern sections of the study areas. The Monmouth County Planning Board staff contacted all municipalities within the study area and provided guidance as to how to select and nominate members to the community stakeholder groups. Each participating municipality selected up to three representatives from a pool of municipal planners, elected officials, council members, planning board members, municipal engineers, municipal traffic safety officers, and emergency management coordinators.

Table E-1, Priority Locations

Portal Route	Priority Location	Priority Issue
CR 39 (Union Ave.)	CR 39/SR 36 Intersection	Capacity, Flooding
CR 7/CR 56 (Palmer Ave.)	CR 7/SR 36 Intersection	Capacity, Flooding
SR 36 (North Coast)	CR 8A/SR 36 Intersection	Capacity
	CR 7/ SR 36 Intersection	Capacity, Flooding
	Cr 39/SR 36 Intersection	Capacity
	Broad St./SR 36 Intersection	Capacity
	CR 36/CR 35 Connection	Capacity, Flooding
CR 516/CR 50	SR 35/CR 516 Connection	Capacity
	Cherry Tree Farm Rd./CR 516	Safety (sight lines)
	RR crossing at Naval Station	Safety
Kings Highway* *Deleted from Study due to Environmental Impacts and number of deects. Replaced with CR 8A/12/12A	Locust Ave./CR 516 (4-way stop)	Safety (awkward crossing angles)
	Hillside Ave. – Sleepy Hollow Rd. Segment	Safety (sharp horizontal curvature,
	CR 35/CR 516 Connection	Capacity
	RR crossing at Naval Station	Safety
CR 8A, 12A Substitute Portal for Kings Highway	Oceanic Bridge	Bridge Loading, Age
	GSP On-Ramp	Capacity
CR 520	Rumson Ave. Bridge	Capacity
	CR 520/Seven Bridges Rd Intersection	Capacity
	T-intersections at Branch Ave., Pinckney Rd.,	Safety (turning movement conflicts), Capacity
Broad St.	Maple Ave./Broad St/Intersection	Capacity
	RR crossing near Shrewsbury Ave.	Capacity, Safety
	GSP on-ramp	Capacity
SR 36 (Mid Coast)	Cluster of signalized intersections bet. Ocean Ave. and CR 29	Capacity, Flooding at Sea Bright
	At-grade RR crossing near Cr 29	Safety

Table E-1, Priority Locations (cont'd)

Portal Route	Priority Location	Priority Issue
	SR 71/SR 33 Intersection	Capacity
	CR 547/SR 36 Intersection	Capacity
	GSP On-ramp	Capacity
Park Avenue	At-grade RR crossing near Woodgate Ave.	Safety
	SR 71/Park Ave. Intersection	Capacity
	Park Ave./CR 15 T-intersection	Safety (turning movement conflicts)
	CR 35/Park Ave. connection	Capacity
CR 16/SR 66	CR 71/CR 16 Intersection	Capacity, Flooding
	SR 35 (Neptune Boulevard)/CR 16 Intersection	Capacity
SR 33	Cluster of signals bet. SR 71 and Atkins Ave.	Capacity
	SR 35/SR 33 Intersection	Capacity
	Lane reduction approaching Fortunato Pl.	Safety (merging maneuvers),
	GSP On-ramp	Capacity
	SR 66/SR 33 Intersection	Capacity
	CR 34/SR 33 Intersection	Safety (lane changing), Capacity
CR 524 (Allaire Road)	SR 71/Allaire Road Intersection	Capacity
	Allaire Rd./Warren Avenue	Safety (awkward crossing angles)
	Allenwood Road bet. SR 34 and CR 524 Alt.	Safety (sharp horizontal curvature)
	Allaire Rd./CR 524 Alt. T-Intersection	Safety (conflicting turning movements), capacity
CR 524 Alt.	SR 35 Traffic Circle	Safety, Capacity
	SR 34 On-Ramp	Capacity
	CR 524 Alt./Ramshorn Drive Intersection	Safety (crossing angle)

Stakeholder meetings provided a work-group setting in which the project technical team could learn about relevant local issues and concerns; discuss specific project alternatives and concepts, and establish appropriate methods and approaches to advancing project activities and findings. The project continued to receive written comments, both on paper and through the interactive website. Most comments were accommodated within this document. A few of the community-driven issues and solutions that were indicated at these meetings include:

- A possible low-lying area where State Routes 35 and 36 meet the Garden State Parkway
- Use of Normandy Road as an Alternate Evacuation Route
- General signing of “Alternate Evacuation Routes” to help where designated evacuation routes become congested.

Technical Advisory Committee

A Technical Advisory Committee (TAC) was formed before the consultant was selected for the Study. This team consisted on representatives from County Departments, including Planning, Engineering, Transportation, and GIS. In addition, representatives from NJDOT, and NJTPA actively participated. NJ Transit was invited to join the TAC, but a representative attended only 1 meeting. The TAC has numerous meetings and reviewed all draft documents as they became available.

Public Input

Meetings were held with each of three Stakeholder groups, representing the north, central, and southern sections of the study areas. The Monmouth County Planning Board staff contacted all municipalities within the study area and provided guidance as to how to select and nominate members to the community stakeholder groups. Each participating municipality selected up to three representatives. In general, the stakeholders were Emergency Management personnel and Police/Public Safety Officers.

Final Project Recommendations:

Part 2 of the report contains the final set of recommendations. Fine tuning of improvements involved weighing the positive aspects of these improvements against any potential negative impacts. As an example, raising a roadway’s profile will make it less susceptible to flooding. But a raised profile can cause problems in connecting to cross streets and service to driveways. Driveways that previously sent water down to the roadway could experience stormwater traveling down from the roadway to the property. Such an outcome is not acceptable.

Part 2 contains specific recommendations. But it is important to recognize those problems and treatments that represent “global” conditions and applications. All problems associated with coastal evacuation can be placed in two categories:

- A. Flooding – Rising of the sea level such that areas are quickly inundated, and therefore not passable or useful as an evacuation route
- B. Capacity – Volumes of evacuating vehicles become so large that a particular route becomes congested, losing its ability to move traffic.

There were two basic approaches to flooding:

1. Raising the elevation of the facility, thereby bringing it above the flood level- This type of treatment was generally very expensive, and should be treated as a longer-range type of solution, or one that could be approached if a facility is already scheduled for capital improvement. Bridge replacement projects should consider increased heights, especially given predictions of rising sea levels due to climate change.
2. Recognizing those areas with a higher likelihood of flooding, and coordinating emergency management efforts to provide the earliest attention for first responders and public notice. These System Management techniques occur in the planning stages of coastal evacuation, are least costly, and probably the most effective in counteracting the worst consequences of coastal flooding.

Table E- 2 - Treatment "Toolbox"

Issue	Treatment Category	Treatment	Timeframe	Unit	Cost per unit
Capacity	Operational	Restriping	Short	roadway-ft	\$5
Capacity	Physical	Minor widening <3 feet	Intermediate	MILE	\$150,000
Capacity	Physical	New Bridge	Long	Sq Foot	\$220
Capacity	Physical	Rehabilitate Bridge	Long	Sq Foot	\$150
Capacity	Physical	Relocate aerial utilities	Long	MILE	\$100,000
Capacity	Technological	Portable traffic signals	Intermediate	Location	
Capacity	Operational	Allow evacuees to wait in emergency shelters until traffic clears	During Emergency	Location	No cost
Capacity	Physical	Reverse On-Ramp	Long	Location	\$500,000
Capacity	Physical	Widening - add lane	Long	Lane-Mile	\$2,100,000
Capacity	System Management	No Parking Legislation	Short	NA	\$0
Capacity	Technological	Install LED's, UPS's	Intermediate	Location	\$7,000
Capacity	Technological	Upgrade signals for wireless control	Intermediate	Location	\$23,000
Capacity	Highway Advisory Radio	Transmitter, two signs	Intermediate	Area	\$35,000
Capacity	Technological	Portable traffic signals	Intermediate	Location	\$60,000

Table E-2, Treatment “Toolbox” (cont’d)

Issue	Treatment Category	Treatment	Timeframe	Unit	Cost per unit
Capacity	System Management	Dissemination of public information about emergency shelters	Short	NA	\$0
Flooding	Operational	Plan to focus on intense inundation areas	During Emergency	Area	\$0
Flooding	Operational	Police assistance	During Emergency	Officer/day	\$500
Flooding	Physical	Modify sign	Short	Mile	\$600
Flooding	Physical	New signs	Short	Mile	\$1,500
Flooding	Physical	Raise roadway - 1 foot	Long	Lane- foot	\$720

Capacity solutions also fell into a number of treatment types:

1. Creation or widening of shoulders – These are capital improvements that provide additional through capacity during evacuation, while providing possible bicycle use during normal periods.
2. Minor widening or changes in parking restrictions to allow for a second outbound lane during evacuations – In some cases, only two or three additional feet were necessary to have enough total roadway width to allow a second outbound lane.
3. Sign to preclude parking in times of evacuation – similar to a snow emergency, this restriction often would create an additional evacuation lane, or assure that a designated lane would remain clear.
4. Ramp reversals – prepare the approaches to Garden State Parkway southbound lanes that may have to be reversed to northbound lanes.
5. Provide battery backup and wireless control for key signalized intersections – allowing officials to move outbound traffic very quickly under rare conditions.
6. Operational Improvements to be implemented at the time of evacuation – these require use of emergency management personnel (mostly police), to control key intersections. Services would include functions such as assisting in the reversal of approach ramps, closing off some intersections so that others would operate more efficiently, and patrolling “No Parking During Evacuation” zones.

Lead Organizations / Future Programming:

Once the improvement scope and locations were determined, the project team determined which agency might be the “Lead Organization”. This determination was made in cooperation with the Monmouth County Planning Board. In some cases, the solution would involve two or more agencies, such as State and County or County and Municipality, and were so listed. With an understanding of the problem, possible solutions, scope, cost, lead agency, and timing; the County now has the ability to consider incorporation of these solutions into their operating and capital programs. As part of the North Jersey Transportation Planning Authority, projects may be included in the multi-year Transportation Improvement Program, or slated for additional study under the Annual Work Program.

This Study developed a Treatment Toolkit, enabling it to recommend a set of improvements tied to individual Portals. However, this same toolkit may be applied globally to assist in programming and policy decisions. It can provide a focus for setting short and long range infrastructure goals relating to coastal evacuation. Although improvements are listed by route, the County can also take a functional or global approach. Improvements can be implemented by type.

Some physical improvements can be applied fairly easily and cheaply on an area-wide basis. Evacuation signing, lane re-striping, and conversion of traffic signals to LED’s are a first step.

Operational Improvements that should be put in place quickly include setting severe inundation zones as priority areas, preparation to place first responders at key intersections and “choke points”, and coordination of highway advisory radio among municipalities.

Longer Term Improvements, such as widening and elevating of roads and bridges need to be integrated into ongoing planning programs. Evacuation improvement should be factored into the process for evaluating larger construction projects.

As a General Reference, **municipalities can use the project data** (populations affected, toolkit, methodologies, appendices) to support municipal evacuation programs. The individual route descriptions and analyses can support improvements recommendations on a corridor or intersection basis. The route tables and maps provide a handy reference. The searchable database is a good starting point for developing local evacuation route programs.

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GLOSSARY

TERM	ACRONYM	DEFINITION
Changeable Message Sign	CMS	Traffic control devices designed to display variable messages in a sequence. Changeable message signs are meant to display pertinent traffic operational and guidance information only, not advertising. In this report, permanently-mounted CMS's are defined as Dynamic Message Signs; while portable CMS's are defined as Variable Message Signs.
County Road	CR	These roads are usually, but not always, maintained by the counties and are denoted by three digits in the 500 to 699 range.
Dynamic Message Sign	DMS	Permanently-mounted Changeable Message Sign
Environmental Assessment	EA	A report subject to the requirements of the National Environmental Policy Act (NEPA) that identifies the environmental impacts of project alternatives. The EA can lead to a Finding of No Significant Impact (FONSI) or an Environmental Impact Statement (EIS).
Environmental Impact Statement	EIS	An investigative report issued to comply with the requirements of the National Environmental Policy Act (NEPA) that identifies in detail the environmental impacts of a project.
Environmental Justice	EJ	Federal requirements that minority and low-income populations be specifically taken into account in the planning of federally-funded facilities.
Evacuation Analysis Zone	EAZ	The study area is divided into three geographic areas identified as the North Coast, Mid Coast and South Coast. This segmentation is based on area drainage basins, travel patterns, and development patterns.
Feasibility Assessment	FA	A phase of work in the NJTPA's PDWP in which a potential project derived from Concept Development is further studied to determine if a solution is feasible in light of environmental, engineering, budgetary and community constraints.
Federal Emergency Management Agency	FEMA	The federal agency responsible for organizing responses to human or natural disasters.

TERM	ACRONYM	DEFINITION
Federal Highway Administration	FHWA	The agency of the USDOT that administers the federal program of financial assistance to state departments of transportation.
Geographic Information System	GIS	A computer system that can spatially manage, analyze and present mapped geographic data.
Highway Advisory Radio	HAR	Highway Advisory Radio - HAR - Highway Advisory Radio is a service for drivers that typically provides roadway, weather, and emergency information.
Intelligent Transportation Systems	ITS	Technology to better manage traffic and transit resources, increase the capacity capabilities of the nation's highways, enhance safety and reduce accidents and more effectively handle toll collection, safety inspection, log maintenance, licensing and vehicle registration. Applications of ITS technology include computerized traffic signal systems, traffic management systems, satellite vehicle tracking systems, electronic toll collection, electronic weigh in motion and safety inspection of commercial vehicles, automatic container tracking systems, in-vehicle route guidance devices, emergency and incident response and Mayday systems in vehicles that automatically alert police, fire or other emergency services if an accident should occur.
Level of Service	LOS	A set of characteristics that indicate the quality and quantity of transportation service provided. Characteristics are based on mode. A facility's LOS is often given as a numerical rating. Leverage Lease Funds LEV LEASE Private funds obtained by NJ Transit from the sale and leaseback of capital assets.
Metropolitan Planning Organization	MPO	The forum for cooperative transportation decision making for a metropolitan area. As designated by federal law, the Board of Trustees consists of local elected officials. The MPO has the responsibility for developing transportation plans and programs for urbanized areas of 50,000 people or more.

TERM	ACRONYM	DEFINITION
National Environmental Policy Act	NEPA	The National Environmental Policy Act of 1969 (NEPA) aims to help the public understand the environmental consequences of major projects. NEPA requires planners to develop an assessment of the environmental impacts of a project and to consider alternatives and mitigation measures.
New Jersey Department of Transportation	NJDOT	The state agency responsible for maintenance, construction, and operation of State and Interstate highways in New Jersey. New Jersey Transit NJ Transit The state agency responsible for maintenance, construction, and operation of public transit facilities.
North Jersey Transportation Planning Authority	NJTPA	The federally-authorized Metropolitan Planning Organization (MPO) for the 15 sub-regions of Northern New Jersey. The Board of Trustees is composed of representatives of the counties of Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union and Warren; the cities of Newark and Jersey City; as well as from: NJDOT, NJ Transit, the PANYNJ; the Governor's office; and a citizen's representative.
Office of Emergency Management	OEM	A group established by a government agency (State, County, City, etc) that is responsible for preparing and managing emergency conditions such as flooding, evacuation, and other incidents.
Planning and Development Work Program	PDWP	The schedule of activities and anticipated products which are focused at bringing projects from a conceptual phase to a more specific development phase or feasibility assessment.
Portal Route	Portal Route	A route whose purpose is to bring people from a hazardous (flood) zone to a safe area.
Portal Route Profile	Portal Route Profile	A listing of critical properties of a portal route including common name, limits, length, and physical and operating aspects,
Priority Location	Priority Location	An area or spot along a portal route that would need improvement in order to operate properly under evacuation conditions. The type of problems associated with priority locations are usually either a flooding condition or a travel restriction.

TERM	ACRONYM	DEFINITION
Project Prioritization	Project Prioritization	A process for ranking proposed projects to determine whether they warrant inclusion in the TIP. The process assigns scores to each potential project based on how well it fulfills a variety of criteria and performance standards related to each of the six goals established in the RTP. The project prioritization process then considers other factors such as funding availability and scheduling.
Public Participation	Public Participation	Federal regulations require MPOs to provide early and continuing opportunities for public input into major decision processes.
Regional Transportation Plan	RTP	The federally-mandated long range Regional Transportation Plan, based on extensive public participation and data driven analysis. The plan forms the basis for transportation decision-making. The RTP is produced by the MPO every 4 years.
Segment Ratio	Segment Ratio	A measure of how much available capacity is being used by traffic crossing a mainline section. Segment ratios over .9 indicate a potential for congestion.
Stakeholders	Stakeholders	Different groups including communities, government officials, MPOs, etc. affected by decisions regarding transportation projects, studies, and initiatives.
State Emergency Evacuation Routes	State Emergency Evacuation Routes	Routes that have been incorporated into New Jersey's Emergency Evacuation Route System.
State Transportation Improvement Program	STIP	The STIP, in New Jersey, represents the combination of MPO capital investment programs (TIPs) from around the state: South Jersey (SJTPA), North Jersey (NJTPA) and the Delaware Valley (DVRPC). State Wide Investment SWI A series of coordinated smaller-scale projects in multiple locations, and in multiple phases of work, that address a specific mobility issue.
Sub-regional Transportation Planning Program	STP	Program Planning activities funded by the NJTPA and carried out by the 13 counties and two major cities in North Jersey.

TERM	ACRONYM	DEFINITION
System Management	System Management	Projects and programs that optimize the performance of the transportation network. Examples of system management projects would include: exclusive bus lanes, reversible lanes, “smart” traffic signs and signals, and intersection improvements.
Transit Dependent Population	Transit Dependent Population	Groups likely to require public transportation services, including those of advanced age, limited income, or with limited or no access to an automobile.
Transportation Control Measure	TCM	A measure that seeks to influence the public's travel choices, including mode, vehicle miles traveled, and timing in order to reduce congestion and pollution, as mandated by the CAAA in 1990.
Transportation Enhancement	TE	Enhancements to transportation facilities such as pedestrian, scenic, historic and other improvements. A separate TE funding program has been established by federal law.
Transportation Improvement Program	TIP	A 4-year prioritized program of transportation projects to be implemented in appropriate stages over the 4 years of the program. The projects are drawn from the NJTPA Regional Transportation Plan (RTP). All federally funded projects and programs must be included in the TIP.
Travel Demand Management	TDM	Programs designed to maximize the people-moving capacity of the transportation system by increasing the number of people using existing transportation facilities, or by influencing the time of, or need to, travel.
Unified Planning Work Program	UPWP	The schedule of activities and anticipated products which guides MPO efforts. This document, which is updated annually, summarizes all activities and budgets of the NJTPA staff, the sub-regions and other transportation agencies in the region.
United States Department of Transportation	USDOT	The USDOT is the main federal agency that develops and coordinates policies pertaining to the national transportation system. The USDOT includes the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA).
Variable Message Sign	VMS	A portable Changeable Message Sign

TERM	ACRONYM	DEFINITION
Vehicle Miles Traveled	VMT	One mile traveled by one vehicle equals one vehicle mile traveled. VMT is used to calculate traffic congestion, fuel consumption, and other key transportation-related indicators.
Vulnerable Population	Vulnerable Population	The number of persons present in an area subject to flooding, both residents and non-residents (visitors, employees, etc),
Travel Demand Management	TDM	Programs designed to maximize the people-moving capacity of the transportation system by increasing the number of people using existing transportation facilities, or by influencing the time of, or need to, travel.

MONMOUTH COUNTY COASTAL EVACUATION ROUTES STUDY



PART 1

Data Collection, Evacuation Portal Selection and Assessment

**Prepared for:
Monmouth County Planning Board**

By:

Jacobs Engineering, Inc.

**In cooperation with
Reichman Frankle Associates, Inc.
and
Techniquet Engineering**

6/19/2009

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I– Introduction

I.A. Overview

One of Monmouth County's finest assets is its 27 miles of sand beaches and 26 miles of bay coastline. The county possesses 9 coastal lakes that discharge into the Ocean. Amenities vary from the surf breaks at places such as Asbury Park, Long Branch, and Spring Lake to the boardwalk and mini-golf at Bradley Beach. Anglers enjoy the great fishing available at Sandy Hook and Union Beach, while those who want to while away an afternoon lounging in the sand might head to Monmouth Beach or Seven Presidents. But this asset can also become a liability. Low-lying coastal areas are subject to flooding from wave action and weather.

In recent years, Monmouth County has taken several measures to mitigate the possibility of harm from coastal flooding. The County's office of emergency management is working with state, federal, and other municipal agencies to coordinate responses and to plan for emergencies. As part of a comprehensive package aimed at coastal flooding, Monmouth County's Planning Board has undertaken a study to evaluate how coastal evacuation routes can be improved to facilitate evacuation.

The Monmouth County Coastal Evacuation Route Improvements Study consists of several elements:

1. Identify those conditions which would generate a coastal evacuation.
2. Identify those populations in need of evacuation under predetermined conditions.
3. Find a set of routes, with county orientation, that would be used for evacuation purposes.
4. Define non-roadway "portal facilities" for evacuation purposes.
5. Analyze physical and operational problems that may be encountered by these facilities during evacuations.
6. Propose near-term, intermediate, and longer range solutions to the problems noted above. Provide descriptions, sketches, cost estimates, for these solutions.
7. Accomplish all the above in an interactive manner with municipalities and other involved stakeholders.

I.B. Project Organization

The project was conducted for the Monmouth County Planning Board and funded by the Board and North Jersey Transportation Planning Authority. Under the direction of the Planning Board Staff and the guidance of a Technical Advisory Committee, Jacobs Engineering (consultants) provided the major work effort with support from its subconsultants and other County participants. A Technical Advisory Committee was established to help set project goals and objectives, to review products, and to make recommendations, and consisted of the following member organizations:

Monmouth County Planning Board
Monmouth County Division of Engineering
NJ TRANSIT Police
North Jersey Transportation Planning Authority
Monmouth County Office of Emergency Management
Monmouth County Information Services
Monmouth County Planning Board
New Jersey Department of Transportation
Monmouth County Department of Transportation

Three Stakeholder Groups were formed to provide a link to individual municipalities. Stakeholder group members were drawn from municipal planners, emergency management coordinators, elected officials, council members, Planning Board members, municipal engineers and municipal traffic safety officers. It was the role of these stakeholders to provide the consultant with municipal reports, master plans, and other data requested by the consultant to accomplish study tasks, meet with the project team at selected key milestones throughout the study and provide a small work-group setting in which the project technical team can learn about relevant local issues and concerns; discuss specific project alternatives and concepts, and establish appropriate methods and approaches to advancing project activities and findings.

The stakeholder Groups are listed below:

North Group

Aberdeen
Keyport
Union Beach
Keansburg
Hazlet
Holmdel
Matawan
Middletown
Atlantic Highlands
Highlands

Central Group

Red Bank
Fair Haven
Sea Bright
Rumson
Shrewsbury Boro
Shrewsbury Twp
Little Silver
Monmouth Beach
Oceanport

Eatontown
Central Group (Cont'd)
Tinton Falls
West Long Branch
Long Branch
Ocean
Deal
Interlaken
Allenhurst
Loch Arbour

Southern Group
Asbury Park
Neptune
Neptune City
Bradley Beach
Avon-by-the-Sea
Belmar
Lake Como
Spring Lake
Spring Lake Hts.
Wall
Sea Girt
Manasquan
Brielle

I.C. Project Tasks and Schedule

The project was subdivided into Four Major Tasks:

- Task I – Project Start-Up and Data Collection
- Task II Problem Identification
- Task III Development of Solutions and Strategies
- Task IV Reporting

Project timing and significant milestones appear in Figure I-1 below.

I.D. Web Page

The project team produced and maintains a website:

<http://www.MonmouthCers.com>

linked to the Monmouth County Planning Board website. The website contains the following project information:

- General project background information
- Project status and progress updates
- Milestone products including presentations and graphics
- Technical Memoranda and Final Reports
- Listings of contact information for project participants.
- A contact page, allowing the public to submit comments and questions to the project.

Information contained on the site is updated at the direction of the County Project Manager

Figure I-1, Project Schedule

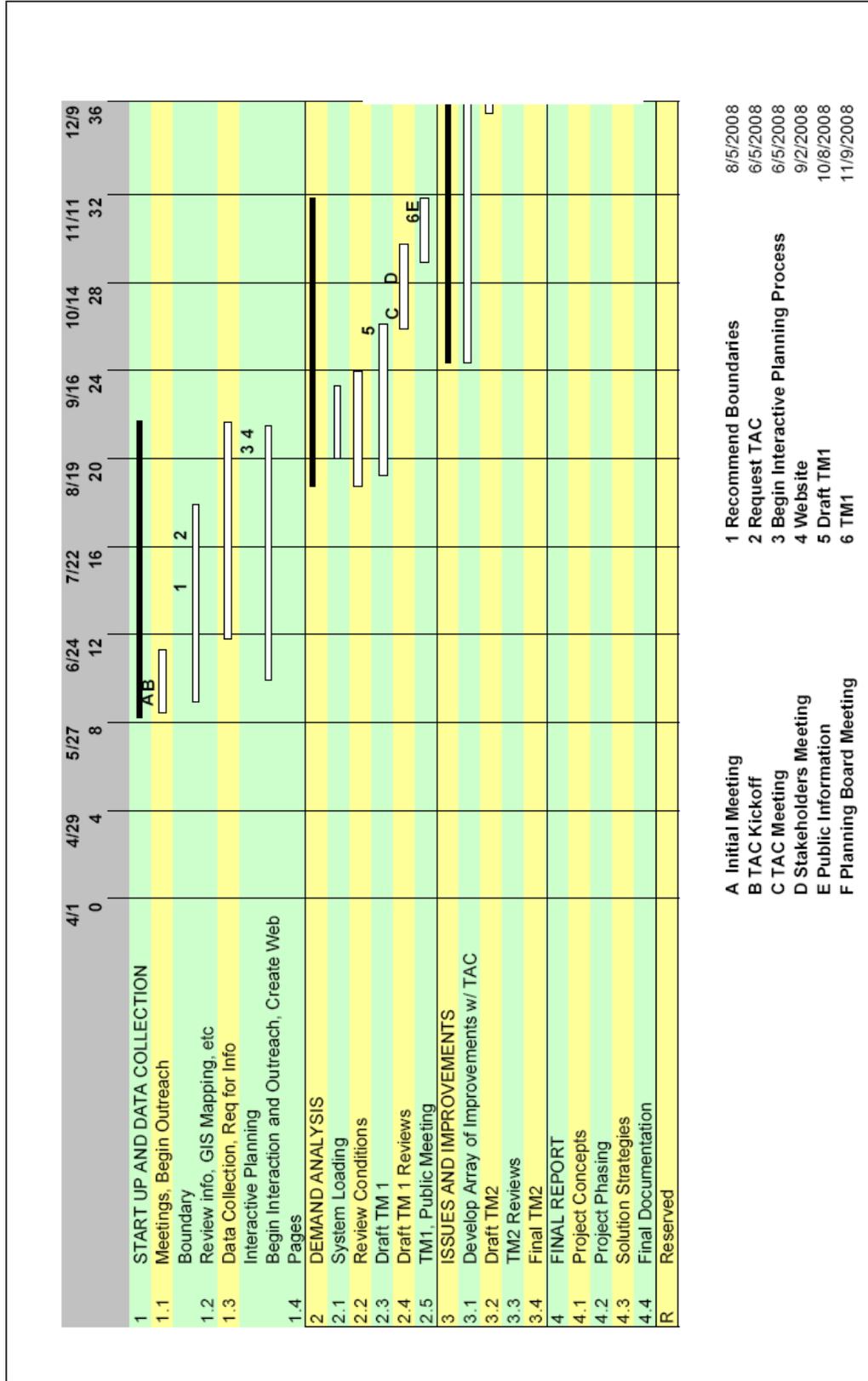
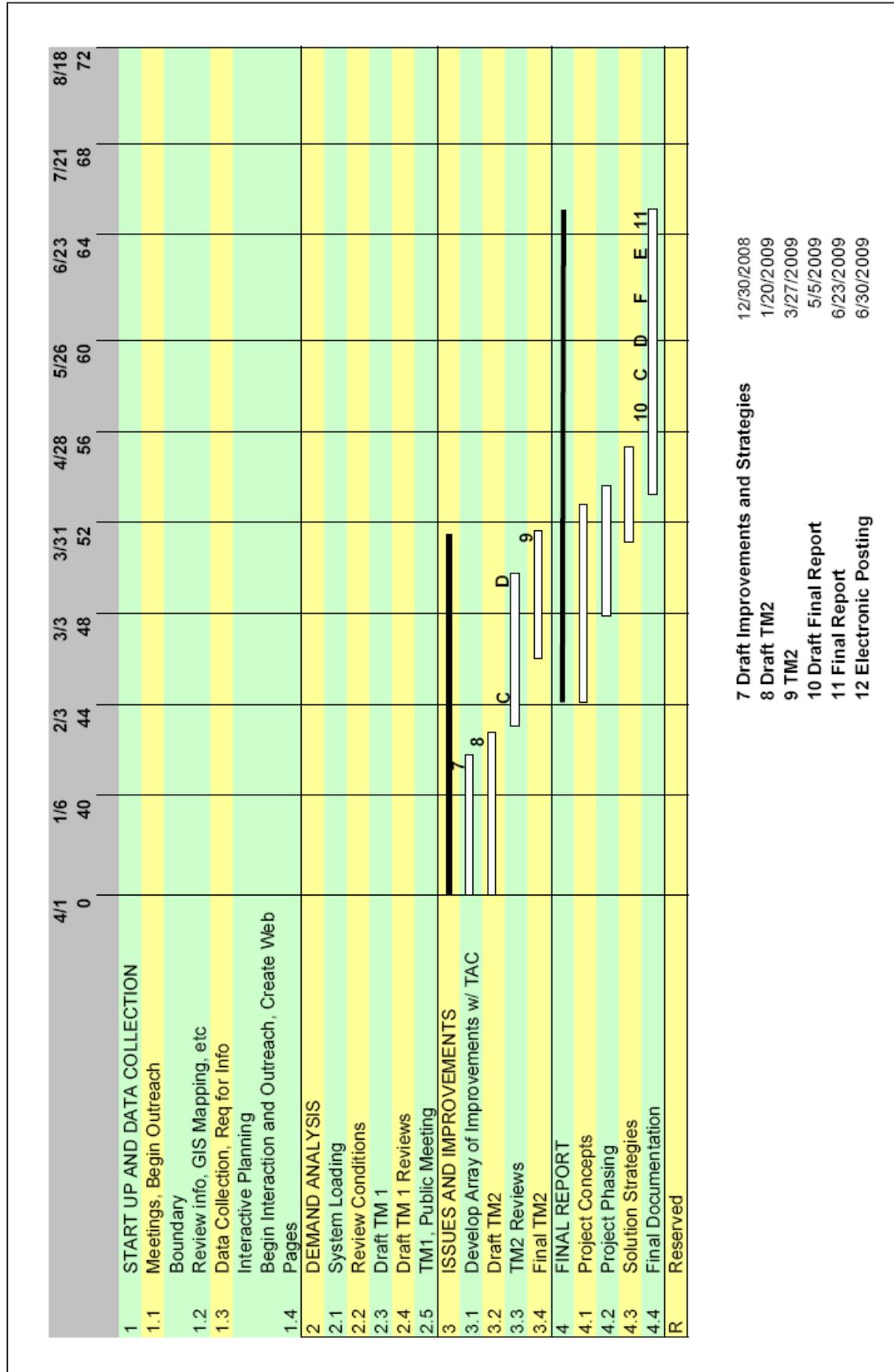


Figure I-1, Project Schedule



II– Identification of Critical Evacuation Portals

Portal selection was a two-step process. Based on the projects initial set of objectives, a methodology was developed to make a first cut at portal route selection. The project’s Technical Advisory Committee (TAC) then reviewed the methodology and an initial set of portals. The TAC refined the process and made the final selection of routes.

II.A. Methodology

Initial Screening

Theoretically, any roadway in The County between the coast and Garden State Parkway could be a portal route candidate. Assessment of the County’s entire road infrastructure would have been impractical. Further, most roads in the County have a functional classification no higher than minor collector. The lower roadway classifications characteristically are discontinuous with limited service capacity and little Right of Way. These features are inherently negative for portal route application. Compared to non-county roads, the County roadway system generally

- is interconnected, providing continuous east-west and north-south travel corridors,
- permits higher travel speeds,
- has less restricted sight lines,
- runs through areas where available widths are more substantial for potential roadway expansion, and
- has better traffic control (e.g. pavement markings, delineators, signage, signals).

These are features that are conducive to efficient movement of high traffic volumes. Some State Routes are already part of Monmouth County Evacuation Route network and have already been judged to be effective portal corridors for hurricane evacuation. Therefore the initial selection process included examining arteries within the following roadway categories;

- All State routes
- All County routes,
- Roadways identified by the State in its Evacuation Planning (some roads in this category are also in either the first or second category), and
- Other thoroughfares with potential to function as a portal corridor given capital improvement upgrades. These roads are not in any of the above categories but have location, geometric and alignment characteristics that appear to meet selection criteria discussed below.

The investigation resulted in over 40 roadways passing as potential Portal Route candidates, and those candidates are listed in Appendix B. Candidate roads were advanced for further assessment.

Final Selection Criteria

The following criteria were used to reduce the initial 40+ candidates to a list of twelve portal routes:

1. Roadway Alignment (Leads away from Flood Zones): Routes should generally pass from storm surge inundation areas to dry areas or to the project boundary – in this case the Garden State Parkway. In the Bayshore Planning Region, portal routes should lead the vulnerable population in southerly and westerly directions away from the Raritan Bay and rivers. In the Coastal Planning Region, portal routes should facilitate east to west travel away from the ocean coastline. Connections formed by a portal candidate and with other major roads that offer multiple escape opportunities, such as SR 18, SR 35 and SR 36 should be viewed as a vital asset.
2. Supplement the Existing Portal Network: Given anticipated Monmouth County growth, it is expected that future travel demand on existing hurricane evacuation routes will increase and potentially impact the effectiveness of current area wide evacuation assets and operations. This criterion evaluates the potential of a new corridor to be incorporated into the existing evacuation. Any part of the existing evacuation route infrastructure that was not selected as a portal for this study would still be highly valued as an asset.
3. Provide Area-wide Coverage. Are there gaps in the network? Each portal was evaluated based on its spacing relative to other portals. This provided viable diversion opportunities within the system. At the same time, consideration was given to the capacity requirements for different parts of the evacuation hazard area. For example, were a sufficient number of travel lanes available to areas where population densities were high such as in Long Branch?
4. Have Potential for Improved Capacity: A portal candidate that meets the three aforementioned criteria but has limited capacity, a narrow cross section, and poor alignment should be given a preference over one that already appears to have good design elements and capacity. The roadway that operates today at a high level of efficiency poses less immediate risk to the public than lower efficiency rated roadways. Targeting improvements to roadway in poorer condition offers higher value to the vulnerable population by providing more alternatives for escaping hazardous zones.
5. Reach Isolated Areas: Portal candidates were evaluated based on their ability to provide alternative access for departing an isolated area such as a peninsula, a barrier

spit, or a mainland neighborhood whose roadway system is interrupted by water bodies such as lakes, tributaries, streams and creeks.

6. Avoid Merging of Traffic Streams: The absence of junction(s) where major streams of traffic merge along an alignment was considered a positive aspect. Merging traffic streams could result in an over-capacity condition, generating a choke point where traffic flow would be constrained. Therefore, the evaluation of routes with parallel alignments to other major roads or where diverging maneuvers are encountered were advanced for the purpose of providing separate escape routes for adjacent hurricane evacuation zones.
7. Make Use of the County System: As a County project, consideration was given to selecting County Routes.

Each route was generally assigned a score of “1” if the performance measure was met. Criteria that were considered critical for determining whether or not a route could function as a portal corridor included;

- Does the roadway lead away from a flood zone or provide access to a safe area, and
- Does the roadway improve the existing evacuation route network’s area coverage .

Because of their significance, these performance measures were assigned a “2”.

The resultant cumulative scores for each roadway were viewed as a relative index comparing the assets and constraints affecting each road’s ability to function as a portal route. The arteries were placed in descending order with the strongest candidates positioned at the top of the matrix. Input from the TAC provided the final adjustments to the list.

II.B. Portal Roadways

The 12 study portal corridors include all or parts of 2 state roads, 9 county roads, and 2 local roads. These corridors are listed below and appear in Figure III-4,

1. CR 39 between Florence Avenue and SR 36,
2. CR 7/CR 56 between Beachway Campview Point and SR 36,
3. SR 36 between Highlands Bridge Over Shrewsbury River and the GSP,
4. CR 516/CR 50 between SR 36 and SR 35,
5. Kings Highway/CR 8 between SR 36 and SR 35,¹
6. CR 520 between Ocean Avenue and GSP,
7. SR 36 (near Oceanport) between the SR 36/CR 57 junction and GSP,
8. Park Avenue between SR 71 and SR 18,
9. CR 16 between SR 71 and GSP and SR 66 between CR 16 and SR 33,
10. SR 33 between SR 71 and SR 34,
11. CR 524 between SR 71 and I-195, and
12. CR 524 Spur between SR 71 and I-CR 524.

¹ Kings Highway/CR 8 was replaced by CR 8A/CR12/CR12A in the evaluation stage of the project, due to the poor geometry and low speeds on Kings Highway and Holland Road

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III– Data Collection

III.A. Photolog

A visual photo-file of each route was created in order to collect an up-to-date inventory of the physical characteristics of the roadway system and to verify information obtained from secondary data sources. The photos were taken during field investigations conducted on June 22, 2008, June 24, 2008, and August 14, 2008. The photographs are organized by roadway corridor and are presented sequentially by direction.

III.B. Bridge Data

Some bridge information was supplied by Monmouth County’s Engineering Department. The information provided descriptions of current bridge conditions and recommended improvements.

III.C. Traffic Data

Automatic Traffic Recorder (ATR) counts and turning movement (TM) counts were obtained from a number of primary and secondary sources. Primary data were generated from recent counts collected for Jacobs Civil along State Route (SR) 36 and Ocean Avenue corridors in the Towns of Highlands and Monmouth Beach as part of the Replacement of the Route 36 Highlands Bridge over Shrewsbury River Project and an adaptive reuse project in Sandy Hook Park. The Consultant Team also collected ATR and TM counts at 23 locations in the project area. These count stations were focused along potential portal route candidates and existing State evacuation routes. The Monmouth County Division of Engineering also supplied the project team with recent counts.

Secondary traffic counts were obtained from County and State sources including New Jersey Department of Transportation (NJDOT) Straight Line Diagrams and NJ DOT Interactive Traffic counts Reports and Monmouth County Planning Board (MCPB)’s Bayshore Region Strategic Plan. Skycomp traffic performance information relating to the Garden State Parkway was obtained from the New Jersey Highway Authority.

III.D. Environmental

The Monmouth County Planning Board was able to supply the project with GIS (Geographic Information System) files showing locations of known environmentally sensitive areas. This included parklands, historic places, and wetlands

III.E. Population and Employment

Population and employment information was obtained from a number of MCPB sources and from U.S Census Bureau data as compiled by the MCPB. These sources are listed below;

- Multi-Jurisdictional Natural Hazard Mitigation Plan – Monmouth County, New Jersey, July 2008 (Draft), MCPB,
- New Residential Development Survey Reports, 2004 and 2007, MCPB,
- Asbury Park Transportation Improvement Study, 2007, MCPB,
- Bayshore Region Strategic Plan, 2007, MCPB,
- U.S. Census Bureau,
- Monmouth County Population Estimates for 2007 and Population Projections for 2020 and 2025, MCPB,
- Monmouth County Department of Economic Development and Tourism, and
- New Jersey Hurricane Evacuation Study Transportation Analysis, Technical Memorandum, June, 2007, U.S. Army Corps of Engineers

III.F. Land Use

Monmouth County is the author of several land use analyses within its jurisdictional boundaries. The land use setting presented in this report is based on several County sources including;

- Bayshore Region Strategic Plan, 2007,
- Multi-Jurisdictional Natural Hazard Mitigation Plan – Monmouth County , New Jersey, July, 2008 (Draft), MCPB,
- Ecological Resource Inventory Reports, MCPB
- Monmouth County Cross Acceptance Reports, MCPB, and
- New Residential Development Survey Reports for 2004 and 2007, MCPB.

Additional data were gathered from the U.S. Army Corps of Engineers' New Jersey Hurricane Evacuation Study Transportation Analysis Report, 2007.

III.G. Seasonal Population Study Conducted by the MCPB

Seasonal population data were obtained from “Seasonal Peak Population in Monmouth County’s Shore Region, MCPB” (Author - Russell Like, Principal Planner) and the “New Jersey Hurricane Evacuation Study Transportation Analysis, Technical Memorandum ,” June 2007, U.S. Army Corps of Engineers.

IV – Base Line Condition (2007)

IV.A. Study Area Description

IV.A.1. Study Area Boundaries

The project area is generally delimited by the Atlantic Ocean to the east, the NJ Garden State Parkway (GSP) to the west, Raritan Bay to the north, and the Ocean County border to the south, an area that covers approximately 170 square miles and contains 41 municipalities (Figure IV-1)

Along its northern and eastern borders, the study area is rimmed by approximately 10 miles of waterfront along the County's north coast and by approximately 27 miles of beach along the County's eastern shoreline. Inland bays add an additional 16 miles of waterfront area. The study area largely coincides with two of Monmouth County's Planning Regions designated by the MCPB as the Bayshore and the Coastal Monmouth Regions.

IV.A.2. Evacuation Analysis Zones (Figure IV-2)

For a variety of factors, the study area was divided into three Evacuation Analysis Zones (EAZ) identified as the North Coast, the Mid Coast, and the South Coast. Water bodies, particularly rivers, have substantially influenced coastal development patterns and the connectivity of the roadway system east of SR 71 and SR 35. Consequently, the segmentation of the project area was based, in part, on the locations of the area's drainage basins to reflect their constraints on current travel patterns and their effects on accessibility and potential usage of existing and proposed evacuation portal corridors during a hurricane event.

The setting of zonal boundaries was influenced by the distribution of the coastal population and the location of roadways on the State's existing hurricane evacuation system. Examination of these factors provided a framework to match service needs and assets on a zonal basis. This enabled the Project Team to select a group of portal facilities that would provide balanced coverage and sufficient capacity to successfully evacuate vulnerable populations within all sections of the study area.

The outreach effort called for organizing three stakeholder groups charged with a mission to provide the project technical team with information relevant to local issues, concerns, and methods for facilitating the advancement of project activities. The attributes unifying the communities in each analysis zone included the sharing of common roadway corridors and common mobility interests and needs relative to the selection of portal candidates and capital improvements.

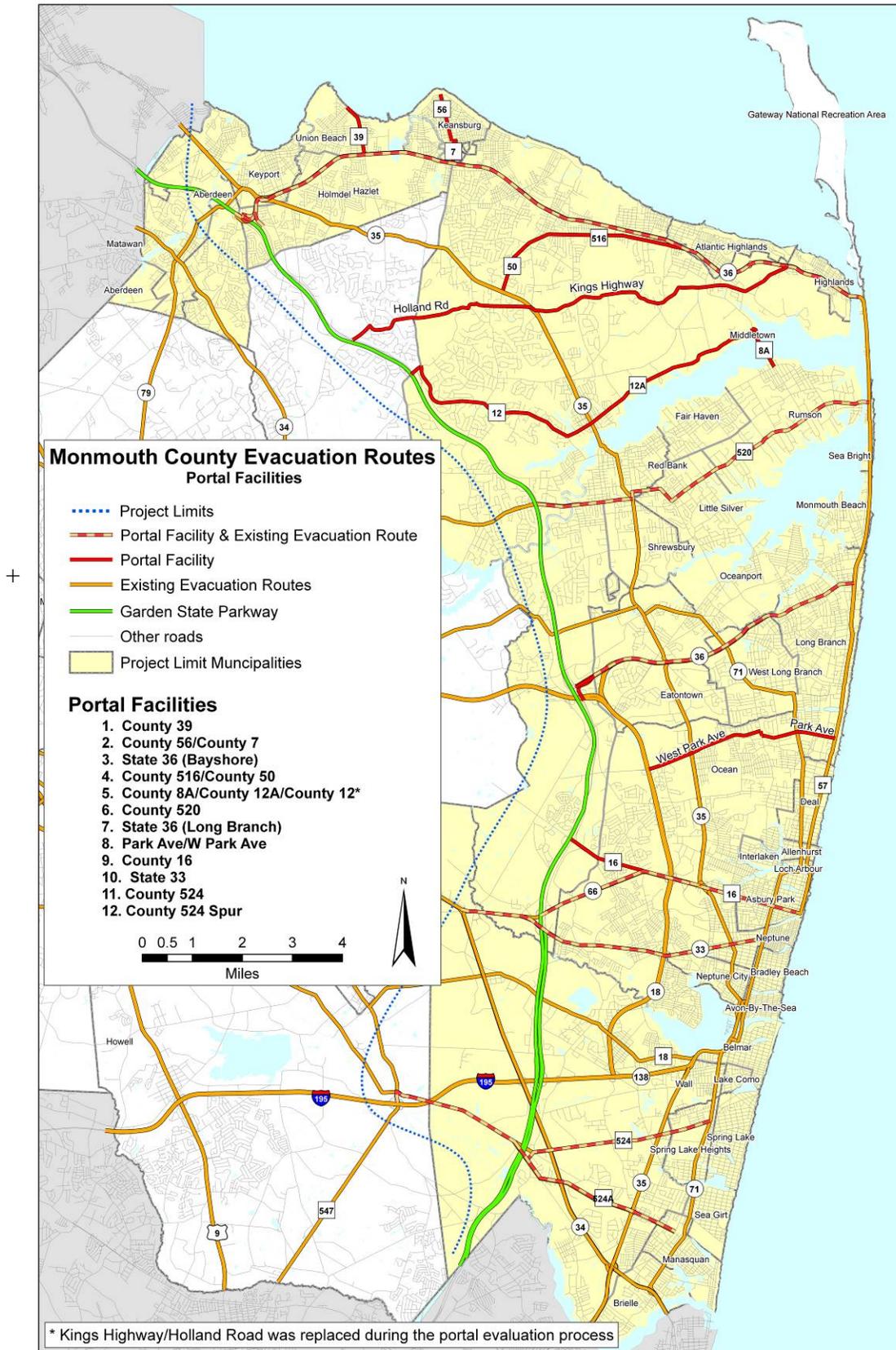


Figure IV-1, Portal Routes

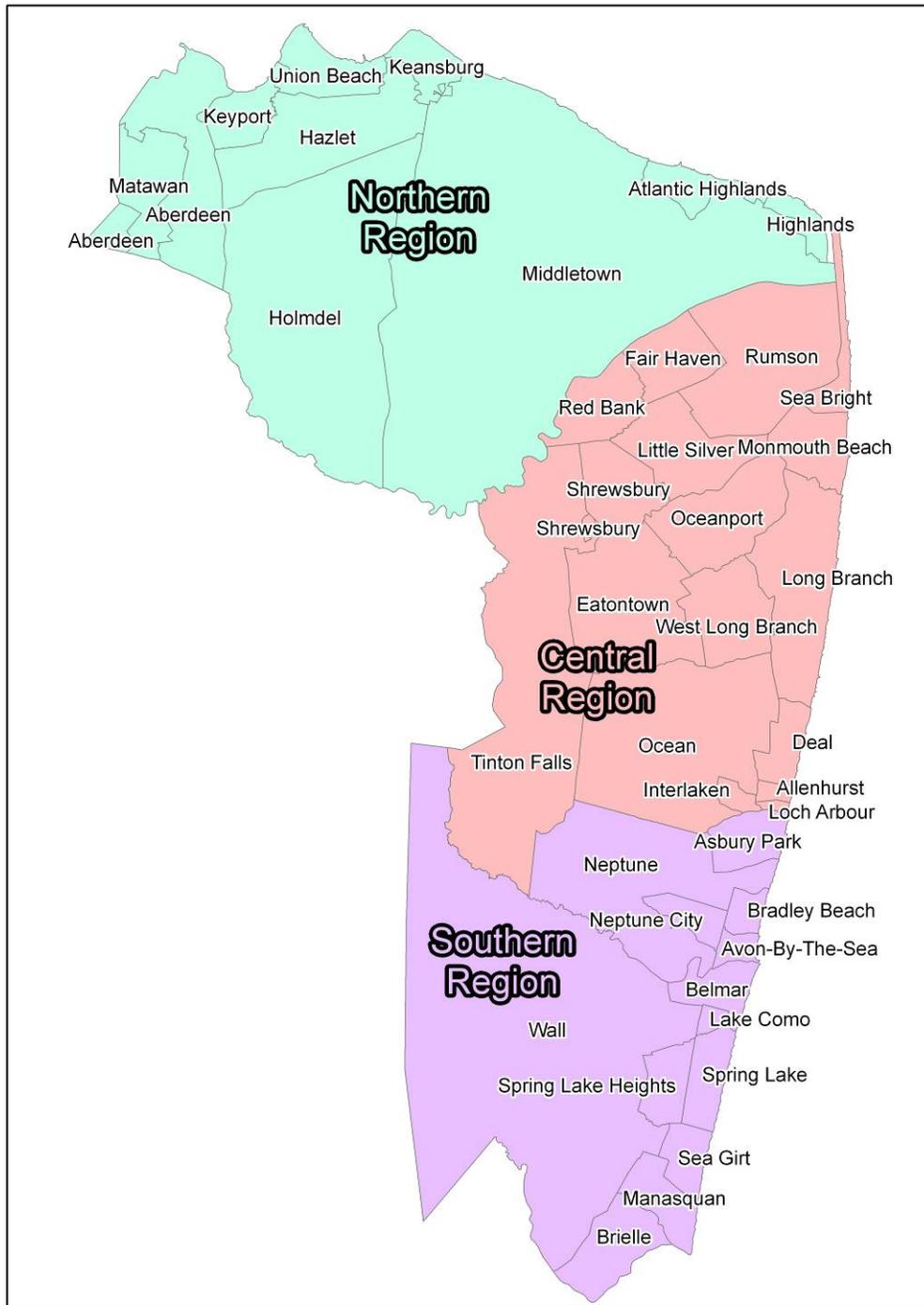


Figure IV-2, Evacuation Zones

Further, the limits of the EAZ's were drawn to achieve a proportional distribution of the study area's roadway infrastructure to ensure that study resources were evenly spread and that a thorough evaluation was performed throughout the entire study area.

IV.A.3. Geography

IV.A.3.a. Water

The Navesink, the Shrewsbury, the Shark, and the Manasquan Rivers represent the region's most significant water features. These rivers and their tributaries intrude westerly into the County's ocean-front communities; producing drainage basins that restrict north-south access to corridors that either contain bridge structures or that pass west of the river headwaters (Figure IV-1).

From the Raritan Bay, a number of creeks infiltrate the North Coast and limit east-west mobility between the waterfront communities in the area. These streams include the Comptons, Pews, Waackaak, Flat East, Chingarora, Florance, Luppataong, Mohingson, and Long Neck Creeks.

The project area also contains several large lakes such as Takamassee Lake in Long Branch, Deal Lake in Deal, Lake Como in Lake Como, and Stockton Lake in Manasquan. These water bodies are located east of the State Route (SR) 71 corridor and create discontinuities in the local street system.

IV.A.3.b. Elevations

The lowest elevations in the study area are located along the north coast and east coast that lie within three miles of the shoreline. SR 36 and SR 71, important roadways serving the shore communities, are both located within flood inundation zones. Elevations typically increase traveling west and southwest from the SR 71 and SR 36 corridors, respectively.

IV.A.3.c. Peninsula and Barrier Features

The Towns of Sea Bright, Monmouth Beach, and portions of Long Branch are located on the Shrewsbury River peninsula in the Coastal Region and are particularly susceptible to storm-related flooding and water damage. Surrounded by the Atlantic Ocean, Shrewsbury River and the Trout Mans Creek, connections between the mainland and the peninsula are few, including the Highlands and Rumson Bridges in the north and one road, SR 36, and three bridges along the CR 33, CR 29, and CR 44 alignments in the south.

At the southern end of the Coastal Region, the east section of Manasquan is separated from the mainland by Watson Creek, Crabtown Creek, Stockton Lake and the Manasquan River. Connections to the mainland are provided by water crossings along three roads including Brielle Road, Ocean Avenue, and Main Street.

The National Park Service Gateway National Recreation Area Sandy Hook Unit lies on a 9.5 mile long thin barrier reef. Surrounded by Sandy Hook Bay and the Atlantic Ocean, The barrier reef is an extension of the Shrewsbury River peninsula.

IV.A.3.d. Flood Inundation Zones

Municipalities in the study area are either fully or partially located within the area that would be affected by the storm surge resulting from a Category 3 hurricane. In subsequent sections, these hazard areas are referred to as “Flood Inundation Zones” (See Figure IV-3). These Communities are generally situated east of SR 35 and SR 71 corridors.

IV.B. Land Development Patterns

IV.B.1. North Coast

IV.B.1.a. Setting

The North Coast EAZ lies largely north of the Navesink River and the NJ GSP corridor as it extends across the northern tier of the Study Area. Ten of the Project’s Area’s forty-one municipalities are located within this zone (Figure IV-1).

According to the MCPB, single family residential development is the dominant land use in the North Coast with about one-half of the area’s total land devoted to residential uses. Once an area generally noted for its second home neighborhoods, many houses that were formally bungalows on small lots have been converted into year-round homes.

Commercial uses account for about eight percent of all development in the North Coast and are generally found along SR 35, SR 36 and in downtown business districts. The downtown districts are concentrated along the waterfront in the Towns of Highlands, Atlantic Highlands, Keansburg, Union Beach and Keyport. Commercial businesses are typically small-scale operations consisting primarily of neighborhood retail stores, restaurants, small offices, personal services establishments and water-related activities including marina and amusement park operations on Raritan Bay. Generally, businesses located within or north of the SR 36 corridor are situated within flood inundation zones.

Industrial development is limited and represents less than three percent of the Zone’s total land area. Industrial facilities in this area include the Bayshore Regional Sewerage Authority with Pump Stations in Hazlet and in Matawan, the Jersey Power and Light Company in Matawan, and the International Flavors and Fragrances Inc. complex in Hazlet.

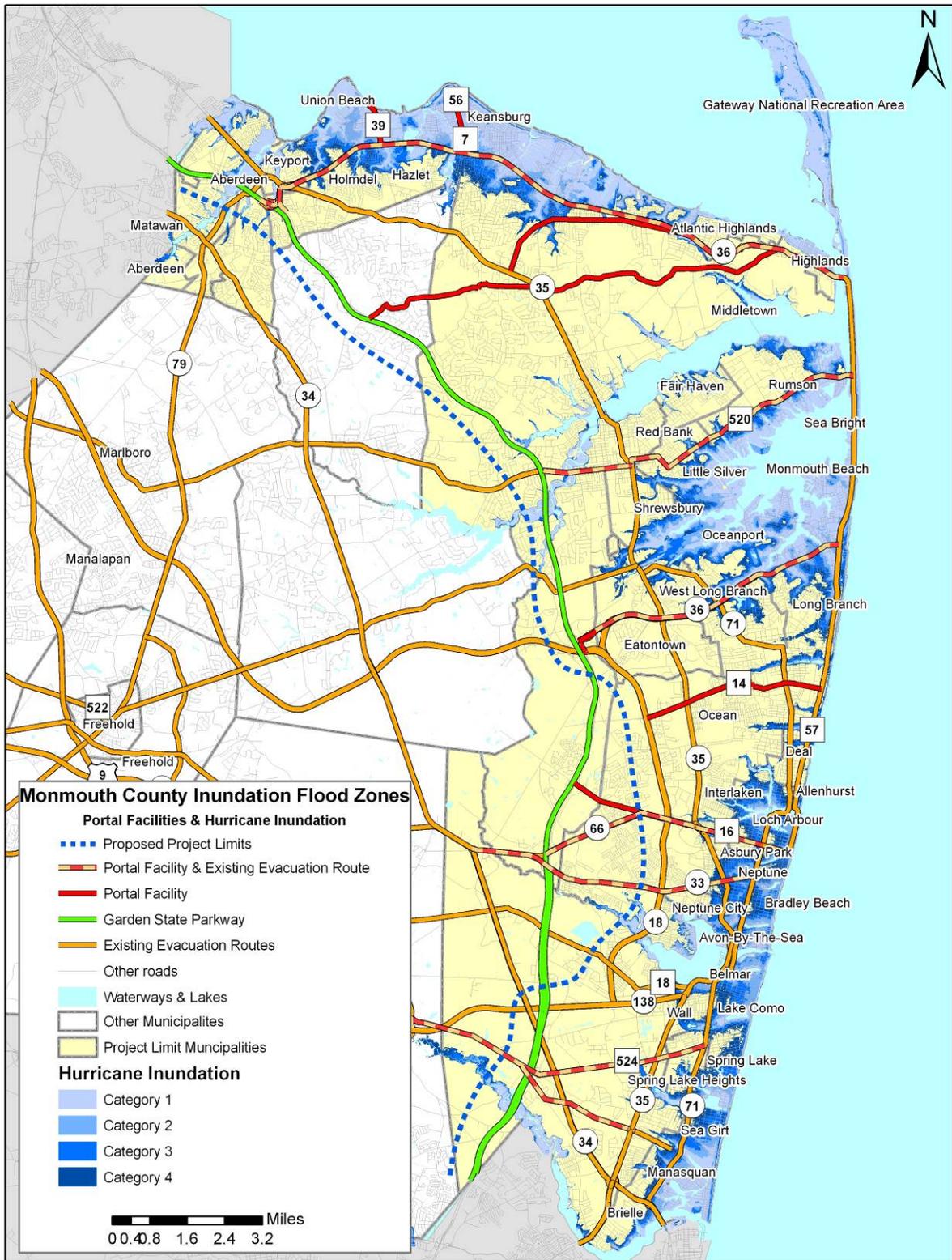


Figure IV-3. Flood Inundation Zones

IV.B.1.b. Housing Stock

According to information presented in the New Jersey Hurricane Evacuation Study, 2007, over 58,000 permanent units were occupied (POU) in the North Coast EAZ in 2006 (See Table IV-1). There were an additional almost 1000 and 600 mobile housing units (MHU) and seasonal tourist units (STU), respectively, in this Zone. Middletown accounted for 40 percent (about 23,000 of the area’s POU’s). Approximately 30 percent of the North Coast EAZ housing stock, including about 550 MHU’s, are located within the flood inundation zone.

Table IV-1, Housing Stock

EVAC ZONE	MUNICIPALITY	TOTAL UNITS				UNITS WITHIN FLOOD ZONE			
		Permanent Occupied Units	Mobile Housing Units	Seasonal Units	Total Units by Municipality	Permanent Occupied Units	Mobile Housing Units	Seasonal Units	Total Units by Municipality
North Coast	Matawan	3529	0	0	3529	49	0	0	49
	Aberdeen	6239	0	0	6239	331	0	0	331
	Keyport	3260	29	37	3326	2013	25	25	2063
	Union Beach	2141	0	0	2141	2141	0	0	2141
	Hazlet	7158	689	38	7885	2451	425	21	2897
	Keansburg	3865	0	63	3928	3865	0	63	3928
	Middletown	22901	33	152	23086	5208	13	29	5250
	Atlantic Highlands	2119	8	30	2157	406	1	5	412
	Highlands	2444	90	199	2733	1597	89	153	1839
	Holmdel	4890	99	65	5054	18	0	0	18
	North Coast Subtotal	58546	948	584	60078	18079	553	296	18928
Mid Coast	Red Bank	5189	0	37	5226	245	0	2	247
	Fair Haven	2002	0	7	2009	174	0	0	174
	Sea Bright	952	0	159	1111	728	0	126	854
	Rumson	2446	7	115	2568	1186	5	76	1267
	Shrewsbury Boro	1202	0	15	1217	81	0	0	81
	Shrewsbury Township	521	0	0	521	0	0	0	0
	Little Silver	2215	0	0	2215	770	0	0	770
	Monmouth Beach	1658	0	312	1970	1649	0	310	1959
	Oceanport	2046	10	29	2085	628	7	21	656
	Eatontown	5337	271	44	5652	59	0	0	59
	Tinton Falls	5806	0	22	5828	7	0	0	7
	West Long Branch	2430	0	61	2491	39	0	1	40
	Long Branch	12575	7	856	13438	4632	7	138	4777
	Ocean Township	9226	10	239	9475	113	0	1	114
	Deal	437	0	494	931	18	0	28	46
	Interlaken	386	0	1	387	102	0	0	102
	Allenhurst	280	0	73	353	37	0	8	45
Loch Arbor	121	3	24	148	105	3	21	129	
	Mid Coast Subtotal	54829	308	2488	57625	10573	22	732	11327
South Coast	Avon-By-The-Sea	1028	0	301	1329	800	0	248	1048
	Asbury Park	6774	0	48	6822	2704	0	28	2732
	Belmar	2663	7	756	3426	2476	5	630	3111
	Bradley Beach	2313	0	545	2858	1071	0	354	1425
	Brielle	1971	1	114	2086	593	20	61	674
	Lake Como	824	0	230	1054	287	0	96	383
	Manasquan	2525	0	700	3225	1622	0	647	2269
	Neptune Boro	2182	73	32	2287	525	4	9	538
	Neptune Township	10886	90	705	11681	1751	11	239	2001
	Sea Girt	942	0	287	1229	331	0	138	469
	Spring Lake Boro	1463	8	380	1851	385	2	119	506
	Spring Lake Heights	2512	0	324	2836	205	0	33	238
	Wall Township	9264	155	335	9754	110	12	7	129
		South Coast Subtotal	45347	334	4757	50438	12860	54	2609
PROJECT AREA					168141				45778

Source: New Jersey Hurricane Evacuation Study, Transportation Analysis, Technical Memorandum, USACOE, June, 2007

Table IV-2, Housing Unit Summary

Evacuation Zone	All Units	Units in Flood Zone	Portion in Flood Zone
North Coast	60,078	18,928	32%
Mid-Coast	57,625	11,327	20%
South Coast	50,438	15,523	31%
Total	168,141	45,778	27%

IV.B.1.c. Current Development Plans

According to the MCPB, the North Coast EAZ is largely built-out and few major changes in land use are anticipated. Generally, Community priorities are expected to focus on preserving the character of existing neighborhoods and redeveloping selected vacant and underutilized sites. These sites include the following locations that are designated as Redevelopment Areas;

- Commerce and Transportation Center Redevelopment Area – Approved by NJ Transit as a Transit Village, this project straddles the Towns of Aberdeen and Matawan and has been designated as a major transportation project in the vicinity of the Aberdeen/Matawan Train Station, and
- Residential Redevelopment Projects in Aberdeen, Keyport, and Matawan that would add about 1800 additional housing units to the Zone’s current inventory.

IV.B.2. Mid Coast

IV.B.2.a. Setting

The Mid Coast EAZ generally stretches between the Navesink River and Deal Lake and contains 18 of the project area’s 41 municipalities. Most municipalities are similar in character having a predominance of their land devoted to low density residential development and a scarcity of vacant land. Excluding Long Branch, Eatontown, and Red Bank, at least 75 percent of the total land area of each remaining Town accommodates single family housing units.

Residential development densities are greatest in sections of Long Branch situated within 2 miles of the coast. Originally settled as resort center, Long Branch has been in transition over several years, acquiring an urban character with new oceanfront and downtown redevelopment. Construction of large-scale residential projects has helped to revitalize the residential and business environment in the Community. According to the MCPB’s New Residential Development Survey Report, 2007, Long Branch accounted for a significant portion of the County’s total multi-family construction projects in 2007.

Other concentrations of multi-family residential areas are found in Eatontown and in Red Bank, particularly along Red Bank’s waterfront area. Another trend of note is the

significance of age-restricted residential construction in Ocean Township. The MCPB estimates that in 2007, over 17 percent, or 455 units, of the County's total age-restricted residential housing were built in this Municipality.

In the Mid Coast, commercial zones are typically clustered along state highways and in downtown local business districts, particularly within the shore communities. In Ocean Township, businesses are concentrated along SR 35 and SR 71. Commercial areas in Tinton Falls are clustered around the NJ GSP interchanges and include hotel and corporate park developments. A recently completed 450,000 square-foot shopping/commercial space, the Jersey Shore Premium Outlets Center is located along Route 66 and Essex Road at NJ GSP Exit 102.

An expansive corporate park, 30 Park Road Corporate Park, Mid-Monmouth, is located at the toll road's Exit 105. It extends over 82 acres and contains about 600,000 square feet of office and light industrial uses.

Eatontown is an important business center for the County and Region. The Borough has not only become a major location for electronics and communications firms, but has also one of the State's largest regional shopping centers at the junction of SR 35 and SR 36. Almost 40 percent of the town's land area is devoted to commercial uses. Demand for expanded services and amenities has resulted in the redevelopment and conversion of underutilized beach fronts into restaurants and retail shops .

Red Bank is also a regional commercial business and cultural center and offers a vibrant downtown waterfront area offering unique shops, restaurants, entertainment establishments, above-store and mid-rise apartments. Almost 30 percent of Red Bank's land is developed for commercial purposes.

A small amount of industrial development is found in Red Bank, Tinton Falls and Eatontown.

IV.B.2.b. Housing Stock

In 2006, the MCPB estimated that the Mid Coast contained over 61,000 POU and almost 2,600 STU (See Table III-1). Fewer than 200 MHU were found in the Mid Coast area. About 20 percent of the EAZ housing stock was located within the flood inundation zone. Over forty percent of the units in the vulnerable areas (about 4800 units) had a Long Branch address.

IV.B.2.c. Current Development Plans

New development and redevelopment projects are expected to be focused in the Towns of Red Bank, Long Branch, Fort Monmouth Redevelopment Area, Eatontown, and Tinton Falls.

Red Bank

Five major projects are under construction including 83,000 square foot office complex and a three-story garage. Ten additional major projects have already been approved for construction.

Long Branch

There are plans for 104 townhouses, 529 condominiums, 543 rental apartments, 100,000 square feet of retail space, 1000 units of other types of residences, 70 businesses a 1500 space parking garage, and 2 performing art centers. In all, these developments are expected to increase the Town's housing supply by over 3000 units. A development plan for a 56 acre tract is projected to include 3165 housing units with retail stores occupying the ground floors.

Eatontown

Large-scale developments including 300 multi-family units (housing 1000 residents), approximately 50,000 square feet of shopping mall space, 100,000 square feet of industrial park space, and 25,000 square feet of medical space are planned for construction in the Borough.

Tinton Falls

There are expansion plans for residential and non-residential development in Tinton Falls. Both open-market and age restricted residential units are planned within the community. These projects are expected to add almost 700 units to the Town's housing stock. In addition, the final phases of the large-scale residential projects, Fox Chase, The Pines, and Seabrook will further increase the Township's housing supply.

IV.B.3. South Coast

IV.B.3.a. Setting

The South Coast EAZ contains 13 project municipalities, 9 of which are coastal communities, including Asbury Park, Neptune Township, Bradley Beach, Avon-By-The-Sea, Belmar, Lake Como, Spring Lake Borough, Sea Girt, and Manasquan. Brielle has frontage along the Manasquan River. The Zones remaining three communities, Neptune Borough, Spring Lake Heights, and Wall Township are inland towns.

According to the MCPB, single family residential development is the dominant land use within the South Coast. Concentrations of multi-family dwellings are located either along or east of Main Street (SR 71), particularly in the Municipality of Asbury Park. SR 71 is the area's major north-south road that links several of the south shore communities. The highest concentrations of seasonal housing units in this Zone are found generally in Belmar, Manasquan, and the eastern section of Neptune Township along blocks that are on or near the oceanfront.

Away from the coastline, commercial areas are generally concentrated along the Zone's major highways such as SR 34 in Wall Township and SR 33 and SR 35 in Neptune Township. Most of these businesses include retail, services, and professional office uses.

Downtown neighborhood business districts serving the coastal communities are found along Main Street (SR 71), whose alignment is a continuation of SR 71 from the Mid Coast. One downtown business district of note is in Belmar. As a major resort destination along the New Jersey shore, Belmar's population increases dramatically during the summer season as the Town's substantial number of rental properties fill to capacity along its 1.25 mile long beach. Two commercial districts have developed to accommodate this seasonal demand, one along Main Street featuring a mix of service businesses and another along Ocean Avenue and the boardwalk where food and entertainment establishments are concentrated.

Two of the area's most significant industrial/business centers are the Allaire Airport Complex located in Wall Township, and Asbury Park's redeveloping downtown area.

Water bodies provide special recreational value for South Coast residents including the Shark River, Wreck Pond Brook, Spring Lake, Silver Lake, and Lake Como. Land uses surrounding these water features typically include a mixture of recreational lands, wooded and open space as well as residential and local commercial development.

IV.B.3.b. Housing Stock

In 2006, it was estimated that the South Coast EAZ contained almost 45,400 permanent occupied units and an additional 4,750 seasonal units. MHU numbered about 350 of which half were located inland in Wall Township (See Table IV-1). Over 40 percent of the EAZ's total units (about 50,400) were located in the area's two townships: Wall and Neptune. About 30 percent of the area's seasonal units (about 1,450) were concentrated in the shore Towns of Belmar and Manasquan.

Thirty percent of the EAZ's total housing supply, about 15,500 units, is located within the flood inundation zone. Almost 70 percent of these vulnerable units are found in the Communities of Asbury Park, Belmar, Manasquan, and the historic Ocean Grove section of Neptune Township. On Ocean Grove's tree-lined streets is the largest assemblage of authentic Victorian architecture in the nation. Ocean Grove is on the State and National Registers of Historic Places.

IV.B.3.c. Current Development Plans

Redevelopment of the southwest portion of Asbury Park is planned and is expected to consist of 2-4 story buildings accommodating a variety of commercial and multi-family uses. Redevelopment of the oceanfront is also planned with proposals for the construction

of several 4 to 6 story mixed-use, 1-2 story commercial, and a 25 story residential high-rise building projects.

According to the MCPB, the remaining ocean front communities are largely fully developed and significant development is not expected in these areas. Some development activity is expected to occur in Belmar which is updating its business zone by rebuilding a six block area. Also, high density commercial uses (above ground floor) are anticipated along Main Street in Lake Como.

Inland, two locations have been identified as potential redevelopment areas in Neptune Township. The first is the Transit Village Redevelopment Area where dense mixed uses are proposed near the Belmar train station. The second area is located along the Shark River waterfront where high density, residential/retail projects are proposed.

IV.C. Emergency Facilities

Area hospitals, schools, and designated shelters can provide temporary safe locations for evacuees. These facilities are highlighted in Figure IV-4, Area Shelters.

IV.D. POPULATION AND EMPLOYMENT

The MCPB estimates that the permanent resident population in the project area increased from approximately 422,000 to 439,000 between 2000 and 2007 - a growth of about 4 percent (Table IV-3). The discussion below disaggregates this growth as well as critical population \ characteristics by EAZ. These characteristics include recent trends, density, seasonality, and vulnerability, and are discussed below and reflected in Tables III-2 and III-3.

IV.D.1. North Coast

IV.D.1.a. Recent Trends

The MCPB estimates that the population in North Coast municipalities increased from about 165,000 residents in 2000 to about 171,000 residents in 2007, a growth of 3.5 percent (0.5 percent annually) (See Table IV-3 below). Middletown had the largest population, 69,000 people, or about 40 percent of all residents in the EAZ while Holmdel experienced the fastest growth with a 10 percent growth rate.

IV.D.1.b. Density

Population densities typically range between 3,000 and 5,500 people per square mile (PPSM). The municipality with the highest density is Keansburg with a PPSM of 11,300.

IV.D.1.c. Seasonality

According to the data presented in the New Jersey Hurricane Evacuation Study Transportation Analysis (NJHESTA), 2007, the seasonal population during the high summer season is approximately 1200 visitors for this EAZ (See Table IV-3). The Study based its analysis on an occupancy rate of 80 percent for tourist units during the high season.

The Sandy Hook National Park is also a major attractor of tourists, generating a significant influx of visitors into the North Coast Area. For example, National Park Service data indicate that the Park's parking facilities, which can accommodate as many as 5000 vehicles, are generally utilized near or at capacity during summer peak weekend periods.

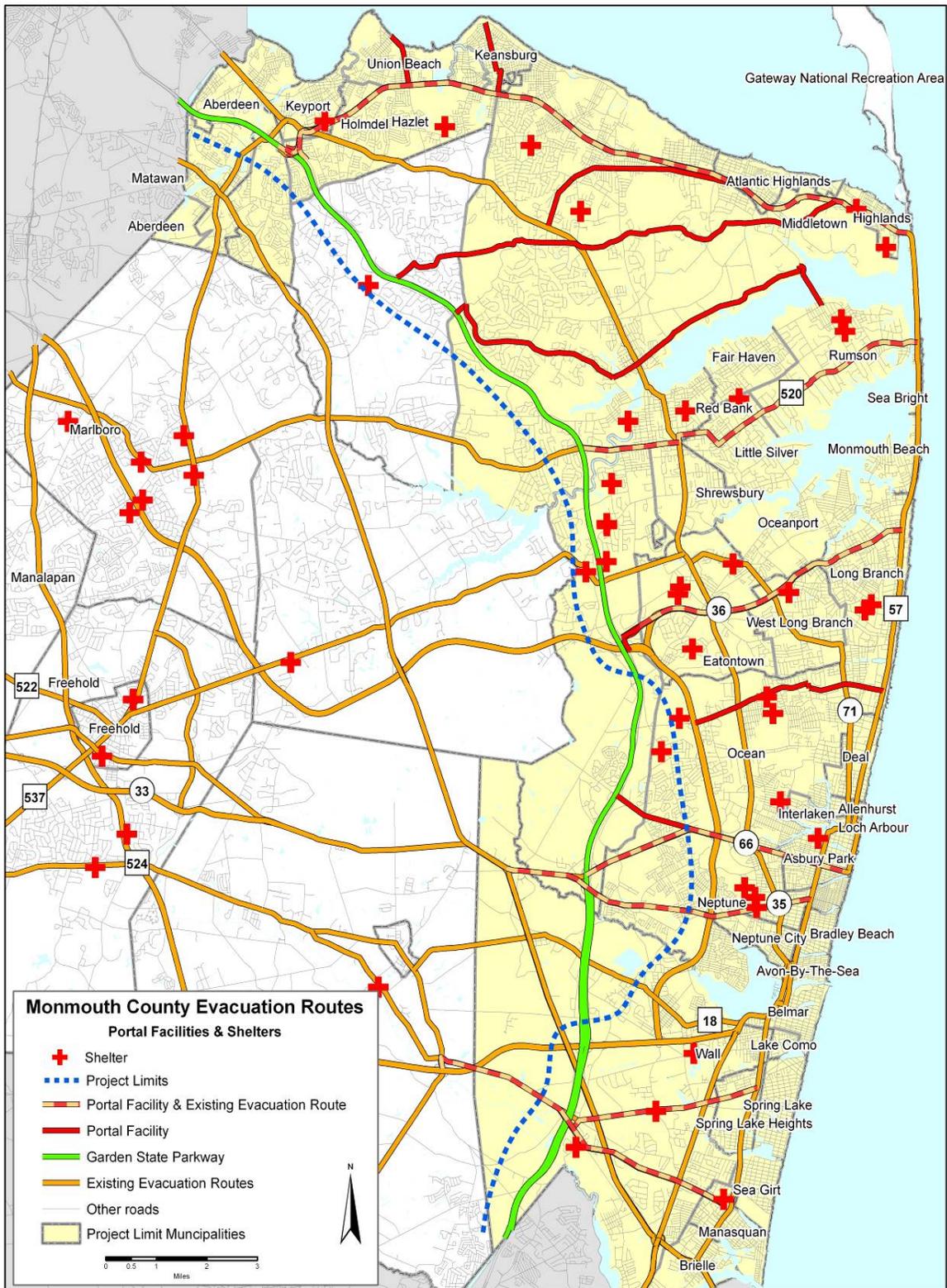


Figure IV-4, Area Shelters

IV.D.1.d. Vulnerability

Population data presented in the NJNESTA indicated that about 52,000 residents and visitors, or 30 percent of the EAZ's total high season population, live within the flood inundation zone (See Table IV-3 and Table IV-4). A significant portion of Highlands' residential areas and all of the residential areas in Keansburg lie within the hurricane flood zone.

IV.D.2. Mid Coast

IV.D.2.a. Recent Trends

The MCPB estimates that the population in the Mid Coast municipalities increased from approximately 145,500, people in 2000 to about 153,000 people in 2007, a growth of about 5 percent. Long Branch alone accounted for approximately 21 percent of the EAZ's 2007 estimated permanent resident population. Ocean Township accounted for an additional 19 percent of the total.

The population growth in most Towns was negligible with fewer than 500 new residents added to the population roles. Exceptions included Tinton Falls and Ocean Township which grew by about 2,500 and 2,000 people, respectively.

IV.D.2.b. Density

Population densities in the Mid Coast are generally under 3,000 PPSM (See Table IV-3). A notable exception is the Town of Long Branch where the population density exceeds 6000 people per square mile.

IV.D.2.c. Seasonality

NJNESTA data estimate that the seasonal population during the high season is about 4,900 visitors in the Mid Coast. These visitors are concentrated in the Towns of Long Branch and Deal where 55 percent of the Zone's STU is located.

IV.D.2.d. Vulnerability

Approximately 33,600 residents and tourists reside in the flood inundation zone in the Mid Coast. This number represents almost 20 percent of the EAZ's total high season population. Long Branch has the largest populations located in the hazard zone, where almost 19,000 people are considered part of the EAZ's vulnerable population.

Table IV-3, 2000 - 2007 Resident and Summer Populations

Evacuation Analysis Zone	Municipality	Population Density 2000	2000 Resident Population (1)	2007 Resident Population (2)	2000-2007 Resident Population Growth	2007 Summer Resident Population (3)	2007 Summer Peak Total Population
North Coast	Aberdeen	3203	17454	18848	8.0%	0	18,848
	Atlantic Highlands	3921	4705	4717	0.3%	55	4,772
	Hazlet	3818	21378	21470	0.4%	88	21,558
	Highlands	2964	5097	5179	1.6%	334	5,513
	Holmdel	882	15781	17271	9.4%	161	17,432
	Keansburg	11297	10420	10772	3.4%	136	10,908
	Keyport	5406	7568	7638	0.9%	68	7,706
	Matawan	3942	8910	8969	0.7%	0	8,969
	Middletown	1615	66633	69166	3.8%	352	69,518
	Union Beach	3694	6649	6788	2.1%	0	6,788
	Subtotal	-	164595	170818	3.8%	1194	172,012
Mid-Coast	Allenhurst	2393	599	716	19.5%	146	862
	Deal	2415	1070	1060	-0.9%	990	2,050
	Eatontown	2415	13964	14381	3.0%	84	14,465
	Fair Haven	3830	5937	6031	1.6%	17	6,048
	Interlaken	1368	900	900	0.0%	2	902
	Little Silver	2204	6170	6224	0.9%	0	6,224
	Loch Arbor	2800	399	280	-29.8%	44	324
	Long Branch	6145	31340	33066	5.5%	1712	34,778
	Monmouth Beach	3268	3595	3655	1.7%	549	4,204
	Oceanport	1873	5834	5868	0.6%	63	5,931
	Ocean Twp.	2407	26959	28884	7.1%	497	29,381
	Red Bank	1373	11844	12124	2.4%	65	12,189
	Rumson	1372	7137	7365	3.2%	267	7,632
	Sea Bright	3030	1818	1850	1.8%	229	2,079
	Shrewsbury Boro	1561	3590	3825	6.5%	36	3,861
	Shrewsbury Twp.	1220	1098	1098	0.0%	0	1,098
Tinton Falls	954	15070	17641	17.1%	44	17,685	
West Long Branch	2918	8258	8272	0.2%	137	8,409	
	Subtotal	-	145582	153240		4882	158,122
South Coast	Asbury Park	11287	16930	16862	-0.4%	132	16,994
	Avon-By-The -Sea	5610	2244	2219	-1.1%	506	2,725
	Belmar	6045	6045	6029	-0.3%	1270	7,299
	Bradley Beach	6847	4793	4940	3.1%	595	5,535
	Brielle	3013	4893	4972	1.6%	228	5,200
	Lake Como	2965	1806	1817	0.6%	405	2,222
	Manasquan	4507	6210	6372	2.6%	1344	7,716
	Neptune Boro	5798	5218	5258	0.8%	59	5,317
	Neptune Twp.	3461	27690	29055	4.9%	1410	30,465
	Sea Girt	2046	2148	2068	-3.7%	528	2,596
	Spring Lake Boro	2744	3567	3574	0.2%	730	4,304
	Spring lake Heights	4021	5227	5227	0.0%	518	5,745
	Wall Twp.	815	25261	26891	6.5%	697	27,588
	Subtotal	-	112032	115284	2.9%	8422	123,706
Project Area		-	422209	439342	4.1%	14498	453,840

Sources: (1). U.S. Census Bureau

(2). MCPB

(3). U.S. Army Corp. of Engineers, NJ Hurricane Evacuation Study Transportation Analysis, June 2007

Monmouth County Coastal Evacuation Routes Improvement Study

(4). MCPB

Table IV-4, Vulnerable Populations

Evacuation Analysis Zone	Municipality	Visitors	Residents	Total Vulnerable Population
North Coast	Aberdeen	0	894	894
	Atlantic Highlands	9	936	945
	Hazlet	49	8340	8389
	Highlands	257	3541	3798
	Holmdel	0	56	56
	Keansburg	136	10772	10908
	Keyport	46	4917	4963
	Matawan	0	123	123
	Middletown	67	15140	15207
	Union Beach	0	6788	6788
	Subtotal	564	51507	52071
Mid-Coast	Allenhurst	13	78	91
	Asbury Park	55	6693	6748
	Deal	25	26	51
	Eatontown	0	142	142
	Fair Haven	0	522	522
	Interlaken	2	237	239
	Little Silver	0	2156	2156
	Loch Arbor	33	210	243
	Long Branch	276	11549	11825
	Monmouth Beach	545	3090	3635
	Oceanport	46	1696	1742
	Ocean Twp.	2	347	349
	Red Bank	4	539	543
	Rumson	176	3454	3630
	Sea Bright	101	1310	1411
	Shrewsbury Boro	0	146	146
	Shrewsbury Twp.	0	0	0
Tinton Falls	0	18	18	
West Long Branch	3	109	112	
Subtotal	1281	32322	33603	
South Coast	Avon-By-The -Sea	417	1680	2097
	Belmar	1058	5210	6268
	Bradley Beach	595	2249	2844
	Brielle	122	1508	1630
	Lake Como	169	631	800
	Manasquan	1242	3893	5135
	Neptune Boro	18	1325	1343
	Neptune Twp.	478	4405	4883
	Sea Girt	254	761	1015
	Spring Lake Boro	228	929	1157
	Spring lake Heights	53	410	463
	Wall Twp.	15	291	306
	Subtotal	4649	23292	25844
Project Area		6494	107121	111518

Source: US Army Corp. of Engineers, NJ Hurricane Evacuation Study Transportation Analysis, 6/2008

IV.D.3. South Coast

IV.D.3.a. Recent Trends

South Coast municipalities increased by 3 percent between 2000 and 2007 as the population grew from 112,000 to over 115,000 residents during this period. Neptune Township and Wall Township accounted for almost all of the growth. The remaining towns generally experienced stable populations.

IV.D.3.b. Density

Densities in the South Coast are generally lower than 6,100 PPSM. Notable exceptions included Asbury Park (11,300 PPSM) and Bradley Beach (6,800 PPSM).

IV.D.3.c. Seasonality

The South Coast attracts about 8400 visitors during the high summer season. About one-third of these visitors reside in the vicinity of the beaches in two Towns, Neptune Township and Manasquan.

IV.D.3.d. Vulnerability

About 21 percent of the South Coast's total summer peak population resides in the flood inundation zone. Over one-half of the area's vulnerable population is located in the Towns of Asbury Park, Neptune Township, Belmar, and Manasquan.

IV.E. Transit Dependent Population

Some of the typical characteristics which define population groups that are likely to need public transportation services include advanced age, limited income, limited or no access to an auto, and mobility limitations. U.S. Census Bureau data indicates Communities within the project area where populations with transit need are prevalent. These municipalities are illustrated in Table IV-5, Transit-Dependent Characteristics.

Table IV-5, Transit-Dependent Characteristics

Evacuation Zone	Municipality	Advanced Age	Low Income	Lack of Automobile	Mobility Limitations *
North Coast	Keyport		✓	✓	
North Coast	Keansburg	✓	✓	✓	
North Coast	Highlands	✓		✓	
North Coast	Middletown				✓
North Coast	Red Bank			✓	
Middle Coast	Long Branch	✓		✓	✓
Middle Coast	Asbury Park	✓	✓	✓	
South Coast	Neptune		✓	✓	✓
South Coast	Bradley Beach	✓	✓	✓	
South Coast	Belmar			✓	

Source: MCPB.

* "Mobility Limitation", as defined by the U.S. Census Bureau refers to people who have identified themselves as having a physical or mental health condition which lasts for six months or more and makes it difficult for the individual to go outside of the home along to activities such as shopping or medical appointments.

Source: NJDOT, "Sharing the Past, Shaping the Future, County of Monmouth, NJ 1609-2000".

IV.F. Workforce Profile

According to the U.S. Department of Labor, Bureau of Labor Statistics, the project area is located within a county that has a strong and diverse employment base. Monmouth County's Retail Trade, Health Care and Social Assistance, and the Accommodation and Food Services Sectors, all of which are strongly represented in the project area, account for the largest portion of the area's economic vitality, amounting to almost 45 percent of Monmouth's total industry employment.

The County's Arts, Entertainment and Recreation, Professional and Technical services and Retail Trade industries dominate the region while Management Services have grown the most in terms of Monmouth employment (57 percent) between 2000 and 2005. The County's largest employers are in the Health Care industry. Appendix A includes a listing of the largest employers in the project area for 2008, according to the Monmouth County Department of Economic Development and Tourism.

IV.G. ENVIRONMENTAL CONDITIONS

IV.G.1. Permitting Requirements

Because of its coastal location, projects within the evacuation area are subject to a set of coast and tidal regulations that are not required inland. Similarly, the abundance of rivers and wetlands also add to the list of potential permit requirements. Additional permits and regulations, such as those relating to stormwater management and historic sites, must always be observed.

The following permits and approvals may be required by New Jersey or Federal agencies for the construction of transportation projects in coastal areas, depending on the specifics of the project.

IV.G.1.a. Construction within State Waters:

- Waterfront Development permit (N.J.S.A. 12:5-3)
- Tidelands Conveyance (N.J.S.A. 12:3-1)
- Concurrence with Federal Consistency determination (16 USC § 1456)
- Water Quality Certificate under Section 401 of the Clean Water Act for any discharge
- Section 10 of the Rivers and Harbors Act from the U.S. Army Corps of Engineers
- Section 404 permit under the Clean Water Act from the U.S. Army Corps of Engineers for any discharge of dredged or fill material

IV.G.1.b. Construction within Federal Waters:

- CAFRA (Coastal Area Facilities) permit (N.J.S.A. 13:19-1 et seq.)
- Upland Waterfront Development permit (N.J.S.A. 12:5-3)
- Freshwater Wetlands permit (N.J.S.A. 13:9B-1 et seq.)
- Coastal Wetlands permit (N.J.S.A. 13:9A-1 et seq.)
- Flood Hazard Area Control Act permit (N.J.S.A. 58:16A-1 et seq.)

A note concerning federal reviews: Projects may be subject to federal environmental reviews under the National Environmental Policy Act (NEPA). A designated “Lead Agency” agency is required to consult with various state and federal agencies, including the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) regarding the application under its review. For example, consultation with the USFWS is required pursuant to Section 7 of the Endangered Species Act regarding threatened and endangered species and their habitats and the Migratory Bird Treaty Act regarding migratory birds. Consultation with NMFS is required under the Marine Mammal Protection Act regarding marine mammals; Section 7 of the Endangered Species Act regarding threatened and endangered species and their habitats; and the Magnuson-Stevens Fishery Conservation and Management Act regarding essential fish

habitat. Consultation with the State Historic Preservation Office is required under Section 106 of the National Historic Preservation Act.

The following permits may be required for any project that may disturb the natural environment:

- Soil Erosion and Sediment Control
- The New Jersey Department of Environmental Protection (NJDEP) New Jersey Pollutant Discharge Elimination System (NJPDES) 5G3 - Construction Activity Stormwater General Permit
- NJDEP Freshwater Wetlands Permit

The following six pages illustrate environmental constraints for each of the twelve portal facilities (See Section III. K, Critical Evacuation Portals), based on information obtained from Monmouth County. Wetlands, Historic Areas, and Parks are included in these files.

Environmental Constraints

Portal Facility #1 - County 39 Corridor

From Front Street to State Route 36



Portal Facility #2 - County 56/County 7 Corridor

From Beachway Avenue to State Route 36



Figure IV-5, Environmental Constraints, Portals #1 & #2

Portal Facility #3 - State 36 (Bayshore) Corridor

From Ocean Avenue to State Route 35



Portal Facility #4 - County 516/County 50 Corridor

From State Route 36 to State Route 35

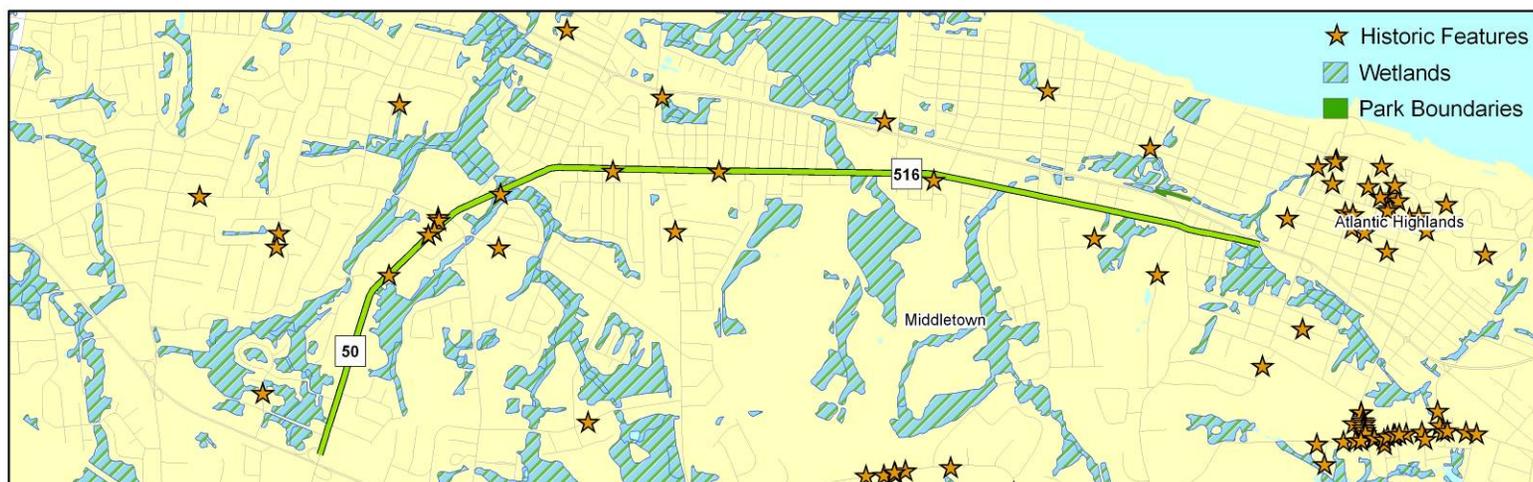
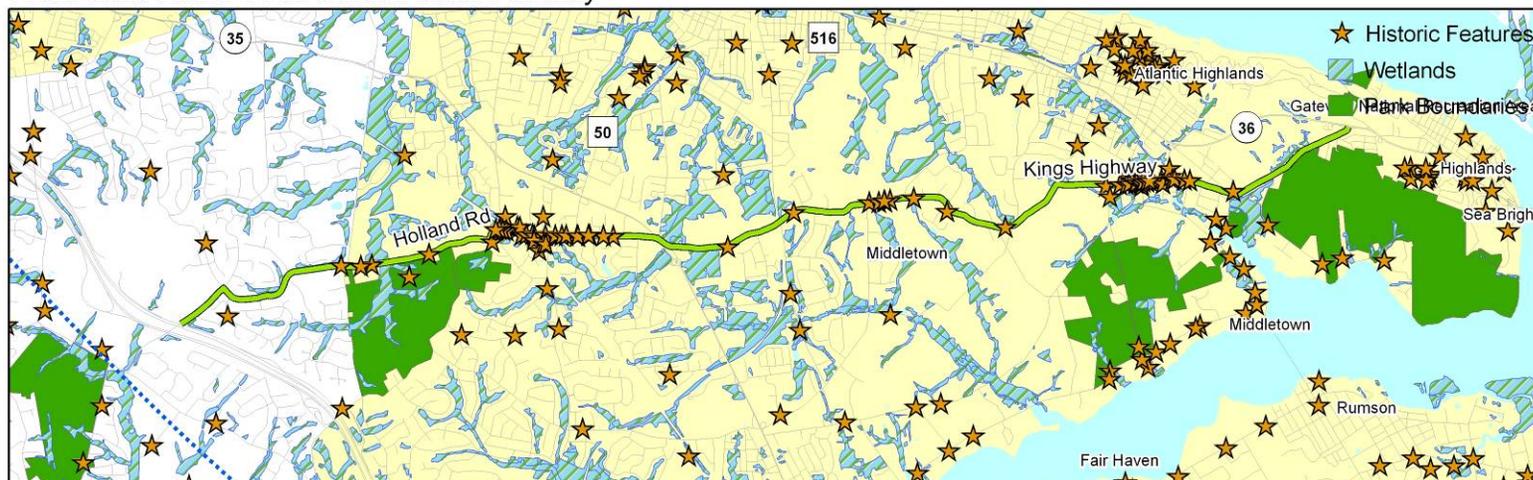


Figure IV-6, Environmental Constraints, Portals #3 and #4

Environmental Constraints

Portal Facility #5 - Kings Highway, Holland Road Corridor

From State Route 36 to Garden State Parkway



Portal Facility #6 County 520 Corridor

From Ocean Avenue to State Route 35



Figure IV-7, Environmental Constraints, Portals #5 & 6

Environmental Constraints

Portal Facility #7 - State 36 (Long Branch) Corridor

From Ocean Boulevard to Garden State Parkway



Portal Facility #8 - Park Avenue, West Park Avenue Corridor

From Ocean Avenue to State Route 18

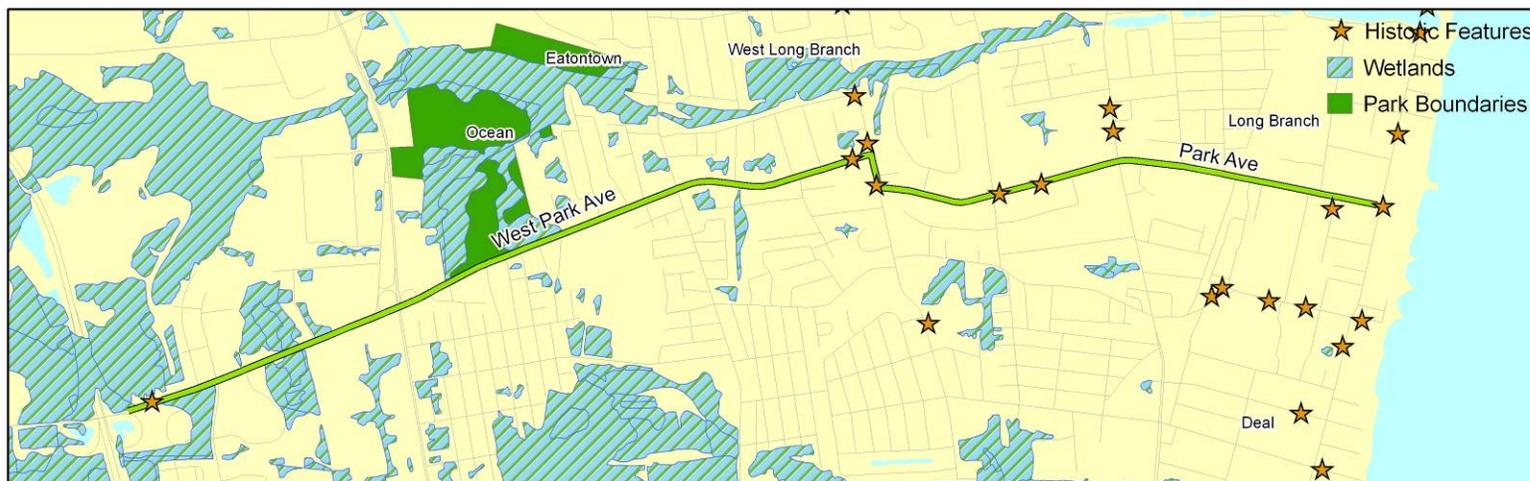


Figure IV-8, Environmental Constraints, Portals #7 and #8

Environmental Constraints

Portal Facility #9 - County 16 Corridor

From Kingsley Street to Garden State Parkway via County 16 or State Route 66



Portal Facility #10 - State 33 Corridor

From South Main Street to State Route 34



Figure IV-9, Environmental Constraints, Portals #9 and #10

Environmental Constraints

Portal Facility #11 - County 524 Corridor

From State Route 71 to Interstate 195



Portal Facility #12 - County 524 Spur Corridor

From State Route 35 to County 524

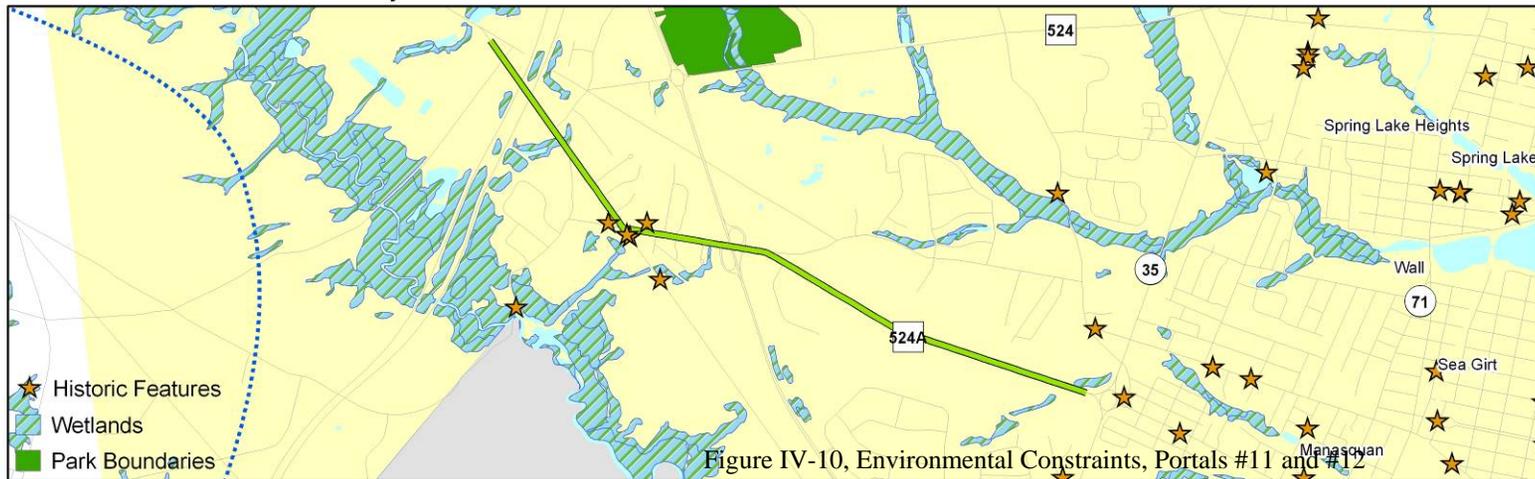


Figure IV-10, Environmental Constraints, Portals #11 and #12

IV.H. Storm History (Storm Surges and Flooding)

Monmouth County has an active history of hurricanes and tropical storms. According to NOAA historical records, 34 hurricanes or tropical storm tracts have passed within 75 miles of Monmouth County since 1850. This includes six Category 2 hurricanes and five Category 1 hurricanes. The historical records also show that almost all storm tracks traverse northward through the region.

IV.I. Impacts on Transportation System and Travel Patterns

Implementation of evacuation orders related to an impending hurricane system would have a significant impact on travel patterns and operating conditions on the area's transportation system. For example, prevailing directional patterns would be altered substantially as westbound and coastal residents and visitors who are traveling away from the coast to higher ground would heavily utilize northbound and westbound travel lanes. Congestion levels at locations that already have constrained service rate issues, such as at merge junctions, ramps, and signalized major intersections would be exacerbated.

The timing of an evacuation order would also have a significant effect on traffic flows. The shorter the period for conducting the evacuation process, the more intense delays and queuing potential are likely to be experienced.

IV.J. TRANSPORTATION FACILITIES DATA

IV.J.1. Intelligent Transportation Systems

IV.J.1.a. Existing

To date, most ITS-Related equipment installed within the study area relate to the Route 36 Highlands Bridge Reconstruction Project. In relation to that project, the following permanent ITS facilities are being installed:

At Milepost 6.15, Ocean Avenue, Long Branch

- E-Zpass Tag Readers (used to calculate travel times)
- Walk-In Dynamic Message Sign facing NB Traffic

At Milepost 13.2, Route 36, Highlands

- E-Zpass Tag Readers
- Ground-Mount Dynamic Message Sign Facing EB Traffic

At Milepost 14.5, Route 26, Atlantic Highlands

- E-ZPass Tag Readers
- Walk-In Dynamic Message Sign Facing EB Traffic

At both ends of the Highlands Bridge

- CCTV Cameras

Additional Temporary Measures

- Various temporary cameras and Variable Message Signs

Equipment at Mileposts 6.15 and 14.5 were specifically developed to help drivers avoid flooding conditions in Monmouth Beach and Sea Bright.

IV.J.1.b. Future Plans

The latest version of NJDOT’s “Investment Strategy, 10 Year Program” shows no projects within the study area. The nearest project would be to add ITS capabilities along Route 9 in Monmouth County (Figure III-3). Undoubtedly, such capability would indirectly aid in the case of an emergency evacuation from the study area. However, the positive effect would likely be a secondary one.

The following State Routes were identified by NJDOT as priority corridors for ITS. They are:

- State Route 18
- State Route 33
- State Route 35
- State Route 36

Discussions with NJDOT’s ITS Engineering Group provided one specific future project - Route 35/36 Eatontown Project. On this project, it is expected to have 2 Dynamic Message Signs at Mileposts 1.13 (Rt. 36) and 2.95 (Rt. 36). The project is expected to be awarded in the Summer of 2009.

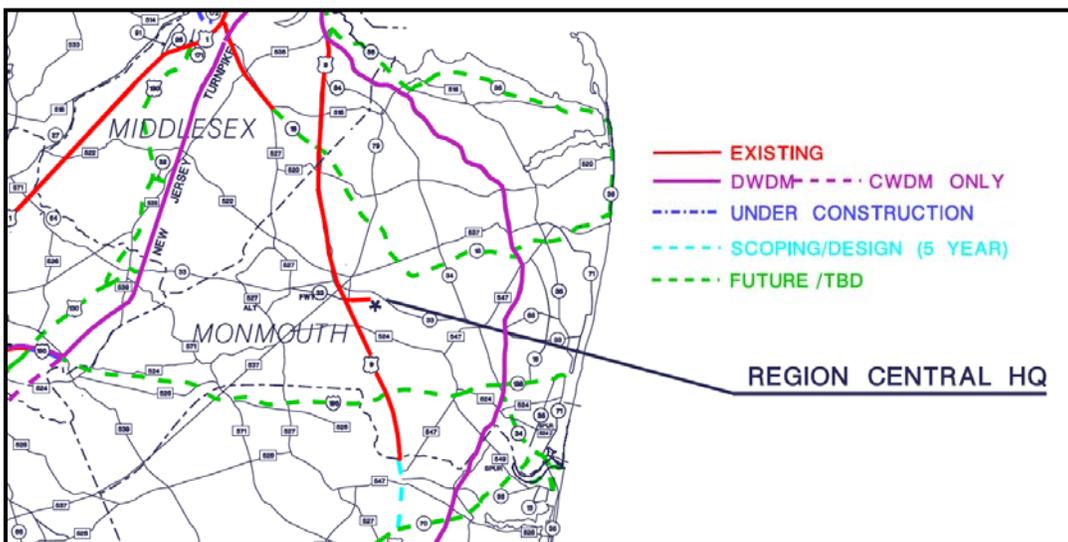


Figure IV-11, NJDOT ITS Strategic Plans

IV.J.2. State Emergency Evacuation Routes

Within the project area, the State's highway system running through Monmouth County as well as two County Roads, have been largely incorporated into the New Jersey State Emergency Evacuation Route System. The State Routes include Garden State Parkway, SR 36, SR 35, SR 18, SR 66, SR 33, SR 34, SR 138, and SR 71. The County Roads include CR 516 and CR 520.

The addition of new portal candidates to the State's existing evacuation system will generate multiple benefits including improved area coverage, increased capacity to serve the intense "evacuation condition" demand, and an expanded number of diversion possibilities to circumvent congestion and blockages resulting from the emergency event.

V– Portal Facility Data

Physical and operating conditions were collected on individual portal roadways in order to assess their functions. A wide range of physical information was collected that described the corridor infrastructure both within the roadbed as well as adjacent to the roadway. Pavement widths, available mainline travel lanes, turning lanes, shoulder widths, medians, at-grade railroad crossings, interchanges, bridges, aerial utilities and driveways were documented for every roadway section. Operational aspects that were documented included posted travel speeds, signalized intersection locations, on-street parking lanes, presence of evacuation signage and adjacent land uses. Proposed TIP improvements throughout the County were also examined to identify if any actions were targeted for any portal candidate.

These data provided the background for undertaking two critical tasks. These included:

- ☛ Highlighting locations where roadway capacities could be insufficient to process volumes generated under an evacuation scenario or where disruptions in traffic flow could occur, and
- ☛ Identifying roadway elements that could limit the range of mitigations or affect implementation of strategies.

In addition to the above, data included the functioning of anticipated entry points and exit points between the surrounding local street system and the portal corridor. Alternative travel paths that include roads already on the State evacuation roadway network and other nearby portal candidates are identified for use by evacuees in the event a diversion is necessary to avoid a blockage that interrupts traffic flow. Some portals exhibit flooding, even under minor storm conditions. Locations of minor flooding are also noted.

V.A. Physical Condition Review

Aspects that were verified in the field included number of travel lanes, striping, horizontal alignments, on-street parking lanes, signalized intersections, ancillary turning lanes, medians, shoulders, at-grade railroad crossings, evacuation signage, interchanges, land service function and driveway access. Extensive use was made of the Photolog Data (See Chapter III, Section A) to verify and review the field information. This information is summarized in a spreadsheet format (See Portal Evaluation Profile, Table V-1) and discussed below.

V.B. Operational Review

The profile of the existing roadway conditions for each Portal corridor is discussed below. Roadways have been subdivided into logical sections that exhibit similar physical and operational characteristics. A separate description of roadway function and features is presented for each logical section. Properties of each portal route were examined for a summer peak condition. Based on the operational and physical information, a set of “Initial Priority Locations” were developed for each portal route. These Initial Priority Locations are areas

where operational of physical issues could potentially impede the flow of evacuating vehicles in the case of a Category III flooding event. The Initial Priority Locations include bridges, signalized traffic intersections, lane reductions, major roadway connections, and interchanges.

V.C. Stakeholder Input

A description of the three geographic stakeholder groups may be found in I.B, Project Organization (above) Stakeholder presentations were made on October 22, 23, and 28, 2008; and again February 16, March 4, and March 16 2009. Meeting reports may be found in Appendix E. Below is a summary of comments received:

V.C.1. North Stakeholder Meetings

- ☛ Kings Highway – Floods often, especially at Rte 12 and 35
- ☛ Kings Highway - Historic Character is a concern. Also, Kings Highway is designated as a scenic roads (Byways) conflict, and passes through the Middletown Historic District
- ☛ Is 12A to 12 (Navesink River Rd) to GSP a possibility? Might be better than Kings Highway
- ☛ Could Normandy Road be used?
- ☛ Concern over how first responders get in
- ☛ Rte 35/36/GSP – need to widen on-ramps, portable median to allow 2 vehicles side by side
- ☛ Reversing traffic flow on 35 or 36 would be difficult due to numerous access points
- ☛ DMV may have info on registered vehicles in the area to get an idea of #'s
- ☛ Rte 39 and Front Street – 2 low areas could be raised to establish a complete evac route
- ☛ Keyport area – Matawan Creek floods
- ☛ Flooding is a problem - Rte 35 north by water tower, under Hudson Trail
- ☛ Clark Street is used as an evacuation route, but it is a marsh area
- ☛ Broad Street and Atlantic can also flood
- ☛ Getting to Broadway is difficult
- ☛ Suggest Elevating Rte 516 bridge
- ☛ Jug Handle @ Rte 36 and Union Avenue floods (behind Bank, Washington and Union)
- ☛ Rte 39 in Union Beach would be totally impassable – could be raised behind bank and then it would be passable
- ☛ 36 in Keyport – NPP – designated study area
- ☛ Once people get to the GSP, then what? Where are people going? Rte 35/36 and GSP gets backed up – choke point
- ☛ Need signs for alternate routes
- ☛ Need to address Senior Citizen areas
- ☛ Aberdeen – County Rte 6 is designated by the town as an evacuation route
- ☛ Parts of Middletown have elevation and could shelter people in place or provide shelters
- ☛ Inundation maps are not accurate – in reality it is a lot worse than shown
- ☛ Hwy 35 to the coast would all be inundated
- ☛ What happens to traffic lights during power outages?

- ☛ U-turn off northbound to south bound – turn in median, allow during emergencies
- ☛ Rte 36 in front of IHOP – emergency U-turn should be designated
- ☛ Large old trees could cause road blockages and electricity outages
- ☛ Utilities - should be strengthened at key intersections. There are utility lines over some of the routes that may come down
- ☛ Need to check with FMERPA about roadway changes associated with future redevelopment
- ☛ All Hazards Mitigation Funds may be available for some of the improvements now that the County has an All Hazard Mitigation Plan. Some of the improvement suggested are already mentioned in the All Hazards Plan
- ☛ The train crossing is a real issue with Newman Springs Road
- ☛ Is the number of people evacuated from an area taken into consideration?
- ☛ The end of Pickney Road, at Foodtown is a nightmare of an intersection
- ☛ Temporary traffic lights would help as well as battery backup
- ☛ The County is putting in 2 temporary lights to do bridgework. Perhaps those lights could stay.
- ☛ Navesink River Road would be tough to widen. What about River Road?
- ☛ Did you look at Wall Street to Industrial Way as a route?
- ☛ Just having battery back-up for the traffic lights would be a huge improvement. There are not enough police officers to be at every intersection
- ☛ If signals are operated remotely, who controls them?
- ☛ There would have to be an operation protocol established for various types of emergencies for remote control of traffic signals
- ☛ Will there be cameras to monitor traffic so that a central control area could see what is going on in order to control lights?
- ☛ Raising the road – expensive option. What else could be done in places like Monmouth Beach?
- ☛ Need to prioritize evacuation or areas like Monmouth Beach and Sea Bright
- ☛ This study may provide additional rationale for funding for operations
- ☛ Will there be permanent Variable Message Boards installed?
- ☛ Long term plan for the Pickney/Rumson area is needed
- ☛ The train is the real issue
- ☛ It may be better to split the traffic and direct some to White Road to avoid the Newman Springs intersection altogether.

V.C.2. Central Stakeholder Meetings

- ☛ GSP goes through a low area near Keyport/Matawan. How will that be handled?
- ☛ Where do routes end up?
- ☛ Will there be recommendations on where shelters should go?
- ☛ Rte 36 and Florence Ave – road is impassable in a rain event
- ☛ Portable traffic signals may help along CR520. If implemented, who would “own” portable signals and could they be used for other uses – special events?
- ☛ Police officers will be needed to direct traffic – manpower!

- ☛ West Park Ave is a mess during normal conditions. School conflicts
- ☛ Trains coming through towns is an impediment. At Broad and CR 520, when the train is in the station, 3 road crossings are closed. 40 trains/day
- ☛ Newman Springs Road and Rte 35
- ☛ Eatontown is centrally located and has the major intersection of Routes 35 and 36 – a major bottleneck
- ☛ Because major escape routes may be congested, look to first evacuate out of vulnerable areas. Use shelters when possible to keep people safe and reduce demand on routes.
- ☛ Some of the identified evacuation routes flood out of Sea Bright and Monmouth Beach
- ☛ Rte 36 – raise road near Union Beach
- ☛ Route 16 is a mess today, and everyday. Anytime there is any kind of an event, Asbury Ave backs up.
- ☛ Get People to 33
- ☛ Evacuate Bradley Beach by getting them to 35 to 138 to 195. Highway 35 south of Belmar floods (Shark River)
- ☛ Need to know when and where to send people. How to get people to the best routes
- ☛ Unless there is improvement to 35 in Belmar, people will just go to 33
- ☛ Are County roads going to be reversed?
- ☛ How will traffic control devices be coordinated?
- ☛ How long will these recommendations stay in place?
- ☛ Where does the \$\$ come from?
- ☛ Limitations from Allaire Road to 34. Directing people onto 34 is a good way to go north before they get to the Parkway
- ☛ Route 18 is another possible Northwest route
- ☛ If we get people off on 18, Asbury Ave could see some relief
- ☛ Recommend permanent solar variable message boards in key locations
- ☛ AM Radio Station – that needs to be coordinated as well
- ☛ Can Hazard Mitigation Funds be used for some of these improvements to prevent roadways from flooding?
- ☛ The importance of having shelters can not be stressed enough. If people can wait at a shelter or high ground, they will be safe and that is more important than moving them out of the area.

V.C.3. South Stakeholder Meetings

- ☛ GSP goes through a low area, how will that be handled?
- ☛ No one will leave until it is critical. People will wait until the last minute
- ☛ Intersection of 524A and Rte 34 – no way to get to Rte 34 north
- ☛ 524 and 524A crossing 34 – traffic circle is a hang up. Not accurately represented on map – it is a 5 way intersection
- ☛ I-195 is a given route for evacuation – contra flow crossover is east of Allaire Road
- ☛ To where are we trying to move people? Where will people end up?
- ☛ Need to look at shelters closer in.

- ☛ Rte 66 – 1 lane going west, can't handle traffic
- ☛ Rte 66 – ROW and drainage facilities are already there for expansion
- ☛ How do volumes deal with the circles, like 33/66 area
- ☛ There is already flooding in the summer on Rte 66 in Neptune
- ☛ Parts of the GSP flood
- ☛ Rte 35 and 3rd Ave is a problem
- ☛ Rte 71 in Spring Lake Heights between 544 and Warren Ave is a problem
- ☛ Manpower is a huge issue
- ☛ Ability for 1st responders to get in is a real concern
- ☛ Need to get information out to the public on routes
- ☛ Mass transit is an important component
- ☛ Need sign directing people where to go
- ☛ Data should be available to municipalities
- ☛ Route 16 is a mess today, and everyday. Anytime there is any kind of an event, Asbury Ave backs up.
- ☛ Get People to 33
- ☛ Evacuate Bradley Beach by getting them to 35 to 138 to 195. Highway 35 south of Belmar floods (Shark River)
- ☛ Need to know when and where to send people. How to get people to the best routes
- ☛ Unless there is improvement to 35 in Belmar, people will just go to 33
- ☛ Are County roads going to be reversed?
- ☛ How will traffic control devices be coordinated?
- ☛ How long will these recommendations stay in place?
- ☛ Where does the \$\$ come from?
- ☛ Limitations from Allaire Road to 34. Directing people onto 34 is a good way to go north before they get to the Parkway
- ☛ Route 18 is another possible Northwest route
- ☛ If we get people off on 18, Asbury Ave could see some relief
- ☛ Recommend permanent solar variable message boards in key locations
- ☛ AM Radio Station – that needs to be coordinated as well
- ☛ Can Hazard Mitigation Funds be used for some of these improvements to prevent roadways from flooding?

Table V-1, Portal Route Profiles

ROUTE	SEG-MENT	LOCAL STREET NAME	LENGTH	LIMITS		Physical and Operational Aspects				
				East Terminus	West Terminus	Posted Trav. Speed	Travel Lanes	Pavement Width (Excl. Shoulders)	Signalized Intersections	Turning Bays
CR39	1	Front Street	0.40	Florance Ave.	Union Ave.	30	2	36	No	NA
	2	Union Street	0.80	Front Street	SR 36	30	2	36	SR 36	No
CR 7/CR 56	1	Carr Avenue	1.00	Beachway	Church St.	25	2	40	No	NA
	2	Church Street	0.20	Carr St.	Palmer/Main St.	30	2	40	Main St.	No
	3	Main/Palmer Ave.	0.50	Church St.	SR 36	30	2	40	SR 36	No - but 2 SB approach lanes
SR 36 (Bayshore)	1	Navesink Ave.	0.30	Gateway Nat. Pk.	Bay Ave.	40	4	42	No	NA
	2	Navesink Ave.	0.50	Bay Ave.	Valley Ave.	45-50	4	60	Miller St.	No
	3	Navesink Ave.	2.00	Valley Ave.	CR 8A	50	4	48	CR 8A	No
	4	Navesink Ave.	0.70	CR 8A	CR 8	45	4	56	Grand Ave., CR 8	No
	5	SR 36	9.00	CR 8	SR 35	50	4	48	Leonard Ave., Broadway East Rd. Main Street Wilson Ave. Main Street (MP 18.9) Wilson Ave. Main Street (MP 18.9) Thompson Ave. Palmer Ave. CR 7 (Munroe Ave.) Rose Lane Union Ave. Seagate Ave. Stone Rd. Poole Ave. Middle Ave Atlantic St. Broad St.	No
CR 516	1	Leonardville Road	3	SR 36	Main Street	40	2	24	East Road	No
	2	Leonardville Road	0.3	Main Street	CR 50	35	2	30-36	Cherry Tree Farm Rd.	No
	3	Monmouth Road	0.5	CR 516	Kenwood Drive	35	2	25	No	No
	4	Monmouth Road	0.7	Kenwood Drive	SR 35	35	2	32-36	SR 35	

Table V – 1, Portal Route Profiles, Continued

ROUTE	SEG-MENT	Physical and Operational Aspects										
		Median	Shoulders	Aerial Utilities	On-Street Parking	At-grade RR X-ing	Inter-change	BRIDGE	Evac-uation Signage	Land Service	Drive-ways	Comments
CR39	1	No	No	Yes- NB side	Yes- SB side	No	No	No	No	Res.	Yes	
	2	No	No	Yes- SB side	Yes - SB side	No	No	No	Yes	Res.	Yes	
CR 7/CR 56	1	No	No	Yes- both side	Yes- both sides	No	No	No	No	Res./Com	Yes	
	2	No	No	Yes -both isdes	Yes - both side	No	No	No	No	Res./Com	Yes	
	3	No	No	Yes- SB side	Yes - SB side	No	No	No	Yes	Res.	Yes	
SR 36 (Bayshore)	1	No	No	Yes - both sides	No	No	No	Highlands	Yes	Res.	Yes	
	2	Yes - 6	No	Yes - both sides	No	No	No	No	Yes	Res.	Yes	
	3	Yes - 15	Yes - 10	Yes - both sides	No	No	No	No	Yes	Res.	Yes	
	4	Yes - 6	Yes - 10	Yes - both sides	No	No	No	No	Yes	Res.	Yes	
	5	8	10	No	No	Yes	No	Many Mind Creek Wagner Creek Near Leonard Av Near Broadway Ware Ck Comptons Ck Pews Ck Stream (MP 19.7) East Creek Flat Creek Stream (MP 23.4)	Yes	Mixed	Yes	
CR 516	1	No	Partial-var.	Alternate sides	No	Yes - M.P. 17.75	No	No	Yes	Res.	Yes	
	2	No	Partial - 3ft.	WB side	No	No	No	No	Yes	Res.	Yes	
	3	No	No	WB side	No	No	No	No	Yes	Res.	Yes	
	4	No	No	WB side	No	No	No	No	Yes	Res.	Yes	

Table V – 1, Portal Route Profiles, Continued

ROUTE	SEG- MENT	LOCAL STREET NAME	LENGTH	LIMITS		Physical and Operational Aspects				
				East Terminus	West Terminus	Posted Trav. Speed	Travel Lanes	Pavement Width (Excl. Shoulders)	Signalized Intersections	Turning Bays
Kings Highway	1	Navesink Avenue	1	SR 36	Locust Avenue	40	2	24	SR 36	Yes
	2	Monmouth Avenue	0.75	Locust Ave.	Hillside Ave.	35	2	24	No but 4-way stop at Locust/Navesink Aves.	NA
	3	Kings Highway East	3.00	Hullside Ave.	Sleepy Hollow Rd.	40	2	24	Sleepy Hollow Rd.	Yes-RT bay
CR 520	1	Rumson Ave.	0.30	Ocean Avenue	Ward Ave.	40	2	40	Ocean Ave.	LT bay NB RT Bay SB
	2	Rumson Ave.	3.60	Ward Ave.	N. Mitchell Place	40	2	24	No	No
	3	Rumson Ave.	0.28	N.Mitchell Place	Church Street	40	2	35	Seven Bridges	LT bay WB
	4	Rumson Ave.	0.57	Church Street	Branch Avenue	35	2	30	Branch Ave.-South leg Prospect Ave. Branch Ave - North Leg	No
	5	Branch Ave./Pinckney Rd.	0.85	Rumson Ave.	Broad Street	30-35	2	40	No	No
	6	Broad St.	0.10	Pinckney Rd.	Maple Ave.	30	2	40	Yes	LT bay WB
	7	Newman Springs Road	0.56	Maple Ave	Shrewsbury Ave.	35	2	40	No	No
	8	Newman Springs Road	0.38	Shrewsbury Ave.	Springdale Ave.	40	4	48	Shrewsbury Ave.	LT Bay EB/WB
	9	Newman Springs Road	0.38	Springdale Ave.	Schultz Dr.	45	4	48	Hance Ave.	LT Bay WB
	10	Newman Springs Road	0.10	Shultz Dr.	Half Mile Rd.	45	2 EB/3WB	64	Shultz Dr.	LT Bay WB
	11	Newman Springs Road	0.1	Half Mile Rd.	NJ GSP	45	2 EB/3WB	64	No	No
	12	Newman Springs Road	0.01	GSP NB on-ramp	GSPSB on-ramp	45	4	62	No	No
SR 36 (Long Branch Corridor)	1	Joline Avenue	1.32	Ocean Avenue	CR 29	35	2	24	Long Branch Avenue Liberty Street Rockwell Avenue Seventh Avenue Branchport Avenue	Branchport Ave. - Left-turn Bays
	2	Joline Avenue	0.57	Branchport Ave.	Victor Avenue	35		30	No	No
	3	Joline Avenue	2.3	Victor Avenue	Marin Way	45-55	4	48	Oceanport Ave. CR 537 SR71 DMV Driveway (MP 2.0)	Oceanport Ave., SR 71 Left-turn Bays
	4	Joline Avenue	1.6	Marin Way	SR 18 Ramp	50-55	6	72	Neptune Boulevard (SR 35) CR 547 Grant Avenue	CR 547, Grant Ave. - Left-turn Bays
	5	Joline Avenue	0.1	SR 18 Ramp	CR 51 (Hope Road)	55	4	48	CR 51	Yes - Left-turn Bays

Table V – 1, Portal Route Profiles, Continued

ROUTE	SEG- MENT	Physical and Operational Aspects										
		Median	Shoulders	Aerial Utilities	On-Street Parking	At-grade RR X-ing	Inter-change	BRIDGE	Evac-uation Signage	Land Service	Drive-ways	Comments
Kings Highway	1	No	Partial -var.	Yes -both sides	No	No	No	No	No	Res.	Yes	
	2	No	Partial -var.	Yes -both sides	No	No	No	No	No	Res.	Yes	
	3	No	Partial -var.	Yes -both sides	No	No	No	No	No	Res.	Yes	Lower warning speeds posted - reverse curves at Roevling Ct. and Chapel Hill Road
CR 520	1	No	No	No	No	No	No	Rumson	Yes	Res.	Yes	
	2	No	Partial	Yes	No	No	No	No	No	Res.	Limited	
	3	No	Partial	Yes	No	No	No	No	No	Res.	Limited	
	4	No	No	Yes	No	No	No	No	Yes	Res.	Yes	
	5	No	No	Yes-EB/WB	Pinckney Rd.	No	No	No	Yes	Res.	Yes	
	6	No	No	Yes-NB/SB	No	No	No	No	Yes	Com.	Yes	
	7	No	No	Yes EB/WB	No	Yes	No	No		Com.	Yes	
	8	No	No	Yes EB/WB	No	No	No	No	No	Mixed	Yes	
	9	Yes	No	Yes EB/WB	No	No	Yes	Yes - over Navasink River	Yes	Mixed	Yes	
	10	Yes	No	Yes EB/WB	No	No	Yes	Yes - over Navasink River	Yes	Mixed	Yes	
	11	Yes	No	Yes EB/WB	No	No	No	No	Yes	Com.	No	
	12	Jersey Barrier	No	No	No	No	Yes	Yes - CR 520	Yes	Bridge Piers	No	
SR 36 (Long Branch Corridor)	1	No	10	Yes - EB/WB	No	Yes	No	Yes - M.P. 5.3	Yes	Mixed	Yes	
	2	No	Partial - 3		No	No	No	Span - M.P. 3.9	Yes	Mixed	Yes	
	3		10 to 12	Yes - EB/WB	No	No	SR 71 SR 35	Span - M.P. 3.2 Span - M.P. 2.6 Span - M.P. 1.8	Yes	Com.	Yes	
	4	Grass 34-58	10	Yes - EB/WB	No	No	NJ GSP	Span - M.P. 1.7	Yes	Com.	Yes	
	5	Grass - var.	12	Yes - EB/WB	No	No	CR 51	?	Yes	Com.	Yes	

Table V – 1, Portal Route Profiles, Continued

ROUTE	SEG- MENT	LOCAL STREET NAME	LENGTH	LIMITS		Physical and Operational Aspects				
				East Terminus	West Terminus	Posted Trav. Speed	Travel Lanes	Pavement Width (Excl. Shoulders)	Signalized Intersections	Turning Bays
Park Avenue	1	Park Avenue	0.38	Ocean Avenue	Lincoln Court	25	2	39		No
	2	Park Avenue	0.37	Lincoln Court	SR 71	25	2	31	SR 71	No
	3	Park Avenue	0.75	SR 71	CR 15	35	2	31	No	No
	5	Monmouth Ave. (CR 15)	0.1	Park Avenue	West Park Ave.	25	2	35	West Park Ave.	Yes-Left turn bay
	6	West Park Ave.	0.76	Monmouth Avenue	Peach Tree Rd	35	2	30	Whale Pond Rd.	No
	7	West Park Ave.	0.35	Peach Tree Rd.	Polbos Pkwy	35	3*	40	No	No
	8	West Park Ave.	0.45	Polbos Pkwy	SR 35	35	2WB-1EB	40	SR 35	Jughandle for LT
	9	West Park Ave.	0.66	SR 35	Frederic Drive	40	3*	40	Raleigh Ct.	LT bay
	10	West Park Ave.	0.2	Frederic Drive	SR 18	45	2	40	No	No
CR 16	1	Asbury Avenue	0.38	SR 71	Pine Street	25	2	49	SR 71 Langford Street Comstock Street Pine Street	No
	2	Asbury Avenue	1.30	Pine Street	SR 35 Ramps	25-35	2	39	Church Street Prospect Avenue Ridge Avenue	No
	3	Asbury Avenue	0.10	SR 35 Ramps	SR 35 Traffic Circle	35	1	12	No	No
	4	Asbury Avenue	1.00	SR 35 Traffic Circle	SR 66	50	4	48	Neptune Boulevard (SR 35) Hillside Avenue SR 66	SR66- 2LT Bays
	5	Asbury Avenue	3.00	Park Road	CR 547	45	2	24	Bowne Road Green Grove Road CR 547	No
SR 66	1	Park Road	2.80	CR 16	SR 33	50	4	68	No	NA
SR 33	1	Corlies Avenue	0.05	SR 71	Memorial Avenue	30 mph	4	72	SR 71	LT Bay - NB/SB
	1	Corlies Avenue	0	Memorial Avenue	Memorial Avenue	30 mph	4	72	Memorial Avenue	LT Bay - EB/WB
	2	Corlies Avenue	0.15	Memorial Avenue	Atkins Avenue	30 mph	2 w/ center turning lane	48	Atkins Avenue	LT Bay - EB/WB
	3	Corlies Avenue	0.28	Atkins Avenue	Fisher Avenue	30 mph	2	48	No	No
	4	Corlies Avenue	0.04	Fisher Avenue	SR 35	30 mph	4	72	SR 35	LT Bays - EB/WB
	5	Corlies Avenue	1.30	SR 35	Walnut Avenue	40 mph	4	72	Neptune Avenue Hospital Entrance Wakefield Avenue Oxford Avenue	No
	6	Corlies Avenue	0.27	Walnut Avenue	SR 18	40	6	80	Brighton Avenue	No
	7	SR 33	0.19	SR 18	Fortunato Place	40	4	48	Fortunato Place	No
	8	SR 33	1.90	Fortunato Place	Roberts Road	40-45	4	48	Green Grove Road West Bangs Road Jumping Brook Road W. Jumping Brk. Rd.	No
	9	SR 33	1.50	Robert Road	GSP Exit 100 B	68	4	68	SR 66	No
10	SR 33	1.10	GSP Exit 100 B	CR 547	50	4	48	Campus Parkway cr 547	No	

Table V – 1, Portal Route Profiles, Continued

ROUTE	SEG- MENT	Physical and Operational Aspects										
		Median	Shoulders	Aerial Utilities	On-Street Parking	At-grade RR X-ing	Inter- change	BRIDGE	Evac- uation Signage	Land Service	Drive-ways	Comments
Park Avenue	1	No	No	Yes	No	Yes	No	No	No	Res.	Yes	
	2	No	No	Yes	No	No	No	No	No	Res.	Yes	
	3	No	No	Yes- EB side	Yes	No	No	No	No	Res.	Yes	
	5	No	No	Yes- both sides	No	No	No	No	No	Com.	Yes	
	6	No	No	Yes- both sides	No	No	No	No	No	Res.	Yes	
	7	No	No	Yes- both sides	No	No	No	No	No	Res.	Yes	
	8	No	No	Yes- WB side	No	No	Yes	SR 18 Ramps and Piers	Yes	Mixed	Yes	
	9	No	Partial	Yes- EB side	No	No	No	No	No	Mixed	Yes	
	10	No	Yes- EB/WB	Yes-EB side	No	No	Yes	SR 18 Ramps and Piers	No	Mixed	Yes	* Includes middle lane to service left-turn maneuvers in both directions.
	CR 16	1	No	No	Yes-WB side	Yes	Yes	No	No	No	Com.	Yes
2		No	No	Yes-WB side	No	No	No	No	No	Com.Res.	Yes	
3		No	No	No	No	No	No	SR 18	No	Open Space	No	
4		Grass-33	10	?	No	No	No	SR 18	No	Open Space	No	SR 66 and CR 16 corridors coincide
5		No	Yes EB/WB		No	No	No	No		Res./Open Space	Yes	
SR 66	1	No	10 - EB/WB	No	No	No	NJ GSP	Jumping Brook	No	Open Space	No	
SR 33	1	No	No	Yes EB/WB	No	Yes	No	No	No	Com.	Yes	
	1											
	2	No	Full - WB	Yes EB/WB	No	No	No	No	No	Com.	Yes	
	3	No	No	Yes EB/WB	Yes-EB	No	No	No	No	Res.	Yes	
	4	No	No	Yes EB/WB	No	No	No	No	No	Com.	Yes	
	5	No	No	Yes EB/WB	No	No	No	No	No	Mix	Yes	
	6	No	No	Yes EB/WB	No	No	SR 18 Ramps	SR 18 Piers	No	Com.	Yes- EB	
	7	No	No	Yes EB/WB	No	No	No	No	No	Com.	Yes-EB	
	8	No										
	9	10 -Grass	10	Yes EB/WB	No	No	GSP Ramps	GSP Piers	No	Open Space	No	
10	No	No	Yes EB/WB	No	No	No	Span - MP 36.6					

Table V – 1, Portal Route Profiles, Continued

ROUTE	SEG-MENT	LOCAL STREET NAME	LENGTH	LIMITS		Physical and Operational Aspects				
				East Terminus	West Terminus	Posted Trav. Speed	Travel Lanes	Pavement Width (Excl. Shoulders)	Signalized Intersections	Turning Bays
CR 524	1	Allaire Road	0.75	SR 71	Old Mill Road	35	2	36-42	SR 71	No
	2	Allaire Road	0.28	Old Mill Road	SR 35	35	2	24	Old Mill Road	No
	3	Allaire Road	1.00	SR 35	Warren Avenue	35	2	40	SR 35	Yes WB/EB
	4	Allaire Road	2.30	Warren Avenue	SR 34	45	2	24-36	Warren Ave.	Yes WB
	5	Allaire Road	0.00	Bailey's Corner	Bailey's Corner	45	2	24-36	Bailey's Corner	Yes WB/EB
	6	Allaire/Allenwood Rds./Atlantic Ave.	0.85	SR 34	Hospital Road	35-40	2	24		Yes - RT Lane Only
	7	Atlantic Ave.	3.00	Hospital Road	CR 547 (Main St.)	50	2	24	CR 547	
CR 524 Spur	1	Atlantic Avenue	1.00	SR 20	SR 35	35	2	30	CR 20	No
	2	Atlantic Avenue	1.50	SR 35	Tiltons Corner Rd.	45	2	24	No	No
	3	Atlantic Avenue	0.10	Tiltons Corner Rd.	SR 34	40-45	2	40	No	No
	4	Atlantic Avenue	1.10	SR 34	CR 524	40	2	24	No	No

ROUTE	SEG-MENT	Physical and Operational Aspects										
		Median	Shoulders	Aerial Utilities	On-Street Parking	At-grade RR X-ing	Inter-change	BRIDGE	Evacuation Signage	Land Service	Drive-ways	Comments
CR 524	1	No	No	Yes	No	Yes	No	No	Yes	Res.	Yes	
	2	No	Partial	Yes	No	No	No	No	Yes	Res.	Yes	
	3	No	Partial	Yes	No	No	No	No	Yes	Res.	Yes	
	4	No	Partial	Yes	No	No	Circle	No	No	Res.	Yes	
	5	No	Partial	Yes	No	No	Circle	No	No	Res.	Yes	Check Location Baileys Corner
	6	No	Partial	Yes -EB side	No	No	Yes	No	No	Res.	Yes	
	7	No	Partial	Yes	No	No	Circle	I-195 Piers	No	Rural	Yes	
CR 524 Spur	1	No	No	Yes	No	No	Circle	No	Yes	Res.	Yes	
	2	No	Partial	Yes	No	No	Yes	No	Yes	Mixed	Yes	
	3	No	Partial	Yes	No	No	Yes	Piers	Yes	Mixed	Yes	
	4	No	Partial	Yes	No	No	No	Yes	No	Res.	Yes	

VI– Summary of Findings

For the baseline condition, Technical Memorandum 1 documented land development patterns, population trends, location of environment/historic sensitive resources, transportation facilities and conditions, ITS assets, travel patterns and operations on key roadways within the project area. This data collection effort yielded the inputs necessary for establishing a comprehensive understanding of the inter-relationship of transportation facilities and services, the transportation system’s capacity and permanence limitations during peak seasonal and emergency management travel periods, as well as roadway usage patterns. Technical Advisory Committee and Community Stakeholder groups were also formed to assist in the production and facilitation of a comprehensive Project database.

This information was analyzed collectively for purposes of developing 12 potential portal route candidates that could supplement the State Emergency Evacuation System for Monmouth County. The information also provided the framework for identifying critical locations along the portals as candidates for developing and targeting capital improvements, operational strategies, ITS solutions, and Transportation System Management and Transportation Demand Management initiatives, tasks reserved for the follow-up Technical Memorandum 2. Key findings of the investigation are summarized below.

VI.A. Key Portal Route Candidates

The 12 study portal corridors include all or parts of 2 state roads, 9 county roads, and 2 local roads. These corridors are listed below and appear in Figure IIIIF-1;

1. CR 39 between Florence Avenue and SR 36,
2. CR 7/CR 56 between Beachway Campview Point and SR 36,
3. SR 36 between Highlands Bridge Over Shrewsbury River and the GSP,
4. CR 516/CR 50 between SR 36 and SR 35,
5. Kings Highway/CR 8 between SR 36 and SR 35²,
6. CR 520 between Ocean Avenue and GSP,
7. SR 36 (near Oceanport) between the SR 36/CR 57 junction and GSP,
8. Park Avenue between SR 71 and SR 18,
9. CR 16 between SR 71 and GSP and SR 66 between CR 16 and SR 33,
10. SR 33 between SR 71 and SR 34,
11. CR 524 between SR 71 and I-195, and
12. CR 524 Spur between SR 71 and I-CR 524.

VI.B. Current Summer Peak Travel Conditions Along Portal Candidates

² Kings Highway/CR 8 was replaced by CR 8A/CR12/CR12A in the evaluation stage of the project, due to the poor geometry and low speeds on Kings Highway and Holland Road

CR 39: Acceptable traffic flow conditions (LOS D or better) would exist along route away from the SR 36 corridor. Approaching SR 36, congestion occurs along the CR 39/SR 36 intersection's southbound approach.

CR 7/CR 56: Acceptable traffic flow conditions along route away from the SR 36 corridor. Approaching SR 36, congestion occurs along the CR 39/SR 36 intersection's southbound approach.

SR 36-North: Acceptable traffic flow conditions occur along the mainline segments. Delays are experienced along the highway's westbound approaches at the artery's busy intersections including CR 39 in Union Beach, CR 7 in Atlantic Highlands, and Broad Street in Keyport. Congestion also occurs at the GSP mainline/on-ramp junction where SR 36 traffic merges into the toll road's mainline.

CR 516: Acceptable traffic flow conditions occur along all sections of the portal route.

Kings Highway: Acceptable traffic flow conditions, given its lower demand. Geometrics dictate low speeds and low speed limits, as well as limited capacity and general unsafe conditions. As a scenic highway, geometric improvements and widening would have visual impact as well..

CR 520: Acceptable traffic flow conditions occur through the Rumson (eastern section) and Tinton Falls (western section) areas. However, congestion occurs in the Red Bank (central section) area in the vicinity of the Broad Street/Maple Avenue intersection as well as at the GSP mainline/on-ramp from CR 520 merge.

SR 36-Mid: Acceptable traffic flow conditions occur along mainline segments. Some travel delay is experienced in Long Branch area due to the presence of a cluster of signalized intersections.

Park Ave.: Acceptable traffic flow conditions occur along all sections of the portal route.

CR 16: Acceptable traffic flow conditions occur along all sections of the portal route.

SR 33: Travel speeds decline approaching Jersey Shore University Medical Center's driveway entrance in Neptune Township due to signal operations. Otherwise, traffic flow conditions are acceptable along remaining sections of the portal.

CR 524: Acceptable traffic flow conditions occur along all sections of the portal route.

CR 524 (Alt.) Acceptable traffic flow conditions occur along all sections of the portal route.

VI.C. 2007 and 2030 Evacuation Conditions

Under an evacuation scenario for 2007, traffic operations along several portal candidates would reach saturated conditions throughout most of the corridors given an evacuation order with a six hour clearance time. Volumes along SR 36 (North Coast area), CR 520, SR 36 (Long Branch

area), CR 16, and SR 33 would reach levels far exceeding 2000 vph per lane. Further, vehicles traveling south along CR 39 and CR 7 would be unable to enter the SR 36 westbound traffic stream due to LOS F conditions on SR 36’s mainline. Travel conditions along these routes during a 2030 evacuation event would deteriorate even further compared to the 2007 scenario.

Acceptable traffic flow conditions would still occur along the CR 516, Kings Highway, Park Avenue, CR 524 Allaire Road, and CR 524 Alternate (Atlantic Avenue). These routes could function as alternate paths to process the overflow demand conditions on adjacent evacuation roads. Signage and ITS strategies could be utilized to direct traffic away from congested portals and onto these less traveled arteries. Under a 2030 evacuation scenario, travel speeds would decline along these thoroughfares as increasing volume would generate longer delays at signalized intersections or in negotiating road segments with physical constraints or restricted sight lines.

VI.D. Key Priority Locations for Advanced Study

Travel conditions along each portal candidate were evaluated using a variety of investigative tools including field surveys, photo log inventories, state straight line diagrams, and transportation evaluation methodologies such as the FHWA Highway Capacity Manual Software procedures. This work resulted in the identification of Initial Priority Locations within each portal, which would be considered for advanced study in Technical Memorandum 2. These locations were determined to have the potential to adversely affect vehicle processing rates as a result of physical, geometric, operational, or traffic demand conditions, such as horizontal curvature, awkward intersection angles, numerous traffic signals, absence of shoulders, restricted sight lines, or significant traffic generators such as active commercial areas or freeway entrance locations. Each initial priority location list was refined to a group of sites where, it was estimated, targeting improvements would likely result in substantial benefits on roadway capacity, balancing travel demand, and safety along the overall length of each portal route. Locations recommended for further investigation are listed in Table X-1 below.

Table VI-1, Priority Locations

Portal Route	Priority Location	Priority Issue
CR 39 (Union Ave.)	CR 39/SR 36 Intersection	Capacity, Flooding
CR 7/CR 56 (Palmer Ave.)	CR 7/SR 36 Intersection	Capacity, Flooding
SR 36 (North Coast)	CR 8A/SR 36 Intersection	Capacity
	CR 7/ SR 36 Intersection	Capacity, Flooding
	Cr 39/SR 36 Intersection	Capacity
	Broad St./SR 36 Intersection	Capacity
	CR 36/CR 35 Connection	Capacity, Flooding
CR 516/CR 50	SR 35/CR 516 Connection	Capacity
	Cherry Tree Farm Rd./CR 516	Safety (sight lines)
	RR crossing at Naval Station	Safety

Table VI-1, Priority Locations (cont'd)

Portal Route	Priority Location	Priority Issue
Kings Highway* *Deleted from Remainder of Study due to Environmental Impacts and number of defects. Replaced with CR 8A/12/12A	Locust Ave./CR 516 (4-way stop)	Safety (awkward crossing angles)
	Hillside Ave. – Sleepy Hollow Rd. Segment	Safety (sharp horizontal curvature,
	CR 35/CR 516 Connection	Capacity
	RR crossing at Naval Station	Safety
CR 8A, 12A Substitute Portal for Kings Highway	Oceanic Bridge	Bridge Loading, Age
	GSP On-Ramp	Capacity
CR 520	Rumson Ave. Bridge	Capacity
	CR 520/Seven Bridges Rd Intersection	Capacity
	T-intersections at Branch Ave., Pinckney Rd.,	Safety (turning movement conflicts), Capacity
Broad St.	Maple Ave./Broad St/Intersection	Capacity
	RR crossing near Shrewsbury Ave.	Capacity, Safety
	GSP on-ramp	Capacity
SR 36 (Mid Coast)	Cluster of signalized intersections bet. Ocean Ave. and CR 29	Capacity, Flooding at Sea Bright
	At-grade RR crossing near Cr 29	Safety
	SR 71/SR 33 Intersection	Capacity
	CR 547/SR 36 Intersection	Capacity
	GSP On-ramp	Capacity
Park Avenue	At-grade RR crossing near Woodgate Ave.	Safety
	SR 71/Park Ave. Intersection	Capacity
	Park Ave./CR 15 T-intersection	Safety (turning movement conflicts)
	CR 35/Park Ave. connection	Capacity
CR 16/SR 66	CR 71/CR 16 Intersection	Capacity, Flooding
	SR 35 (Neptune Boulevard)/CR 16 Intersection	Capacity

Table V1-1, Priority Locations (cont'd)

Portal Route	Priority Location	Priority Issue
SR 33	Cluster of signals bet. SR 71 and Atkins Ave.	Capacity
	SR 35/SR 33 Intersection	Capacity
	Lane reduction approaching Fortunato Pl.	Safety (merging maneuvers),
	GSP On-ramp	Capacity
	SR 66/SR 33 Intersection	Capacity
	CR 34/SR 33 Intersection	Safety (lane changing), Capacity
CR 524 (Allaire Road)	SR 71/Allaire Road Intersection	Capacity
	Allaire Rd./Warren Avenue	Safety (awkward crossing angles)
	Allenwood Road bet. SR 34 and CR 524 Alt.	Safety (sharp horizontal curvature)
	Allaire Rd./CR 524 Alt. T-Intersection	Safety (conflicting turning movements), capacity
CR 524 Alt.	SR 35 Traffic Circle	Safety, Capacity
	SR 34 On-Ramp	Capacity
	CR 524 Alt./Ramshorn Drive Intersection	Safety (crossing angle)

--End--

MONMOUTH COUNTY COASTAL EVACUATION ROUTES STUDY



Part 2

Portal Conditions and Solution Strategies

Prepared for:
Monmouth County Planning Board

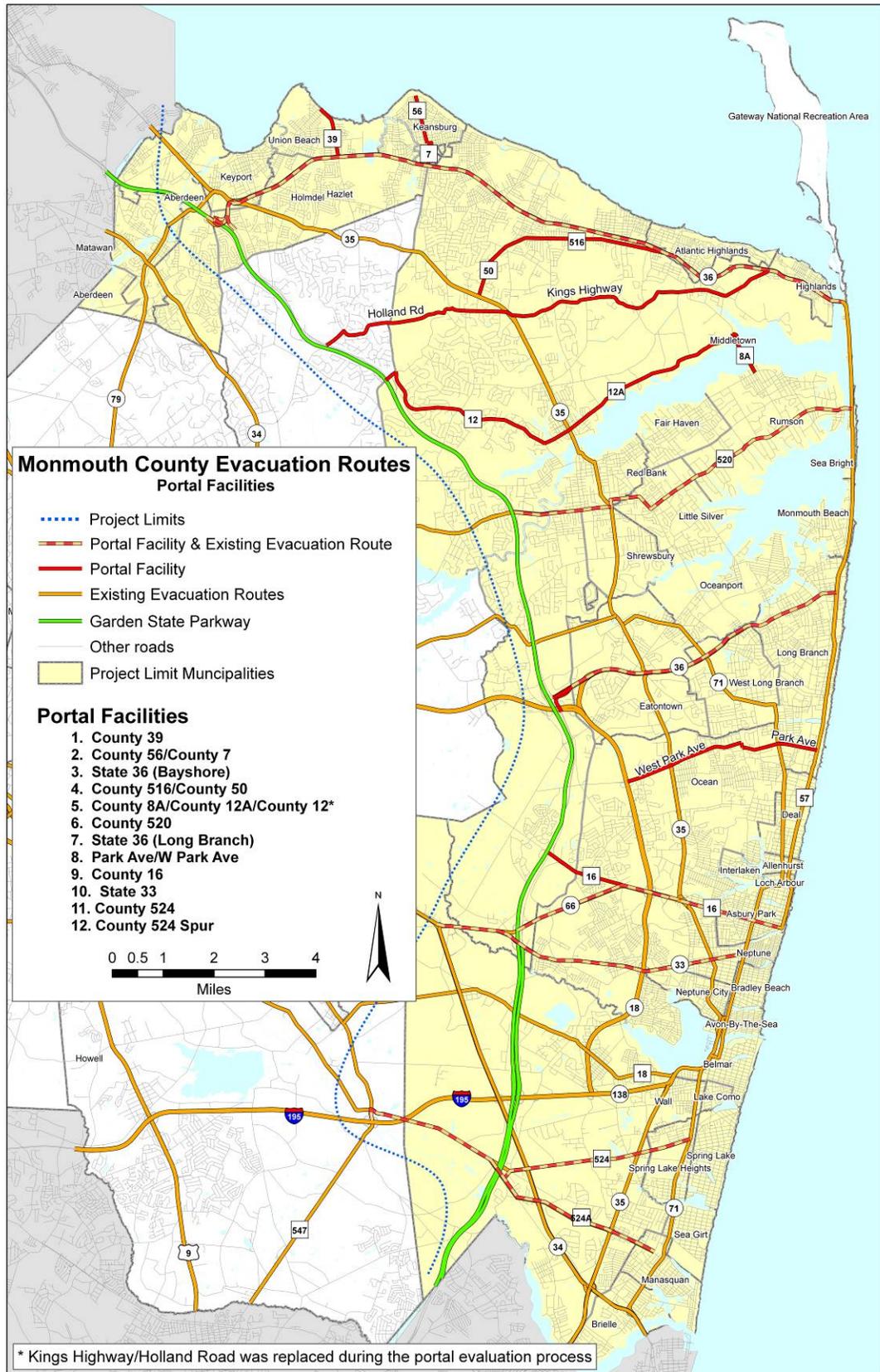
By:
Jacobs Engineering, Inc.

In cooperation with

Reichman Frankle, Inc.
and
Techniquet Engineering

6/19/2009

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Introduction

Background:

As part of its overall effort to protect residents and visitors from the hazards of coastal flooding, Monmouth County’s Planning Board has undertaken a study to evaluate how the current coastal evacuation route system can be improved and possibly expanded to facilitate the safe and efficient movement of people away from the flood zone. Part 1 of this report covers identifying a set of analysis routes and assessing physical and operational problems (Initial Priority Locations) that could be targeted for mitigation treatments.

This section, Part 2, recommends of a mix of solutions ranging from spot applications over short segments (short range, low cost¹) to complex major investment projects (long range, high cost).

Toolbox Approach:

After studying the evacuation issues associated with the twelve portal routes, it became clear that certain treatments would be applicable to most if not all routes, but at different points. A set of treatments were developed –a “toolbox”- that could be applied in a fairly consistent manner. The toolbox approach allowed the team to work efficiently, and helped assure that some treatments would not be overlooked. This set of improvements is listed in the Introductory Section below.

The baseline assessment revealed that under a 6-hour evacuation scenario, operations on all but two of the portal candidates would operate near capacity or would fail. Demand would be so substantial that severe congestion occurring at priority locations would spill back across adjacent segments and result in breakdown conditions on a corridor-wide scale.

Given these levels of congestion, it was determined that in many cases, implementation of more than one solution would be required to mitigate a bottleneck at a particular location along a portal. In addition, each portal has its own unique physical characteristics, including the amount of traffic it was designed to carry, different usage patterns, and various land use development patterns and sensitive resources adjacent to its alignment.

The work took the approach that strategies dealing with non-recurring congestion (i.e. weather events) must be the most cost effective improvements to ensure the greatest return on investment, while being consistent with overall Community and County transportation and comprehensive planning goals. For example, a high value was placed

¹ The New Jersey Transportation Authority (NJTPA) defines these time intervals as follows; short range (within 5 years), intermediate range (5 – 15 years), and long range (beyond 15 years).

on developing solutions that would not only improve traffic operations during an infrequent and short term hurricane event, but would also facilitate travel along coastal access roads the during the “recurring” seasonal condition. For example, the availability of a wire less adaptable traffic control system would be highly effective in mitigating congestion associated with tourist/recreational generated traffic during the summer season. Further, expanding shoulder areas might present an opportunity for their use as year-around bicycle facility. All treatments were subject to review and comment by the Study’s Technical Advisory Committee. The analysis also assigned conceptual cost estimates for the recommended treatments.

The Solutions Toolbox was designed as a systematic method to address congestion issues associated with chokepoints and corridor-wide capacity constraints in a consistent and comprehensive manner. The assessment of the portals’ physical and operational characteristics revealed that certain treatments would be applicable to most, if not all routes. Conversely, it was also determined that each strategy would not be effective or practicable for every road segment or circumstance. Further, some tools would be more effective if used in combination. The most effective measure or combination of measures hinges on existing conditions along a portal and the desired outcome (i.e. expansion of roadway capacity, shifting or spreading of travel demand within peak periods).

The Study’s Toolbox included solutions within the four general categories, Physical Capacity Expansion, Operational Improvements, Technological Initiatives and System Management Strategies. These options are designed to relieve congestion via the broad strategies that focus on building roadway capacity, reducing demand, or managing existing capacity.

- Physical Capacity Expansion including construction of new roadway infrastructure or the enhancement of existing roadway sections (i.e. hard running shoulders);
- Operational Improvements including reconfiguration or use of turning lanes, pavement management, access management, roadway closures, lane striping, provision of acceleration/deceleration lanes, traffic signal modification;
- Technological Initiatives including adaptive real time traffic control systems, Light Emitting Diode (LED) signals coupled with back-up power systems, dynamic messaging, dynamic traveler information, CCTV, etc.,
- System Management (Corridor Management) Solutions including alternate routing of traffic, issuance of early evacuation orders to spread evacuation-generated trips over a longer period of time, coordination of County activities with State and other jurisdictional evacuation procedures, etc. System Management solutions rely on coordination, communication, and cooperation along the various political and agency units to mitigate non-recurring congestion.

Table 1 below summarizes the individual “toolbox” solutions and associated conceptual costs, and time intervals for implementation.

Portal Listings:

Each of twelve evacuation portals is discussed below, along with a map and treatment table. A description of problems identified in Technical Memorandum #1 provides background information. Then treatments are listed – first for each portal as a corridor, and then for individual problem areas along that portal route. A complete data listing is included in Appendix F.

Community Outreach:

Two initial meetings were held with each of the three Stakeholder groups, representing the north, central, and southern sections of the study areas. The first set of meetings covered the study purpose and the issues uncovered. The second set of meetings focused on proposed solution strategies. Results of both sets of meetings are covered in Part 1, Section V. A final set of meetings reviewed all work, as well as the updated set of solutions. In addition, one final public meeting was held on June 2. Again, community suggestions did have an impact on the report. Specific improvements were added, such as re-construction of a turn-around at the western end of Route 36/35 merge. Also, the importance of Shelters was emphasized by first responders. If evacuees can not escape the area totally, they should still be able to find a designated shelter at high ground.

The second and final public meeting had few attendees from the public at large. However, there was excellent media coverage. As a result, the project received important publicity. The project received a front-page article in the local “Atlantic” weekly newspaper, as well as national coverage in the “Transportation Communications Newsletter”, a daily email, containing collections of important transportation news.

Table 1 - Treatment "Toolbox"

Issue	Treatment Category	Treatment	Timeframe	Unit	Cost per unit²
Capacity	Operational	Restriping	Short	roadway-ft	\$5
Capacity	Physical	Minor widening <3 feet	Intermediate	MILE	\$150,000
Capacity	Physical	New Bridge	Long	Sq Foot	\$220
Capacity	Physical	Rehabilitate Bridge	Long	Sq Foot	\$150
Capacity	Physical	Relocate aerial utilities	Long	MILE	\$100,000
Capacity	Operational	Allow evacuees to wait in emergency shelters until traffic clears	During Emergency	Location	No cost
Capacity	Physical	Reverse On-Ramp	Long	Location	\$500,000
Capacity	Physical	Widening - add lane	Long	Lane-Mile	\$2,100,000
Capacity	System Management	No Parking Legislation	Short	NA	\$0
Capacity	Technological	Install LED's, UPS's	Intermediate	Location	\$7,000
Capacity	Technological	Upgrade signals for wireless control	Intermediate	Location	\$23,000
Capacity	Highway Advisory Radio	Transmitter, two signs	Intermediate	Area	\$35,000
Capacity	Technological	Portable traffic signals	Intermediate	Location	\$60,000

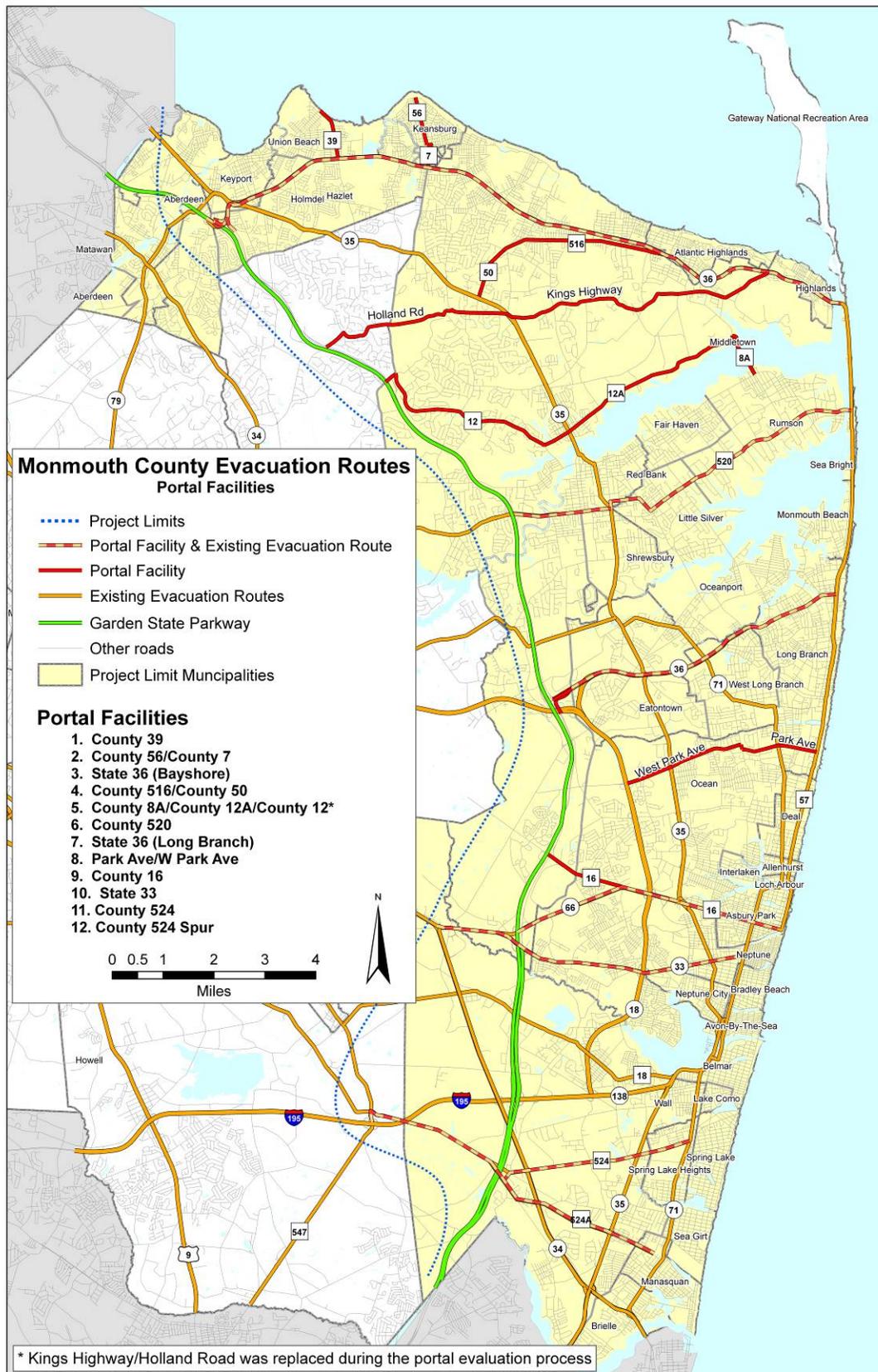
² Not including Right-of-Way costs or costs resulting from new Stormwater Management mandates. This is true for all cost estimates in this document.

Issue	Treatment Category	Treatment	Timeframe	Unit	Cost per unit ²
Capacity	System Management	Dissemination of public information about emergency shelters	Short	NA	\$0
Flooding	Operational	Plan to focus on intense inundation areas	During Emergency	Area	\$0
Flooding	Operational	Police assistance	During Emergency	Officer/day	\$500
Flooding	Physical	Modify sign	Short	Mile	\$600
Flooding	Physical	New signs	Short	Mile	\$1,500
Flooding	Physical	Raise roadway - 1 foot	Long	Lane- foot	\$720

2 Not including Right-of-Way or costs or costs resulting from new Stormwater Management mandates. This is true for all cost estimates in this document.

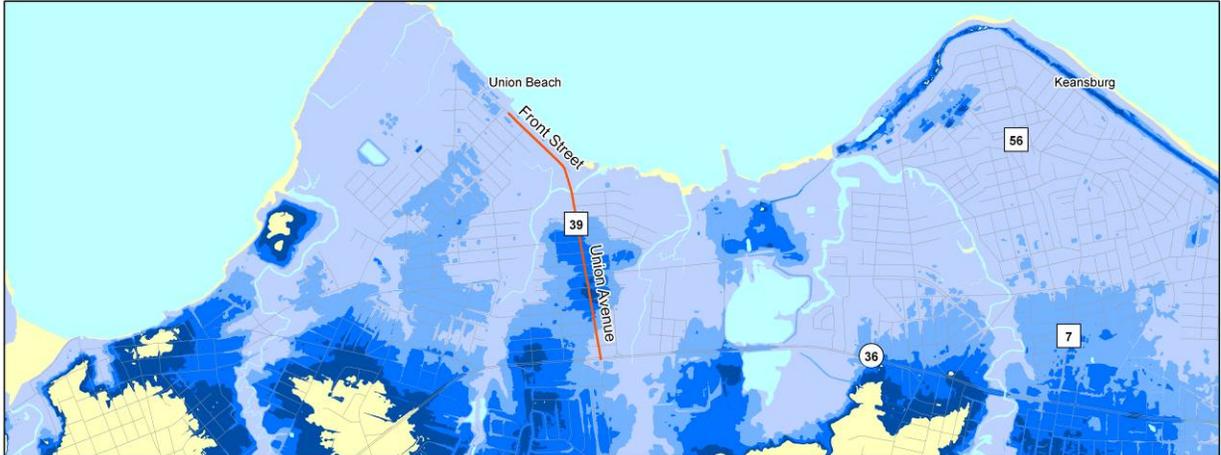
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Portal Route Conditions and Solution Strategies



I. County Route 39

Portal Facility #1 - County 39 Corridor From Front Street to State Route 36



I.A. Existing Conditions

I.A.1. Physical and Operating Characteristics

Union Avenue is one of Union Beach's two (the other being Poole Avenue) key roads providing north-south service between the waterfront area and SR 36. The County Road maintains one travel lane and a parking lane in each direction and provides land service for residential uses and a variety of local businesses. The posted speed limit on the artery is 30 mph. The major intersection along then route is located at CR 39's connection with SR 36.

I.A.2. Proposed TIP Improvements

No corresponding TIP improvements were found.

I.A.3. Alternative Routes

The alternative path to escape the hazard area for the Union Beach population is the Florence Avenue/Poole Avenue corridor. Poole Avenue also forms a connection with SR 36.

I.A.4. Entry Points

The local street system could be used to access Union Avenue along the portal's entire length.

I.A.5. Exit Points

SR 36 is the most direct route to escape the hazard zone.

I.A.6. Key Data Deficiencies/Omissions

Signal Timing Plans

I.A.7. Priority Location

Traffic flow is unimpeded along the CR 39 mainline. However, congestion associated with traffic signal operations at the SR 36 intersection is recurring along CR 39's southbound approach.

I.A.8. Flooding

Union Avenue does exhibit flooding where it crosses over Flat Creek, and where it intersects SR 36 at East Creek. The Flat Creek Crossing is identified by the County as having a condition "Critical". Rehabilitation of this bridge is on the County's Capital Program

I.B. Evacuation Condition

I.B.1. Physical and Operating Characteristics

CR 39 provides a direct link away from the flood zone for Union Township. However, this two-way roadway is too narrow to provide a constant two-lane southbound movement – especially with parking at many southbound curbs. During an evacuation condition in 2007 and in 2030, traffic flow would reach almost 600 vph and about 850 vph, respectively. In addition this corridor would become totally inundated under a Category 3 storm scenario; unlike other corridors which become only partially inundated.

I.C. Treatments / Strategies:

Portal Facility #1 - County 39 Corridor
 From Front Street to State Route 36



PORTAL ROUTE TREATMENT TABLE - COUNTY ROUTE 39

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost ³	Lead Organization	Comment
Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$2,400	County	
Capacity	Corridor Wide	Physical	NA	Widen to 42 feet	Long	\$400,000	County	
Capacity	Corridor Wide	Physical	NA	Install Coastal Evacuation Route Signs	Short	\$1,500	County	
Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,300	Municipality	Daily
Capacity	Corridor Wide	System Management	NA	Plan to focus on Intense Inundation Areas	Short	\$0	MCOEM	
Flooding	Flat Creek Bridge (Bridge R-7)	Physical	❶	New Bridge	Short	\$0	N/A	Project is Completed
Flooding	East Creek	Physical	❸	Elevate Roadway, Improve Drainage	Long	\$10,000,000	State	
Capacity	Washington Avenue to SR 36	Physical	❷	Hard Running Shoulder	Intermediate	\$50,000	State/County	
Capacity	Washington Avenue to SR 36	Physical	❷	Relocate Utilities	Intermediate	\$35,000	State/County	
Capacity	Hemlock Street	Operational	❹	Two-phase signal during evacuations. Divert NB Traffic.	During Evacuations	\$4,000	County/Local	Daily
Flooding	SR 36/Union Ave	Technological	❺	LED and Backup Power for Signals	Intermediate	\$7,000	State	location
Flooding	SR 36/Union Ave	Technological	❺	Upgrade signals for wireless control	Intermediate	\$23,000	State/County	location

³ Not including Right-of-Way or costs or costs resulting from new Stormwater Management mandates. This is true for all cost estimates in this document.

I.C. Treatments / Strategies

I.C.1. Corridor Wide.

a) Flooding

Physical:

- Elevate the roadway and implement drainage improvements along sections crossing low-lying areas that are at to flooding during a hurricane event. (Long Range) [\$10M]

b) Capacity

Physical

- Modify the Coastal Evacuation Route sign assemblies by adding a “No Parking During Evacuation” placard throughout corridor. Sign modification actions must go through a legislative process (Short Range).[\$2,400] ⁴
- Widen the CR 39 corridor to a minimum of 42 feet. (Long Range)[\$400,000]

Operational (During Evacuation)

- Strictly enforce parking restriction regulations (towing if necessary) to maintain a curb lane for travel. [Police Patrol]

System Management

- As there is no “high ground” in the vicinity of this portal, focus early evacuation actions within the Union Beach and Keansburg areas (Short range) [No Cost]
- Install Coastal Evacuation route signs at critical intersections and at a maximum spacing of 2000 feet. (Short Range)[\$1,500]



Photo 1 - Remove on-street parking during evacuations.

I.C.2. Crossing over Flat Creek (Bridge R-7)

a) Flooding

⁴ Not including Right-of-Way or costs or costs resulting from new Stormwater Management mandates. This is true for all cost estimates in this document

Physical

- The Flat Creek Bridge was identified by Monmouth County as having a condition “Critical”. Programmed for rehabilitation on the County’s Capital Program, the reconstruction and elevation of the bridge has been completed.

I.C.3. Vicinity of Union Avenue/SR 36 Intersection and East Creek Crossing

- a) Flooding

Physical

- Include drainage and roadway elevation improvements for SR 36 at this location (Long Range).

- b) Capacity

Physical

- Widen Union Avenue southbound between Washington Avenue and SR 36 to accommodate a full hard-running shoulder for temporary use. (Intermediate Range) [\$50,000].
- Relocate aerial utilities, sidewalk and mounted signs along the west side of Union Avenue



Photo 2 - Widen roadway to install hard-running shoulder.

facilitate the widening project (Intermediate Range) [\$35,000].

Operational (During Evacuations)

- Implement a two-phase signal operation at SR 36 during an evacuation order, with phase 1: SR 36 eastbound and westbound traffic moves, and phase 2: Union Avenue southbound traffic moves. Northbound traffic is diverted from northbound approach .
- Facilitate the activation of two-phase signal operations at the SR 36 intersection by implementing a northbound detour on Union Avenue south of SR 36. The detour plan would divert Union Avenue northbound traffic onto SR 36 eastbound via a; Left-turn onto Hemlock Street (which changes to Aumach Lane), a Right-turn onto the Aumach

Lane jughandle, and a Right-turn onto SR 36. Deploy traffic enforcement personnel to direct detour operation.[\$1,000]

Technological

- Provide LED and battery back-up for existing signals, particularly for the SR 36/Union Avenue intersection signal. (Intermediate)[\$7,000]
- Install a wireless traffic control system that would permit activation of a two-phase signal operation at Union Avenue/SR 36 intersection only during evacuation proceedings. (Intermediate)[\$23,000]

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II.CR 56/CR 7

Portal Facility #2 - County 56/County 7 Corridor From Beachway Avenue to State Route 36



II.A. Existing Conditions

II.A.1. Physical and Operating Characteristics

Main Street is a key north-south road in Keansburg as it links CR 7 with SR 36. Main Street is a two lane, two-directional artery serving both residential and local business uses.

The posted speed limit is 30 mph. This portal route includes two other roads including Church Street and Carr Street, whose paths connect with the Town's waterfront area. These roads are also two-way streets with on-street parking on both sides of each road and a posted speed limit of 25 mph. Carr Street is currently signed as an evacuation route.

II.A.2. Proposed TIP Improvements

No corresponding TIP improvements were found.

II.A.3. Alternative Routes

Other travel paths leading out of the town include SR 7 (Munro Avenue), situated to the east of Main Street, and Ocean Avenue, located to the west of Main Street. Both routes link into SR 36.

II.A.4. Entry Points

The local street system could be used to access Carr Street, Church Street or Main Street at multiple points.

II.A.5. Exit Points

SR 36 is the most direct route to escape the hazard zone.

II.A.6. Key Data Deficiencies/Omissions

Signal Timing Plans

II.A.7. Priority Location

SR 36/Main Street intersection.

II.A.8. Flooding

Although flooding was not identified in any Stakeholder Meetings, the northern end of Carr Ave is at an elevation where occasional flooding may occur. This would be true for almost all Portal Routes with an end close to the beach area.

II.B. Evacuation Condition

II.B.1. Physical and Operating Characteristics

CR 56 (Carr Avenue) and CR 7 (Main Street) form a key north-south corridor through Keansburg linking the waterfront area and coast road, Beachway Avenue, with CR 7 and SR 36. The two avenues are connected by a two-block section of Church Street, which also forms part of the CR 7 alignment in Town. The portal is shorter than two miles and maintains one travel lane in each direction. There are several historic features along or near Carr Avenue. There are no shelters located in the vicinity of the corridor. Under a 2007 6-hour evacuation condition, the traffic flow would reach over 2000 vph. By 2030, evacuating volumes could be as high as 3000 vph.

II.C. Treatments / Strategies:

Portal Facility #2 - County 56/County 7 Corridor
 From Beachway Avenue to State Route 36



PORTAL ROUTE TREATMENT TABLE - COUNTY ROUTE 56/CHURCH STREET/MAIN STREET

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including RoW, SWM)	Lead Organization	Comment
Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$1,400	County/MCOEM	
Capacity	Corridor Wide	Physical	NA	Install Coastal Evacuation Route Signing at Critical Intersections	Short	\$2,000	County/MCOEM	
Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	
Capacity	Corridor Wide	Operational	NA	Coordinate Existing Highway Advisory System	Short	\$0	State/County OEM	
Flooding	Corridor Wide	System Management	NA	Plan to focus on Intense Inundation Areas	During Evacuation	\$0	MCOEM	
Capacity	Carr Ave	Operational	❶	Close Circuit Street	During Evacuation	\$1,000	Municipality	Daily
Capacity	Carr Ave	Physical	❷	Re-stripe	Short	\$27,000	County	
Capacity	Church St., Rt. 36, Pt. Monmouth Rd.	Technological	❸	LED and Backup Power for Signals	Intermediate	\$21,000	State/County	Location
Capacity	Church St., Rt. 36, Pt. Monmouth Rd.	Technological	❸	Upgrade signals for wireless control	Intermediate	\$69,000	State/County	Location
Capacity	Church St.	Operational	❹	Use parking lane as a through street - Police	During Evacuation	\$500	Municipality	Daily
Capacity	Main St./Henry Hudson Bike Trail	Operational	❺	Control Crossing Using Police	During Evacuation	\$500	Municipality	Daily
Capacity	Main St./SR 36	Physical	❻	Widen to create full shoulder	Intermediate	\$300,000	State	
Capacity	Main St./SR 36	Operational	❻	Control Crossing Using Police	During Evacuation	\$500	Municipality	Daily

II.C.1. Corridor Wide.

a) Flooding

Physical:

- Modify the Coastal Evacuation Route sign assemblies by adding a “No Parking - During Evacuation” placard throughout corridor. Sign modification actions must go through a legislative process. (Short Range) [\$1,400]
- Install Coastal Evacuation route signs at critical intersections and at a maximum spacing of 2000 feet. (Short Range) [\$2,000]

Operational (During Evacuations)

- Strictly enforce parking restriction regulations (towing if necessary) to maintain southbound curb lane for travel. [\$2000 per day]
- Promote coordination of existing Union Beach HAR system (Station 1610 AM) to provide consistent information for this corridor. (Short Range) [No Cost]

System-Management

- Plan to initiate evacuation orders well in advance of the emergency event in order to provide an extended temporal distribution that would spread the travel demand over a period of time substantially longer than the analysis study period of six hours. (Short Range) [No Cost]

II.C.2. Carr Avenue/Washington Street/Circuit Street Intersection ❶

a) Capacity

Operational (During Evacuations)

- Circuit Street intersects Carr Avenue at an acute angle. Under this condition, observation of opposing traffic is impacted as drivers must turn their heads to acquire an adequate line of sight down an acute-angle approach. This makes identifying adequate gaps to enter the Carr Avenue traffic stream more difficult and potentially results in disruptions to traffic flow and increased travel time. To mitigate, close Circuit Street southbound between Garfield Avenue and Carr Avenue. Use Myrtle Avenue as alternate route to Carr Avenue. [\$1,000 per day]

Physical

- Re-stripe Carr Avenue to provide 22 foot-wide SB travel way along its approximately one mile alignment. (Short Range) [\$27,000]

II.C.3. Intersections of Main St. at Church St., Port Monmouth Rd., and SR 36 ③

- a) Capacity

Technological

- Circuit Street intersects Carr Avenue at an acute angle. Under this condition, observation of opposing traffic is impacted as drivers must turn their heads to acquire an adequate line of sight down an acute-angle approach. This makes identifying adequate gaps to enter the Carr Avenue traffic stream more difficult and potentially results in disruptions to traffic flow and increased travel time. To mitigate, close Circuit Street southbound between Garfield Avenue and Carr Avenue. Use Myrtle Avenue as alternate route to Carr Avenue.

There are three signalized intersections within the corridor, including Main Street's crossings at Church Street (CR 7) at Port Monmouth Road (CR 7) and at SR 36. At these locations:

- Provide LED and battery back-up for existing signals. (Intermediate Range)[\$21,000]
- Install a wireless "real time" traffic control system (i.e. an Adaptable Traffic Control System (ATCS)) that can respond to changes in traffic patterns in real time to maximize throughput, reduce delay and shorten queues. This type of system can be activated in rapid reaction to an emergency, such as during a hurricane evacuation, at the user's discretion. (Intermediate Range) [\$69,000]

Since the roads forming these intersections would all carry evacuation traffic, the signal system would be programmed to balance operations between southbound traffic already on the portal and cross street traffic entering or crossing the portal.

II.C.4. Church Street and Main Street ④

- a) Capacity

Operational (During Evacuations)

- Use parking lane to maintain two eastbound travel lanes along Church Street and two southbound travel lanes along Main Street. Use police resources for traffic control. [\$500 per pay]

II.C.5. Main Street/Henry Hudson Bike Trail ⑤

- a) Capacity

Operational (During Evacuations)

- Deploy police for traffic control where the Henry Hudson Bike Trail crosses Main Street between Hancock St. and Wood St. [\$500 per day]

II.C.6. Main Street between Lorraine Avenue and SR 36 ⑥

- a) Capacity

Physical

- Widen Main Street between SR 36 and Lorraine Avenue to install a full shoulder in the southbound direction. The shoulder would be used as an exclusive right-turn lane onto the state highway during an evacuation event. Right-turn maneuvers would also be permitted from the outside lane. (Intermediate) [\$300,000]



Photo 3 - Palmer Avenue/SR 36 Intersection: Widen southbound approach to provide a full shoulder.

Operational (During Evacuations)

- Deploy police for traffic control where the Henry Hudson Bike Trail crosses Main Street between Hancock St. and Wood St. [\$500 per day]

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III.State Route 36 (North Corridor)

Portal Facility #3 - State 36 (Bayshore) Corridor
From Ocean Avenue to State Route 35



Figure III-1, SR 36 (North)

III.A. Existing Conditions

III.A.1.Physical and Operating Characteristics

The SR 36 parallels the County’s northern coastline and generally runs between 1 and 1.5 miles from the waterfront between Highlands and Keyport. The state road is classified as an Urban Principal Arterial and extends a distance of about 12 miles between the Shrewsbury River and SR 35 . The artery forms key connections at its termini within the project area. At the eastern end, SR 36 provides a crossing over the Shrewsbury River, connecting the Communities of Sea Bright and Monmouth Beach and Sandy Hook Park on the peninsula to the mainland.



Photo III-1, SR36 WB, Vicinity of Union Beach

The Route 36 Highlands Bridge over the Shrewsbury River is currently undergoing reconstruction as the existing bascule bridge is being replaced by a fixed span (See Section IV.E.2.) At the western end, SR 36 connects

into SR 35 and the GSP, two important state roads that maintain continuous alignments between the southern and northern borders of the project area.

In this northern section, the roadway's two-travel lanes and full shoulder provided in each direction are generally separated by a concrete median barrier. The median itself is 8 feet in width (total). SR 36 operates through residential and mixed use areas and provides critical access for coastal and riverfront community populations to escape storm surge and flooding impacts associated with hurricane events. Travel flow along the corridor is generally metered at the several signalized intersections that are located in Atlantic Highlands and Middletown Township.

Westbound traffic volumes through the SR 36 corridor typically range within a narrow band of approximately 850-1100 vph during the PM peak hour. There is one roadway segment in Atlantic Highlands, delimited by Valley Drive (CR 8A) and CR 516, where the vph along SR 36 reaches 2100. A substantial portion of this volume is generated by the U.S. Naval Station which is located at the intersection of CR 516 and Railroad Road. Much of the westbound SR 36 traffic exits the corridor at CR 516 which provides direct access into the naval facility.

Along the highway's mainline sections, traffic flows generally at an acceptable LOS D or better condition. However, travel conditions deteriorate along the approaches at a number of intersections including 1st Avenue in Atlantic Highlands, Palmer Avenue in Keansburg, Union Avenue in Union Beach, and Broad Street in Keyport. Congestion is also significant at the GSP/on-ramp junction where SR 36 terminates.

III.A.2. Proposed TIP Improvements

The existing double-leaf bascule structure is currently being replaced with a 65-foot high, fixed span on a shifted alignment. The new bridge will provide for two travel lanes a full shoulder, and a pedestrian sidewalk in each direction separated by a raised concrete center median. Additional improvements will include new approach ramps on the eastern side (Ramps J, K and L), a new fender system, and new pedestrian bridges over SR 36 and Ocean Avenue. On the western side, reconfiguration of egress and acceleration from Bay and Highlands Avenues will be provided, as well as new toll booths for the Nation Park Service with new transitions to the toll plaza, and realignment of Ocean Avenue Nation Park toll facility including new turn-arounds.

III.A.3. Alternative Routes

Two portal route candidates will provide evacuation options to SR 36 for area residents including the alignment composed of CR 516 and SR 35. CR 516 diverges from SR 36 in Atlantic Highlands and connects into SR 35 in Middletown Township, offering motorists a viable alternate to access either the GSP or points further north and west. In addition, a portal candidate, Kings Highway East/SR 35 portal, will provide another exit opportunity from SR 36 in Highlands at Navesink Avenue which links SR 36 to Kings Highway.

Alternative Route signs could be posted on SR 36 upstream from the SR 36/CR 516 diverge to alert drivers that CR 516 could be to bypass congestion on SR 36 westbound resulting from high volume or incidents.

III.A.4. Entry Points

Access onto the SR 36 corridor is provided by the numerous local streets that cross the highway from either the northbound or southbound direction.

III.A.5. Exit Points

Users of SR 36 can connect into either the GSP or SR 35 to access destination points beyond the project area.

III.A.6. Key Data Deficiencies/Omissions

Signal Timing Plans

III.A.7. Priority Location

Initial priority locations include all signalized intersections within the corridor and the interchanges formed by the SR 36/SR 35 and SR 36/NJ GSP connections.

III.B. Evacuation Condition

III.B.1. Physical and Operating Characteristics

SR 36 is the major existing evacuation route serving the County's north coastal Communities. The state highway overlaps several local arteries including Navesink Avenue (in Highlands), Memorial Parkway (in

Atlantic Highlands, Middletown), Leonard La (in Keansburg), and Stone Road (in Union Beach, Hazlet, Keyport). It links Sandy Hook Park, Sea Bright, Monmouth Beach, and mainline Raritan Bay waterfront Towns to the NJ Garden State Parkway, State Route 35, and higher ground outside the flood zone. The major transportation facility on the portal is the Route 36 Highlands Bridge over Shrewsbury River which is currently undergoing reconstruction.

The westbound through cross-section along this state route varies between two and three travel lanes. Roadway operations are affected by numerous signalized intersections, the situation being exacerbated during the recreational season when travel demand through the corridor is heavy throughout the day. The roadway is also affected by poor drainage at certain locations as most sections of SR36 lie within the flood inundation zone outside of Highlands.

There is a Red Cross Shelter located on SR 36 in Keyport. There are also several historic resources situated within or near the portal's alignment.

Traffic operations along the portal would quickly deteriorate under either a 2007 or 2030 evacuation condition. In Middletown, 2007 westbound traffic flows would exceed 5500 vph (the roadway's approximate hourly capacity) and then increase to almost 9000 vph generating breakdown conditions throughout the corridor. The 2030 travel demand would be more intense, exceeding 15,000 vph. Under either condition, the roadway would be impassable in the westbound direction.

III.C. Treatments / Strategies:

III.C.1. Corridor Wide.

a) Capacity

Physical

- Where feasible, widen westbound roadway to provide an available hard-running shoulder in the westbound direction. Relocate aerial utilities, sidewalks, and mounted signs situated along the north side of SR 36 as required prior to reconstruction activities. Comply with all environmental and historic preservation Federal, State, and local regulations. (Long Range) [\$30M]
- Modify the Coastal Evacuation Route sign assemblies by adding a "No Parking - During Evacuation" placards. Sign modification actions action must go through legislative process. (Short Range) [\$10,400]

Portal Facility #3 - State 36 (Bayshore) Corridor
 From Ocean Avenue to State Route 35



PORTAL ROUTE TREATMENT TABLE – STATE ROUTE 36 (NORTH CORRIDOR)

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including RoW)	Lead Organization	Comment
Capacity	Corridor Wide	Physical	NA	Widen WB roadway to create a full shoulder	Long	\$30,000,000	State	
Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$10,400	County with State Approval	
Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	Daily
Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuation	\$5,000	Municipality	Daily
Capacity	Corridor Wide	Technological	NA	LED and Backup Power for Signals	Intermediate	\$154,000	State	
Capacity	Corridor Wide	Technological	NA	Upgrade signals for wireless control	Intermediate	\$506,000	State	
Capacity	Corridor Wide	Operational	NA	Coordinate Existing Highway Advisory System	Short	\$0	Municipalities with MCOEM	
Capacity	Corridor Wide	System Management	NA	Plan to focus on Intense Inundation Areas	Short	\$0	MCOEM	
Capacity	Highlands/Sea Bright	Physical	❶	New Bridge	Under Construction	\$0	State	
Capacity	CR8A	Physical	❷	Install Dynamic Message Sign	Intermediate	\$30,000	State	
Capacity	CR 8A	Physical	❸	Reconfigure Intersection	Long	\$170,000	State/County	
Capacity	Normandy Road Underpass	Physical	❹	Create one-lane bypass under bridge	Intermediate	\$600,000	State	
Capacity	Broad Street	Physical	❺	Widen at Intersection	Intermediate	\$4,000,000	State/County	
Flooding	Lupatatong Creek	Physical	❻	Elevate Roadway, Improve Drainage	Long	\$6,500,000	State/County	
Flooding	Many Mind / Wagner Creek	Physical	❼	Elevate Roadway, Improve Drainage	Intermediate	\$6,500,000	State	

Operational (During Evacuation)

- Strictly enforce No Parking restriction (towing if necessary) to maintain an unobstructed curb lane for travel. [\$2,000/day]
- Initiate a program of Emergency Service Patrols to provide quick response for clearing accidents and breakdowns. [\$5,000/day]
- Coordinate HAR broadcasts among Towns operating local radio stations, including 1630 AM (Sea Bright), 1620 AM (Middletown), 1610 AM (Union Beach), and 1630 AM (Rumson), to transmit emergency information that is consistent throughout the corridor. [No Cost]

Technological

There are 22 signalized intersections along the SR 36 Portal including SR 36's crossing at Miller St., Linden Ave., Navesink Ave., Allyson La., Grand Ave., Sears Ave., 1st Ave., Leonardville Rd., Ave. D, East Rd., Main St. (MP 18.01), Wilson Ave., Main St. (MP 18.91, Thompson Ave., Laurel Ave., Rose Lane, Sea gate Ave., Stone Rd., Poole Ave., Middle Ave., Atlantic St., and Broad St. At these locations

- Provide LED and battery back-up for existing signals. (Intermediate Range)[\$154,000]
- Install a wireless “real time” traffic control system (i.e. an Adaptable Traffic Control System (ATCS) that can respond to changes in traffic patterns in real time to maximize throughput, reduce delay and shorten queues. This type of system can be activated in rapid reaction to an emergency, such as during a hurricane evacuation, at the user's discretion. Almost all of them are located within the flood zone. Program the system to balance operations by allocating green time fairly between westbound traffic already on the portal and cross street traffic entering the portal. (Intermediate Range)[\$506,000]
- Coordinate HAR broadcasts among Towns operating local radio stations, including 1630 AM (Sea Bright), 1620 AM (Middletown), 1610 AM (Union Beach), and 1630 AM (Rumson), to transmit emergency information that is consistent throughout the corridor.

System-Management

- Plan to initiate evacuation orders well in advance of the emergency event in order to spread the travel demand over a period of time substantially longer than the analysis study period of six hours. The employment of multi-modal strategies involving a variety of transit and



Photo 5 - Areas such as Sea Bright will depend heavily on early notice.

high occupancy vehicle initiatives would also substantially reduce the temporary demand on the roadway system during an evacuation. (Short Range)[no cost]

III.D. SR 36 Highlands Bridge over Shrewsbury River ①

III.D.1. Capacity

Physical

- This former bascule bridge is currently being reconstructed as a fixed span with a wider roadbed that will maintain two travel lanes and a full shoulder in both directions. The new structure will provide the area's population with a more efficient and more reliable crossing. Delays associated with bridge openings to accommodate marine traffic will be eliminated. This project is on the NJTPA's Project Development work Program and is expected to be completed by 2010. (Under construction) [No Cost]

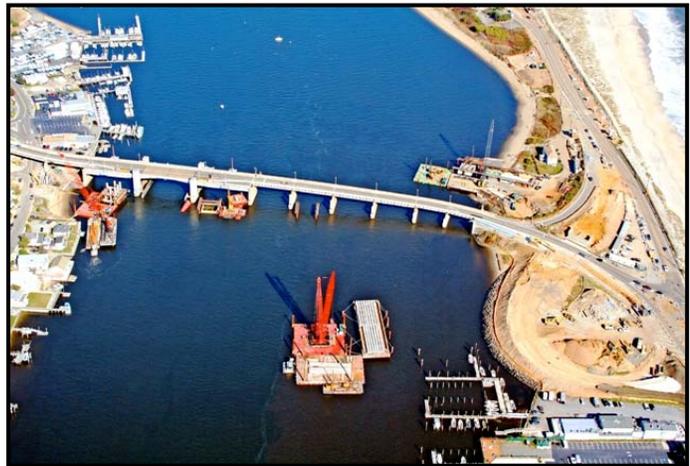


Photo 6 - Highlands Bridge under construction

Delays associated with bridge openings to accommodate marine traffic will be eliminated. This project is on the NJTPA's Project Development work Program and is expected to be completed by 2010. (Under construction) [No Cost]

III.E. Dynamic Message Signs (DMS) ②

III.E.1. Capacity

Technological

- Install permanent DMS upstream from SR 36 connections with CR 8A and CR 516 . Provide evacuees with information concerning travel conditions on the state highway. Also provide evacuees with guidance to use alternate routes away from the flood zone and onto higher ground in the event that an incident or severe congestion seriously degrades traffic operations along SR 36 (Intermediate Range) [\$30,000]

III.F. SR 36/CR 8A Intersection ③

III.F.1. Capacity

Physical

- Reconfigure intersection. Remove signal at Valley Drive/SR 36 intersection. Close Valley Drive between SR 36 and Sears Avenue. Direct CR 8A northbound traffic to SR 36/Sears Avenue signalized intersection. Provide for two left-turn bays along Sears Avenue westbound approach. (Long Range) [Signal removal - \$7,000; Widen Sears Ave. - \$170,000]

III.G. Normandy Road Overpass ⑥

III.G.1. Capacity

Physical

- Create a short one-lane by-pass under the overpass, utilizing the existing recreational bicycle facility that crosses under Normandy Road and that runs adjacent to the SR 36 roadway. This allows a short thru-lane around the traffic signals at that location (Intermediate Range) [\$600,000]

III.H. SR 36/Broad Street Intersection ⑦

III.H.1. Capacity

Physical

- Previous Studies have demonstrated the need to improve this intersection, which experiences delays in all directions even during the off-season condition. Additional turning lanes should be added to the cross street to permit the allocation of more green time to the mainline. (Intermediate Range) [\$3M]

III.I. Lupatong Creek Crossing at SR 36 ④

III.I.1. Flooding

Physical

- Undertake major capital investment project to elevate roadway at Lupatong Creek crossing under SR 35 Bridge. Raise SR 35 structure over SR 36. Place on NJTPA Project Index. (Long Range)[\$6.5M]

III.J. Many Mind Creek/Wagner Creek ⑤

III.J.1. Flooding

Physical

- Drainage Improvements SR 36 Section at MP 15.50 and at MP16.20 - This is a proposed project under the NJTPA “FY2009 Project Development Work Program”. This Project would implement drainage improvements at the two creek crossings to alleviate flooding across the SR 36 roadway. The Many Mind Creek crossing is located at Leonardville Road; the Wagner Creek crossing is located between Chamone Avenue and Leonard Avenue. Flooding generally occurs during heavy rains that coincide with a high tide, a condition that typically occurs at least four times a year. Coordinate all portal capacity improvements with these drainage projects. (Long Range) [\$6.5M]

IV. County Route 516/County Route 50

Portal Facility #4 - County 516/County 50 Corridor
From State Route 36 to State Route 35



IV.A. Existing Conditions

IV.A.1. Physical and Operating Characteristics

This portal route consists of the alignments of two county roads including CR 516 and CR 50. Both county roads are classified as Urban Minor Arterials. The portion of CR 516 that is under investigation as a portal route is about three miles long and runs along an east-west alignment between SR 36, its eastern terminus, and its connections with CR 50 to the west. The CR 50 alignment runs south between CR 516 and SR 35, a roadway section approximately 1.25 miles in length. This corridor provides the area with an alternate east-west route to SR 36 and a connection to the area's other state highway, SR 35. The portal route traverses low density residential zones along its entire length maintaining two travel lanes as the prevailing condition.

IV.A.2. Proposed TIP Improvements

No Corresponding TIP improvements were found.

IV.A.3. Alternative Routes

The CR 516/CR 50 portal route runs along a northeast to southwest alignment and connects the area's two state highways, SR 36 and SR 35 which are both on the State's evacuation roadway system for Monmouth County. The SR 36 runs along the north coast while SR 35 passes near the headwaters of the Shrewsbury River and crosses the Navesink River via the Cooper's Bridge.

Both state roads collect traffic from numerous county roads serving the Bayshore Region.

IV.A.4. Entry Points

Within the hazard zone, key roads entering CR 516 from east to west include SR 36 in Atlantic Highlands, and Normandy Road and Main Street in Middletown.

IV.A.5. Exit Points

SR 35 is the most direct route to escape the hazard zone.

IV.A.6. Key Data Deficiencies/Omissions

Signal Plans and Turning Movement Counts at SR 35/CR 516 intersection

IV.A.7. Priority Location

The Initial Priority Locations coincide with signalized intersections along the portal route and include;

- Rumson Road (CR 516/East Road,
- CR 516 /Cherry Tree Farm Road, and
- CR 516/SR 35.

IV.B. Evacuation Condition

IV.B.1. Physical and Operating Characteristics

This portal route consists of portions of two county roads, CR 516 (Leonardville Road) and CR 50 (Monmouth Road), and maintains one travel lane in each direction along its four and one-quarter mile alignment. CR 516 intersects SR 36 in Atlantic Highlands at its eastern terminus and roughly parallels the state road, providing a bypass opportunity around locations of congestion and incidents along the state road. A jug-handle is provided to facilitate the movement across SR 36 to access CR 516 from the state highway. The continuation of CR 516 into CR 50, which intersects another evacuation route, SR 35, provides the North Coast Communities with an alternate escape portal to SR 36. CR 516's connections with SR 36 and with CR 50 are situated within the inundation

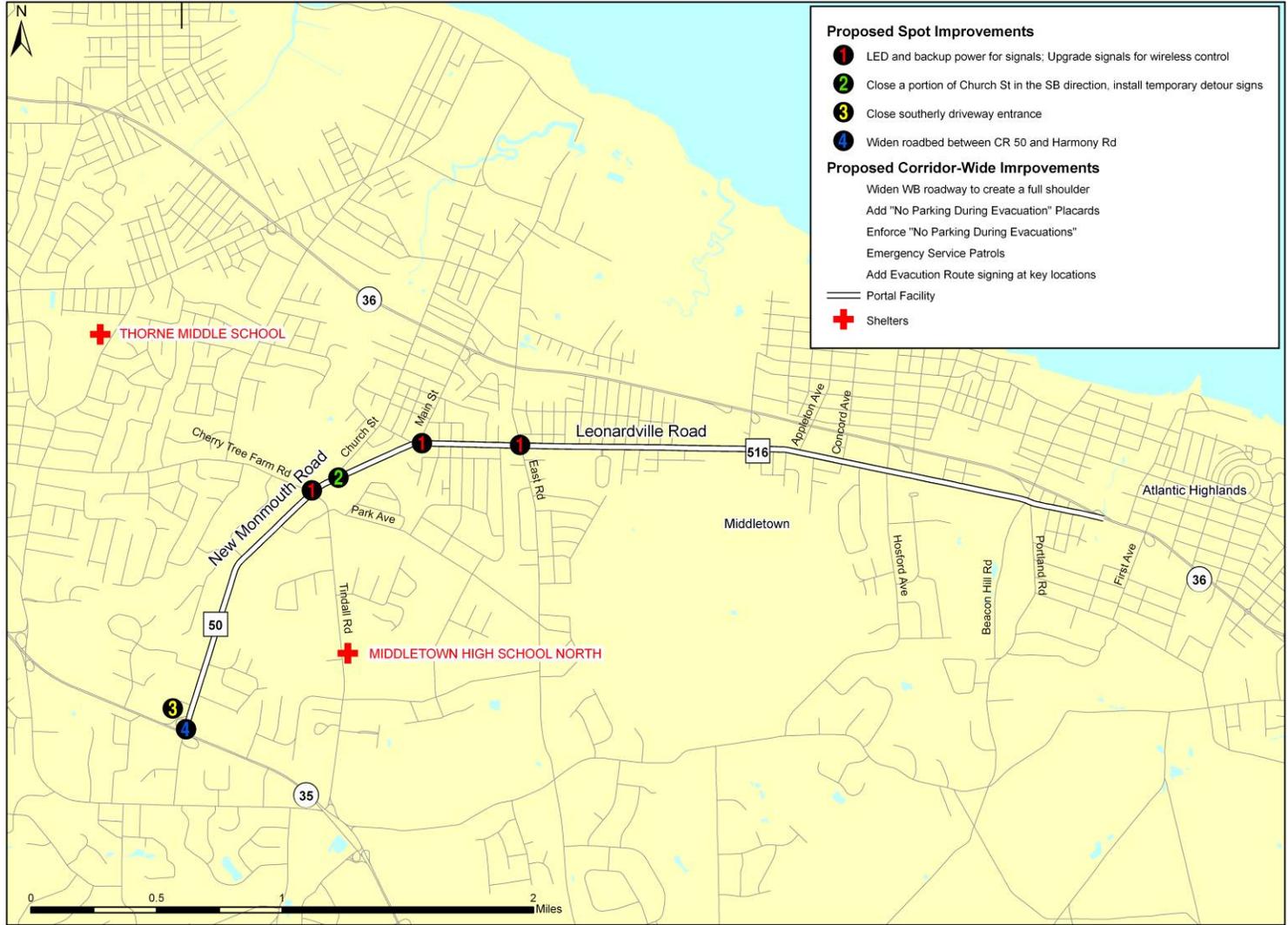
zone. This portal is covered by the Middletown HAR system, which uses Station 1620 AM to broadcast live information.

There are eight historic features scattered along portal which could affect strategies to expand capacity through the portal. There is also an Emergency Shelter located along Tindal Road about .75 miles from the CR 50/SR 35 intersection.

Under a 2007 evacuation condition, travel demand would not exceed the portal's capacity with maximum vph not exceeding 1100. During a 2030 evacuation event, travel demand along CR 516 would reach about 1400 vph near CR 50 and continue to increase along CR 50 to about 1600 vph at SR 35.

IV.C. Treatments / Strategies:

Portal Facility #4 - County 516/County 50 Corridor
 From State Route 36 to State Route 35



PORTAL ROUTE TREATMENT TABLE - COUNTY ROUTE 516

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including RoW, SwM)	Lead Organization	Comment
Capacity	Corridor Wide	Physical	NA	Widen WB roadway to create a full shoulder	Long	\$6,000,000	County	Not including Harmony Road (below)
Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$2,100	County	
Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	Daily
Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuation	\$5,000	Municipality	Daily
Capacity	Corridor Wide	Physical	NA	Add Evacuation Route signing at key locations	Short	\$1,600	County	
Capacity	East Road, Main Street, Cherry Tree Farm Road	Technological	❶	LED and Backup Power for Signals	Intermediate	\$28,000	County	
Capacity	East Road, Main Street, Cherry Tree Farm Road	Technological	❶	Upgrade signals for wireless control	Intermediate	\$92,000	County	
Capacity	Church Street	Operational	❷	Close a portion of Church Street in the SB Direction, Install temporary detour signs	During Evacuation	\$2,000	Municipality	
Capacity	SR 35 / CR 50	Physical	❸	Widen roadbed between CR 50 and Harmony Road	Long	\$1,500,000	State/County	
Capacity	Parking Lot, SR 36	Operational	❹	Close southerly driveway entrance	During Evacuation	\$500	Municipality	

IV.C.1. Corridor Wide Improvements

a) Capacity

Physical

- Where feasible, widen roadbed to provide a full (12 feet) hard-running shoulder in the westbound direction to permit temporary use during an evacuation event. This would require relocation of aerial utilities, sidewalks, and mounted signs along the north side of the CR 516 and west side of CR 50 prior to reconstruction. Comply with all Federal and State and Local environmental and historic preservation regulations, such as the NJ Register of Historic Places Act, the Land Use Regulation Program, and the Federal and State DEP regulations. (Long Range)[\$6M]



Photo 7 - Widen shoulder for evacuation use.

- Modify the Coastal Evacuation Route sign assemblies by adding “No Parking - During Evacuation” placards. Sign modification actions must go through legislative process. (Short Range)[\$2,100] Then, as an operational measure, enforce “No Parking restriction. (During Evacuation) [\$2,000/day]
- Add Coastal Evacuation route signs at key intersections including the following;
 - Place two evacuation route signs on the southbound approach of the SR 36/CR 516 On-ramp. The placement of the evacuation signs at this location would indicate that either SR 36 or CR 516 could be used as an escape route. They could be mounted on or next to a guide sign cluster that exists at the northwest corner of the intersection.[\$800]
 - Place evacuation route sign on CR 50 on the southwest corner of the CR 516/CR 50 intersection. Also, move existing evacuation route placard on CR 516 closer to the same intersection. These sign locations would indicate that either corridor could be used to continue the evacuation journey.[\$400]

- Place evacuation route sign on the southwest approach of Main Street at the CR 516/Main Street intersection. The evacuation route sign would direct evacuees onto CR 516 portal. (Short Range) [\$400]

Operational (During Evacuations)

- Initiate a program of Emergency Service Patrols to provide quick response for clearing incidents. Short Range [\$5,000/day]

IV.C.2. Intersections at East Rd., Main St., Cherry Tree Farm Rd., and SR 35 ❶

- a) Capacity

Technological

- Provide LED and battery back-up for existing signals. (Intermediate Range)[\$28,000]
- Install a wireless “real time” traffic control system (i.e. an Adaptable Traffic Control System (ATCS)) that can respond to changes in traffic patterns in real time to maximize throughput, reduce delay and shorten queues. This type of system can be activated in rapid reaction to an emergency, such as during a hurricane evacuation. During evacuation, the system could allocate green time fairly to intersection approaches near the flood zone, and could favor main line exiting traffic in safer inland areas. (Intermediate Range) [\$92,000]

IV.C.3. CR 50/Church Street Intersection ❷

- a) Capacity

Operational (During Evacuation)

Church Street intersects CR 50 at an acute angle. Under this condition, observation of opposing traffic impacted as drivers must turn their heads to acquire an adequate line of sight down an acute angle approach. This condition makes identifying adequate gaps to enter the traffic stream more difficult and potentially results in disruptions to traffic flow and increased travel time. To mitigate, close Church Street southbound between Drift Road and



Photo 8 – Church Street Intersection – Control Southbound Moves During Evacuations

CR 50 to prevent traffic from entering CR 50 by diverting traffic to Drift Road where its connection with CR 50 is signalized. Install temporary detour signs along Apple Valley Drive, Church Street, Woodbine Street, and Maple Drive. (During Evacuations). [\$2,000 per event]

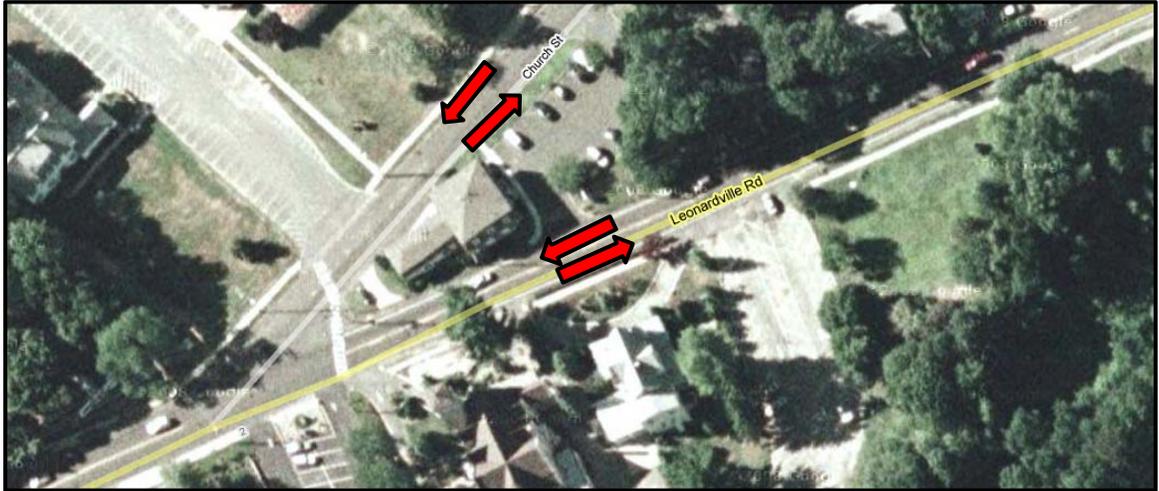


Figure IV-1 – Potential Conflicts at Church Street During Evacuations

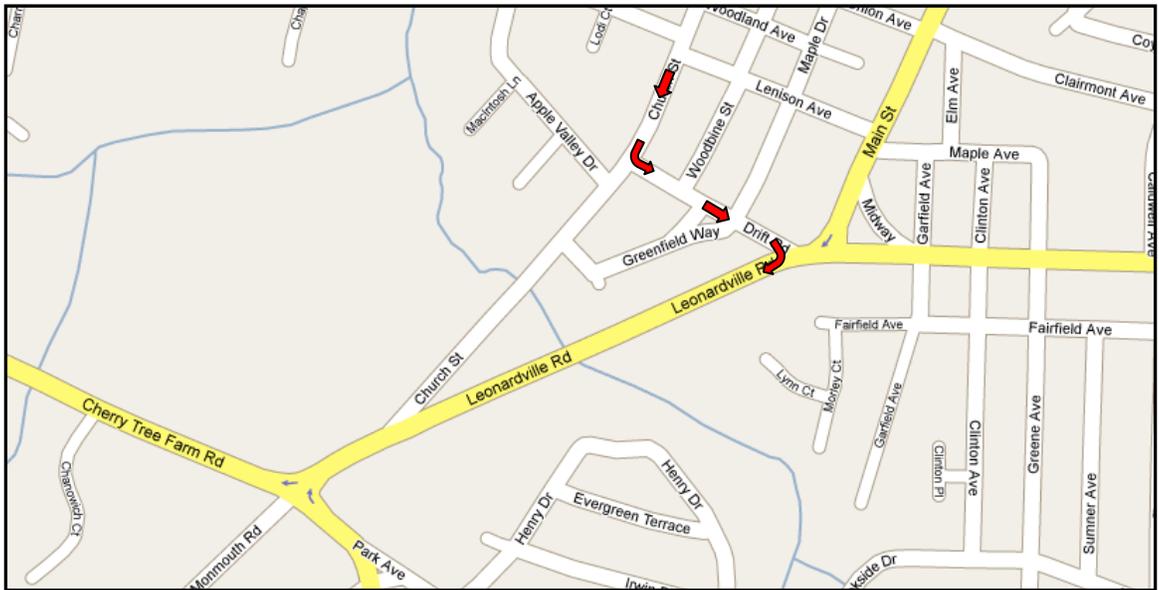


Figure IV-2 - Treatment at Church Street During Evacuations

IV.C.4.SR 35/CR 50 Connection ③, ④

a) Capacity

Physical

- Widen SR 35 roadbed between CR 50 and Harmony Road to provide full hard running shoulder in the westbound direction to permit its use as a temporary travel lane during evacuation events. (Long Range) [\$ 1.5 M]

Operational (During Evacuations)

- Close southerly driveway entrance to parking lot that is adjacent to CR 50 on entrance ramp to SR 36. This will reduce the number of conflicting movements at the intersection and will improve safety as well. A second entrance driveway would still be available for parking lot users about 250 north of the intersection. (\$500 per event)

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V.County Routes 8A/12A/12

Portal Facility #5 - Kings Highway, Holland Road Corridor From State Route 36 to Garden State Parkway



V.A. Existing Conditions

V.A.1. Selection Process for County Routes 8A/12A/12 Portal

County Routes 8A/12A/12 corridor was not one of the original 12 portals selected as a potential candidate to be incorporated into the State’s Emergency Evacuation Route System in Monmouth County. Rather, CR 8A/12A/12 replaced Kings Highway after completing the data collection and assessment phase of the project and processing information obtained from Stakeholder Groups and TAC meetings.

The assessment of the physical features and operating conditions along Kings Highway revealed that significant challenges exist in order to upgrade this artery into a viable portal roadway. The physical challenges are not only difficult and pervasive but are most likely to be expensive to mitigate. Right-of-way and environmental/historic resource constraints would severely impact engineering design options to resolve roadway performance issues. These issues include curved and reverse curved alignments, restricted sight lines, limited pavement width to expand capacity, and the lack of shoulders for emergency use. In addition, occasional flooding is experienced at key crossings including SR 36 and CR 12A.

These challenges were expanded upon during discussions at TAC and Stakeholders Meetings where topics covering the artery’s historic character as a State-designated “Scenic Road”, flooding conditions at SR 35, and limited access for first responders were raised. Stakeholders

suggested assessing the CR 8A/CR 12A corridor as a potential replacement portal for Kings Highway.

Given these factors, the Project Team selected to drop the Kings Highway corridor from further analysis and to replace it with the CR 12/12A/8A corridor, which includes the Oceanic Bridge over the Navesink River. CR12A, which forms the longest section of the portal candidate, roughly parallels the Kings Highway alignment and has the advantage of being on the County road system. The corridor's profile is highlighted below.

V.A.2. Selected Physical and Operating Characteristics

This portal candidate extends between CR 520 at its southern terminus and at the NJ GSP at its western terminus. The portal's corridor is formed by three county roads including from east to west CR 8, CR 12A, and CR 12. The local names of these arteries are Bingham Avenue (CR 8A), Navesink Avenue (CR 12A), and Nut Swamp Road/Dwight Road (CR 12).

The corridor crosses over the NJ GSP at Exit 114 via Red Hill Road. Although the CR 12A portion of the corridor crosses SR 35, no connection is currently available to access this state road. This condition could be considered a location for targeting an improvement to accommodate movements between the two corridors. CR 8A would provide evacuees with a crossing over the Navesink River via the Oceanic Bridge.

The three county-road corridor traverses Rumson and Middletown and typically provides two travel lanes and either partial or no shoulders within a pavement width varying between 30 feet and 40 feet. The functional classification of Urban Collector assigned to CR 8A and 12A changes to Urban Minor Arterial along CR12. The posted travel speed typically ranges between 35 and 45 mph outside of CR 8A, where the speed limit is lowered to 25 mph.

Initial observations would indicate that the signalized intersections at CR 12A/SR 35, CR 12/Red Hill Road, CR 8A/CR 12, and CR 8A/CR10, an at-grade railroad crossing near SR 35, and the Oceanic Bridge should be considered as Initial Priority Locations.

There are a number of historic features concentrated along the CR 12A portion of the portal. The roadway also borders the south side of a number of recreational facilities including the Huber Woods County Park, the Bodman Park, and the Navesink Country Club.

V.A.3. Alternative Routes

This portal route meanders along the north bank of the Navesink River but lies outside the inundation zone. The corridor runs about one mile from and parallel to CR 520, whose alignment is situated on the south side of the Navesink River. Access between the corridors is provided by the Oceanic Bridge.

V.A.4. Entry Points

From the south, the corridor can be accessed within the flood zone via CR 10, CR 34, and CR 520. From the north, the roadway can be entered via CR 8B. The portal can also be accessed from various points using the local street system.

V.A.5. Exit Points

Traffic evacuating the hazard zone could proceed to points northwest using the NJ GSP at Exit 14, or CR 52 to SR 35. Evacuees could also continue traveling north along CR 8A to access either SR 36 or Kings Highway.

V.A.6. Key Data Deficiencies/Omissions

Signal Timing Plans

V.B. Evacuation Condition

V.B.1. Physical and Operating Characteristics

This portal route meanders along the north bank of the Navesink River but lies outside the inundation zone. Located in Middletown, this portal would provide the North Coast Communities with critical supplemental capacity to SR 36 and CR 520, which operate to the north and south of CR 12A. This Middletown corridor currently maintains one westbound travel lane and provides largely uninterrupted flow since few signalized intersections are found along the portal. At its termini, the alignment connects to major transportation facilities including the Oceanic Bridge to the east and the NJ GSP (Exit 114) to the west. This portal is covered by the Rumson HAR and Middletown HAR systems, which operate on Stations 1630 AM and 1620 AM, respectively.

There are a number of historic features concentrated along the CR 12A portion of the portal. The roadway also borders the south side of a number of recreational facilities including the Huber Woods County Park, the Bodman Park, and the Navesink Country Club.

PORTAL ROUTE TREATMENT TABLE - COUNTY ROUTE 8/12A/12

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including RoW, SwM)	Lead Organization	Comment
Capacity	Corridor Wide	Physical	NA	Widen WB roadway to create a full shoulder	Long	\$12,500,000	County	
Capacity	Corridor Wide	Physical	NA	Install Coastal Evacuation Route signing throughout route	Short	\$4,500	County	
Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuation	\$5,000	Municipality	
Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	
Capacity	Corridor Wide	Technological	NA	LED and Backup Power for Signals	Intermediate	\$42,000	County	
Capacity	Corridor Wide	Technological	NA	Upgrade signals for wireless control	Intermediate	\$138,000	County	
Flooding	Corridor Wide	System Management	NA	Plan to focus on Intense Inundation Areas	During Evacuation	\$0	MCOEM	
Capacity	Oceanic Bridge	Physical	❶	Reconstruct Bridge	Long	\$50,000,000	County/State/Federal	
Capacity	NJ GSP Exit 114	Operational	❷	Close connecting ramp between GSP on-and off ramps; reverse GSP southbound Exit Ramp to Red Hill Rd.	During Evacuation	\$8,000	Municipality	Daily
Capacity	NJ GSP Exit 114	System Management	❸	Coordinate GSP ramp reversal activities with NJMCOEM and NJDOT	Short	\$0	MCOEM	

V.C.1. Corridor-Wide

a) Capacity

Physical

- Where feasible, widen roadbed along CR 12A and CR 12 to provide a full (12 feet) hard-running shoulder in the westbound direction to permit temporary shoulder use as a through travel lane during an evacuation event. This improvement would require relocation of any aerial utilities, sidewalks, and mounted signs situated along the north side of the county roads prior to reconstruction activities. After completion of widening work, install Coastal Evacuation Route sign assembly with “No Parking – During Evacuation” placard. Designate the new shoulder as a bicycle lane. Install bicycle pavement markers and signage to alert drivers to the presence of an active bicycle lane. (Long Range)[\$12.5M]



**Photo 9- CR 12A, Typical Roadway Section:
Add one shoulder where feasible.**

- Install Coastal Evacuation route signs at critical intersections and at a maximum spacing of 2000 feet. (Short Range)[\$4,500]

Operational (During Evacuations)

- Initiate a program of Emergency Service Patrols to provide quick response for clearing accidents and breakdowns.). [\$5,000 per event]
- Strictly enforce No Standing restriction (towing if necessary) within shoulder to maintain an unobstructed curb lane. [\$2,000/day]

Technological

The Portal has six signalized intersections, located at Locust Point Rd., SR 35, Navesink River Rd., Normandy Rd., Middletown Lincroft Rd., and Red Hill Rd. At these sites,

- Provide LED and battery back-up for existing signals.(Intermediate Range)[\$42,000]
- Install a wireless “real time” traffic control system (i.e. an Adaptable Traffic Control System (ATCS)) that can respond to changes in traffic

patterns in real time to maximize throughput, reduce delay and shorten queues. This type of system can be activated in rapid reaction to an emergency, such as during a hurricane evacuation, at the user's discretion. Program system to maximize throughput across the portal. There are six signalized intersections along the three county roads. (Intermediate Range)[\$138,000]

System-Management

- Plan to initiate evacuation orders well in advance of the emergency event in order to spread the travel demand over a period of time substantially longer than the analysis study period of six hours. (Short Range)[No Cost]

V.C.2. Oceanic Bridge ❶

- a) Capacity

Physical

- Included in NJTPA's Project Development Work Program, FY 2009 is the Monmouth County Bridge S-31(AKA Bingham Avenue Bridge) over Navesink River. Bridge S-31 carries CR 8A traffic across the Navesink River between Middletown and Rumson and is the area's primary crossing over this body of water. The span is in poor condition with major bridge components deteriorating. Rehabilitation or replacement of the span will be studied. (Long Range)[\$50M]

V.C.3. Garden State Parkway Exit 114 ❷, ❸

- a) Capacity

Operational (During Evacuations)

- Red Hill Road provides access to both the GSP Northbound and Southbound mainlines via a group of ramps, including a ramp connecting Red Hill Road Eastbound to GSP Southbound, Red Hill Road Westbound to GSP Southbound, and GSP Southbound mainline to Red Hill Road in both directions.



When the direction on the GSP Southbound mainline is

**Photo 10 - Red Hill Road NJ GSP Exit 14:
Reverse GSP SB Exit**

reversed under a Statewide evacuation condition, provide access from Red Hill Road to the GSP Southbound mainline operating as a northbound facility by implementing the following actions:

- Close Red Hill Road Westbound to GSP Southbound ramp.
- Close Red Hill Road Eastbound to GSP Southbound ramp.
- Close connecting ramp between GSP on- and off-ramps.
- Reverse GSP Southbound exit ramp to Red Hill Road. [\$8,000 per event]

System Management

- Ensure future coordination for the Garden State Parkway Exit Ramp operations with NJOEM and NJDOT when the State Agencies reverse the direction of the GSP southbound travel lanes. (Short Range) [No Cost].

VI. County Route 520

Portal Facility #6 County 520 Corridor
From Ocean Avenue to State Route 35



Figure VI-1, CR 520

VI.A. Existing Conditions

VI.A.1. Physical and Operating Characteristics

CR 520 is classified as an Urban Minor Arterial with a posted speed limit ranging between 30 and 45 mph. Running along a northeast to southeast alignment in the westbound direction, this portal route is continuous (no turns off the alignment) between the Atlantic Ocean and Branch Avenue. At Branch Avenue, the CR 520 alignment changes direction four times within a distance that is less than one mile, as the county road coincides with sections of four different streets. These streets form four intersections which must be crossed before reaching the NJ GSP via Newman Springs Road. The intersections include;



Photo VI-1, CR 520 as Branch Ave, Rumson

- Rumson Road (CR 520)/Branch Avenue,
- Branch Avenue /Pinckney Road,
- Pinckney Road /Broad Street, and
- Newman Springs Road (CR 520)/SR 35.

The two-way artery maintains two travel lanes between Ocean Avenue and Shrewsbury Avenue (about .6 mile west of SR 35) where it widens between 4 and 5 travel lanes and then narrows back to two travel lanes after passing under the NJ GSP.

During evening peaks, westbound traffic volume varies between 350 and 800 vph within the Rumson and Little Silver areas to the east and between 500 and 900 within the Red Bank and Tinton Falls areas to the west. Congestion is experienced along the Broad Street portion of the corridor, particularly along the approaches to Maple Avenue and Newman Springs Road. CR 520 traffic destined for the GSP northbound is also adversely affected as on-ramp traffic merges into a recurring highly congested condition on the GSP mainline. Travel delays experienced along the portal's remaining sections are acceptable (estimated LOS C or better).

VI.A.2. Proposed TIP Improvements

SR 35 Shrewsbury Borough Intersection Improvements: NJDOT is working with Shrewsbury Borough to achieve the common goal of reducing or slowing traffic as well as improving safety along this commuter corridor. Funding is allocated to project DB numbers 98539A, B and C. Route 520 intersects with SR35 in Shrewsbury, and therefore this project should consider improvements to maintain movement at intersections with CR 520.

VI.A.3. Alternative Routes

Comparable roads that are parallel and in close proximity to CR 520 and that also lead away from the hazard zone include CR 34 and CR 10, both located south of the Navesink River. These parallel roads are situated within 1.25 miles of the CR 520 corridor and terminate on the mainland, excluding access from the peninsula. However, as with CR 520, both alternative routes lead to CR 35 which is currently part of the State Evacuation Route System for Monmouth County.

VI.A.4. Entry Points

Within the hazard zone, key roads entering SR 36 include Ocean Avenue, Florence Avenue, and Branchport Avenue. In addition, the portal route can be accessed via a number of local cross streets in Long Branch.

VI.A.5. Exit Points

Upon leaving the hazard zone, evacuating traffic could access the NJ GSP by remaining on SR 36 or could leave the portal route at the SR 35 or SR 18 junctions to reach safe locations.

VI.A.6. Key Data Deficiencies/Omissions

Traffic Signal Plans

VI.A.7. Initial Priority Location

As noted above, congestion is experienced along the Broad Street portion of the corridor.

Full shoulders are not available within this corridor. Posted travel speeds range between 30 and 45 miles per hour (mph). Pavement markings are currently in good conditions along its entire length.

There are several Initial Priority Locations within the County Route 520 corridor. From east to west, they are identified as follows:

- ✦ Rumson Bridge/Ocean Avenue Intersection
- ✦ Rumson Road/Seven Bridges Road Intersection
- ✦ Rumson Road/Prospect Avenue Intersection
- ✦ Rumson Road/Branch Avenue T-Intersection
- ✦ Branch Avenue/Pinckney Road T-Intersection
- ✦ Pinckney Road/Broad Street T-Intersection
- ✦ Broad Street/Maple Avenue Intersection
- ✦ RR crossing on SR 35 between Maple Avenue and Newman Spring Road
- ✦ Newman Spring Road/SR 35 Intersection
- ✦ Newman Spring Road/Shrewsbury Avenue
- ✦ Newman Spring Road/Springdale Avenue
- ✦ Bridge west of Hance Avenue over Navesink Avenue
- ✦ Newman Spring Road/Hance Avenue
- ✦ Newman Spring Road/Half Mile Road
- ✦ Garden State Parkway ramps.
- ✦ In addition, the CR 520 Bridge over the Shrewsbury River has been rated poor due to superstructure and scour-critical issues in its biennial bridge inspection report. This structure is currently in the Scoping Phase as part of NJTPA's Local Scoping Program

VI.A.8. Flooding

Route 520 is located along the spine of a Peninsula, and its relatively high elevation allows it to avoid occasional flooding.

VI.B. Evacuation Condition

VI.B.1. Physical and Operating Characteristics

CR 520 provides a vital evacuation route for a number of Communities that are particularly vulnerable because they are almost surrounded by water. These communities include Sea Bright, Highlands Monmouth Beach, Rumson, Little Silver, and Fair Haven. The corridor typically maintains one westbound travel lane and contains Sea Bright Rumson Bridge, which provides one of the few crossings over the Shrewsbury River.

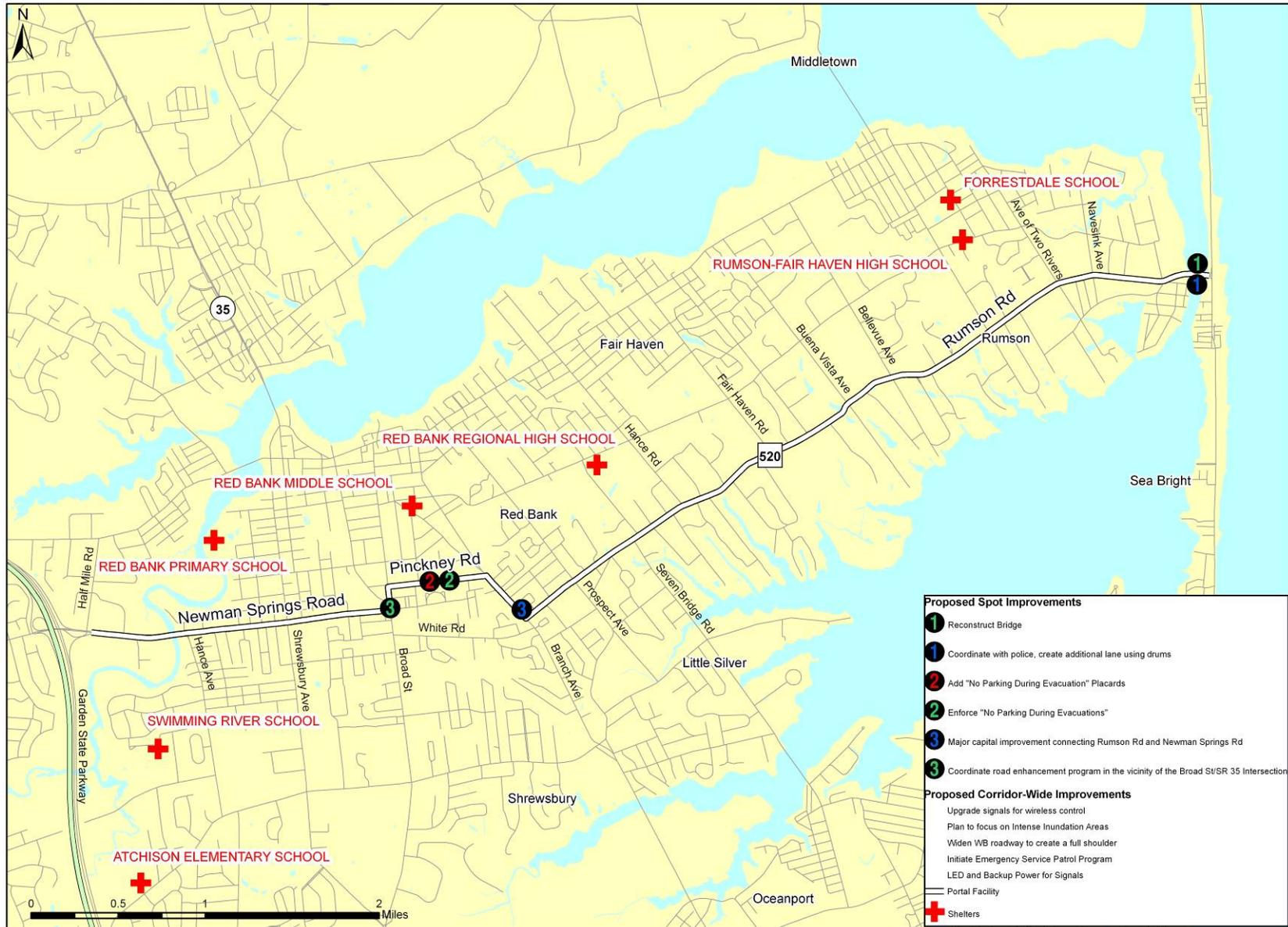
This portal is covered by the Rumson HAR and Middletown HAR systems, which operate on Stations 1630 AM and 1620 AM, respectively.

The portal coincides with several local streets including, from east to west, Rumson Road, Branch Avenue, Pinckney Road, Broad Street, and Newman Springs Road. There are a number of historic resources along the corridor, which could constrain or modify improvement options. There are also a number of Red Cross Shelters which are situated north of and in close proximity to the portal.

Travel along the roadway currently ranges between 800 and 900 vehicles per hour (vph) during the peak periods. However, under a 2007 hurricane evacuation condition, traffic loads would overwhelm the corridor, reaching in excess of 1400 vph across Fair Haven and increasing to over 3000 vph within the Red Bank and Shrewsbury Borough area. Travel conditions would worsen by 2030 when traffic flow would increase substantially to over 4000 vph under an evacuation order.

Portal Facility #6 County 520 Corridor

From Ocean Avenue to State Route 35



PORTAL ROUTE TREATMENT TABLE - COUNTY ROUTE 520

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including RoW)	Lead Organization	Comment
Capacity	Corridor Wide	Physical	NA	Widen WB roadway to create a full shoulder	Long	\$16,500,000	County	
Capacity	Corridor Wide	Operational	NA	Initiate Emergency Service Patrol Program	During Evacuation	\$4,000	Municipality	Daily
Capacity	Corridor Wide	Technological	NA	LED and Backup Power for Signals	Intermediate	\$70,000	Municipality	
Capacity	Corridor Wide	Technological	NA	Upgrade signals for wireless control	Intermediate	\$230,000	County	
Capacity	Corridor Wide	System Management	NA	Plan to focus on Intense Inundation Areas	Short	\$0	MCOEM	
Capacity	Rumson Bridge	Physical	①	Reconstruct Bridge	Short	\$80,000,000	County	
Capacity	Rumson Bridge	Operational	①	Coordinate with police. Create additional lane using drums.	Short	\$0	MCOEM	
Capacity	Pinckney Road	Physical	②	Add "No Parking During Evacuation" Placards	Short	\$6,000	County	
Capacity	Pinckney Road	Operational	②	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	Daily
Capacity	CR 520 sections of Branch Ave., Broad St., Pinckney Rd.	Physical	③	Major capital improvement connecting Rumson Rd. and Newman Springs Rd.	Long	\$30,000,000	County / Municipality / State	
Capacity	CR 520 sections of Branch Ave., Broad St., Pinckney Rd.	System Management	③	Coordinate road enhancement program in the vicinity of the Broad Street / SR 35 Intersection.	Intermediate	\$0	County / NJTPA / State	

PORTAL ROUTE TREATMENT TABLE - COUNTY ROUTE 520 (CONT'D)

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including RoW)	Lead Organization	Comment
Capacity	CR 520 sections of Branch Ave., Broad St., Pinckney Rd.	Operational	③	Detour Rumson Rd. WB traffic to White Rd. and SR 35 NB to access Newman Springs Rd. and provide "Alt" Signing	During Evacuation	\$2,000	Municipality	
Capacity	CR 520 sections of Branch Ave., Broad St., Pinckney Rd.	Operational	③	Upgrade White Rd., as necessary to function as a portal section and install Coastal Evacuation route signs	Long	\$1,900,000	Municipality	
Capacity	NJ GSP Exit 109 SB entrance ramp	Physical	④	Construct cross-over ramp section that would connect GSP SB entrance ramp to the GSP SB exit ramp; reverse direction of exit ramp from SB to NB	Intermediate	\$198,000	State	
Capacity	NJ GSP Exit 109 SB entrance ramp	Operational	④	Close ramp, provide police enforcement	During Evacuation	\$5,000	State	Daily
Capacity	NJ GSP Exit 109	System Management	④	Coordinate GSP ramp reversal activities with NJMCOEM and NJDOT	Short	\$0	State/MCOEM	

VI.C. Treatments / Strategies:

VI.C.1. Corridor Wide.

a) Capacity

Physical:

- Where feasible, widen roadbed along Rumson Road to provide a full (12 feet) hard-running shoulder in the westbound direction to permit temporary shoulder use as a through travel lane during an evacuation event. This improvement would require relocation of aerial utilities, sidewalks, and mounted signs situated along the north side of the CR 520 prior to



Photo 12 - Provide full shoulder on Rumson Road (Long Range)

reconstruction activities. After completion of widening work, modify Coastal Evacuation Route sign assembly by adding “No Parking – During Evacuation”. Designate the shoulder as a bicycle lane. Install bicycle pavement markers and signage to alert drivers to the active bicycle lane. (Long Range)[\$16.5M]

Operational (During Evacuation)

- Initiate a Program of Emergency Service Patrols to provide quick response for clearing accidents and breakdowns.[\$4,000/day]

Technological

There are 10 signalized intersections within the Portal including, from east to west, Ocean Ave., Seven Bridges Rd., Prospect Ave., Branch Ave. (operates as a flasher), Maple Ave., Broad St., Shrewsbury Ave., Hance Ave., Schulz Drive, and Half Mile Run. At these locations

- Provide LED and battery back-up for existing signals.(Intermediate Range)[\$70,000]
- Install a wireless “real time” traffic control system (i.e. an Adaptable Traffic Control System (ATCS)) that can respond to

changes in traffic patterns in real time to maximize throughput, reduce delay and shorten queues. This type of system can be activated in rapid reaction to an emergency, such as during a hurricane evacuation, at the user's discretion. Program system to maximize throughput across the portal. (Intermediate Range) [\$230,000]

As an interim measure, signal locations which are situated in the more congested Red Bank area, namely Branch Ave. Broad St. and Maple Ave. could be upgraded initially.

System-Management

- Plan to initiate evacuation orders well in advance of an emergency event in order to spread the travel demand over a period of time substantially longer than the analysis study period of six hours. The employment of multi-modal strategies involving a variety of transit and high occupancy vehicle transport initiatives would also substantially reduce the temporary demand on the roadway system during an evacuation procedure. (Short Range) [No Cost]

VI.C.2.Rumson Bridge (S-32) ①

a) Capacity

Physical:

- The existing structure, which carries CR 520 traffic across the Shrewsbury River between the Boroughs of Rumson and Sea Bright, is in poor condition, with deterioration of major bridge components. The NJTPA had included possible rehabilitation or reconstruction of the structure to be studied as part of their 2009 Project Development Work Plan. This project has now progressed to the Scoping stage, and is part of the County's project development process. Implementation is to occur within 3-5 years. In the mean time, as an **operational measure**, work with police to use drums to create two outbound lanes during evacuations. . (during emergencies)

Operational:

- Work with police to use drums to create two outbound lanes during evacuations. . (during emergencies)

VI.C.3. Pinckney Road ②

a) Capacity

Physical:

- Modify the Coastal Evacuation Route sign assemblies by adding a “No Parking - During Evacuation” placard along throughout corridor where on-street parking is permitted. Sign modification actions must go through legislative process. The curb lane along Pinckney road would function as a storage area to facilitate the clearing of incidents from the active roadway way. (Short Range)[\$6,000]

Operational:

- Strictly enforce parking restriction regulations (towing if necessary) to maintain an unobstructed curb lane. (Short Range)[\$2,000/day]

VI.C.4. CR 520 Sections of Road Branch Ave., Broad Street, Pinckney Road ③

a) Capacity

Physical:

- The eastern portion of CR 520 (Rumson Road) is connected to the western portion of CR 520 (Newman Springs Road) by sections of four arteries including Branch Avenue, Broad Street, CR 35, and Pinckney Road. These connections form three T-intersections and a five-legged intersection across which an at-grade RR crossing is located. Significant congestion occurs across these links as a result of numerous conflicting traffic movements, the signal operation at the RR crossing where the priority movement is given to SR 35 traffic rather than to CR 520 traffic, and the presence of active business driveways, including a strip shopping mall, along Broad Street and SR 35. Development of short range or intermediate solutions or long range solutions that are not costly is challenging because of the



Photo 13 - Develop alternative route from Branch Avenue (Long Range)

density and proximity of development to the roadbed. A major capital improvement investment would likely be required to effectively connect Rumson Road and Newman Springs Road. (Long Range) [\$30M]

Interim Strategy

An interim strategy could be explored to ameliorate delays and lengthy travel times across Red Bank until improved connectivity is available. Development of an alternate path between Rumson Road and Newman Spring Road would transfer a portion of the demand from the existing portal route and reduce congestion through the area.

White Road was identified as a potential candidate. It provides a paved 12-foot wide travel lane with a partial shoulder. The roadway edge is clearly delineated and pavement markings are in good condition.

Operational:

The alternate route would operate as follows;

- Left-turn from Rumson Road onto Branch Avenue Southbound,
- Right-turn from Branch Avenue to White Road Westbound,
- Right-turn from White Road to SR 35 Northbound,
- On-structure ramp from SR 35 to Newman Springs Road Westbound.
- [Cost for “Alt” signing - \$2,000]

Physical

- Upgrade White Road, as necessary, to function as a portal and install Coastal Evacuation route signs at critical intersections. (Intermediate Range)[\$1.9M]

System Management ③

The NJTPA has identified a road enhancement project within the Portal corridor. The proposed project is located between M.P. 32.85 and M.P. 33.00 and contains the Maple Street/SR 35 and Broad Street/SR 35 intersections.

The proposed project is entitled, Route 35 Section Rail Crossing Operational Improvement, Red Bank/Shrewsbury, between Mile Posts 32.85 and 33.00.



Photo 14 – Proposed road enhancement site

Potential improvements could include a variety of initiatives such as geometry and signage enhancements, re-striping, and new lane assignments.

The NJTPA considers this type of project as a mid-term improvement (5-15 years). County initiatives to improve traffic conditions through the CR 520 corridor in Red Bank and Shrewsbury Borough should be coordinated with NJTPA activities associated with this proposal.

VI.C.5.G S Pky. Exit 109 SB On-Ramp from Newman Springs Rd. WB ④

a) Capacity

Physical

- Construct a cross-over ramp section that would split from the existing Interchange 109 Entrance Ramp onto GSP Southbound from Newman Springs Road Westbound and connect into the inside lane on the Exit Ramp from GSP Southbound to Newman Springs Road. Provide an acceleration lane for Newman Springs Road traffic to enter the GSP Southbound mainline when operating in the northbound direction under a State-wide evacuation protocol. (See illustration below) (Long Range) [\$198,000].

System Management

- Prepare to coordinate Garden State Parkway Exit 109 Ramp operations with NJOEM and NJDOT when the State Agencies reverses the direction of the GSP southbound travel lanes. (Intermediate Range) [No Cost].

Operational (During Evacuation)

- Close GSP Exit 109 entrance ramp to CR 16 Eastbound.
- Provide Police Enforcement (\$5,000 per day)

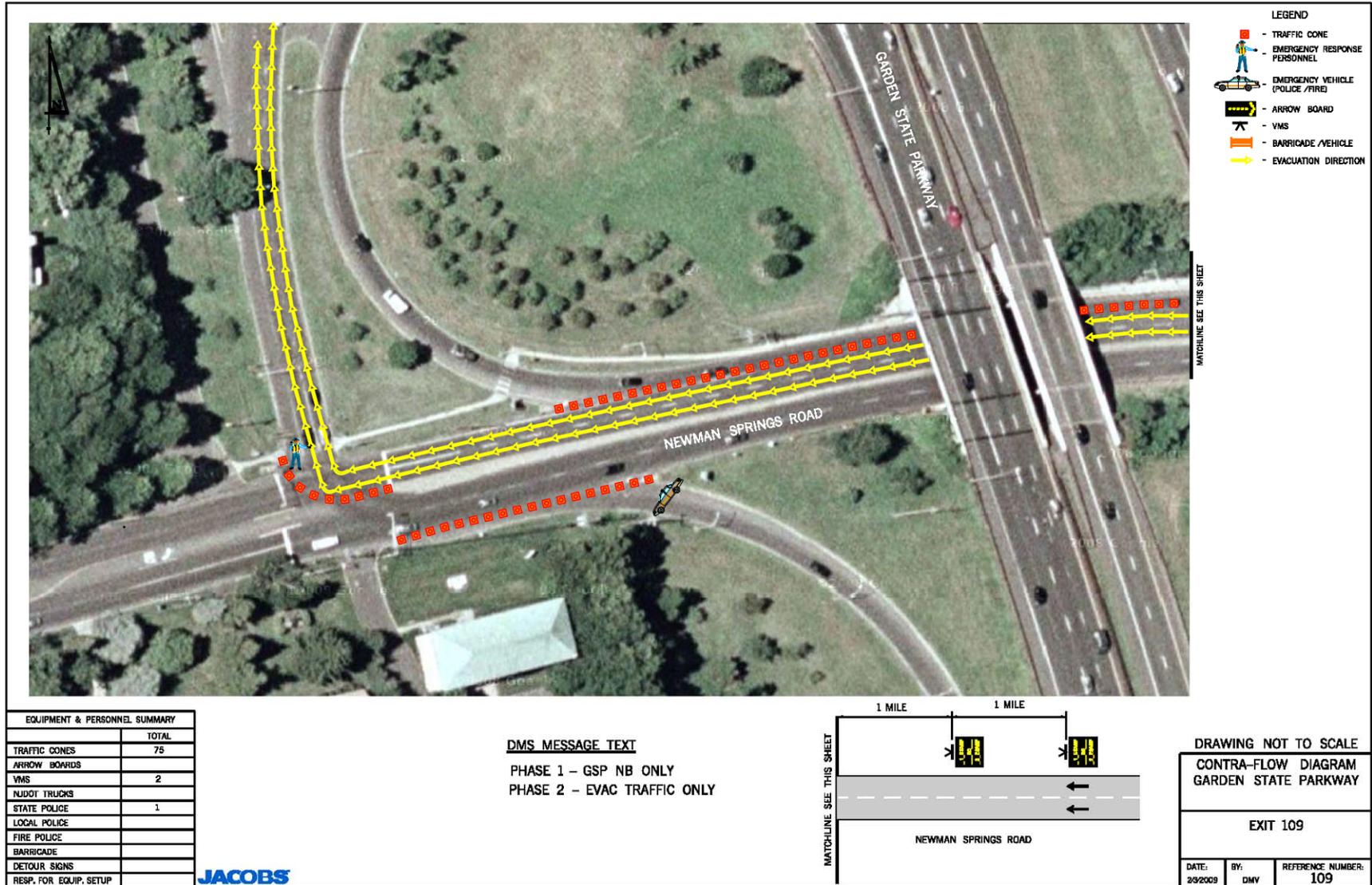


Figure 2 - Treatment at Garden State Parkway Exit 109 During Evacuations

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VII.State Route 36 (Central Corridor)

Portal Facility #7 - State 36 (Long Branch) Corridor From Ocean Boulevard to Garden State Parkway



Figure VII-1, SR 36 (North)

VII.A. Existing Conditions

VII.A.1. Physical and Operating Characteristics

The Joline Avenue section of SR 36 is classified as an Urban Principal Arterial and is designated by the State as one of Monmouth County’s emergency evacuation routes. SR 36 is a critical corridor as it encircles the Bayshore and northern coastal communities, many of which are isolated by water and/or vulnerable to flooding and provides these areas with two east-west escape routes during a hurricane event. For peninsula residents and visitors, including Sandy Hook Park employees and recreational users, SR 36 offers the only access to the mainland.



Photo VII-1, SR 36 vic. Eatontown

Joline Avenue’s alignment runs along the entire length of the study between Ocean Avenue and the NJGSP and generally has attracted a wide variety of highway commercial development. The thoroughfare connects

with most of the major north-south arteries in the study area, including SR 71, SR 35, SR 18, CR 51, and the NJ GSP.

Several bridges form part of the Joline Avenue alignment as the road crosses a number of streams and tributaries emanating from the Shrewsbury and Navesink Rivers. The posted speed limit for the undivided section of the road is 35 mph. while the posted travel speed increases to 45-55 along the divided portion of the highway (west of CR 11).

VII.A.2. Proposed TIP Improvements

Two related projects currently appear in the TIP:

- 35 / 36 Eatontown: This project will realign Route 35 to provide a near 90-degree intersection with Route 36. Ramp C located at the southwest quadrant will be eliminated to avoid the weaving movement, and double left turn lanes will be provided on the northbound approach of Route 35. A loop ramp will be constructed in the southeast quadrant. At a cost of approximately \$17 million, it will be very helpful in moving evacuating vehicles through to the Garden State Parkway.
- SR 36 – Highlands Bridge over Shrewsbury River: The existing double-leaf bascule structure is being replaced with a 65-foot high, fixed-span structure on a shifted alignment. The existing structure is 1,247 feet long and the roadway consists of four travel lanes with no median barrier and a sidewalk. In addition to the new structure, the following will also be provided: new approach ramps on the eastern side (Ramps J, Ramps K/L), new fender system, new pedestrian bridge over Route 36/Ocean Avenue and a new pedestrian bridge over Ocean Avenue. On the western side, reconfiguration of egress and acceleration from Bay and Highlands Avenue will be provided, as well as new toll booths for the National Park Service with new transitions to the toll plaza, and realignment of Ocean Avenue to the National Park toll facility with new turn-arounds. Removal of the bascule span, combined with improved geometrics, will vastly improve the ability to evacuate Sandy Hook and parts of Sea Bright.

VII.A.3. Alternative Routes

The closest alternate evacuation route, the CR 25/SR 71 corridor, lies to the south Joline Avenue, originating at Ocean Avenue in West Long Branch and leading from the hazard zone in a northwesterly direction before reaching its western terminus at SR 35 in Eatontown. The alternate

route crosses Joline Avenue in Oceanport. Access to other evacuation routes to the north is limited as a result of the Shrewsbury River and its tributaries.

VII.A.4. Entry Points

Key entry roads into the portal route include Ocean Avenue, CR 33, and CR 29, and Branchport Avenue and CR 11. Ocean Avenue would facilitate access to SR 36 for vehicles leaving Long Branch and Monmouth Beach. CR 33 and CR 29 provide vital connections into SR 36 for vehicles leaving the North Long Branch neighborhood which is surrounded by water on three sides. Branchport Avenue and CR 11 link Oceanport, which is situated on a peninsula, to the escape route near the headwaters of the Branchport Creek

VII.A.5. Exit Points

Evacuees could exit the hazard zone by remaining on CR 36, which connects into the NJ GSP or by exiting the portal corridor at SR 35 to reach points to the northwest or SR 18 to reach destinations to the southwest.

VII.A.6. Key Data Deficiencies/Omissions

Signal timing plan and TMC's at SR 36/SR 35 Intersection.

VII.A.7. Priority Location

Several Initial Priority Locations were identified along this portal as listed below.

- ☛ Cluster of signalized intersections between Ocean Avenue and CR 29
- ☛ At-grade railroad crossing near CR 29
- ☛ Signalized intersection at Oceanport
- ☛ Signalized intersection at CR 537
- ☛ Signalized intersection at SR 71
- ☛ SR 35/SR 36 interchange
- ☛ Signalized intersection at CR 547
- ☛ NJ GSP on-ramps.

VII.B. Evacuation Condition

VII.B.1. Physical and Operating Characteristics

SR 36 (Joline Avenue) is a major evacuation route serving the County's central coastal communities, particularly the densely populated and active shore community of Long Branch. The corridor typically maintains one or two westbound travel lanes and turning bays at major intersections as far west as Marin Way. At that point it opens to three travel lanes at the SR 18 ramps before narrowing back to a two-lane section to its Garden State Parkway connection. There are grassy or painted center medians and at least partial shoulders located along most sections of the portal.

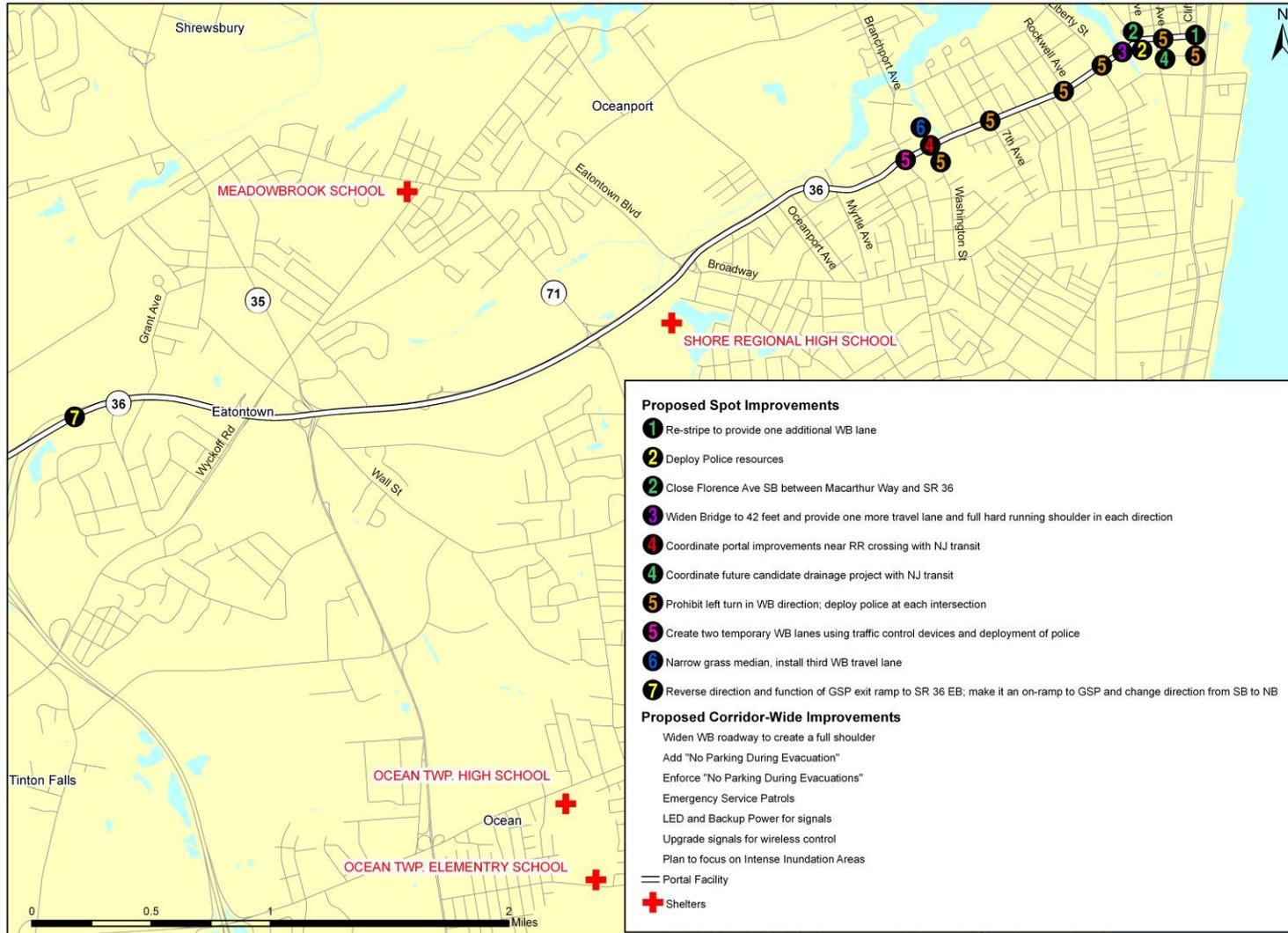
There are several signalized intersections across the portal with a concentration located east of SR 71. The signal operations result in lower travel speeds and increased travel times, particularly within the Towns of Long Branch and West Long Branch where numerous signalized intersections and coastal-generated recreational traffic combine to degrade roadway performance.

The portal lies within the flood inundation zone as far west as SR 71. The nearest Red Cross Shelter is located along SR 36 near the SR 71 artery. This portal is covered by the Long Branch and Oceanport HAR systems, which operate on Stations 1620 AM and 1610 AM, respectively. There are no environmental or historic resources along or near the portal.

SR 36 would carry traffic loads that would reach capacity westbound under either a 2007 or 2030 evacuation event. Within the flood zone, traffic flow on the portal's one available westbound travel lane would reach over 3000 vph under a current evacuation order and make SR 36 impassable.

Portal Facility #7 - State 36 (Long Branch) Corridor

From Ocean Boulevard to Garden State Parkway



PORTAL ROUTE TREATMENT TABLE – SR 36 (Central Corridor)

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including RoW, SwM)	Lead Organization	Comment
Capacity	Corridor Wide	Physical	NA	Widen WB roadway to create a full shoulder	Long	\$14,000,000	State	
Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$5,000	County with State Approval	
Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	Daily
Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuation	\$4,000	Municipality	Daily
Capacity	Corridor Wide	Technological	NA	LED and Backup Power for Signals	Intermediate	\$98,000	State	
Capacity	Corridor Wide	Technological	NA	Upgrade signals for wireless control	Intermediate	\$322,000	State	
Capacity	Corridor Wide	System Management	NA	Plan to focus on Intense Inundation Areas	Short	\$0	MCOEM	
Capacity	SR 36 between Clifton Ave. and Washington Street	Physical	①	RE-stripe to provide one additional WB lane	Short	\$30,000	State	
Capacity	SR 36/Florence Ave. unsignalized intersection	Operational	②	Deploy police resources	During Evacuation	\$500	Municipality	Daily
Capacity	Florence Ave. between MacArthur Ave. and SR 36	Operational	②	Close Florence Close Florence Ave. SB between MacArthur Way and SR 36 (option to deploying police as above)	During Evacuation	\$0	Municipality	
Capacity	Bridge over Troutmans Creek	Physical	③	Option - Widen Bridge to 42 feet and provide one travel lane and full hard running shoulder in each direction	Long	\$44,000	State	

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including RoW, SwM)	Lead Organization	Comment
Capacity	SR 36 connections at Clifton Ave., Long Branch Ave., Liberty St., Rockwell Ave., Seventh Ave., Washington St.	Operational	⑤	Prohibit left-turn in WB direction; deploy police at each intersection.	During Evacuation	\$3,000	Municipality	Daily
Capacity	At-grade RR crossing near Washington St.	System Management	④	Coordinate portal improvements near RR crossing with NJ Transit	Long	\$0	NJ TRANSIT / MCOEM	
Flooding	(MP 4.4 to MP5.5 - Long Branch Ave.)	System Management	④	Coordinate this future candidate drainage project with NJ Transit	Long	\$0	STATE / COUNTY/ NJ TRANSIT	
Capacity	SR 36 between Branchport Ave. and Victor Ave.	Operational	⑤	Create two temporary WB lanes using traffic control devices and deployment of police.	During Evacuation	\$1,000	MCOEM/ Municipality	
Capacity	SR 36 between Washington St. and Victor Ave.	Operational	⑥	Narrow grassy median, install third WB travel lane	Long	\$5,000,000	State	
Capacity	NJ GSP Exit105	Operational	⑦	Reverse direction and function of GSP Exit ramp to SR 36 EB; make it an on-ramp to GSP and change its direction from SB to NB	Short	\$5,000	State	Daily

VII.C. Treatments / Strategies:

VII.C.1. Corridor Wide.

a) Capacity

Physical

- Where feasible, widen westbound roadway and/or re-stripe pavement markings in roadbed to provide additional capacity on the portal to improve service during an evacuation event. Depending on the location, accommodate either a full (12 feet) hard-running shoulder, or another travel lane or both in the westbound direction. Where necessary, relocate aerial utilities, sidewalks, and mounted signs situated along the north side of SR 36 prior to reconstruction activities. (Long Range)[\$14M]
- Modify the Coastal Evacuation Route sign assemblies by adding a “No Parking - During Evacuation” placard. Sign modification actions action must go through legislative process. (Short Range) [\$5,000]



Photo 16 - SR 36 Section - SR 71 To SR 35
Candidate for installing additional travel lane in the westbound direction by narrowing the center median

Operational (During Evacuations)

- Strictly enforce No Parking restriction (towing if necessary) to maintain an unobstructed curb lane for travel. [\$2,000 per day]
- Initiate a program of Emergency Service Patrols to provide quick response for clearing accidents and breakdowns. [\$4,000 per day]

Technological

There are 14 signalized intersections along the corridor including, from east to west, at Long Branch Ave., Liberty St., Rockwell Ave., Seventh Ave., Branchport Ave., Myrtle Ave., Oceanport Ave., Eatontown Blvd., Monmouth Rd., Motor Vehicle Driveway (M.P. 22.44), Neptune Blvd. (SR 35), Wyckoff Rd. (CR 547), Grant Ave., and Hope Rd. (CR 51). At these locations;

- Provide LED and battery back-up for existing signals. (Intermediate Range)[\$98,000]
- Install a wireless “real time” traffic control system (i.e. an Adaptable Traffic Control System (ATCS)) that can respond to changes in traffic patterns in real time to maximize throughput, reduce delay and shorten queues. This type of system can be activated in rapid reaction to an emergency, such as during a hurricane evacuation, at the user’s discretion. Of the 15 signalized intersections within the corridor, 11 are located within the flood zone. [\$322,000]

System-Management

- Plan to initiate evacuation orders well in advance of the emergency event in order to provide an extended temporal distribution that would spread the travel demand over a period of time substantially longer than the analysis study period of six hours. The employment of multi-modal strategies involving a variety of transit and high occupancy vehicle transport initiatives would also substantially reduce the temporary demand on the roadway system during an evacuation procedure. (Short Range) [no cost]

VII.C.2. SR 36 – Clifton Avenue to Washington Street ❶

- a) Capacity

Physical

- Due to development abutting the roadbed, re-stripe pavement, rather than widening, to provide a full an additional westbound travel lane (Short Range)[\$30,000]

VII.C.3. SR 36/Florence Avenue (Unsignalized Intersection) ❷

- a) Capacity

Operational (During Evacuations)

- Deploy police for traffic enforcement. [\$500/day]
- Option – Close Florence Avenue southbound between MacArthur Way and SR 36. Use Elmwood Avenue and Long Branch Avenue as a detour to SR 36. [\$500/event]

VII.C.4. Bridge Over Troutmans Creek ⑤

a) Capacity

Physical/Operation (During Evacuations)

- Widen Bridge from 40 feet (existing) to 42 feet to provide one westbound travel lane (12 feet) and full hard running shoulder (11 feet) in westbound direction. Place on NJTPA Capital Improvement Candidate List. (Long Range) [\$44,000]

VII.C.5. Intersections at Clifton Avenue, Long Branch Avenue, Liberty Street, Rockwell Avenue, Seventh Avenue, and Washington Street ⑤

a) Capacity

Operational (During Evacuations)

- Prohibit left-turns along westbound approach
- Deploy police to facilitate through movements across intersections. [\$3,000 per day]

VII.C.6. NJ Transit At-Grade Crossing near Washington Street ④

a) Capacity

System Management

- Coordinate County improvement projects in vicinity of at-grade rail crossing with NJ Transit. (Long Range) [No Cost]

VII.C.7. Long Branch Drainage Improvement (MP 4.4) to Long Branch Avenue (MP 5.5) ④

a) Flooding

System Management

- The NJTPA has identified a future candidate drainage project along SR 36 to be implemented within the next five years. The project is entitled Rte. 36 Sec. Long Branch Drainage Improvements Mile posts 4.40 – 5.50. The project is placed under the Regional Capital Investment Strategy category, Roadway Preservation.

Drainage improvements in the vicinities of Washington Street, Sixth Avenue, and Florence Avenue will include reconstruction and upgrade of existing drainage system and installation of new pipes and inlets. In

addition, the roadway in vicinity of Lanes Creek near Edwards Avenue will be raised and the existing structure will be replaced with a larger structure.

- Coordinate roadway and drainage improvement actions. (Long Range) [No Cost]

VII.C.8. SR 36 Section – Washington Street to Victor Avenue ⑥

- a) Capacity

Operational (During Evacuations)

- Maintain two temporary westbound travel lanes by permitting travel across painted median on north side of roadway, prohibiting left turn moves from the westbound direction, and deploying police for traffic management. (Long Range) [\$1,000 per day]

VII.C.9. SR 36 Section – Victor Avenue to SR 35 ⑥

- a) Capacity

Physical

- Narrow grassy median and install a third westbound travel lane. (Long Range) [\$5M]



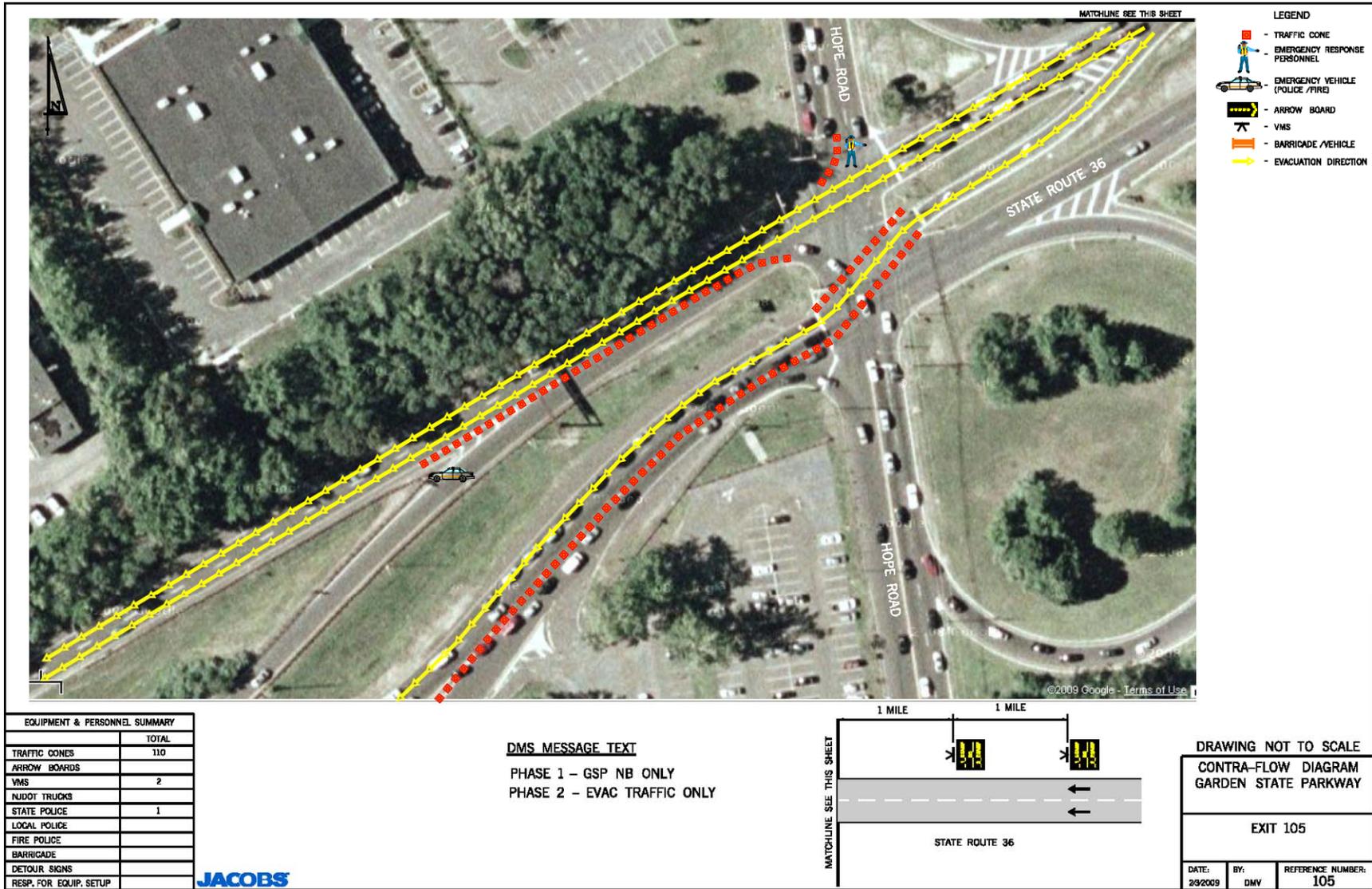
Photo 17 - SR 18 Ramps to CR 547 Is a Candidate for Installing a Full Shoulder Westbound

VII.C.10. NJ GSP Exit 105 ⑦

- a) Capacity

Operational

- Reverse direction and function of GSP Exit 105 Exit Ramp to SR 36 eastbound to an on-ramp to the GSP Southbound mainline from SR 36 westbound when NJDOT reverses the direction of the GSP southbound travel lanes during an evacuation event. Provide acceleration lane to enter reverse (northbound) traffic flow on the southbound lanes safely.[\$5,000/day]
- Coordinate GSP Exit Ramp operations with NJOEM and NJDOT when the State Agencies reverses the direction of the GSP southbound travel lanes. (Short Range) [No Cost]



VIII.Park Avenue

Portal Facility #8 - Park Avenue, West Park Avenue Corridor From Ocean Avenue to State Route 18



VIII.A. Existing Conditions

VIII.A.1. Physical and Operating Characteristics

Park Avenue is classified as an Urban Minor Arterial with a posted speed limit ranging between 25 mph and 35 mph. The avenue maintains one travel lane in each direction along its entire length between Ocean Avenue and CR 15 (Monmouth Road) as it runs through low density residential areas. The portal route's alignment turns north onto CR 15 for two blocks before



Photo VIII-1, Park Avenue, Westbound

continuing its westbound direction via West Park Avenue. West Park Avenue also functions as an Urban Minor Arterial, forming connections with SR 35, SR 18, CR 38, and Hope Road, all important north-south corridors in the area. It runs through low density residential zones, leaving the study area as it crosses under the NJ GSP corridor.

VIII.A.2. Proposed TIP Improvements

No Corresponding TIP improvements were found.

VIII.A.3. Alternative Routes

The nearest evacuation route to Park Avenue is the SR 71/CR 25 corridor, located about .75 mile north of the Urban Minor Arterial within the hazard zone. The closest evacuation route south of the Avenue is CR 16 whose alignment lies about 3.25 miles away.

VIII.A.4. Entry Points

The key roads that would provide access to the portal route for local traffic in Deal and surrounding neighborhoods within the hazard zone would include SR 71, CR 15 and Ocean Avenue.

VIII.A.5. Exit Points

Traffic evacuating the hazard zone via Park Avenue would have exit options at SR 35 and SR 18 in addition to remaining on the Park Avenue/West Park Avenue portal corridor

VIII.A.6. Key Data Deficiencies/Omissions

Signal Timing Plans

VIII.A.7. Priority Location

The following Initial Priority Locations were identified along Park Avenue and West Park Avenue include corridor:

- ✦ At-Grade RR Crossing,
- ✦ SR 71 Signalized Intersection,
- ✦ Park Avenue/CR 15 T-Intersection,
- ✦ 0Cr 15/ West Park Avenue Signalized T-Intersection,
- ✦ Whale Pond Road Signalized Intersection,
- ✦ SR 35 Signalized Intersection,
- ✦ SR 35 Ramp,
- ✦ SR 35 Piers,
- ✦ Raleigh Court Signalized Intersection,
- ✦ SR 18 Ramp,
- ✦ SR 18 Piers.

VIII.B. Evacuation Condition

VIII.B.1. Physical and Operating Characteristics

The Park Avenue portal would provide critical additional capacity for evacuees as its corridor is situated midway between the two densely populated coastal areas of Long Branch and Asbury Park. The portal also includes CR 15 (Monmouth Road) where the alignment changes to a north-south direction, and West Park Avenue, where the alignment returns to an east-west direction. The corridor maintains one prevailing westbound travel lane across the corridor and provides access for numerous commercial and industrial uses west of Whale Pond Road. The corridor connects with two existing State evacuation routes including SR 18 (where the portal terminates) and SR 35. Designated emergency shelters are bounded by Polbos Parkway to the west, Whalepond Rd to the east, and Dow Ave to the south. They are the Ocean Township High and Elementary schools. There are historic building resources located at the portals intersections with SR 18, Larchmont Avenue, CR15, Saxony Drive, and Eaton Avenue. These resources could impact implementation of any physical improvement projects and would likely require completion of an environmental analysis.

Although it is presently not a highly traveled road, with traffic flows not reaching more than 500 vph, under a hurricane evacuation condition, the Portal would carry traffic loads as high as 1000 vph in 2007 and about 2500 vph by 2030, a flow rate substantially higher than the available capacity provided by the corridor's single westbound lane.

VIII.C. Treatments / Strategies:

VIII.C.1. Corridor Wide.

a) Capacity

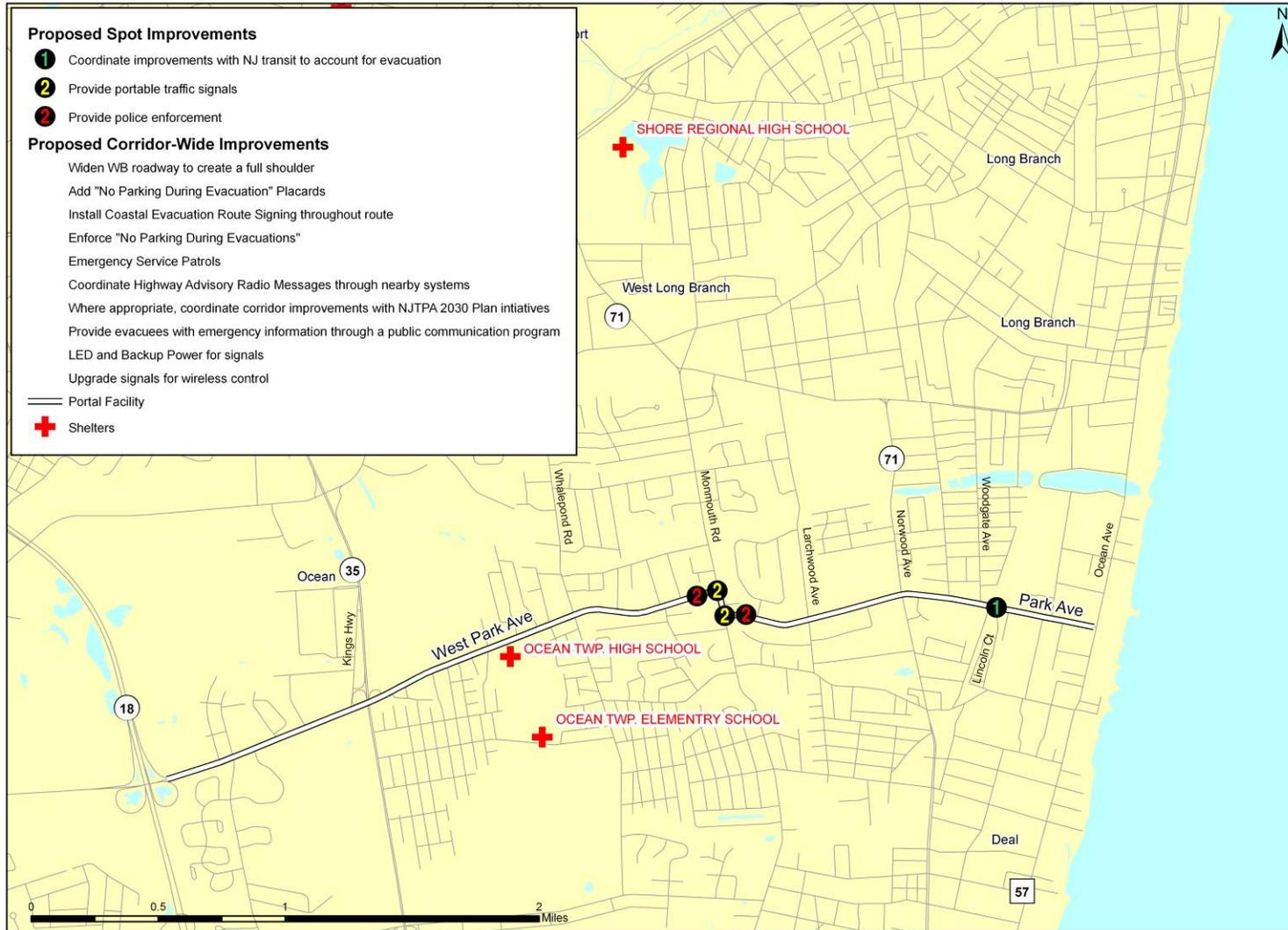
Physical

Where feasible, widen roadbed to provide a full (12 feet) hard-running shoulder in the westbound direction to permit temporary shoulder use as a through travel lane during an evacuation. This improvement would require relocation of aerial utilities, sidewalks, and mounted signs



Photo 19 - West Park Avenue Westbound Approaching Branch Road - Add shoulder when possible

Portal Facility #8 - Park Avenue, West Park Avenue Corridor From Ocean Avenue to State Route 18



PORTAL ROUTE TREATMENT TABLE – PARK AVENUE

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including RoW, SwM)	Lead Organization	Comment
Capacity	Corridor Wide	Physical	NA	Widen WB roadway to create a full shoulder	Long	\$3,300,000	County	
Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$2,400	County	
Capacity	Corridor Wide	Physical	NA	Install Coastal Evacuation Route signing throughout route	Short	\$8,000	County	
Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	Daily
Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuation	\$5,000	Municipality	
Capacity	Corridor Wide	Operational	NA	Coordinate Highway Advisory Radio Messages through nearby systems	Short	\$0	MCOEM/ Municipality	
Capacity	Corridor Wide	System Management	NA	Where appropriate, coordinate corridor improvements with NJTPA 2030 Plan initiatives	Long	\$0	State/ County/ NJTPA	
Capacity	Corridor Wide	System Management	NA	Provide evacuees with emergency information through a public communication program	Short	\$0	MCOEM	
Capacity	NJ Coast Line Crossing, West of Lincoln Ave.	System Management	①	Coordinate improvements with NJ Transit to account for Evacuation	Long	\$0	County/ NJ Transit	Cost of coordination is part of regular ongoing work

PORTAL ROUTE TREATMENT TABLE – PARK AVENUE (CONT'D)

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including RoW, SwM)	Lead Organization	Comment
Capacity	Park Ave./CR 15 and West Park Ave./CR 15 unsignalized intersections	Technological	②	Provide Portable Traffic Signals	Intermediate	\$60,000	County/ Municipality	
Capacity	Park Ave./CR 15 and West Park Ave./CR 15 unsignalized intersections	Operational	②	Provide police enforcement	During Evacuation	\$4,000	Municipality	Daily
Capacity	Corridor Wide	Technological	②	LED and Backup Power for Signals	Intermediate	\$35,000	County	
Capacity	Corridor Wide	Technological	②	Upgrade signals for wireless control	Intermediate	\$115,000	County	

situated along the north side of the CR 16, as needed, prior to reconstruction activities. (Long Range)[\$3.3M]

Install Coastal Evacuation Route signs at critical intersections and at a maximum spacing of 2000 feet. (Short Range) [\$8,000]. Add “No Parking During Evacuation” placard to each sign. (Long Range) [\$2,400]. Sign modification action must go through legislative process.

Operational (During Evacuations)

- Strictly enforce no-parking regulations (towing if necessary). (Long Range) [\$2,000 per day]
- Initiate a program of Emergency Service Patrols. [\$5,000 per day]
- Promote coordination of Long Branch HAR system (Station 1620 AM) for this corridor. (Short Range) [No Cost]

System-Management

- Where appropriate, coordinate corridor improvements with NJTPA 2030 Plan initiatives such as the planned Park Avenue Bridge Over North Jersey Coast Line Project (Long Term) [No Cost] ❶
- Institute a public communication program through multi-media sources (radio, internet, telephone, etc.) to provide evacuees with the locations of emergency shelters, designated evacuation routes, availability medical assistance, provisions for pets, availability of private accommodations (hotels, motels), etc. (Short Term) [No Cost]
- Coordinate corridor improvements with NJTPA 2030 Plan to construct Park Avenue Bridge over North Jersey Coast Line.(Long Term) [\$0]

VIII.C.2. Park Avenue/CR 15 (Unsignalized)❷

a) Capacity

Operational (During Evacuations)

- Provide Police Enforcement to regulate traffic flow on CR 15 between the two adjacent T-intersections, Park Avenue/CR 15 and West Park Avenue/CR.
- Priority would be given to the Park Avenue right turn onto CR 15 over the CR 15 NB



Photo 20 - CR 15 NB Between Park Avenue and West Park Avenue: Provide police assistance during evacuations.

through movement [\$4,000/Day]

- CR 15 left-turn movement onto West Park Avenue over the CR 15 Southbound through movement [\$4,000/Day]

Police enforcement activities would be coordinated with signal operations at the West Park Avenue/CR 15 intersection to ensure that Park Avenue evacuation traffic would not be blocked from entering CR 15 Northbound and proceeding west via West Park Avenue.

Technological

- Provide portable traffic signals. (Intermediate) [\$60,000/location]

VIII.C.3. Park Avenue Connections at (SR 71, CR 15, Whale Pond Rd., SR 35, and Raleigh Court) ③

- a) Capacity

Technological

- Provide LED and battery back-up for existing signals [\$35,000]
- Install a wireless “real time” traffic control system (i.e. an Adaptable Traffic Control System (ATCS)) that can respond to changes in traffic patterns in real time to maximize throughput, reduce delay and shorten queues. This type of system can be activated in rapid reaction to an emergency, such as during a hurricane evacuation, at the user’s discretion. (Intermediate Range) [\$115,000]
- For the signal operation at SR 71, program the system to balance operations between opposing traffic streams. Since the remaining four signal locations are situated away from the coast and inundation zone, give priority to maximizing throughput on the portal.

IX. County Route 16

Portal Facility #9 - County 16 Corridor

From Kingsley Street to Garden State Parkway via County 16 or State Route 66



Figure IX-1, CR 16

IX.A. Existing Conditions

IX.A.1. Physical and Operating Characteristics

CR 16 is an east-west corridor connecting Asbury Park and Tinton Falls. Within the study area, the artery is approximately five miles long, extending between SR 71 and CR 547, which is located about .7 mile west of the NJ GSP. Classified as an Urban Minor



Arterial, CR 16 shares a common alignment with SR 66

along a 1.5 mile segment between SR 18 and the CR 16/SR 66 junction. The posted speed limit along the portal route varies between 25 mph and 45 mph with the lower speeds promulgated along the more urbanized section of the corridor in the vicinity of SR 71.

After leaving the SR 71 where commercial uses predominate, CR 16 runs largely through single family residential zones. The thoroughfare forms interchanges with SR 35, SR 18 and the NJ GSP and forms a major

diverge with SR 66 in the westbound direction. The CR 16 corridor is part of the State's existing Evacuation Roadway system for Monmouth County.

IX.A.2. Proposed TIP Improvements

No Corresponding TIP improvements were found.

IX.A.3. Alternative Routes

The closest alternate evacuation route to CR 16 is SR 33. SR 33 is an east-west corridor that leads away from the flood inundation hazard zone and that is situated within one mile of CR 16 near the coast. SR 33 is also designated by the State as a County evacuation route.

IX.A.4. Entry Points

Within the hazard zone, SR 71 and Asbury Avenue would serve as the key facilities, collecting local traffic from Asbury Park and neighboring towns and processing the evacuation traffic streams into the CR 16 portal corridor.

IX.A.5. Exit Points

Besides remaining on CR 16 which traverses the NJ GSP corridor, SR 66 and SR 18 offer coastal residents optional paths to the NJ GSP and to points further west as they escape the hazard zone.

IX.A.6. Key Data Deficiencies/Omissions

Signal timing plan and TMC's at SR 71/SR 16 Intersection..

IX.A.7. Priority Location

Initial Priority Locations along CR 16 are identified from west to east as follows:

- ✦ SR 71 intersection
- ✦ Langford Street intersection
- ✦ Comstock Street intersection
- ✦ Pine Street intersection
- ✦ Church Street intersection

- ☛ Prospect Avenue intersection
- ☛ Ridge Avenue intersection
- ☛ Neptune Boulevard intersection
- ☛ Hillside Avenue intersection
- ☛ SR 66 intersection
- ☛ Bowne Street intersection
- ☛ Green Grove Road intersection
- ☛ CR 547

IX.B. Evacuation Condition

IX.B.1. Physical and Operating Characteristics

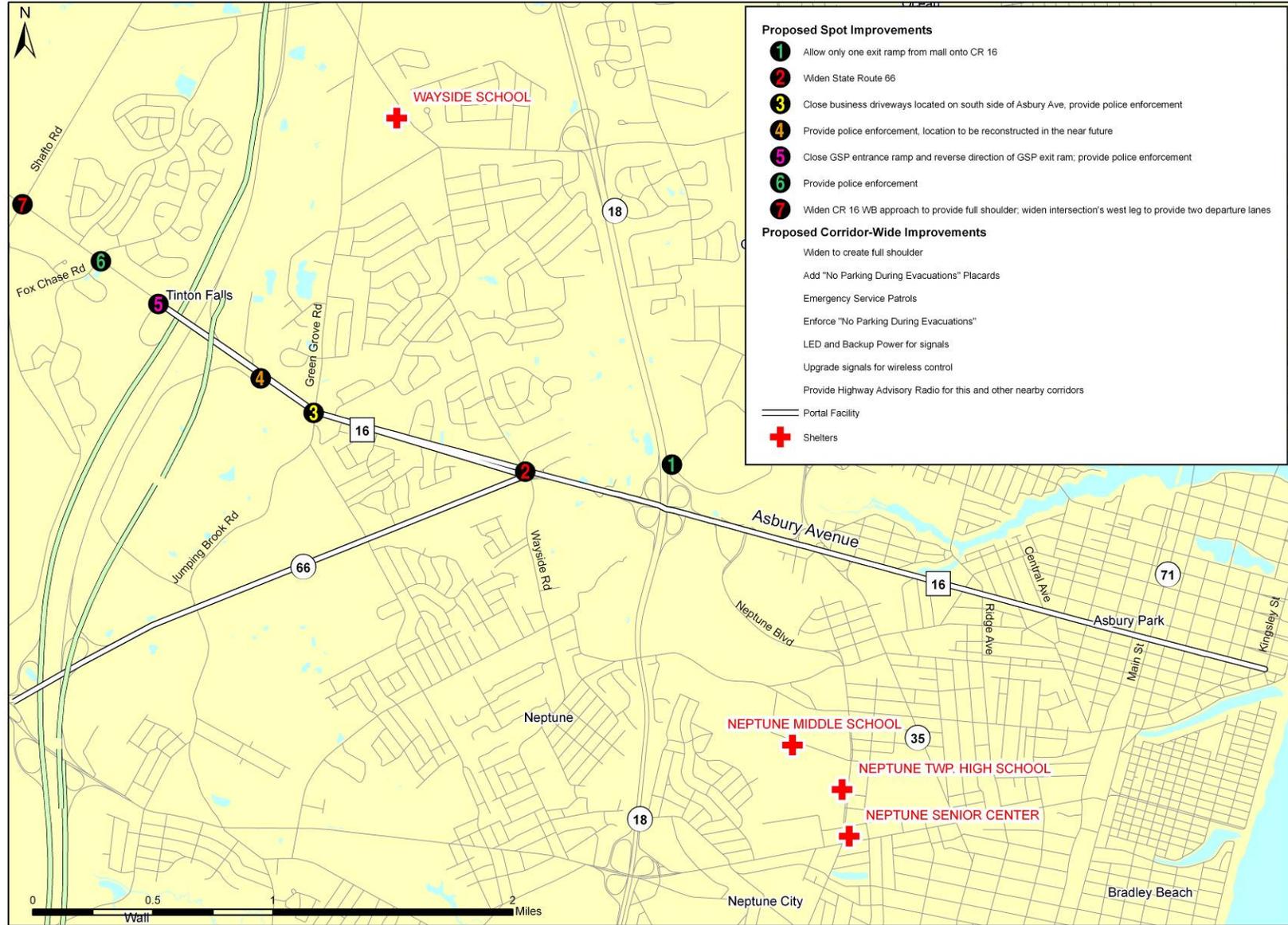
County Route 16 (Asbury Avenue) is one of two portals (the other is SR 33) that traverses or crosses near the densely populated and active communities of Asbury Park, Ocean Grove, Neptune City Borough and Neptune Township. The corridor typically maintains one westbound travel lane and turning bays at major intersections and provides access for shopping mall and industrial park developments further west from the coastline. There are no emergency shelters or environmental resources along or near the corridor.

Numerous signalized intersections are located in the eastern portion of the portal between SR 71 and SR 35. These locations result in lower travel speeds and increased travel times through the area. At least partial shoulders are available along the entire portal whose roadbed, including medians, typically varies between approximately 35 feet for section west of SR 66 and about 50 feet for sections east of SR 66.

Although it is presently not a highly traveled road, with traffic flows not reaching more than 600 vph, under a hurricane evacuation condition, CR 16 would carry traffic loads that would overwhelm the corridor, in excess of the roadway's capacity, because of its proximity to a number of popular beach resort Towns, including Asbury Park where oceanfront redevelopment is contributing to travel demand growth.

Portal Facility #9 - County 16 Corridor

From Kingsley Street to Garden State Parkway via County 16 or State Route 66



PORTAL ROUTE TREATMENT TABLE - COUNTY ROUTE 16

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including RoW, SwM)	Lead Organization	Comment
Capacity	Corridor Wide	Physical	NA	Widen to create full shoulder	Long	\$9,000,000	County	
Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$3,400	County	
Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuation	\$5,000	Municipality	Daily
Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	Daily
Capacity	Corridor Wide	Technological	NA	LED and Backup Power for Signals	Intermediate	\$105,000	County/ State	
Capacity	Corridor Wide	Technological	NA	Upgrade signals for wireless control	Intermediate	\$345,000	County/ State	
Capacity	Corridor Wide	System Management	NA	Provide Highway Advisory Radio for this and other nearby corridors	Intermediate	\$35,000	MCOEM	

PORTAL ROUTE TREATMENT TABLE – COUNTY ROUTE 16 (CONT'D)

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including RoW, SwM)	Lead Organization	Comment
Capacity	Seaview Sq. Mall entrances to CR 16	Operational	❶	Allow only one exit ramp from the mall onto CR 16	During Evacuation	\$5,000	Municipality	Daily
Capacity	Wayside Rd. to Jumping Brook Rd.	Physical	❷	Widen State Route 66	Long	\$3,800,000	State	
Capacity	Asbury Park between Essex Rd. and Green Grove Rd.	Operational	❸	Close business driveways located on south side of Asbury Ave. Provide police enforcement	During Evacuation	\$2,000	Municipality	Daily. Location is to be re-aligned and signaled in the near future.
Capacity	Asbury Ave./Essex Rd. unsignalized intersection	Operational	❹	Provide police enforcement	During Evacuation	\$2,000	Municipality	Daily. Location is to be re-aligned and signaled in the near future

PORTAL ROUTE TREATMENT TABLE – COUNTY ROUTE 16 (CONT'D)

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including RoW, SwM)	Lead Organization	Comment
Capacity	NJ GSP Exit 102	Operational	⑤	Close GSP entrance ramp and reverse direction of GSP exit ramp; provide police enforcement	During Evacuation	\$2,000	State	Daily
Capacity	CR 16/Foxchase Drive unsignalized intersection	Operational	⑥	Provide police enforcement	During Evacuation	\$2,000	Municipality	Daily
Capacity	CR 16/CR 547 intersection	Physical	⑦	Widen CR 16 westbound approach to provide full shoulder; also widen intersection's west leg to provide two departure lanes	Long	\$500,000	County	

IX.C. Treatments / Strategies:

IX.C.1. Corridor Wide.

a) Capacity

Physical

- Where feasible, widen roadbed to provide a full (12 feet) hard-running shoulder in the westbound direction to permit temporary shoulder use as a through travel lane



Photo 22 – Typical Section, CR 16 West of SR 66

Candidate for Widening

during an evacuation event. This improvement would require relocation of aerial utilities, sidewalks, and mounted signs situated along the north side of the CR 16 prior to reconstruction activities. (Long Range)[\$9.0M]

- Modify the Coastal Evacuation Route sign assemblies by adding a “No Parking - During Evacuation” placard. Sign modification actions must go through legislative process. (Short Range)[\$3,400]

Operational (During Evacuations)

- Strictly enforce parking restriction regulations (towing if necessary) to maintain a curb lane for travel. [\$2,000/day]
- Initiate a program of Emergency Service Patrols to provide quick response for clearing accidents and breakdowns. [\$5,000/day]

Technological

There are 14 signalized intersections along the corridor. They include the intersections at SR 71, Memorial Dr., Langford St., Comstock St., Pine St., Central Ave., Prospect Ave., Ridge Ave., Neptune Blvd., Hillside Ave., SR 66, Bowne Rd. Green Grove Rd. and Shafto Rd. In addition, there is a signal at SR 66/Wayside which is part of the complex CR 16/SR 66 interchange. At these locations,

- Provide LED and battery back-up for existing signals. (Intermediate Range)[\$105,000]
- Install a wireless “real time” traffic control system (i.e. an Adaptable Traffic Control System (ATCS)) that can respond to changes in traffic patterns in real time to maximize throughput, reduce delay and shorten

queues. This type of system can be activated in rapid reaction to an emergency, such as during a hurricane evacuation, at the user's discretion. (Intermediate) [\$345,000]. For locations near the coast, the system would be programmed to balance operations using signal progression between westbound traffic already on the portal and cross street traffic entering the portal. Away from the coast and inundation zone, maximizing the throughput on the portal would be given the highest priority.

- Provide Highway Advisory Radio (HAR) system for Asbury Park, Bradley Beach and surrounding communities. Construct new transmitter for this operation in Neptune Township in order to provide maximum coverage for the southern half of the study area. (Intermediate Range)[\$35,000]

IX.C.2.Seaview Square Mall Driveway Entrances to CR 16 ①

a) Capacity

The Seaview Square Mall currently maintains two driveways on its property to access CR 16. The western-most driveway is located about 350 feet east of the entrance ramp to SR 18 and the eastern-most driveway is located about 800 feet east of the SR 18 entrance ramp. Between the east driveway and the SR 18 entrance ramp, CR 16 operates continuous travel lanes. A third lane is provided between these two points but it is discontinuous and serves as an acceleration or deceleration lane for traffic either leaving or entering the mall or for exiting CR 16 for SR 18. This results in a substantial amount of weaving across this section. To reduce the number of weaving maneuvers and create safer and more efficient driving conditions in this area, the following is recommended

Operational (During Evacuations)

- Close access from eastern mall driveway to CR 16. Permit access to CR 16 exclusively from mall's western driveway.
- Permit westbound CR 16 traffic to cross painted gore at SR 18 entrance. This will allow exiting mall traffic to remain in the outside lane and avoid the need to execute weaving maneuvers to enter CR 16.
- Deploy police for traffic enforcement. (Short Range))[\$5,000]

IX.C.3.SR 66 Between Wayside Road and Jumping Brook Road ②

a) Capacity

Physical

- Widen roadbed to provide two westbound travel lanes in westbound direction along an approximately 1.8 mile section between Wayside Road and Jumping Brook Road. The State owns ample land on either side of the state highway so the availability of land for right-of-way is not an issue. (Long Range) [\$3.8M]

IX.C.4.Asbury Avenue Between Essex Road and Jumping Brook Road//Green Brook Road Corridor ③

a) Capacity

Operational (During Evacuations)

- Close business driveways located on south side of Asbury Avenue. Alternative routing is available via Green Grove Road Northbound to access CR 16 westbound and either Jumping Brook Road southbound or Green Grove Road southbound access to SR 66, the NJ GSP, and CR 547. Provide police enforcement [\$2,000/day]

X. State Route 33

Portal Facility #10 - State 33 Corridor From South Main Street to State Route 34



Figure X-1, SR 33

X.A. Existing Conditions

X.A.1. Physical and Operating Characteristics

SR 33 is situated within the same east-west corridor as the CR 16 alignment with both facilities terminating at SR 71 in Asbury Park at their eastern end and merging in Tinton Falls at their western end. Of the two, SR 33 runs along a more southerly alignment and is classified as an urban principal arterial along its entire length. Less than one mile of this portal route is classified as an Urban Minor Arterial. This lower classification applies to the section of SR 33 that lies east of SR 35 within the more densely developed town of Asbury Park. The posted speed limit along the portal route varies between 40 mph and 50 mph west of SR 35 and lowers to 30 mph east of SR 35 where a cluster of signalized intersections largely influence the flow of traffic.



Photo X-1, SR33 South of SR 35, Neptune

The SR 33 corridor generally serves commercial highway strip development uses. SR 33 provides convenient access to the area's highway system as the artery forms interchanges with SR 35, SR 18 and

the NJ GSP as well as forms a major diverge with SR 66 in the westbound direction. The CR 16 corridor is part of the State's existing Evacuation Roadway system for Monmouth County.

X.A.2. Proposed TIP Improvements

No Corresponding TIP improvements were found.

X.A.3. Alternative Routes

The closest alternate evacuation route to SR 33 is the CR 16 corridor. CR 16 is an east-west corridor that leads away from the flood inundation hazard zone and that is situated within one mile of CR 16 near the coast. CR 16 is also designated by the State as a County evacuation route.

X.A.4. Entry Points

Within the hazard zone, SR 71, Atkins Avenue, and Broadway would serve as key feeder facilities, collecting local traffic from surrounding towns such as Ocean Grove, Bradley Beach, Neptune City, and Avon-by-the-Sea and processing the evacuation traffic streams into the CR 16 portal corridor.

X.A.5. Exit Points

Evacuees traveling on SR 33 WB would have several options to escape the hazard zone. Besides remaining on CR 33, which traverses the NJ GSP corridor, residents and visitors could also exit SR 33 at SR 35, SR 18 and travel northwesterly to safe locations on high ground..

X.A.6. Key Data Deficiencies/Omissions

Signal Timing Plans

X.A.7. Priority Locations

Initial Priority Locations along SR 33 are identified from west to east as follows:

- ✦ Cluster of signalized intersections between SR 71 and Atkins Ave,

- ☛ SR 35 signalized intersection,
- ☛ Cluster of signalized intersections between Neptune Ave. and Fortunato Place,
- ☛ SR 18 ramp,
- ☛ SR 18 piers,
- ☛ Travel land reduction from 3 to 2 approaching Fortunato Place,
- ☛ Green Grove Road signalized intersection,
- ☛ Span at M.P. 39.1,
- ☛ West Bang Avenue signalized intersection,
- ☛ Jumping Brook Road signalized intersection,
- ☛ West Jumping Brook Road signalized intersection,
- ☛ NJ GSP ramp,
- ☛ NJ GSP piers,
- ☛ SR 66 signalized intersection,
- ☛ Span at M.P. 36.6,
- ☛ Campus Parkway signalized intersection, and
- ☛ CR 547 signalized intersection

X.B. Evacuation Condition

X.B.1. Physical and Operating Characteristics

State Route 33 (Corlies Avenue) is one of two portals (the other being County Road 16) that traverses or crosses near the densely populated and active communities of Asbury Park, Ocean Grove, Neptune City Borough and Neptune Township. The corridor typically maintains one westbound travel lane and turning bays at major intersections; and provides access for shopping mall and industrial park developments further west from the coastline. There are no Red Cross shelters or identified environmental resources along the corridor.

There are numerous signalized intersections located in the east portion of the portal between SR 71 and SR 35 which results in lower travel speeds and increased travel times through the area. At least partial shoulders are available along the entire portal whose roadbed, including medians, typically varies between approximately 35 feet for section west of SR 66 and about 50 feet for sections east of SR 66.

Although it is presently not a highly traveled road, with traffic flows not reaching more than 600 vph; under a hurricane evacuation condition, SR 33 would carry traffic loads that would overwhelm the corridor, because of its proximity to popular shore Towns.

X.C. Treatments / Strategies:

X.C.1. Corridor Wide.

a) Capacity

Physical:

- Where feasible, widen roadbed to provide a full (12 feet) hard-running shoulder in the westbound direction to permit use during an evacuation. Exclude the segment between Brighton Avenue and Fortunato Place where three westbound travel lanes are already available and where roadway expansion is constrained by the SR 18 Bridge piers. This improvement would typically require the relocation of aerial utilities, sidewalks, and mounted signs situated along the north side of SR 33 prior to reconstruction activities. (Long Range)[\$10M]



**Photo 24 - SR 33 between Atkins Ave. and Ridge Ave.:
Re-stripe and Widen to Provide 2 WB Lanes**

- Modify the Coastal Evacuation Route sign assemblies by adding a “No Parking - During Evacuation” placard. Sign modification actions action must go through legislative process. (Short Range) [\$3,700]

Operational (During Evacuations):

- Strictly enforce No Parking restriction (towing if necessary) to maintain an unobstructed curb lane for travel. [\$2,000]
- Initiate a program of Emergency Service Patrols to provide quick response for clearing accidents and breakdowns. [\$5,000/day]
- Promote coordination of HAR system proposed for Neptune Township to provide emergency information for this corridor.

PORTAL ROUTE TREATMENT TABLE – STATE ROUTE 33

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including RoW, SwM)	Lead Organization	Comment
Capacity	Corridor Wide	Physical	NA	Widen to create full shoulder	Long	\$10,000,000	State	
Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$3,700	County with State Approval	
Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuations	\$2,000	Municipality	Daily
Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuations	\$5,000	Municipality	Daily
Capacity	Corridor Wide	Technological	NA	LED and Backup Power for Signals	Intermediate	\$105,000	State	
Capacity	Corridor Wide	Technological	NA	Upgrade signals for wireless control	Intermediate	\$345,000	State	
Capacity	Corridor Wide	System Management	NA	Plan to focus on Intense Inundation Areas	During Evacuation	\$0	MCOEM	
Capacity	Corridor Wide	System Management	NA	Institute public communication program through multi-media sources to provide evacuees with information about emergency shelters	During Evacuation	\$0	MCOEM	
Capacity	Corridor Wide	Physical	NA	Promote coordination with the new HAR proposed for Neptune in this report.	Intermediate	\$0	MCOEM	
Capacity	SR 33 WB between Atkins Ave. and Myrtle Ave.	Physical	1	Provide second westbound lane through a combination of pavement re-stripping, narrowing center median, and realigning sidewalk	Long	\$250,000	State	

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including RoW, SwM)	Lead Organization	Comment
Capacity	SR 33 at NJ GSP Exit 100A	Physical	②	Construct crossover between GSP on-ramp and exit ramp	Long	\$750,000	State	
Capacity	SR 33 at NJ GSP Exit 100A	Operational	③	Provide police enforcement	During Evacuation	\$4,000	Municipality	Daily

Technological

There are 15 signalized intersections along the Portal, including, SR 71, Memorial Dr., Atkins Ave., Ridge Ave., SR 35, Hospital Driveway, Oxford Way, Brighton Ave., Fortunato Pl., Green Grove Rd., West Bang Ave., Jumping Brook Rd., School House Rd., SR 66, and Shafto Rd. At these locations;

- Provide LED and battery back-up for existing signals. (Intermediate Range)[\$105,000]
- Install a wireless “real time” traffic control system (i.e. an Adaptable Traffic Control System (ATCS)) that can respond to changes in traffic patterns in real time to maximize throughput, reduce delay and shorten queues. This type of system can be activated in rapid reaction to an emergency, such as during a hurricane evacuation, at the user’s discretion. (Intermediate Range) [\$345,000]

For the five signalized locations situated within the flood zone at SR 71, Memorial Drive, Atkins Avenue, Ridge Avenue, SR 35 and Neptune Boulevard, the system would be programmed to balance operations between westbound traffic already on the portal and cross street traffic entering the portal. Westbound travel speeds could be improved by signal progression along the portal. Away from the vulnerable flood areas, maximizing throughput on the portal would be given the highest priority (Intermediate Range)

System-Management

- Prepare to initiate evacuation orders well in advance of the emergency event in order to spread the travel demand over a period of time substantially longer than the analysis study period of six hours. The employment of multi-modal strategies involving a variety of transit and high occupancy vehicle transport initiatives would also substantially reduce the temporary demand on the roadway system during an evacuation procedure. (Short Range)[No Cost]
- Institute a public communication program through multi-media sources (radio, internet, telephone, etc.) to provide evacuees with the locations of emergency shelters, designated evacuation routes, availability medical assistance, provisions for pets, availability of private accommodations (hotels, motels), etc. (Short Range)[No Cost]

X.C.2. SR 33, Between WB Approach to Atkins Ave. and Myrtle Ave. ❶

a) Capacity

Physical

- One westbound travel lane is available through this section which has a roadbed width of 46 feet. Provide two westbound travel lanes through a combination of methods that could include re-striping lane and shoulder markings, narrowing center median, realigning and narrowing sidewalk infrastructure and relocating a limited number of utility poles and signs. (Intermediate to Long Range). [\$250,000]



Photo 25 - SR 33 approaching Neptune Boulevard Intersection: Install Wireless TC System.

X.C.3. NJ GSP Exit 100A ❷

a) Capacity

Physical

- Adjacent to the crossing of the SR 33 Westbound and SR 66 Eastbound roadways, there is a pair of GSP ramps that connect SR 66 Westbound and the NJ GSP Southbound mainline. The east ramp is a GSP Southbound entrance ramp from SR 66 westbound and the west ramp is a GSP Southbound exit ramp that feeds into SR 66 westbound. Provide a crossover between ramps to permit vehicles to access the west ramp from the east ramp. (Long Range)[\$750,000]

Operational (During Evacuation)

- Close the portion of the GSP 100A entrance ramp between the crossover and the GSP mainline.
- Close portion of GSP 100A Exit Ramp to CR 66 Westbound between crossover and CR 66.
- Reverse direction and function of GSP 100 A Exit Ramp and operate roadway as a northbound entrance ramp on the GSP southbound

mainline when NJDOT reverses the direction of the GSP southbound travel lanes during an evacuation event.

- Provide Police Enforcement.[\$4,000/day]

System Management

- Coordinate GSP Exit Ramp operations with NJOEM and NJDOT when the State Agencies reverses the direction of the GSP southbound travel lanes. (Short Range). [No Cost]

XI. County Route 524

Portal Facility #11 - County 524 Corridor
From State Route 71 to Interstate 195



Figure XI-1, CR 524

XI.A. Existing Conditions

XI.A.1. Physical and Operating Characteristics

Except for a half mile roadway section bound by SR 34 and Atlantic Avenue, CR 524 is classified as an Urban Minor Arterial between its eastern terminus at SR 71 and the NJ GSP. The half-mile exception is classified as an Urban Collector. Between the NJ GSP and CR 547, the study area's western boundary, the portal route operates as either an Urban Collector or a Rural Major Collector. The posted speed limit along the portal corridor varies between 35 mph and 50 mph with the higher speed limit permitted west of the NJ GSP.



Photo XI-1, CR 524

The artery is approximately six miles between C 71 and CR 547 and runs along an east-west alignment to the toll road where it turns and proceeds along a northwesterly course until it exits the study area. CR 524 forms an intersection with CR 524 Spur near the GSP. The portal artery provides direct access onto SR 34 and SR 35 before reaching the Parkway.

XI.A.2. Proposed TIP Improvements

No Corresponding TIP improvements were found.

XI.A.3. Alternative Routes

Comparable or higher capacity roads that are in close proximity to CR 524 and that also lead away from the hazard zone include SR CR 138 and CR 30. These alternative corridors are located within 1.20 miles of CR 524 and provide the Communities of Belmar, Lake Como, Spring Lake, Spring Lake Heights, and Sea Girt with westbound service to the area where the GSP, I-195, SR 34 corridors converge. near the western boundary of the study area in Wall Township.

XI.A.4. Entry Points

A number of roads would serve to collect traffic from the local street system and to process vehicular flows into the portal corridor during evacuation from coastal areas. The portal extensions accessing CR 524 include SR 71 from the north and south, Warren Avenue from the southeast, and Ludlow Avenue from the east.

XI.A.5. Exit Points

Evacuating traffic would have the option to either continue west along CR 524 past the GSP or to access SR 34 northbound to points north and west of the hazard zone.

XI.A.6. Key Data Deficiencies/Omissions

Signal Timing Plans

XI.A.7. Priority Location

There are several Initial Priority Locations within the CR 520 corridor. From west to east, they are identified as follows:

- ✦ SR 71 signalized intersection,
- ✦ Old Mill Road signalized intersection,
- ✦ SR 35 signalized intersection,
- ✦ Warren Avenue signalized intersection,
- ✦ Bailey's Corner signalized intersection,
- ✦ SR 34 Traffic Circle,
- ✦ I-195 Piers, and
- ✦ CR 547 signalized intersection.

XI.B. Evacuation Condition

XI.B.1. Physical and Operating Characteristics

CR 524 (Allaire Road) maintains two travel lanes through the corridor, providing connections for Spring Lake and neighboring communities to the State's designated evacuation routes, SR 35 and SR 34, before crossing over the NJ GSP to higher ground. A Red Cross designated shelter is located on the County road at Bailey's Corner (Wall Township Municipal Building and Public Library).

There are five locations where travel speeds typically decline through the corridor. They include the signalized intersections at SR 35, Warren Avenue, at Bailey's corner, the SR 34 traffic circle, and the five-legged unsignalized intersection where CR 524 converges with Ridgewood Road and Allenwood Wood near the portal western terminus. Roadway and emergency information for the this corridor is provided by the existing Manasquan HAR system (Station 1620 AM).

Under either a 2007 or 2030 evacuation condition, westbound volume along the portal would not exceed flow rates higher 1000 vph as far west as SR 35. Given this demand, westbound traffic operations would operate acceptably between SR 71 and SR 35. However, these portal flow rates would double west of SR 35 during either a 2007 or 2030. Although the level-of-service would still be acceptable during a 2007 emergency, westbound travel conditions would reach saturated conditions across the entire length of the portal under a 2030 evacuation event. Therefore, the investigations were focused to the west of State Route 35.

XI.C. Treatments / Strategies:

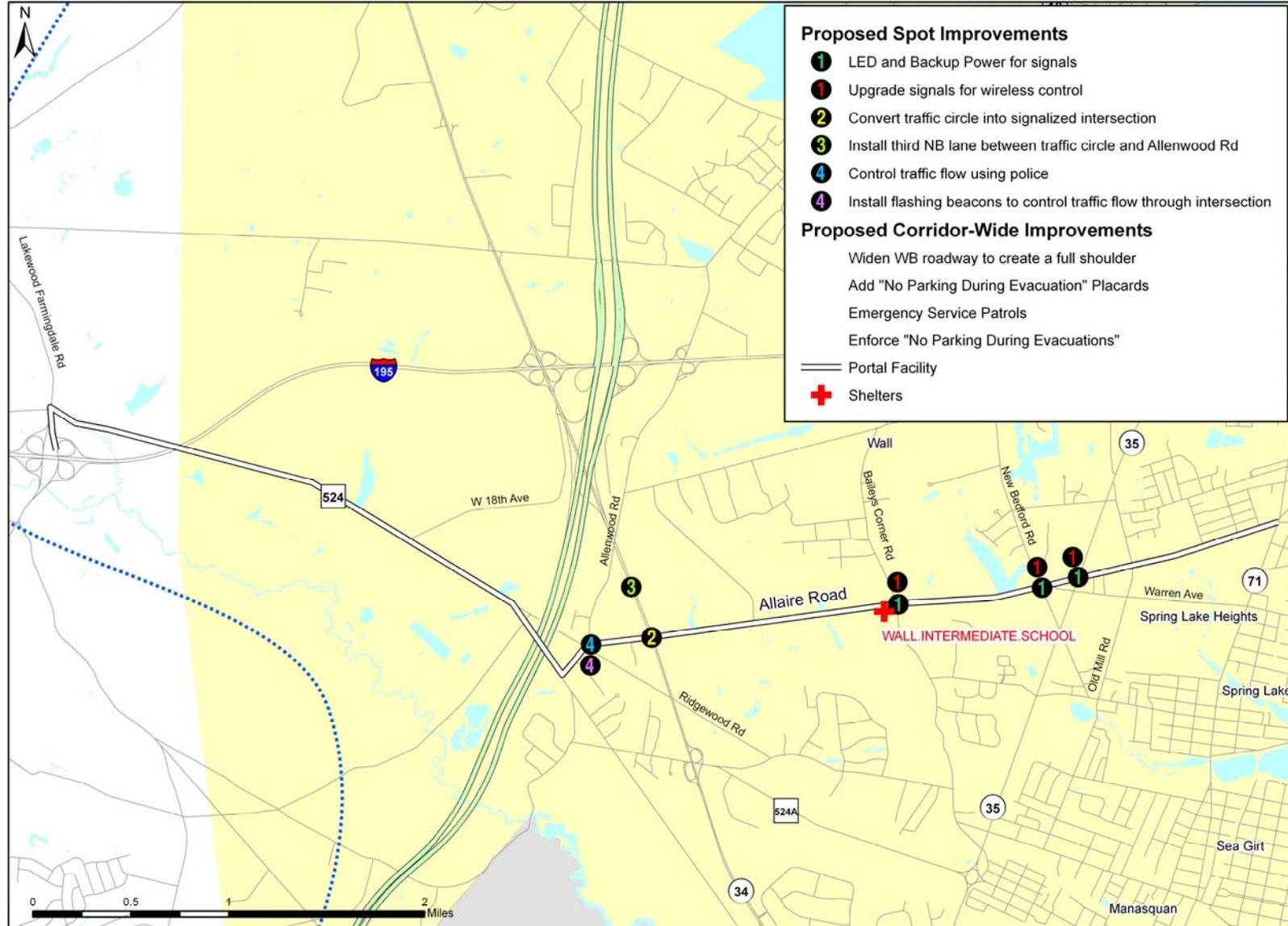
XI.C.1. Corridor Wide.

a) Capacity

Physical:

- Widen roadbed, where feasible, to provide a full hard running shoulder in westbound direction. This treatment not only provides increased temporary capacity, but also provides space to clear incidents and breakdowns (. (Long Range)[\$7.7M]
- Modify the Coastal Evacuation Route sign assembly by adding a "No Parking - During Evacuation" placard. Sign modification actions must go through legislative process (Short Range)[\$3,000].

Portal Facility #11 - County 524 Corridor
 From State Route 71 to Interstate 195



PORTAL ROUTE TREATMENT TABLE - COUNTY ROUTE 524

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including RoW, SwM)	Lead Organization	Comment
Capacity	Corridor Wide	Physical	NA	Widen WB roadway to create a full shoulder	Long	\$7,700,000	County	
Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$3,000	County	
Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuation	\$5,000	Municipality	Daily
Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	Daily
Capacity	Intersection of CR 524 at SR 35, Warren Ave. and Baily's Corner	Technological	①	LED and Backup Power for Signals	Intermediate	\$21,000	County	
Capacity	Intersection of CR 524 at SR 35, Warren Ave. and Baily's Corner	Technological	①	Upgrade signals for wireless control	Intermediate	\$69,000	State	
Capacity	SR 34, between Traffic Circle and Allenwood Rd.	Physical	③	Install third travel lane in northbound direction between traffic circle and Allenwood Rd.	Long	\$1,100,000	State	
Capacity	SR 34 Traffic Circle	Physical	②	Convert traffic circle into signalized intersection	Long	\$10,000,000	State	
Capacity	Cr 524/Allenwood Rd./Ridgewood Rd.	Operational	④	Control traffic flow using police	During Evacuation	\$500	County	Daily
Capacity	Cr 524/Allenwood Rd./Ridgewood Rd.	Technological	④	Install flashing beacons to control traffic flow through intersection	Short	\$10,000	County	

Operational (During Evacuations):

- Initiate a program of Emergency Service Patrols to provide quick response for clearing incidents and breakdowns. This service would be particularly beneficial east of SR 35 where the travel way is constrained due to intensive land development immediately adjacent to the road. (Short Range)[\$5,000/day]
- Strictly enforce No Parking restriction (including towing) to maintain unobstructed shoulder for temporary use as a travel lane. [\$2,000 per day]

. CR 524's Intersections at SR 35, Warren Ave., and Bailey's Corner ❶

b) Capacity

Technological:

- Provide LED and battery back-up for existing signal.(Intermediate Range)[\$21,000]
- Install a wireless traffic control system that would facilitate an adaptive signal control operation. This would permit adjustment of traffic signals to adjust lengths of phases based on the prevailing traffic condition. Since CR 524 is located outside the flood zone, allocate a greater proportion of green time to the portal to facilitate through movement on the artery during evacuation event. (Intermediate Range)[\$69,000]



Photo 27 - Section Between Warren Avenue and SR 34 is a Candidate for widening

XI.C.2.SR 34 Between Traffic Circle and Allenwood Rd. ❸

a) Capacity

Physical:

- Widen SR 34 roadbed to install a third travel lane in the northbound direction between traffic circle and Allenwood Road. This action would provide a continuous three lane



Photo 28 – Approaching SR 34 Traffic Circle

section between the traffic circle and the NJGSP corridor. (Long Range)[\$1.1M]

- Convert traffic circle into a signalized intersection. Although NJDOT is generally moving towards increasing the number of roundabouts, they are difficult to manage under “crush” conditions. This action could be considered as a future candidate in the NJTPA Project Development Work Program. (Long Range)[\$5M]

XI.C.3.CR 524/Allenwood Road/Ridgewood Road Five Legged Intersection ④

a) Capacity

Operational (During Evacuations):

- Deploy traffic enforcement agents to manage traffic flow through the intersection. [\$500/day]

Technological:

- Install flashing beacons to control traffic flow through intersection (Short Range)[\$10,000]

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XII. County Route 524 Spur

Portal Facility #12 - County 524A Corridor From State Route 35 to County 524



XII.A. Existing Conditions

XII.A.1. Physical and Operating Characteristics

The CR 524 Alternate corridor stretches between CR 20 in Manasquan and CR 524 near the Monmouth County/Ocean County border and the NJ GSP corridor. The portal route's alignment is approximately 3 miles long, providing the Communities of Manasquan and Sea Girt with convenient access to area's highway system via connections with CR 35 and CR 34.

Within the study area, CR 524 Alternate is classified as an Urban Minor Collector with a posted speed limit ranging 35 mph and 45 mph. Commercial uses are located in the vicinity of intersection of CR 524 Spur and CR 20, the entrance to the portal. Traveling further west, the Spur typically runs through low density residential and open space, maintaining one travel lane in each direction. Between SR 35 and SR 34, the adjacent land use is mixed.

XII.A.2. Proposed TIP Improvements

No Corresponding TIP improvements were found.

XII.A.3. Alternative Routes

CR 524 Alternate is located at the southern end of the study area and is situated between two arteries that are currently part of the State Evacuation Road system for Monmouth County, CR 524 to the north

(about 2.5 miles) and the SR 34/SR 35 corridor slightly over one mile to the south. However, access between these east-west portals is limited because the north-south movement on the area's local street systems is interrupted by various water bodies and man made features including a National Guard Camp, golf courses, and a cemetery. The only continuous north-south road running near the coast between Manasquan and Spring Lake is SR 71, which is intensely used as it serves commercial and retail development.

XII.A.4. Entry Points

The key roads that would collect local traffic in Sea Girt and Manasquan and funnel it into the portal route include CR 20 and Washington and Beacon Boulevards which run into CR 20. Several local streets also intersect CR 20 in both towns.

XII.A.5. Exit Points

Traffic evacuating the hazard zone via CR 524 Alternate would have exit options at SR 34, which runs northeasterly across both the GSP and I-195 corridors, and at CR 524 which runs through Wall Township and other points further west.

XII.A.6. Key Data Deficiencies/Omissions

Signal Timing Plans

XII.A.7. Priority Location

There are several Initial Priority Locations within the CR 520 corridor. From west to east, they are identified as follows:

- ✦ CR 524CR Spur/CR 20 Intersection
- ✦ SR 35 Ramp and Bridge Piers
- ✦ CR 34 Ramps
- ✦ CR 524 Spur/Ramshorn Drive Intersection
- ✦ Bridge over CR 524 Spur.

XII.B. Evacuation Condition

XII.B.1. Physical and Operating Characteristics

CR 524 Spur (Atlantic Avenue) as the primary evacuation route for the Communities of Manasquan and Sea Girt, where substantial portions of these Towns lie within the flood inundation zone. The portal maintains two travel lanes within a roadbed that is 30 feet wide east of SR 35 and widens generally to 30 feet west of SR 35 to its western terminus at Allaire Road. There are three historic features where the portal intersects Ramshorn Drive before turning in a northwesterly direction.

Travel demand under either a 2007 or 2030 evacuation condition would not exceed 600 vehicles per hour. Given this moderate traffic flow, the portal would serve the area's population between Brielle and Sea Girt as supplemental capacity for the adjacent and more heavily traveled SR 34 and CR 524 evacuation routes. This corridor is covered by the Manasquan HAR system that broadcasts live information over Station 1620 AM.

XII.C. Treatments / Strategies:

XII.C.1. Corridor Wide.

a) Capacity

Physical:

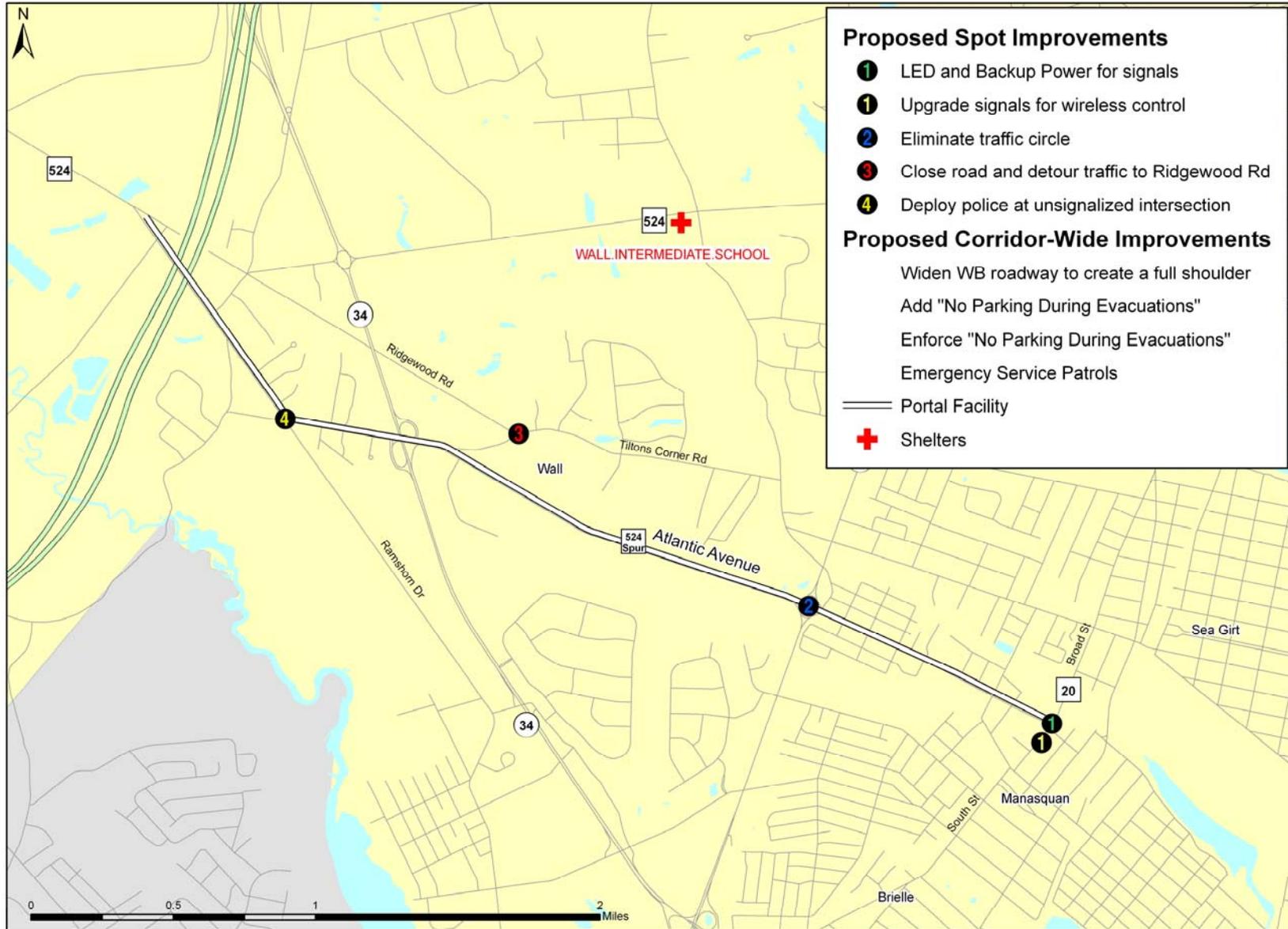
- Elevate the roadway and implement drainage improvements along sections crossing low-lying areas that are at to flooding during a hurricane event. (Long Range) [\$10M] Where feasible, widen roadbed to provide a full (12 feet) hard-running shoulder in the westbound direction to permit temporary shoulder



Photo 29 - CR524 Spur under SR 34 bridge

use as a through travel lane during an evacuation event. Relocate aerial utilities, sidewalk, and mounted signs as necessary. Exclude section in vicinity of SR 34 between Tilton Corner Road and Robin Way where roadway expansion is constrained by the SR 34 Bridge piers. (Long Range) [\$8.8M] Within this section, the center line could be restriped

Portal Facility #12 - County 524 Spur Corridor
 From County Route 20 to County 524



PORTAL ROUTE TREATMENT TABLE - COUNTY ROUTE 524 SPUR

Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including RoW, SwM)	Lead Organization	Comment
Capacity	Corridor Wide	Physical	NA	Widen WB roadway to create a full shoulder	Long	\$8,800,000	County	
Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$3,200	County	
Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	na
Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuation	\$5,000	Municipality	Daily
Capacity	CR 20 (Broad Street)	Technological	❶	LED and Backup Power for Signals	Intermediate	\$7,000	County	
Capacity	CR 20 (Broad Street)	Technological	❶	Upgrade signals for wireless control	Intermediate	\$23,000	State	
Capacity	SR 35/CR 524 Spur Traffic Circle	Physical	❷	Eliminate traffic circle	Long	\$10,000,000	Municipality	
Capacity	Tilton Corner Road	Operational	❸	Close road and detour traffic to Ridgewood Road	During Evacuation	\$4,000	Municipality	Daily
Capacity	CR 524 Spur at Ramshorn Drive	Operational	❹	Deploy police at unsignalized intersection	During Evacuation	\$500	Municipality	Daily

to provide one travel lane and a full shoulder in the westbound direction and one travel lane in the eastbound direction.

- Modify the Coastal Evacuation Route sign assemblies by adding a “No Parking - During Evacuation” placard. Sign modification actions action must go through legislative process. (Short Range)[\$3,200]

Operational (During Evacuations)

- Strictly enforce No Parking restriction (towing if necessary) to maintain an unobstructed curb lane for travel. [\$2,000/day]
- Initiate a program of Emergency Service Patrols to provide quick response for clearing accidents and breakdowns. [\$5,000/day]

XII.C.2. Atlantic Avenue/CR 20 Intersection ❶

- a) Capacity

Technological

- Provide LED and battery back-up for existing signals. (Intermediate Range)[\$7,000]
- Install a wireless “real time” traffic control system (i.e. an Adaptable Traffic Control System (ATCS)) to balance operations at the intersection. (Intermediate Range) [\$23,000]

XII.C.3. SR 35/CR 524 Spur Traffic Circle ❷

- a) Capacity

Physical

- Place as a NJTPA candidate project to eliminate the SR 35/CR 524 Spur traffic circle. (Long Term) [\$10M]

XII.C.4. Tilton Corner Road ❸

- a) Capacity

Operational (During Evacuations)

- Place as a NJTPA candidate project to eliminate the SR 35/CR 524 Spur traffic circle. (Long Term) [\$10M]



Photo 30 - Acute angled intersection at Tilton's Corner Road

- Tilton Corner Road intersects CR 524 Spur at an acute angle. Because of the difficulty in viewing down an acute-angle approach, identifying adequate gaps to enter the portal's traffic stream is difficult and could potentially result in disruptions to traffic flow and increased travel time. To mitigate, close Tilton Corner Road in both directions between Ridgewood Road and CR 524 Spur. Redirect traffic to Ridgewood Road to access SR 34 or to CR 524 to continue in a westerly direction.[\$4000/day]

XII.C.5. CR 524 Spur/Ramshorn Drive ④

- a) Capacity

Operational (During Evacuations)

- Deploy police for traffic control at unsignalized intersection where the roads cross at acute angles. [\$500/day]

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XIII. Project Conclusions – A Global Approach

This Study is only one piece of a much larger Coastal Evacuation picture. The hope is that the information contained in the study can be used by the State, County and Municipalities as infrastructure improvements are proposed and built in the future. The study also points out the need for significant coordination amongst all parties that play a role in successfully evacuating our coastal areas. That includes regional, state and local Emergency Management Professionals, state and local police, county and city engineers and all local decision makers.

This Study developed a Treatment Toolkit, enabling it to recommend a set of improvements tied to individual Portals. However, this same toolkit may be applied globally to assist in programming and policy decisions. It can provide a focus for setting short and long range infrastructure goals relating to coastal evacuation.

Physical Improvements that can be applied area-wide can be implemented fairly easily and cheaply, in order of ease include:

1. Place Evacuation Route Signs on newly – designated routes. Provide extra signing at problem locations. Develop “alternate route” signing where existing routes may become overcrowded and alternate routes exist.
2. Add “No Parking During Evacuation” signs as necessary. Pass local ordinances to make these signs enforceable.
3. Restripe where possible to create additional outbound lanesxxModify Traffic Signals as follows:
 - a. Switch to Light Emitting Diodes (LED’s) first
 - b. Add Battery Backup simultaneously or when funding permits.

Operational Improvements that should be put in place ASAP:

1. Identify the most vulnerable areas for priority evacuation
 - a. Sea Bright, Monmouth Beach
 - b. Bayshore between Union Beach and Atlantic Highlands
2. Work with State to discuss reverse On-Ramps and coordination with the “511” system as indicated
3. Plan for additional Police assistance for an evacuation event
4. Work with NJ Transit to decide how train crossings conflicts can be minimized. Include widening of crossing when crossing improvements are planned.
5. Work with NJ Transit on use of their vehicles for evacuation
6. Coordinate using the Emergency Radio Frequency for evacuation information

Prioritization of Longer Term Improvements

1. Remote control for traffic signals along with State/County/Local coordination of that control.
2. Identify areas for shoulder widening where ROW exists and shoulders can be used as Bike Paths when not needed for evacuation purposes
3. Provide municipalities with Portable Traffic Signals when necessary
4. Include “Raise elevation of roadway/bridge to reduce flood impact” in project plans and checklists in flood areas.

How to Use this Project’s Products in Developing Projects and Programs

As a General Reference

Use the project data (populations affected, toolkit, methodologies, appendices) to support municipal evacuation programs.

For the Routes Themselves

Use the individual Route Sections to support improvements along those routes, or intersecting with those routes by referring to the Route tables or coded maps.

For Local Capital and Operational Planning

Use the project Database to identify a specific location or area that may be a priority; or use the information to support/develop capital improvements.

1. Link on monmouthplanning.com website
2. Call up the database
3. Sort by any of the headings listed
 - a. Issue (Capacity or Flooding)
 - b. Portal route
 - c. Location
 - d. Treatment Category
 - e. Map code (reference number)
 - f. Treatment Description
 - g. Timeframe
 - h. Estimated Cost
 - i. Lead Organization
 - j. Comments
4. Find spot improvement locations from Latitude and Longitude

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APPENDIX A

WORKFORCE DATA

**MONMOUTH COUNTY DEPARTMENT OF ECONOMIC DEVELOPMENT
AND TOURISM**

MAJOR EMPLOYERS LIST 2008

<u>EMPLOYER ADDRESS & PHONE NUMBERS</u>	<u>NUMBER OF EMPLOYEES</u>	<u>CONTACT PERSON(S)</u>
Meridian Health System (includes) Riverview Medical Center Jersey Shore Medical Center 1350 Campus Parkway Neptune, NJ 07763 732-751-7560 www.meridianhealth.com	8,300	John E. Sindoni Al Swinney
U.S. Army Communications Electronics Command Fort Monmouth (CECOM) Bldg 901, Murphy Drive Fort Monmouth, NJ 07703 732-532-9000 www.monmouth.army.mil	5,300	Deborah Devlin
County of Monmouth Hall of Records 1 East Main Street Freehold, NJ 07728 732-431-7300 www.visitmonmouth.com	3,338	Fredrica A. Brown
CentraState Healthcare Systems 901 West Main Street Freehold, NJ 07728 732-294-7080 www.centrastate.com	2,407	Jacquie Piccolini Renee Crotts
Monmouth Medical Center 300 Second Avenue Long Branch, NJ 07740 732-222-5200 www.sbhcs.com	2,050	Bruce Pardo

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**NUMBER OF
EMPLOYEES**

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Maureen Coffey

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1,239

Linda Higgins

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www.foodcircus.com

1,200

Nancyanne Fama

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1,100

Suzanne Corson

Horizon Blue Cross Blue Shield
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732-256-5660
www.horizon-BCBSNJ.com

850

Jonathan Pearson
Patricia Trombino

**EMPLOYER ADDRESS &
PHONE NUMBERS**

**NUMBER OF
EMPLOYEES**

**CONTACT
PERSON(S)**

• Visiting Nurse Assoc. of Central Jersey 141 Bodman Place Red Bank, NJ 07701 732-747-1204 www.vnacj.org	834	Mary Anne Christopher
Brookdale Community College 765 Newman Springs Road Lincroft, NJ 07738 732-224-2345 www.brookdalecc.edu	728	Patricia Sensi Dr. Stephen Nacco
Naval Weapons Stations Earle State Highway 34 Colts Neck, NJ 07722 732-866-2171 www.globalsecurity.org/military/facility/earle.htm	677	Nancy Eldridge
• New Jersey Resources Corporation 1415 Wyckoff Road Wall, NJ 07719 732-938-1000 http://www.njresources.com	831	Don Irvin
• JCP&L / First Energy One River Centre 331 Newman Springs Road, Bld 3 Red Bank, NJ 07701 732-212-4148 www.firstenergycorp.com	533	Janis Lewandowski
Avaya, Inc. (main office) 211 Mount Airy Road Basking Ridge, NJ 07920 908-953-6000 www.avaya.com	500	Deborah Kline

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**CONTACT
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Nicholas Donofrio

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435

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Kerry Herbert

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Sharon Halpin

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Joseph Jenci

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www.comvault.com

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Ellen Finn

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340

Beverly Brodowski

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t/a Marion Security Agency
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Debbie E. Cohen

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Mary Ann Schulz

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www.L-3com.com

305

Tom Porskievies
Jennifer Strapko

APPENDIX B

INITIAL PORTAL ROUTE CANDIDATES

Monmouth County Coastal Evacuation Route Improvements

JURISDICTION	NUMBER	STREET NAMES	FROM	TO	COMMUNITY REFERENCE	NOMINAL SCORE	IDENTIFIED IN STATEWIDE PLAN	LEAD AWAY FROM FLOOD ZONES	SUPPLEMENT EXISTING IDENTIFIED NETWORK	PROVIDES AREAWIDE COVERAGE	HAS POTENTIAL FOR IMPROVED CAPACITY	REACHES ISOLATED AREAS	AVOIDS MERGING TRAFFIC STREAMS	MAKES USE OF THE COUNTY SYSTEM
COUNTY	13A	Sycamore Avenue	CR 13B	Hance Avenue	Shrewsbury	8		2	1	2	1	1		1
COUNTY	7	Port Monmouth Road, Palmer Ave., Ocean Ave	Atlantic Ave	SR 35	Keansburg	8		2	1	2	1	1		1
COUNTY	16	Asbury Avenue	Ocean Avenue	SR 35	Asbury Park	8	Yes	2		2	1	1	1	1
COUNTY	34	Harding Road, Ridge Road, Avenue of Two	CR 11	CR 520	Rumson	8		2	1	2	1	1		1
COUNTY	39	Front Street	Florence Ave	SR 36	Union Beach	8		2	1	2	1	1		1
COUNTY	44	State Route 36 (Duplication)	CR 57 (SR 36)	SR 71	Long Branch	8	Yes	2		2	1	1	1	1
OCEAN	NA	Park Avenue	SR 35	Ocean Avenue	Ocean	7		2	1	2	1			1
COUNTY	57	State Route 36 (Duplication)	Florence Ave	Ocean Ave	Long Branch	7		2		2		1	1	1
COUNTY	520	Rumson Road, Branch Avenue, Pinkney Road, Broad Street, Newman Springs Road	Ocean Avenue	Garden State Parkway	Red Bank	7	Yes	2		2	1	1		1
COUNTY	524	Allaire Road	SR 34	CR 18	Spring Lake	7		2	1	2	1			1
STATE	33		State Route 71	Garden State Parkway	County	6	Yes	2		2	1	1		
STATE	36		Garden State Parkway (K	Garden State Parkway (Eatontown)	County	6	Yes	2		2	1	1		
COUNTY	8A	Valley Drive, Locust Ave, Locust Point Road, Oceanic Bridge, Bingham Ave	SR 36	CR 520	Highlands	6		1	1	2	1			1
COUNTY	12A	Locust Avenue, Locust Point Road, Navesink River Road	CR 8A	CR 12	Middletown	6				2	1	1	1	1
COUNTY	13B	Willow Drive, Prospect Ave	CR 13A	CR 520	Little Silver	6		2	1		1	1		1
COUNTY	4	Broad Street, Keyport-Holmdel Road	CR 6	Bethany Road	Keyport	6		2	1		1		1	1
COUNTY	10	River Road, Front Street	CR 8A	SR 35	Rumson	6		2			1	1	1	1
COUNTY	12	Nut Swamp Road, Dwight Road	CR 12A	Red Hill Road	Middletown	6		2	1		1	1		1
COUNTY	29	Shrewsbury Branchport Avenue, Atlantic Avenue	CR 33	CR SR 36	Long Branch	6		2	1		1	1		1
COUNTY	30	18th Avenue, 17th Avenue	SR 34	CR 18	Wall	6		2	1		1		1	1
COUNTY	33	Monmouth Boulevard, Port-au-Peck Ave, Florence Ave	CR 520	Broadway	Oceanport	6		2	1		1		1	1
COUNTY	56	Carr Ave	Beachway Ave	CR 7 (Church Street)	Keyport	6		2	1		1		1	1
STATE	34	SR 34	Ocean County Line	Garden State Parkway	County	6	Yes	2		2	1	1		
STATE	35		Middlesex County Line	Ocean County Line	County	5	Yes	2		2	1			
STATE	71	Norwood Ave, Deal Lake Drive, Main Street, Manasquan Turnpike, Taylor Ave, Union Ave	CR 25	State Route 35 (Brielle)	Deal	5	Yes			2	1	1	1	
COUNTY	6A	County Line	Cliffwood Ave	SR 35	Aberdeen	5		2			1		1	1
COUNTY	13	Rector Ave, Shrewsbury Ave	SR 35 (Red Bank)	SR 35 (Shrewsbury)	Red Bank	5		2		2				1
COUNTY	20	Broad Avenue, South Street, Old Bridge Road	Beacon Boulevard	SR 70	Manasquan	5		2	1		1			1
COUNTY	52	Van Schoick Road	SR 35	Garden State Parkway	Holmdel	5		2			1		1	1
COUNTY	25	Norwood Ave, Cedar Ave	Broadway	Ocean Avenue	Long Branch	4.5	Partial		0.5	2		1		1
COUNTY	36	Ocean Ave, Thompson Ave	Atlantic Ave	CR 7	Keansburg	4		2	1					1

Monmouth County Coastal Evacuation Route Improvements

JURISDICTION	NUMBER	STREET NAMES	FROM	TO	COMMUNITY REFERENCE	NOMINAL SCORE	IDENTIFIED IN STATEWIDE PLAN	LEAD AWAY FROM FLOOD ZONES	SUPPLEMENT EXISTING IDENTIFIED NETWORK	PROVIDES AREA-WIDE COVERAGE	HAS POTENTIAL FOR IMPROVED CAPACITY	REACHES ISOLATED AREAS	AVOIDS MERGING TRAFFIC STREAMS	MAKES USE OF THE COUNTY SYSTEM
ATLANTIC HIGHLANDS	NA	Avenue D, Portland Ave, Hillside Ave, Navesink Ave, Locust Point Road	SR 36	CR 12A		4	Yes			2	1		1	
STATE	66		CR 16	Garden State Parkway	Wall	3	Yes	2					1	
STATE	138		State Route 35	Garden State Parkway	Wall	3	Yes	2					1	
COUNTY	2	Shoreham Road, 6th Avenue	Oxford Way	Memorial Drive	Neptune	3		2						1
COUNTY	8	Linden, Bay Ave	SR 36 (Atlantic Highlands)	SR 36 (Highlands)	Highlands	3						1	1	1
COUNTY	18	Newark Ave., Ocean Ave.Crescent Ave	CR 71	CR 49	Belmar	3					1	1		1
STATE	18		Garden State Parkway	State Route 138	County	2	Yes	2						
STATE	71	Monmouth Road, Cedar Avenue	State Route 35 (Eatontov	County Route 25 (Long Branch)	West Long Branch	2	Yes	2						
COUNTY	6	Cliffwood Ave, Amboy Ave, Front Street, 1St Street, Stone Road	SR 35	SR 36	Keyport	2						1		1
COUNTY	11	Main St., E. Main St., Oceanport Ave.	SR 71	CR 537 (Broadway)	Ft. Monmouth	2					1			1
COUNTY	15	Monmouth Road	Broadway	SR 71	Ocean Township	2	Yes				1			1
COUNTY	37	Brighton Avenue	CR 25	Ocean Ave	Long Branch	2			1					1
COUNTY	49	Washington Boulevard	SR 71	2nd Ave	Sea Girt	2							1	1
COUNTY	516	Maple Place, Middle Road, Laurel Ave, Cherry Farm Road, Leonardville Road	SR 35	SR 36	Middletown	2	Yes				1			1
COUNTY	14				Elberon	2			1					1
COUNTY	5	Steiner Avenue, Atkins Ave	SR 33	Sylvania Ave	Neptune City	1								1
COUNTY	51	Hance Avenue	CR 520	Sycamore Ave	Red Bank	1								1

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APPENDIX C
PORTAL ROUTE EVACUATION
TRIP LOADING

Volume and distribution of traffic across the twelve portal routes were estimated for the evacuation condition based on a number of volume adjustment and loading source factors, and a scenario under which an advanced six-hour evacuation order would be implemented.

Overall Process:

Portal volumes were estimated based on a methodology that applied Monmouth County Planning Board's Municipality population growth rates at the census tract level, automobile ownership and auto occupancy characteristics, the presence of competing routes, and a temporal distribution pattern that assumed that the affected population cohort would leave the flood inundation zones in a pattern similar to a normal distribution, resulting in a peak hour of travel occurring within the six-hour evacuation order. These variables were converted into factors for estimating number of vehicles. Individual components are discussed below:

Summer Population Growth:

Summer population growth was derived through application of factors that had been developed by the Monmouth County Planning Board in its Summer Population Study. This study used seasonal wastewater production as an indirect measure of population at these shore areas. Because there are eight sewer districts and over forty municipalities, it was necessary to apply factors for the nearest sewer districts to each population group. In some cases, two or more sewer district growth factors were averaged if the population group was physically near the location of a specific sewer authority. The sewage production increases were calculated under several scenarios. This project used an average of increased production for a peak summer day and increased production in an average summer day, assuming a 5% increase in individual water consumption in hot weather. The result of these calculations may be seen in the two Appendix C sheets labeled Factor Development near the end of Appendix C.

By way of an example, the Township of Neptune shows an average 2007 baseline population of 50,292. It also shows an additional 24,485 persons on an average summer day, assuming a 5% increase in water consumption. An increase of 57,035 is shown in a peak summer day, assuming a 5% increase in water consumption. Averaging both increases and adding to the base of 50,292 yields an expected summer population of 91,052, or a total representing 181% of the average population. The 181% may be found in the second page labeled Factor Development.

Growth Rate Application – Summer Adjustment Factors:

These rates were applied to each portal route as appropriate. For example, the 181% noted above was applied to Portal Route 8 (CR 16), along with the developed growth for the Asbury Park Sewer Authority (321%). This may be seen in the sheet labeled Factor

Application at the end of Appendix C. The resultant 251% factor can be seen there, becoming the “Summer Adjustment Factor” for Portal Route 8.

Hourly Adjustment Factor:

Represents a maximum hourly volume assuming 10% in the first hour, 18% in the second hour, 22% in the third and fourth hour, 18% in the fifth hour, and 10% in the sixth hour.

Modal Split: Modal splits of Auto, bus, and rail were assumed values based on recreational areas with some access to public transportation.

Automobile Occupancy: Was generally either 1.7 or 2 persons per vehicle, based on similar results in coastal studies for recreational areas in the State of Delaware. While higher occupancies are often observed for non-residents, it is important to note that residents will often chose to evacuate their residences in multiple vehicles, so as to preserve those vehicles.

Bus Occupancy: An assumed value of 20.

Daily Vehicle Factor:

A combination of Hourly Adjustment Factor, Automobile Occupancy, and Bus Occupancy that translates a population value into a vehicle value.

Census Tract: For each Portal Route, the surrounding census tracts were assumed as trip origin locations. Evacuees would come from these tracts, and travel towards inland areas.

Tract Evacuation Factor:

Represents a probability that persons in that census tract would truly evacuate. The higher and drier the tract or the further from a water body, the lower the chance that the area would be evacuated.

Route Factor: Represents the availability of more than one evacuation route. As the number of possible routes increases, the probability of using the subject route decreases.

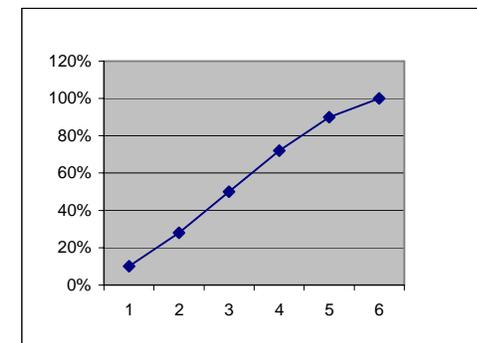
Methodology Application: A short description of how each formula is applied appears on the second sheet for Portal Route #1

INPUT										
Community	Population	Summer Adjustment	Visitor Adjustment	Stay with Friends or Relatives - Local High Ground	Evac auto	Evac Bus	Evac Rail	Auto Occ	Bus Occ	Peak Pct
Asbury Park	16000	1.7058824	1	5%	70%	25%	5%	2.8	20	20%
Manasquan	6310	1.5	1	15%	90%	5%	3%	2.1	20	20%
					must total 100%					

OUTPUT												
Not Staying	Total Veh	Peak Veh	Rail Riders	Summer Population	Total Summer Evacuation	Total Evac	Total Auto Riders	Total Autos	Bus Riders	Total Buses	Rail Riders	
95%	6,806	1,361	1,296	27,294	27,294	25,929	18,151	6,482	6,482	324	1,296	
85%	3,468	694	241	9465	9465	8,045	7,241	3,448	402	20	241	

DEFINITIONS		
NAME	COLUMN	HOW DERIVED
Summer Adjustment	Column	Factor for Seasonal Population
Visitor Adjustment	D	For Daytrippers - already accounted for by the County
Stay with..	E	Population NOT seeking to evacuate
Evac Auto	F	Of those evacuating - those using auto
Evac Bus	G	Of those evacuating - those using Bus
Evac Rail	H	Of those evacuating - those using rail
Auto Occ	I	Automobile Occupancy
Bus Occ	J	Bus Occupancy
Peak Pct	K	Of the 6 hours, the percent of that volume in the peak hour
Not Staying	L	1-E
Total Veh	M	T + V
Peak Veh	N	K * M
Rail Riders	O	W
Summer Population	P	B * C
Total Summer Evacuation	Q	P * D
Total Evac	R	Q * L
Total Auto Riders	S	R * F
Total Autos	T	S / I
Bus Riders	U	R * G
Total Buses	V	U / J
Rail Riders	W	R * H

Loading per hour	Hrly Factor	Cumulative
Loading in 0 to Hour 1	0.10	10%
Loading in Hour 1 to 2	0.18	28%
Loading in Hour 2 to 3	0.22	50%
Loading in Hour 3 to 4	0.22	72%
Loading in Hour 4 to 5	0.18	90%
Loading in Hour 5 to 6	0.10	100%
Must total 100%	100%	



Portal Facility #1 - State 36 (Bayshore) Corridor

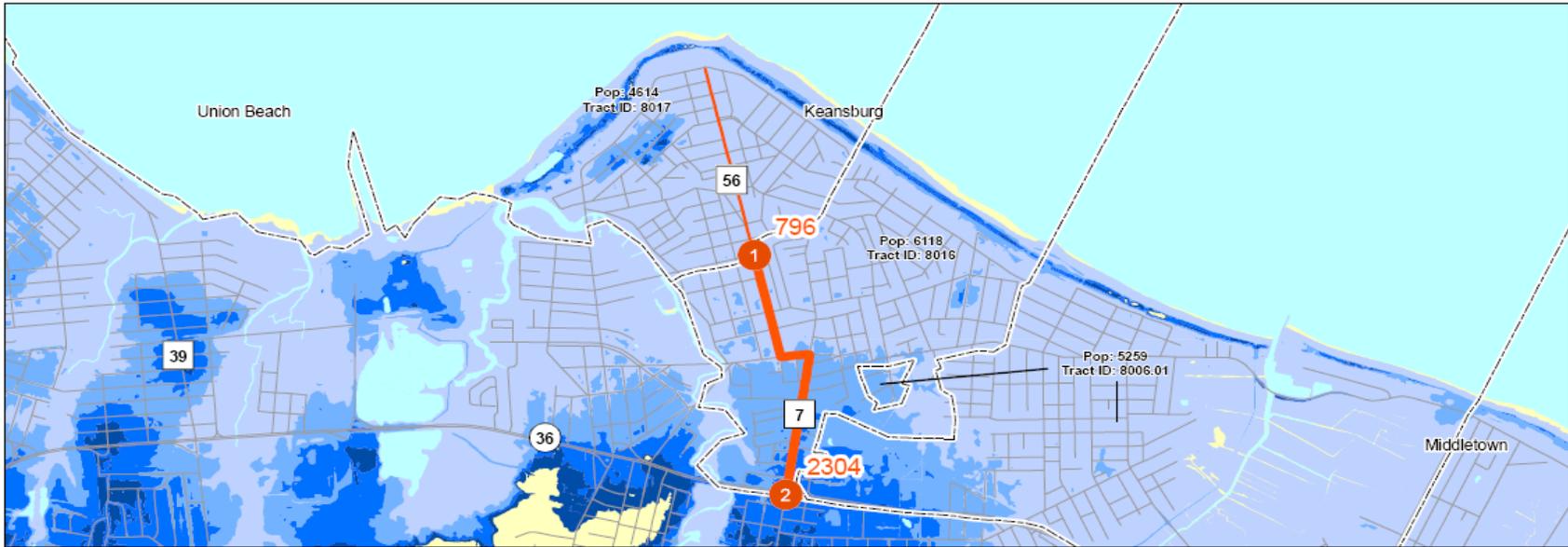
From Ocean Avenue to State Route 35



INPUT									
Sewer Authority	Population	Summer Adjustment	Hourly Adjustment Factor	Evac auto	Evac Bus	Evac Rail	Auto Occ	Bus Occ	Daily Vehicle Factor (DVF)
Bayshore	51255	1.43	22%	93%	2%	5%	1.7	20	0.78
				must total 100%					

Loading Sources									
Census Tract #	Census Tract Pop	Tract Evacuation Factor	Evacuation Population	Route Factor	Pop using Portal	Veh Using the Portal	Peak Vol	Cum Vol	Loading Point
8003	20	1	20	1	20	16	3	3	1
8001	5097	1	5097	1	5097	3995	879	882	1
8002	4705	0.67	3152	0.5	1576	1235	272	1154	2
8004	3769	0.67	2525	0.5	1263	990	218	1372	2
8005	4088	1	4088	1	4088	3204	705	2077	3
8006.01	5259	1	5259	1	5259	4122	907	2983	3
8006.02	3740	1	3740	1	3740	2931	645	3628	3
8016	6118	1	6118	1	6118	4795	1055	4683	3
8017	4614	1	4614	1	4614	3616	796	5479	3
8007.01	5094	0.33	1681	0.5	841	659	145	5624	3
8022	4267	1	4267	1	4267	3344	736	6359	4
8018	6649	1	6649	1	6649	5211	1146	7506	4
8021	6610	0.33	2181	1	2181	1710	376	7882	4
8023	4621	0.1	462	0.5	231	181	40	7922	5
8019	3761	1	3761	1	3761	2948	648	8570	5
8020	3807	0.66	2513	0.5	1256	985	217	8787	5
8024	5880	0.1	588	0.5	294	230	51	8837	5
Total Evacuation Population along Portal						51255	40170	8837	
Daily Vehicle Factor							0.8		
Total Evacuation Volume along Portal							40170		

Portal Facility #2 - County 56/County 7 Corridor From Beachway Aveune to State Route 36



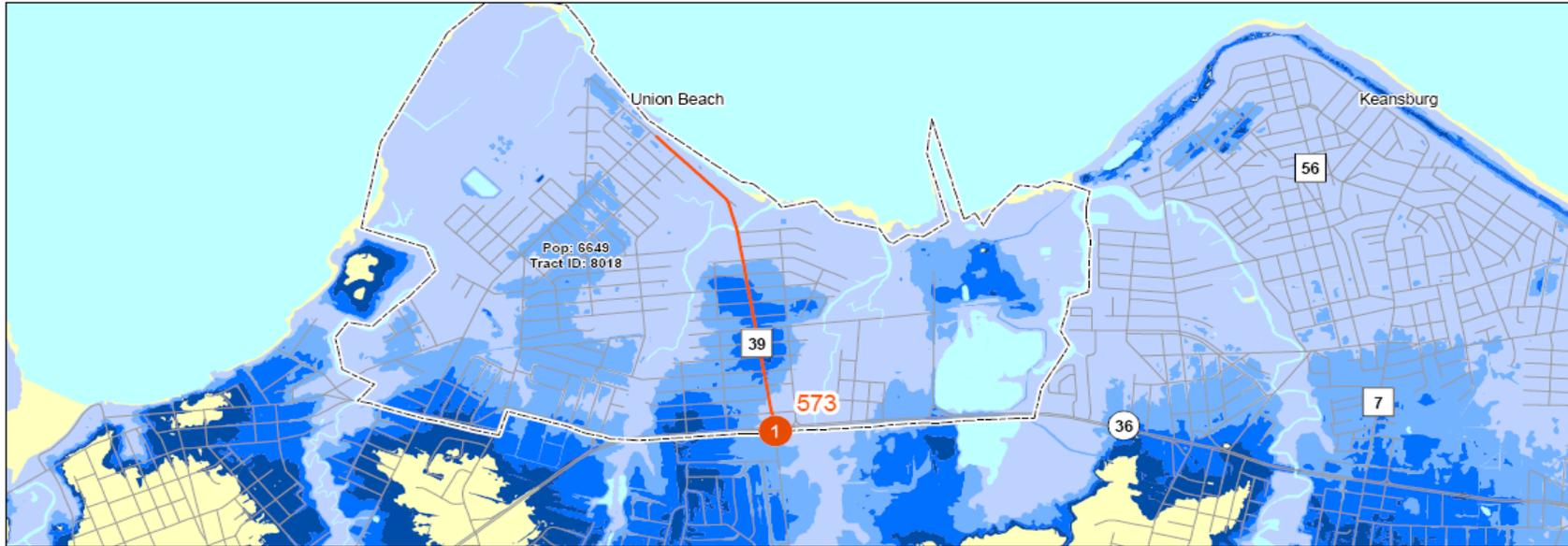
INPUT										
Sewer Authority	Population	Summer Adjustment	Hourly Adjustment Factor	Evac auto	Evac Bus	Evac Rail	Auto Occ	Bus Occ	Daily Vehicle Factor (DVF)	
Bayshore	13362	1.43	22%	93%	2%	5%	1.7	20	0.78	
				must total 100%						

Loading Sources

K	L	M	N	O	P	Q	R	S	T	
Census Tract #	Census Tract Pop	Tract Evacuation Factor	Evacuation Population	Route Factor	Pop using Portal	Veh Using the Portal	Peak Vol	Cum Vol	Loading Point	
8017	4614	1	4614	1	4614	3616	796	796	1	
8016	6118	1	6118	1	6118	4795	1055	1850	2	
8006.01	5259	1	5259	0.5	2630	2061	453	2304	2	
Total Evacuation Population along Portal					13362	10472	2304			
Daily Vehicle Factor					0.8					
Total Evacuation Volume along Portal					10472					

Portal Facility #3 - County 39 Corridor

From Front Street to State Route 36



INPUT									
Sewer Authority	Population	Summer Adjustment	Hourly Adjustment Factor	Evac auto	Evac Bus	Evac Rail	Auto Occ	Bus Occ	Daily Vehicle Factor (DVF)
Bayshore	3325	1.43	22%	93%	2%	5%	1.7	20	0.78
				must total 100%					

Loading Sources

K	L	M	N	O	P	Q	R	S	T
Census Tract #	Census Tract Pop	Tract Evacuation Factor	Evacuation Population	Route Factor	Pop using Portal	Veh Using the Portal	Peak Vol	Cum Vol	Loading Point
8018	6649	1	6649	0.5	3325	2605	573	573	1
Total Evacuation Population along Portal					3325	2605	573		
Daily Vehicle Factor					0.8				
Total Evacuation Volume along Portal					2605				

Portal Facility #4 - County 516/County 50 Corridor From State Route 36 to State Route 35



INPUT									
Sewer Authority	Population	Summer Adjustment	Hourly Adjustment Factor	Evac auto	Evac Bus	Evac Rail	Auto Occ	Bus Occ	Daily Vehicle Factor (DVF)
Bayshore	6674	1.43	22%	93%	2%	5%	1.7	20	0.78
				must total 100%					

Loading Sources

	K	L	M	N	O	P	Q	R	S	T
Census Tract #	Census Tract Pop	Tract Evacuation Factor	Evacuation Population	Route Factor	Pop using Portal	Veh Using the Portal	Peak Vol	Cum Vol	Loading Point	
8009	5984	0.33	1975	0.5	987	774	170	170	1	
8004	3769	0.67	2525	0.5	1263	990	218	388	2	
8005	6989	1	6989	0.5	3495	2739	603	990	3	
8008	6989	0.1	699	0.5	349	274	60	1051	4	
8007_02	3515	0.33	1160	0.5	580	455	100	1151	4	
Total Evacuation Population along Portal					6674	5230	1151			
Daily Vehicle Factor					0.8					
Total Evacuation Volume along Portal					5230					

Portal Facility #5 County 520 Corridor From Ocean Avenue to State Route 35



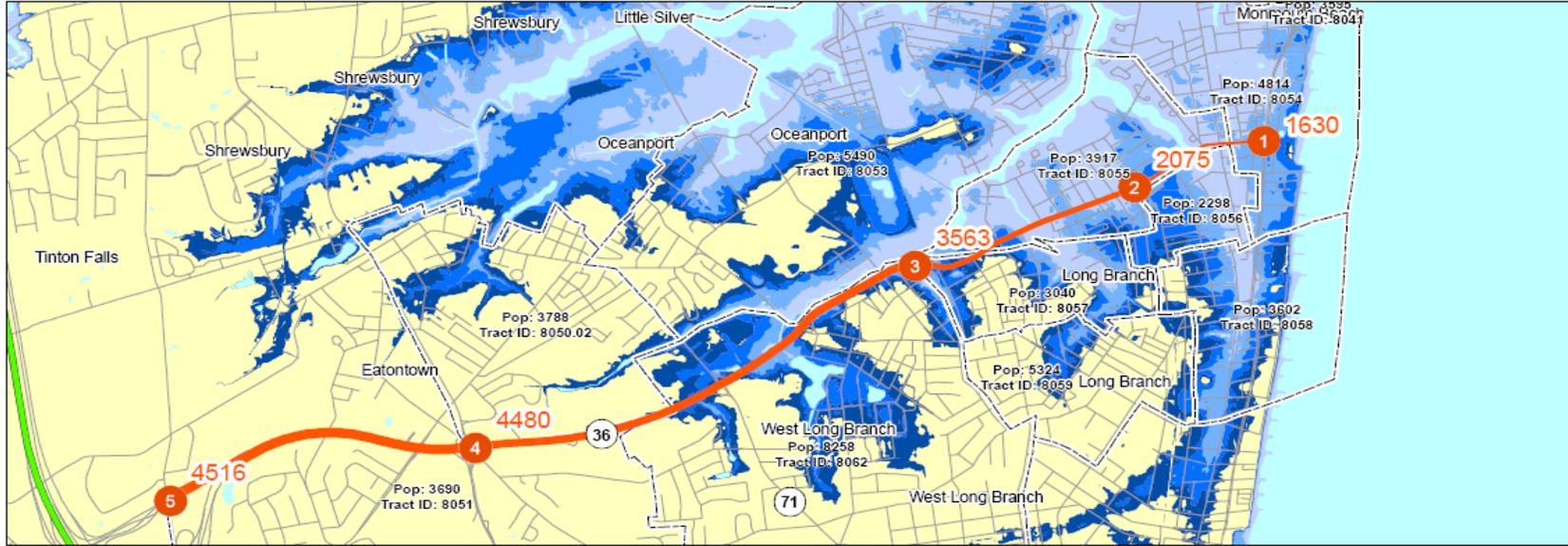
INPUT									
Sewer Authority	Population	Summer Adjustment	Hourly Adjustment Factor	Evac auto	Evac Bus	Evac Rail	Auto Occ	Bus Occ	Daily Vehicle Factor (DVF)
Two Rivers	18662	1.45	22%	93%	2%	5%	1.7	20	0.79
				must total 100%					

Loading Sources

K	L	M	N	O	P	Q	R	S	T
Census Tract #	Census Tract Pop	Tract Evacuation Factor	Evacuation Population	Route Factor	Pop using Portal	Veh Using the Portal	Peak Vol	Cum Vol	Loading Point
8040	1818	1	1818	1	1818	1446	318	318	1
8039	3756	1	3756	1	3756	2986	857	975	2
8038	3381	0.67	2265	1	2265	1800	396	1371	2
8037	5937	0.33	1959	1	1959	1557	343	1713	3
8042	6170	1	6170	1	6170	4903	1079	2792	3
8036	4811	0.1	481	1	481	382	84	2876	3
8035	2528	0.1	253	1	253	201	44	2920	3
8043	3590	0.66	2369	0.5	1185	941	207	3127	4
8034	4505	0.1	451	0.5	225	179	39	3167	4
8045	5332	0.1	533	0.5	267	212	47	3213	4
8013	6069	0.1	607	0.5	303	241	53	3266	5
Total Evacuation Population along Portal					18662	14847	3266		
Daily Vehicle Factor						0.8			
Total Evacuation Volume along Portal						14847			

Portal Facility #6 - State 36 (Long Branch) Corridor

From Ocean Boulevard to Garden State Parkway



INPUT									
Sewer Authority	Population	Summer Adjustment	Hourly Adjustment Factor	Evac auto	Evac Bus	Evac Rail	Auto Occ	Bus Occ	Daily Vehicle Factor (DVF)
Long Branch	23123	1.89	22%	93%	2%	5%	2	20	0.88
				must total 100%					

Loading Sources									
K	L	M	N	O	P	Q	R	S	T
Census Tract #	Census Tract Pop	Tract Evacuation Factor	Evacuation Population	Route Factor	Pop using Portal	Veh Using the Portal	Peak Vol	Cum Vol	Loading Point
8041	3595	1	3595	0.5	1798	1583	348	348	1
8054	4814	1	4814	1	4814	4240	933	1281	1
8058	3602	1	3602	0.5	1801	1588	349	1630	1
8056	2298	1	2298	1	2298	2024	445	2075	2
8055	3917	1	3917	1	3917	3450	759	2834	3
8057	3040	0.86	2006	1	2006	1767	389	3223	3
8059	5324	0.33	1767	1	1767	1547	340	3563	3
8062	8258	0.33	2725	0.5	1363	1200	264	3827	4
8053	5490	1	5490	0.5	2745	2418	532	4359	4
8050.02	3788	0.33	1250	0.5	625	550	121	4480	4
8051	3690	0.1	369	0.5	185	162	36	4516	5
Total Evacuation Population along Portal					23123	20366	4480		
Daily Vehicle Factor						0.9			
Total Evacuation Volume along Portal						20366			

Portal Facility #7 - Park Avenue, West Park Avenue Corridor From Ocean Avenue to State Route 18



INPUT									
Sewer Authority	Population	Summer Adjustment	Hourly Adjustment Factor	Evac auto	Evac Bus	Evac Rail	Auto Occ	Bus Occ	Daily Vehicle Factor (DVF)
Long Branch, Ocean	5078	2.05	22%	93%	2%	5%	2	20	0.96
				must total 100%					
Loading Sources									
Census Tract #	Census Tract Pop	Tract Evacuation Factor	Evacuation Population	Route Factor	Pop using Portal	Veh Using the Portal	Peak Vol	Cum Vol	Loading Point
8060	4551	0.66	3004	1	3004	2869	631	631	1
8068	1070	0.66	706	0.5	353	337	74	705	1
8061	3794	0.33	1252	0.5	626	598	132	837	2
8063	2983	0.33	984	0.5	492	470	103	940	3
8064	5167	0.1	517	0.5	258	247	54	995	4
8065.02	3598	0.1	360	0.5	180	172	38	1033	5
8065.01	3298	0.1	330	0.5	165	158	35	1067	5
Total Evacuation Population along Portal					5078	4851	1067		
Daily Vehicle Factor					1.0				
Total Evacuation Volume along Portal					4851				

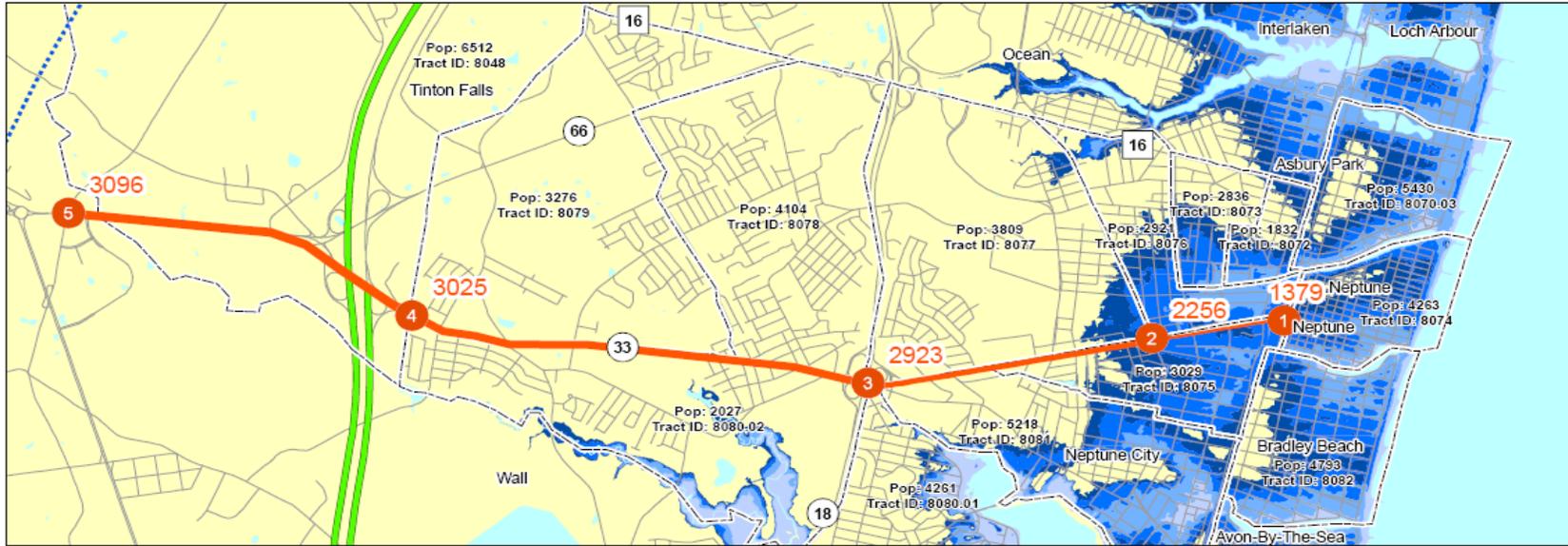
Portal Facility #8 - County 16 Corridor

From Kingsley Street to Garden State Parkway via County 16 or State Route 66



INPUT									
Sewer Authority	Population	Summer Adjustment	Hourly Adjustment Factor	Evac auto	Evac Bus	Evac Rail	Auto Occ	Bus Occ	Daily Vehicle Factor (DVF)
Asbury Park, Neptune	14338	2.51	22%	93%	2%	5%	2	20	1.17
				must total 100%					
Loading Sources									
Census Tract #	Census Tract Pop	Tract Evacuation Factor	Evacuation Population	Route Factor	Pop using Portal	Veh Using the Portal	Peak Vol	Cum Vol	Loading Point
8068	1070	0.66	706	0.5	353	413	91	91	1
8069	998	0.66	659	0.5	329	385	85	176	1
8070.04	3458	1	3458	0.5	1729	2022	446	621	1
8070.03	5430	0.66	3584	0.5	1792	2098	461	1082	1
8067	900	0.66	594	1	594	695	153	1234	2
8071	3374	0.66	2227	0.5	1113	1302	287	1521	2
8073	2836	0.66	1872	0.5	936	1065	241	1762	2
8072	2766	0.66	1826	0.5	913	1068	235	1997	2
8066	5730	0.66	3782	1	3782	4423	973	2970	3
8076	2921	0.66	1928	1	1928	2255	496	3466	3
8065.04	2766	0.1	277	0.5	138	162	36	3502	4
8077	3809	0.1	381	0.5	190	223	49	3551	4
8065.03	3417	0.1	342	0.5	171	200	44	3594	5A
8078	4104	0.1	410	0.5	205	240	53	3603	5B
8079	3276	0.1	328	0.5	164	192	42	3645	5B
Total Evacuation Population along Portal					14338	16770	3689		
Daily Vehicle Factor					1.2				
Total Evacuation Volume along Portal					16770				

Portal Facility #9 - State 33 Corridor From South Main Street to State Route 34



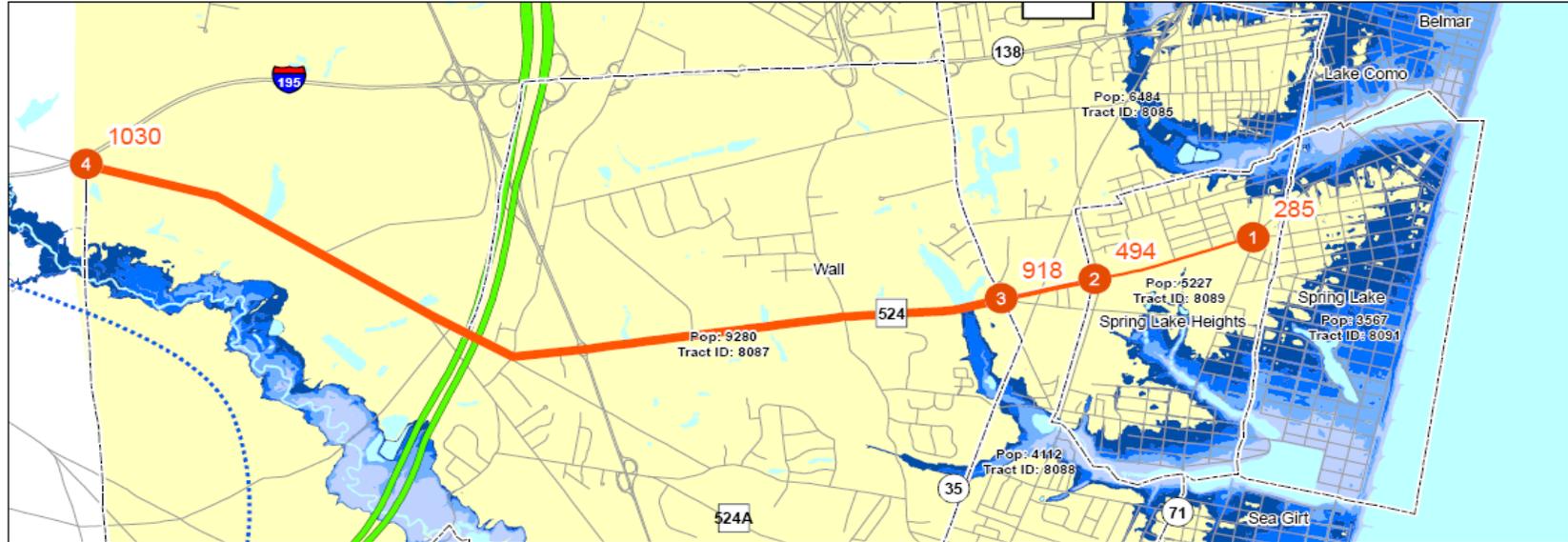
INPUT									
Sewer Authority	Population	Summer Adjustment	Hourly Adjustment Factor	Evac auto	Evac Bus	Evac Rail	Auto Occ	Bus Occ	Daily Vehicle Factor (DVF)
Neptune	14188	1.81	22%	93%	2%	5%	1.7	20	0.99
				must total 100%					

Loading Sources

Census Tract #	Census Tract Pop	Tract Evacuation Factor	Evacuation Population	Route Factor	Pop using the Portal	Veh Using the Portal	Peak Vol	Cum Vol	Loading Point
8070.03	5430	0.66	3584	0.5	1792	1778	391	391	1
8074	4263	1	4263	0.5	2132	2114	465	856	1
8082	4793	1	4793	0.5	2397	2377	523	1379	1
8072	1832	0.66	1209	0.5	605	600	132	1511	2
8073	2836	0.66	1872	0.5	936	928	204	1715	2
8076	2921	0.66	1928	0.5	964	956	210	1928	2
8075	3029	1	3029	0.5	1515	1502	331	2256	2
8081	5218	0.66	3444	0.5	1722	1708	376	2632	3
8077	3809	0.33	1257	0.5	628	623	137	2769	3
8080.01	4261	0.33	1406	0.5	703	697	163	2923	3
8078	4104	0.1	410	0.5	205	204	45	2967	4
8080.02	2027	0.1	203	0.5	101	101	22	2990	4
8079	3276	0.1	328	0.5	164	162	36	3025	4
8048	6512	0.1	651	0.5	326	323	71	3096	5
Total Evacuation Population along Portal					14188	14075	3096		
Daily Vehicle Factor					1.0				
Total Evacuation Volume along Portal					14075				

Portal Facility #10 - County 524 Corridor

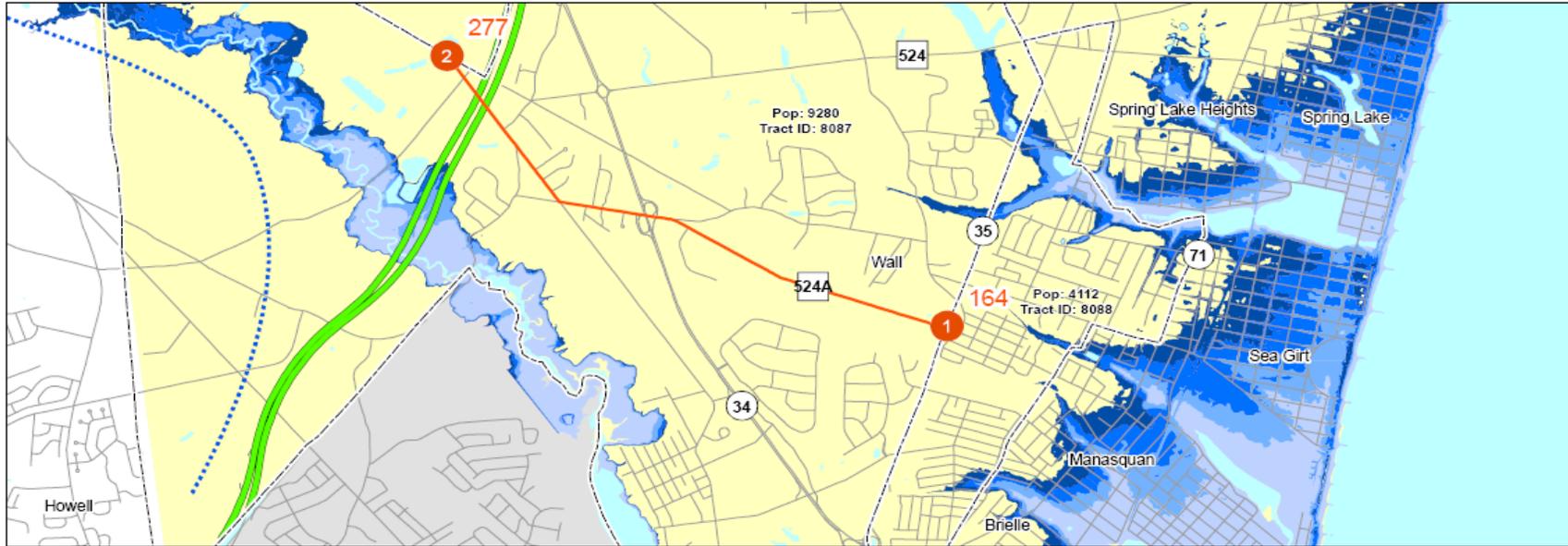
From State Route 71 to Interstate 195



INPUT									
Sewer Authority	Population	Summer Adjustment	Hourly Adjustment Factor	Evac auto	Evac Bus	Evac Rail	Auto Occ	Bus Occ	Daily Vehicle Factor (DVF)
South Monmouth	4252	2.01	22%	93%	2%	5%	1.7	20	1.10
				must total 100%					

Loading Sources									
K	L	M	N	O	P	Q	R	S	T
Census Tract #	Census Tract Pop	Tract Evacuation Factor	Evacuation Population	Route Factor	Pop using Portal	Veh Using the Portal	Peak Vol	Cum Vol	Loading Point
8091	3567	0.66	2354	0.5	1177	1297	285	285	1
8089	5227	0.33	1725	0.5	862	950	209	494	2
8085	6484	0.33	2140	0.5	1070	1179	259	754	3
8088	4112	0.33	1357	0.5	678	747	164	918	3
8087	9280	0.1	928	0.5	464	511	112	1030	4
Total Evacuation Population along Portal					4252	4684	1030		
Daily Vehicle Factor					1.1				
Total Evacuation Volume along Portal					4684				

Portal Facility #11 - County 524 Spur Corridor From State Route 35 to County 524



INPUT									
Sewer Authority	Population	Summer Adjustment	Hourly Adjustment Factor	Evac auto	Evac Bus	Evac Rail	Auto Occ	Bus Occ	Daily Vehicle Factor (DVF)
South Monmouth	1142	2.01	22%	93%	2%	5%	1.7	20	1.10
				must total 100%					

Loading Sources										
K	L	M	N	O	P	Q	R	S	T	
Census Tract #	Census Tract Pop	Tract Evacuation Factor	Evacuation Population	Route Factor	Pop using Portal	Veh Using the Portal	Peak Vol	Cum Vol	Loading Point	
8088	4112	0.33	1357	0.5	678	747	164	164	1	
8087	9280	0.1	928	0.5	464	511	112	277	2	
Total Evacuation Population along Portal					1142	1259	277			
Daily Vehicle Factor					1.1					
Total Evacuation Volume along Portal					1259					

Portal Facility #12 - Kings Highway, Holland Road Corridor From State Route 36 to Garden State Parkway



INPUT									
Sewer Authority	Population	Summer Adjustment	Hourly Adjustment Factor	Evac auto	Evac Bus	Evac Rail	Auto Occ	Bus Occ	Daily Vehicle Factor (DVF)
Middletown	1786	1.2	22%	93%	2%	5%	1.7	20	0.66
				must total 100%					

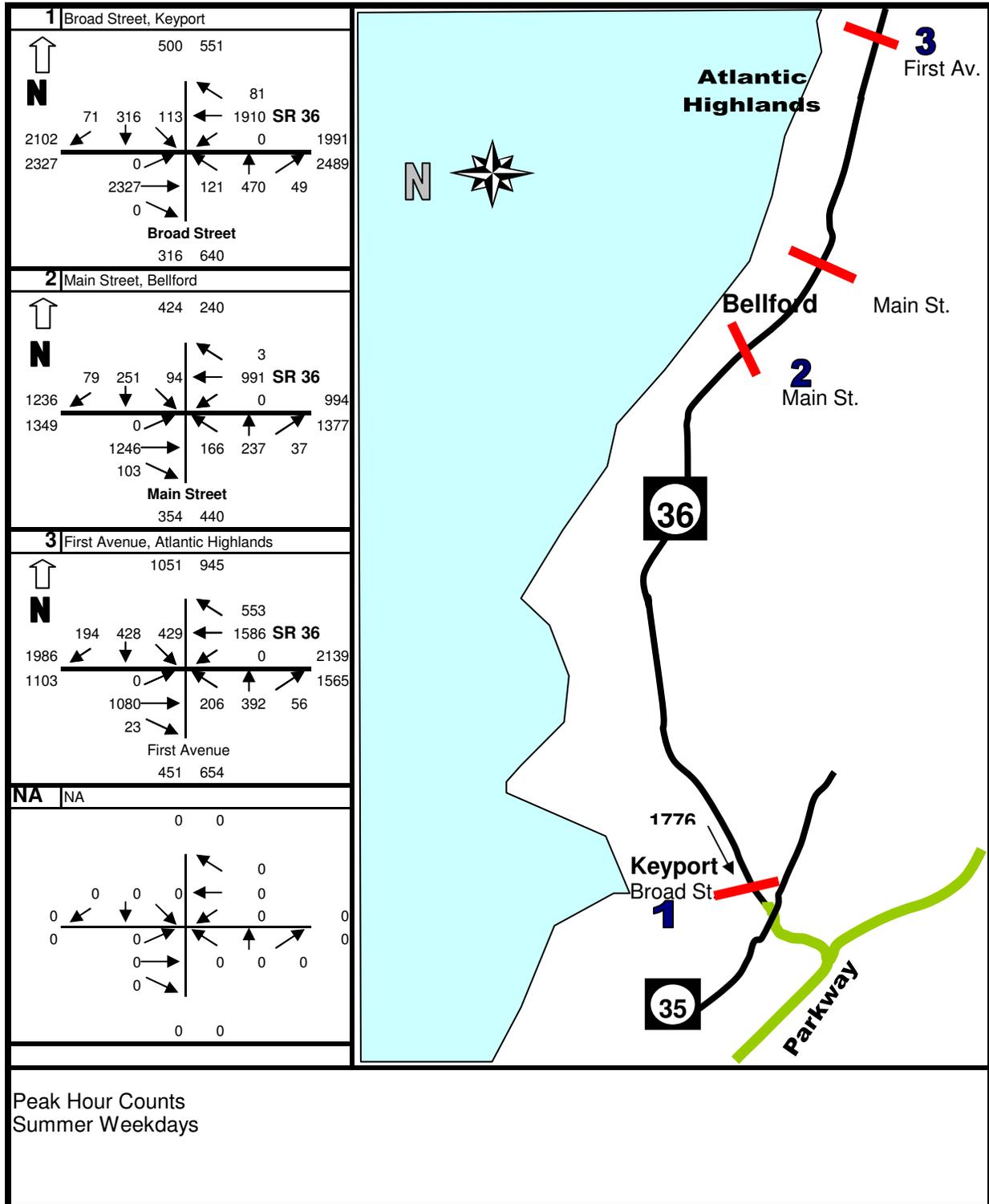
Loading Sources

K	L	M	N	O	P	Q	R	S	T
Census Tract #	Census Tract Pop	Tract Evacuation Factor	Evacuation Population	Route Factor	Pop using Portal	Veh Using the Portal	Peak Vol	Cum Vol	Loading Point
8009	5984	0.1	598	1	598	394	87	87	1
8010	3455	0.1	346	0.5	173	114	25	112	2
8008	6989	0.1	699	0.5	349	230	51	162	2
8011	4289	0.1	429	0.5	214	141	31	193	3
8032	9010	0.1	901	0.5	451	296	65	258	4
Total Evacuation Population along Portal					1786	1174	258		
Daily Vehicle Factor					0.7				
Total Evacuation Volume along Portal					1174				

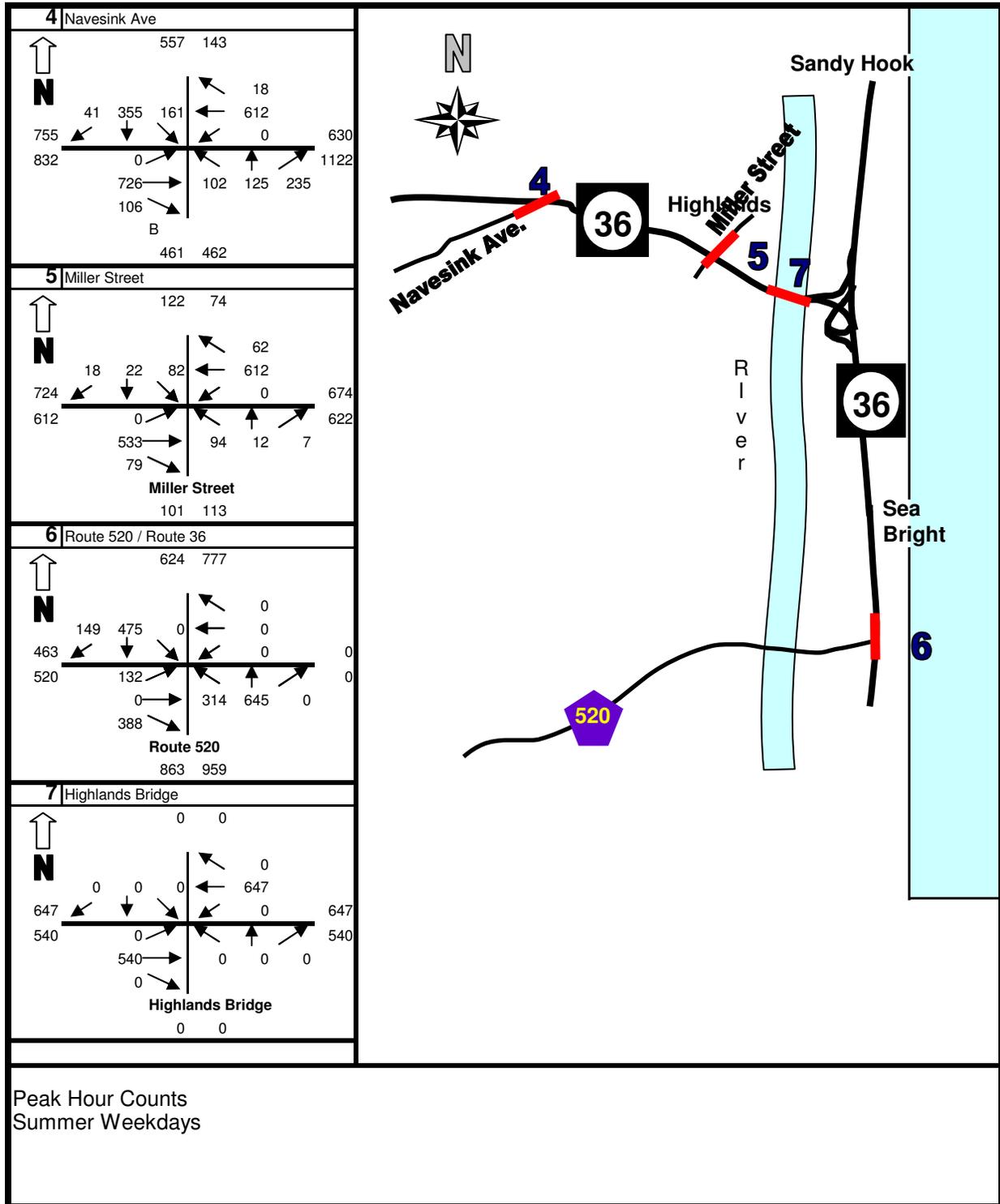
APPENDIX D

TRAFFIC COUNT DATA

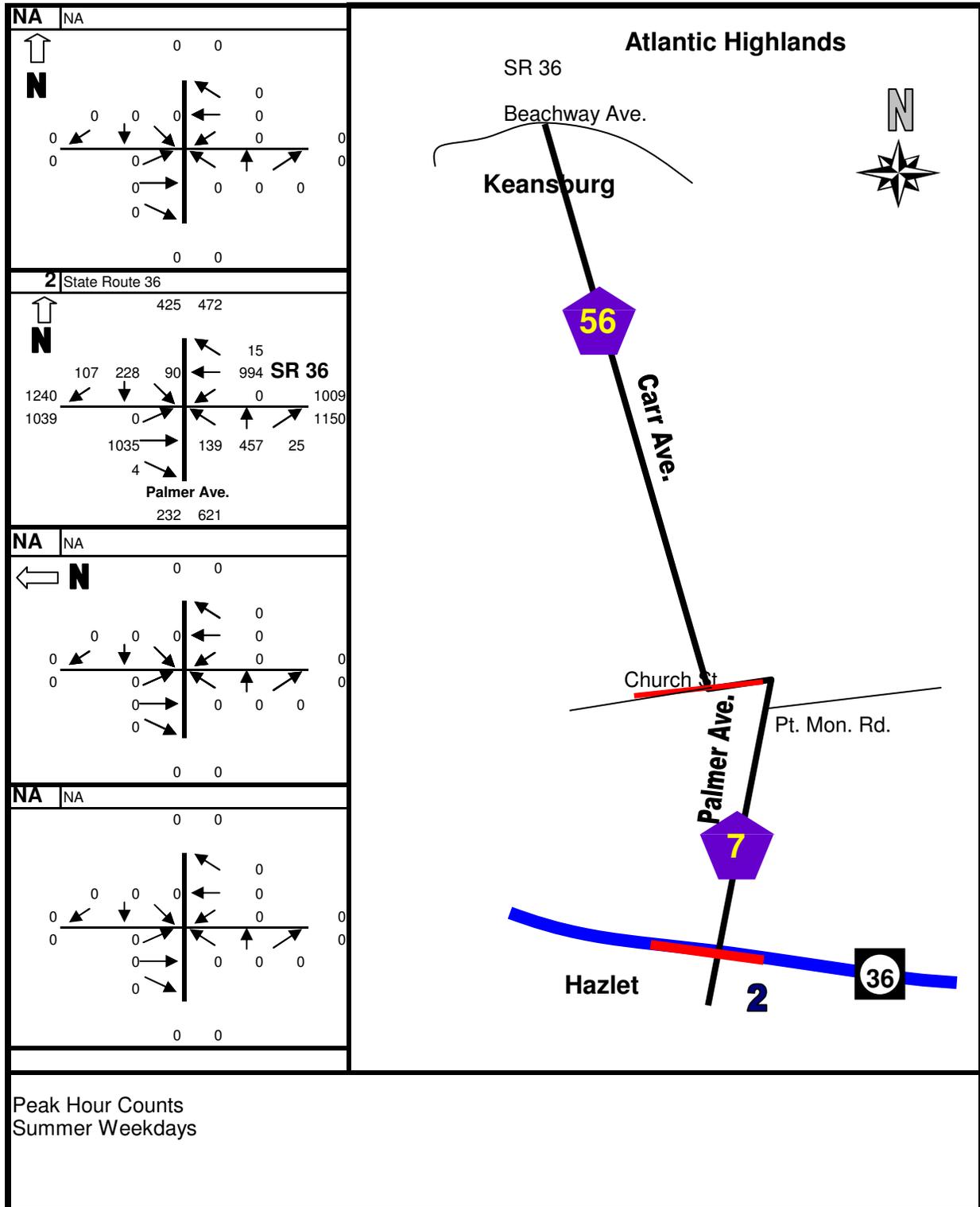
Peak Summer 2007



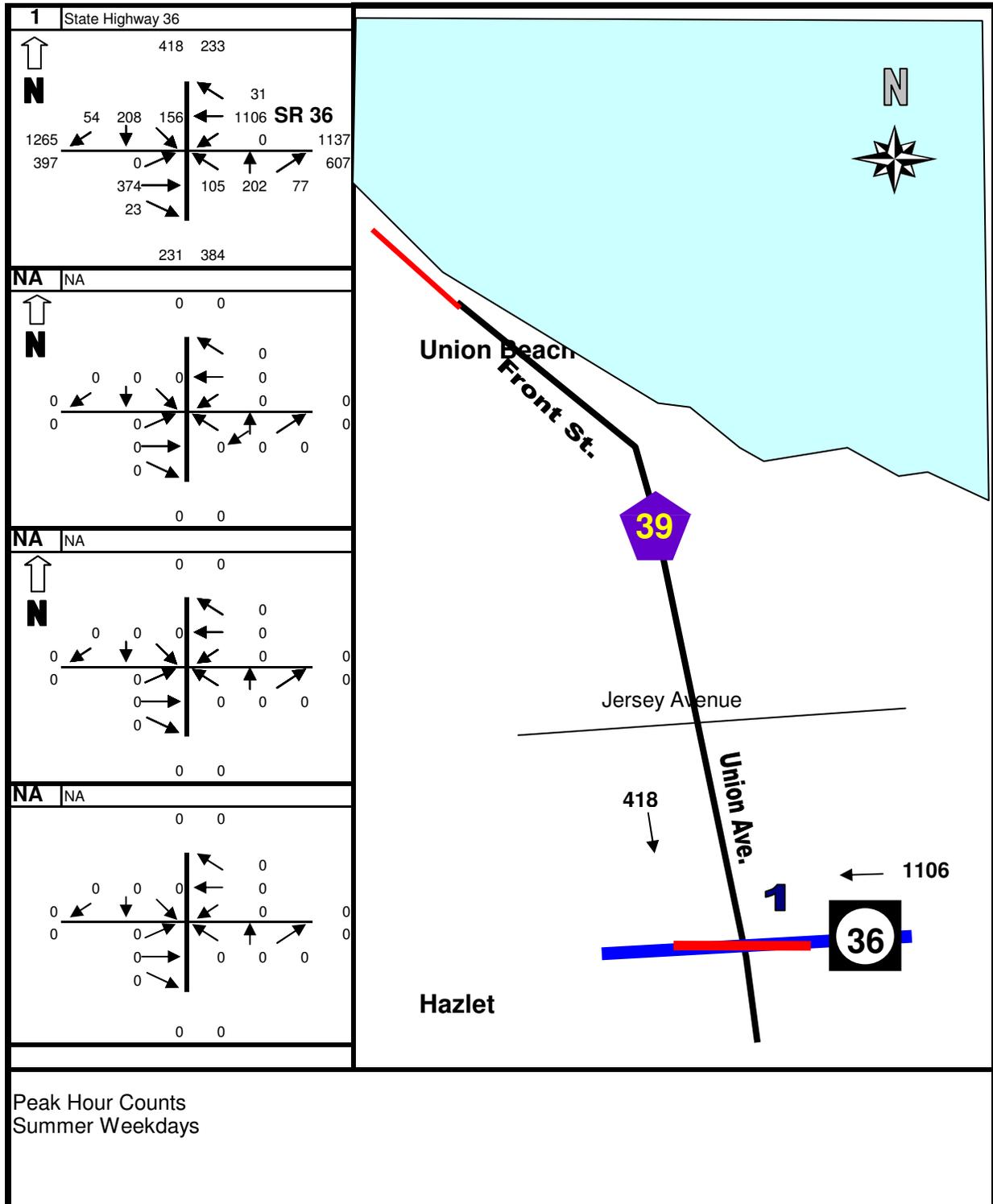
Peak Summer 2007



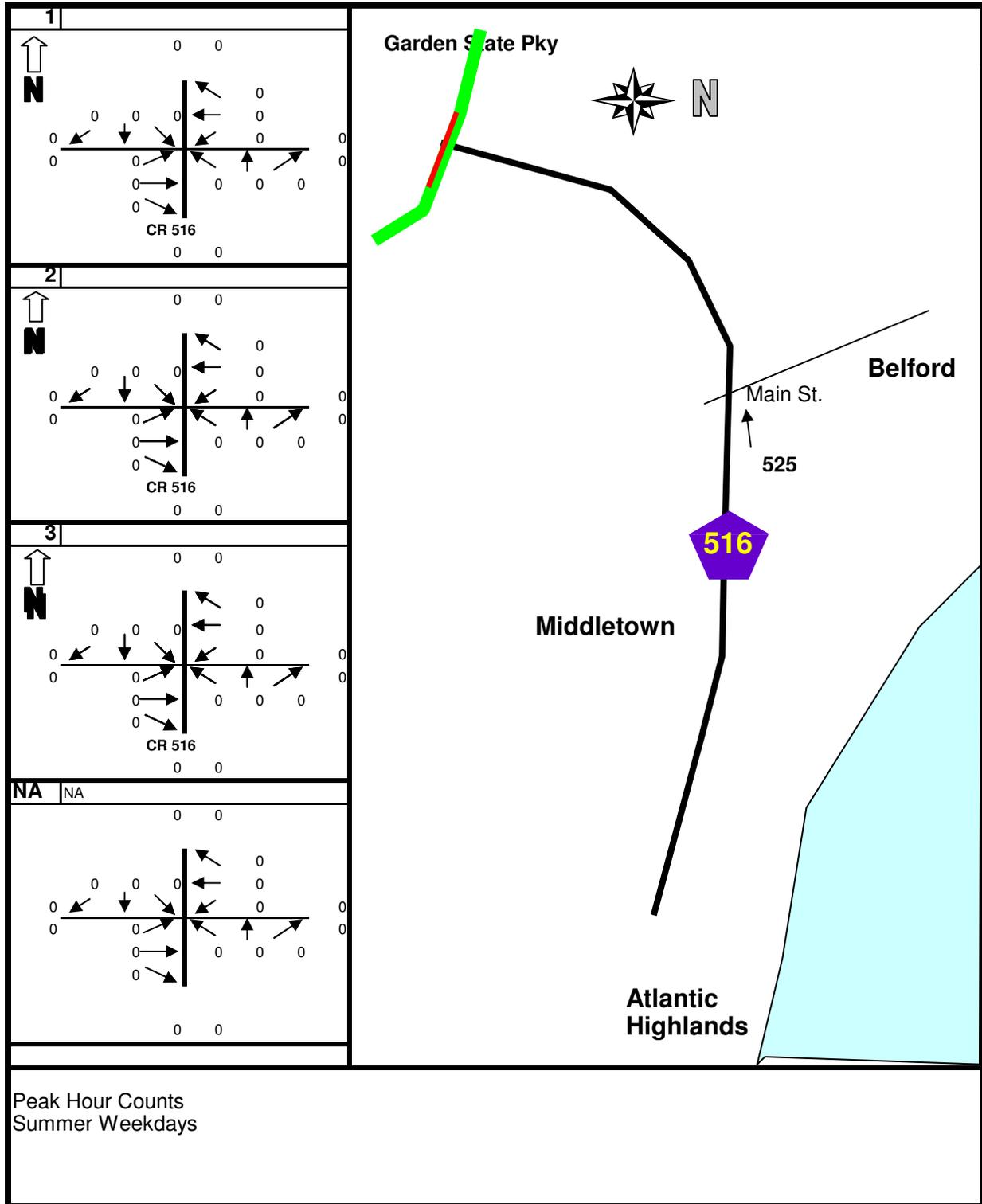
Peak Summer 2007



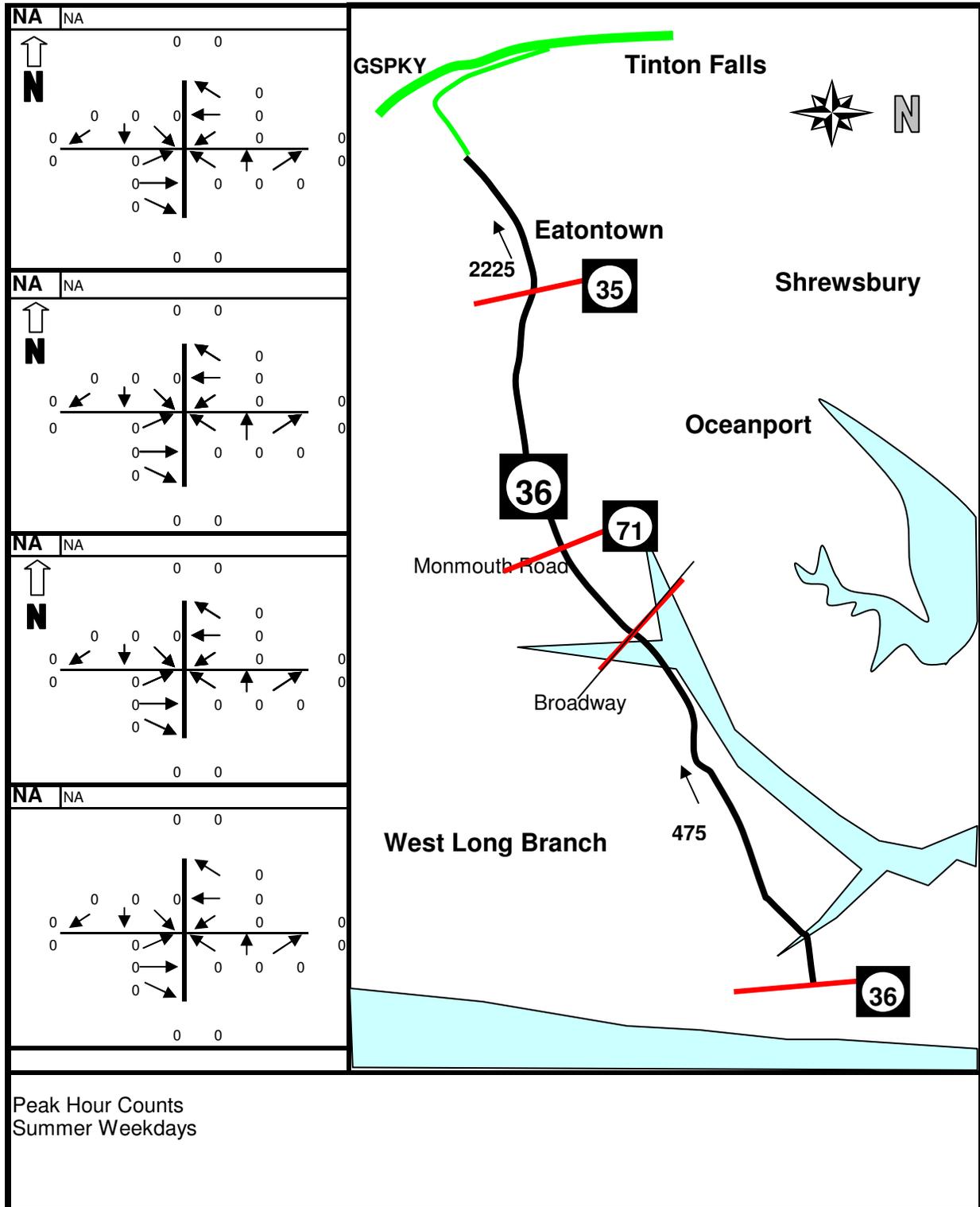
Peak Summer 2007



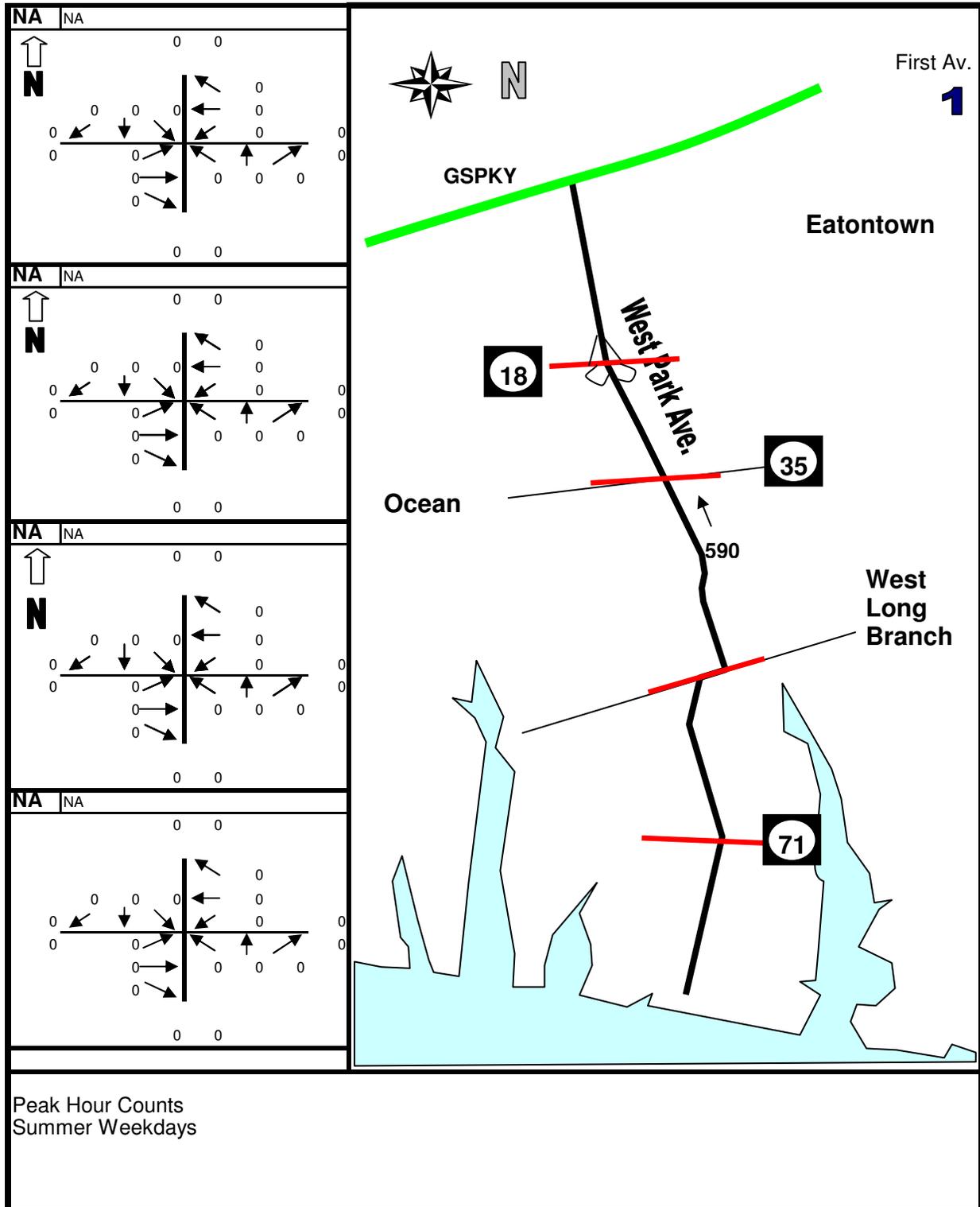
Peak Summer 2007



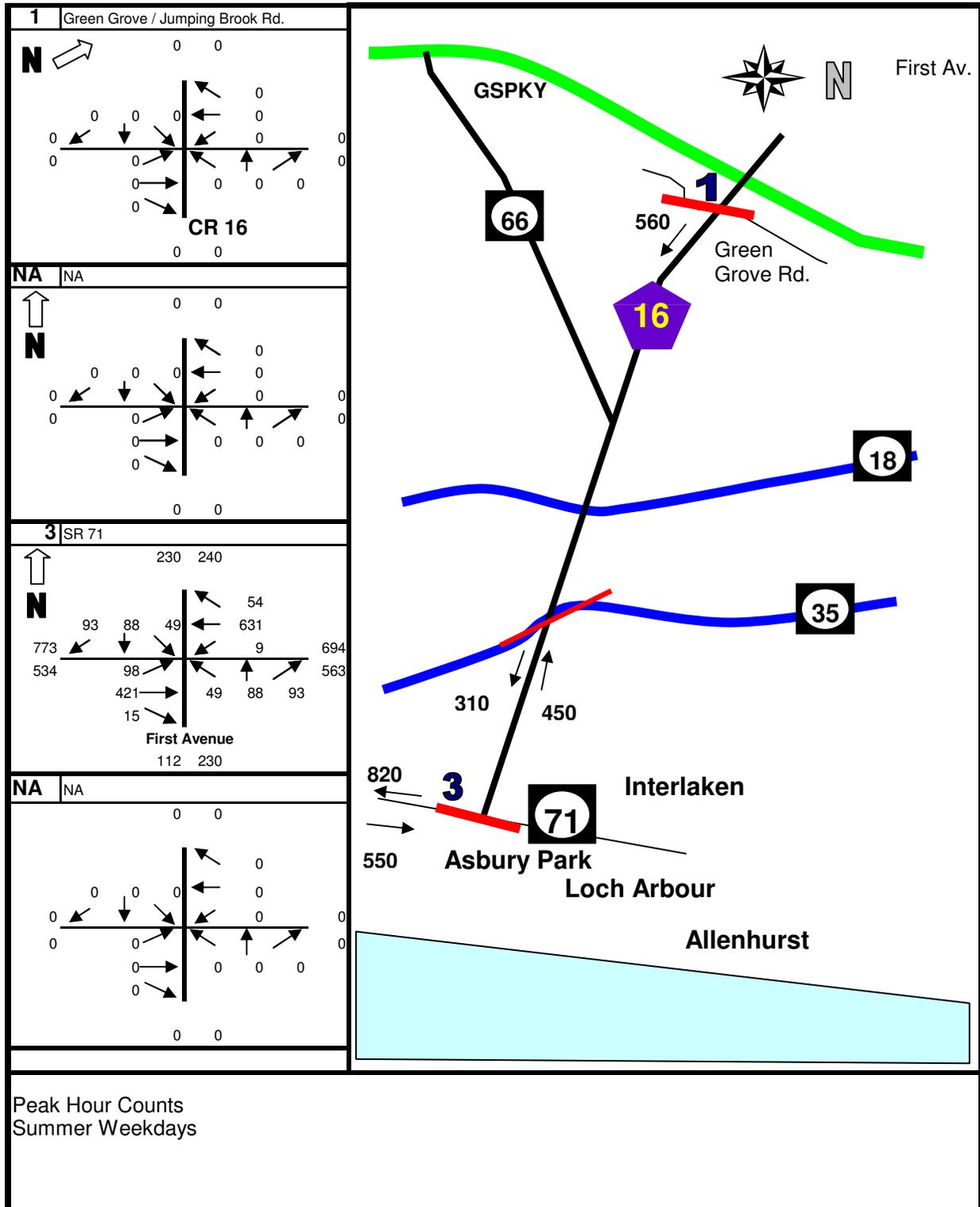
Peak Summer 2007



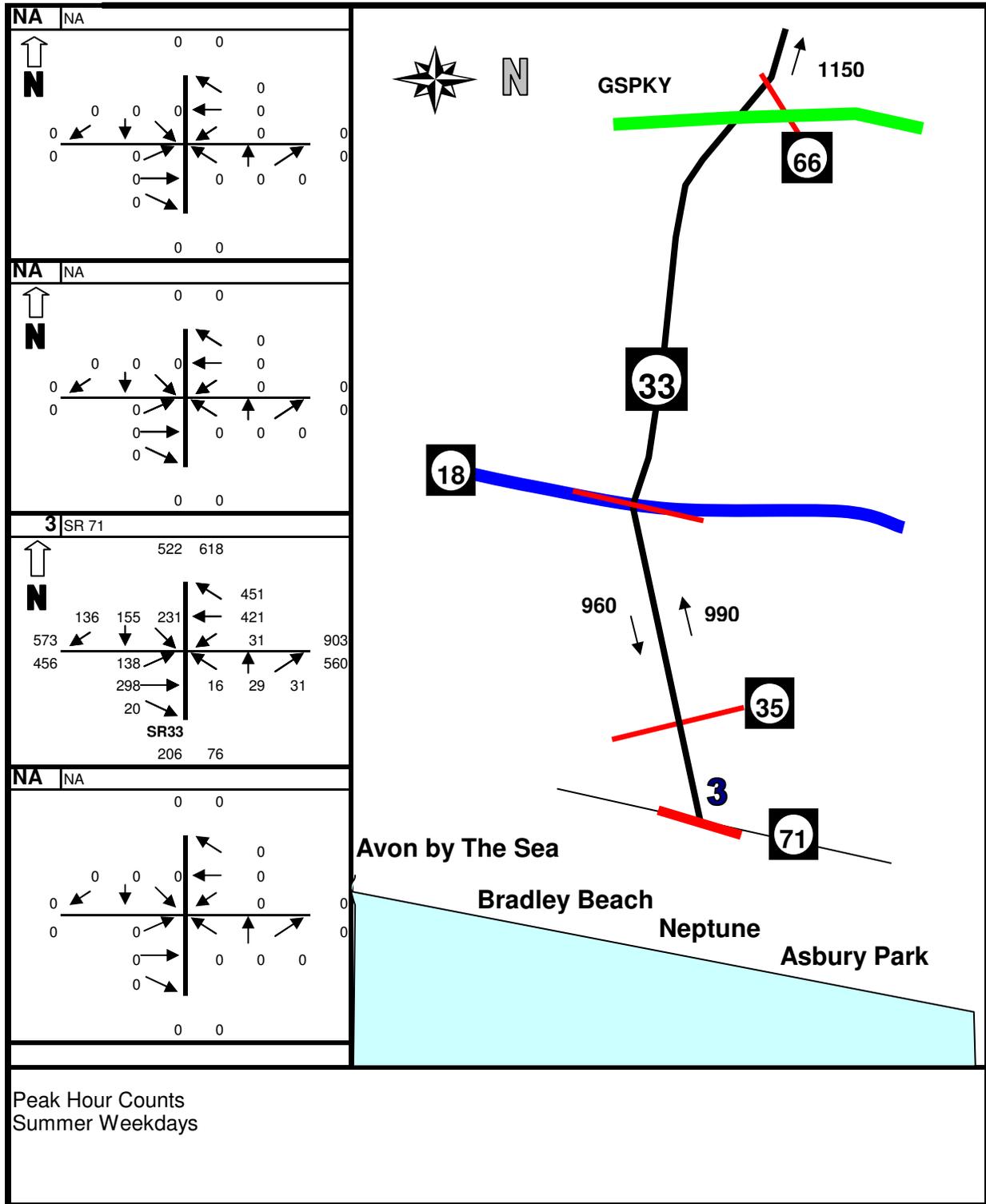
Peak Summer 2007



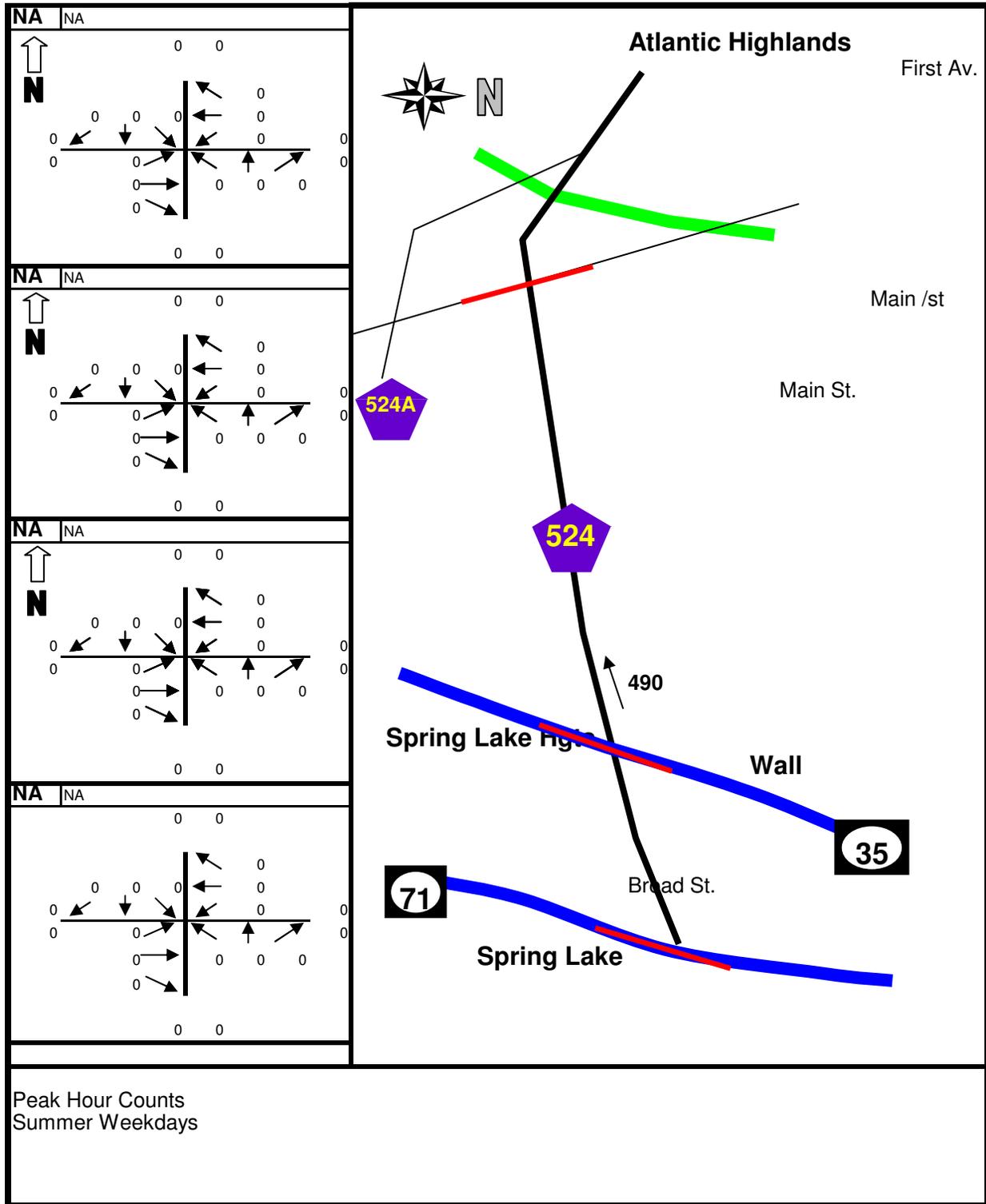
Peak Summer 2007



Peak Summer 2007

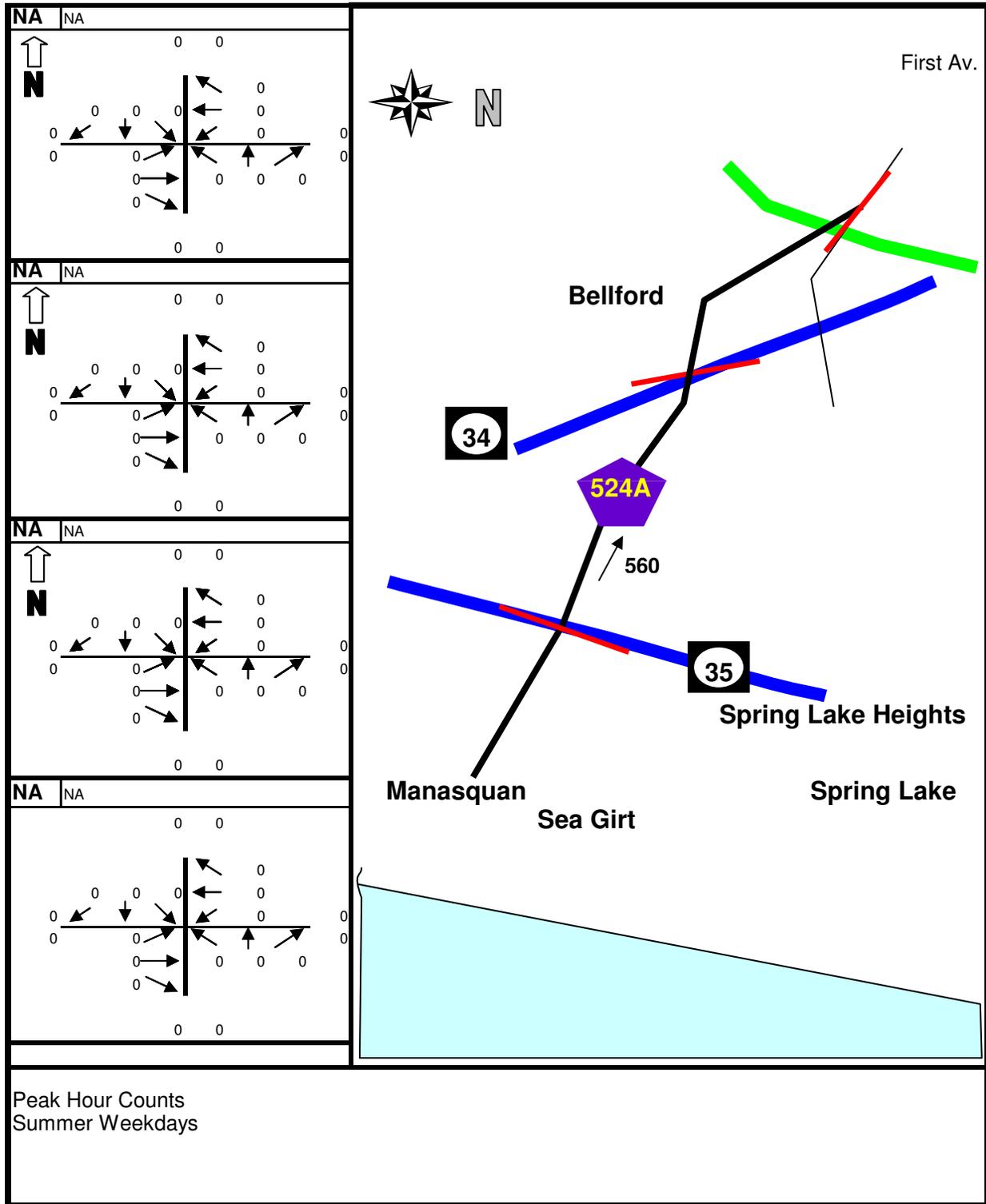


Peak Summer 2007

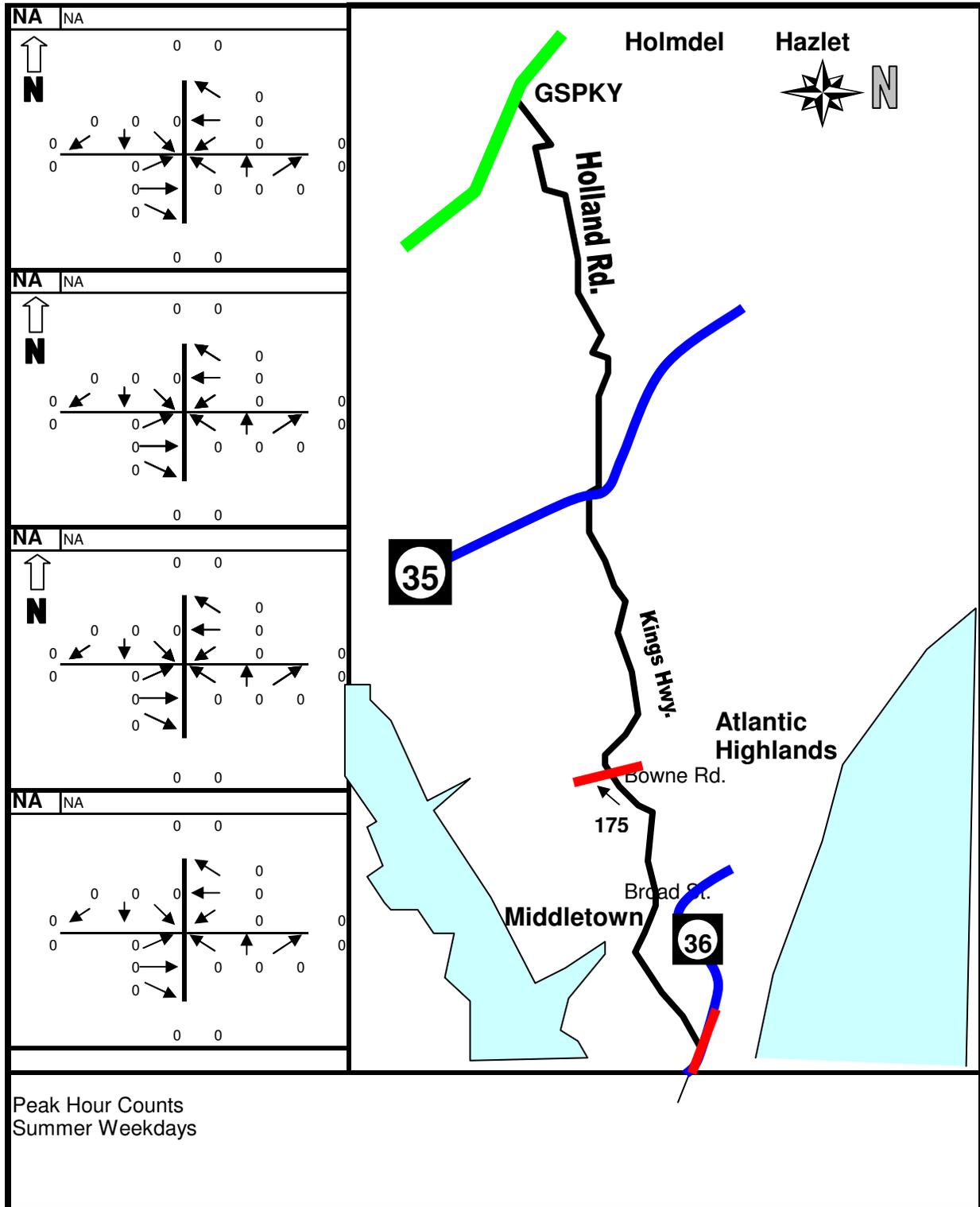


Peak Hour Counts
Summer Weekdays

Peak Summer 2007



Peak Summer 2007



TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 1
Station ID: 12148
SR 36 between Broad ST & Grove Avenue

Latitude: 0' 0.000 Undefined

Start Time	14-Aug-Thu	WB		---		Combined		15-Aug-Fri	WB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	201	*	0	*	201	56	216	0	0	56	216		
12:15	*	227	*	0	*	227	39	245	0	0	39	245		
12:30	*	213	*	0	*	213	31	202	0	0	31	202		
12:45	*	265	*	0	*	265	39	242	0	0	39	242		
01:00	*	265	*	0	*	265	31	267	0	0	31	267		
01:15	*	236	*	0	*	236	21	242	0	0	21	242		
01:30	*	261	*	0	*	261	28	246	0	0	28	246		
01:45	*	245	*	0	*	245	19	262	0	0	19	262		
02:00	*	222	*	0	*	222	30	254	0	0	30	254		
02:15	*	257	*	0	*	257	25	291	0	0	25	291		
02:30	*	260	*	0	*	260	18	264	0	0	18	264		
02:45	*	308	*	0	*	308	13	299	0	0	13	299		
03:00	*	325	*	0	*	325	19	535	0	0	19	535		
03:15	*	289	*	0	*	289	26	442	0	0	26	442		
03:30	*	296	*	0	*	296	27	444	0	0	27	444		
03:45	*	314	*	0	*	314	31	435	0	0	31	435		
04:00	*	286	*	0	*	286	48	456	0	0	48	456		
04:15	*	288	*	0	*	288	70	439	0	0	70	439		
04:30	*	310	*	0	*	310	79	554	0	0	79	554		
04:45	*	290	*	0	*	290	92	483	0	0	92	483		
05:00	*	328	*	0	*	328	158	446	0	0	158	446		
05:15	*	292	*	0	*	292	185	383	0	0	185	383		
05:30	*	304	*	0	*	304	230	421	0	0	230	421		
05:45	*	324	*	0	*	324	218	486	0	0	218	486		
06:00	*	324	*	0	*	324	319	488	0	0	319	488		
06:15	*	363	*	0	*	363	326	401	0	0	326	401		
06:30	*	324	*	0	*	324	302	446	0	0	302	446		
06:45	*	204	*	0	*	204	284	419	0	0	284	419		
07:00	*	250	*	0	*	250	336	474	0	0	336	474		
07:15	*	217	*	0	*	217	296	367	0	0	296	367		
07:30	*	182	*	0	*	182	342	373	0	0	342	373		
07:45	*	213	*	0	*	213	297	316	0	0	297	316		
08:00	*	179	*	0	*	179	326	350	0	0	326	350		
08:15	*	162	*	0	*	162	297	316	0	0	297	316		
08:30	*	167	*	0	*	167	291	261	0	0	291	261		
08:45	*	130	*	0	*	130	257	250	0	0	257	250		
09:00	232	129	0	0	232	129	274	308	0	0	274	308		
09:15	251	104	0	0	251	104	216	226	0	0	216	226		
09:30	240	114	0	0	240	114	225	254	0	0	225	254		
09:45	223	133	0	0	223	133	182	210	0	0	182	210		
10:00	210	134	0	0	210	134	204	131	0	0	204	131		
10:15	213	99	0	0	213	99	225	116	0	0	225	116		
10:30	203	108	0	0	203	108	200	175	0	0	200	175		
10:45	197	93	0	0	197	93	207	162	0	0	207	162		
11:00	212	99	0	0	212	99	203	163	0	0	203	163		
11:15	209	71	0	0	209	71	185	171	0	0	185	171		
11:30	236	40	0	0	236	40	249	139	0	0	249	139		
11:45	211	61	0	0	211	61	204	108	0	0	204	108		
Total		2637	10506	0	0	2637	10506	7780	15178	0	0	7780	15178	
Day Total		13143		0		13143		22958		0		22958		
% Total		20.1%	79.9%	0.0%	0.0%			33.9%	66.1%	0.0%	0.0%			
Peak		09:00	05:45			09:00	05:45	07:00	04:00			07:00	04:00	
Vol.		946	1335			946	1335	1271	1932			1271	1932	
P.H.F.		0.942	0.919			0.942	0.919	0.929	0.872			0.929	0.872	

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 1
Station ID: 12148
SR 36 between Broad ST & Grove Avenue

Latitude: 0' 0.000 Undefined

Start Time	16-Aug-Sat	WB		---		Combined		17-Aug-Sun	WB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		126	450	0	0	126	450		151	276	0	0	151	276
12:15		107	355	0	0	107	355		115	304	0	0	115	304
12:30		77	373	0	0	77	373		139	308	0	0	139	308
12:45		85	288	0	0	85	288		100	323	0	0	100	323
01:00		79	328	0	0	79	328		81	342	0	0	81	342
01:15		82	303	0	0	82	303		56	352	0	0	56	352
01:30		53	343	0	0	53	343		60	293	0	0	60	293
01:45		79	363	0	0	79	363		59	400	0	0	59	400
02:00		71	325	0	0	71	325		63	379	0	0	63	379
02:15		38	396	0	0	38	396		79	350	0	0	79	350
02:30		44	386	0	0	44	386		46	330	0	0	46	330
02:45		42	382	0	0	42	382		41	427	0	0	41	427
03:00		41	379	0	0	41	379		33	427	0	0	33	427
03:15		44	440	0	0	44	440		30	434	0	0	30	434
03:30		37	439	0	0	37	439		22	447	0	0	22	447
03:45		34	411	0	0	34	411		22	451	0	0	22	451
04:00		41	441	0	0	41	441		22	419	0	0	22	419
04:15		50	439	0	0	50	439		30	387	0	0	30	387
04:30		54	447	0	0	54	447		28	447	0	0	28	447
04:45		69	398	0	0	69	398		38	401	0	0	38	401
05:00		69	429	0	0	69	429		21	431	0	0	21	431
05:15		114	462	0	0	114	462		39	390	0	0	39	390
05:30		132	443	0	0	132	443		50	393	0	0	50	393
05:45		136	434	0	0	136	434		62	383	0	0	62	383
06:00		148	427	0	0	148	427		47	397	0	0	47	397
06:15		160	429	0	0	160	429		82	410	0	0	82	410
06:30		173	419	0	0	173	419		81	393	0	0	81	393
06:45		195	459	0	0	195	459		88	403	0	0	88	403
07:00		185	452	0	0	185	452		85	392	0	0	85	392
07:15		191	407	0	0	191	407		111	397	0	0	111	397
07:30		222	411	0	0	222	411		92	395	0	0	92	395
07:45		228	415	0	0	228	415		116	373	0	0	116	373
08:00		261	408	0	0	261	408		111	368	0	0	111	368
08:15		250	402	0	0	250	402		105	356	0	0	105	356
08:30		284	396	0	0	284	396		139	359	0	0	139	359
08:45		305	398	0	0	305	398		160	323	0	0	160	323
09:00		340	375	0	0	340	375		170	312	0	0	170	312
09:15		342	315	0	0	342	315		182	245	0	0	182	245
09:30		334	283	0	0	334	283		186	272	0	0	186	272
09:45		309	274	0	0	309	274		238	216	0	0	238	216
10:00		379	260	0	0	379	260		207	203	0	0	207	203
10:15		352	279	0	0	352	279		243	182	0	0	243	182
10:30		427	294	0	0	427	294		268	156	0	0	268	156
10:45		428	265	0	0	428	265		245	157	0	0	245	157
11:00		387	222	0	0	387	222		235	145	0	0	235	145
11:15		384	230	0	0	384	230		268	110	0	0	268	110
11:30		452	181	0	0	452	181		257	86	0	0	257	86
11:45		436	158	0	0	436	158		310	65	0	0	310	65
Total		8876	17613	0	0	8876	17613		5413	15809	0	0	5413	15809
Day Total		26489		0		26489			21222		0		21222	
% Total		33.5%	66.5%	0.0%	0.0%				25.5%	74.5%	0.0%	0.0%		
Peak		11:00	05:00			11:00	05:00		11:00	03:00			11:00	03:00
Vol.		1659	1768			1659	1768		1070	1759			1070	1759
P.H.F.		0.918	0.957			0.918	0.957		0.863	0.975			0.863	0.975

TechniQuest Corporation

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Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 1
Station ID: 12148
SR 36 between Broad ST & Grove Avenue

Latitude: 0' 0.000 Undefined

Start Time	18-Aug- Mon	WB		---		Combined		19-Aug- Tue	WB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		64	218	0	0	64	218		69	265	0	0	69	265
12:15		48	248	0	0	48	248		75	255	0	0	75	255
12:30		50	207	0	0	50	207		44	242	0	0	44	242
12:45		49	313	0	0	49	313		34	278	0	0	34	278
01:00		42	320	0	0	42	320		40	283	0	0	40	283
01:15		21	303	0	0	21	303		35	300	0	0	35	300
01:30		25	307	0	0	25	307		30	287	0	0	30	287
01:45		22	309	0	0	22	309		33	291	0	0	33	291
02:00		19	341	0	0	19	341		29	293	0	0	29	293
02:15		26	342	0	0	26	342		24	287	0	0	24	287
02:30		24	350	0	0	24	350		19	293	0	0	19	293
02:45		14	334	0	0	14	334		18	327	0	0	18	327
03:00		14	362	0	0	14	362		21	296	0	0	21	296
03:15		29	382	0	0	29	382		23	377	0	0	23	377
03:30		32	387	0	0	32	387		45	355	0	0	45	355
03:45		35	454	0	0	35	454		38	357	0	0	38	357
04:00		41	393	0	0	41	393		39	364	0	0	39	364
04:15		56	439	0	0	56	439		51	344	0	0	51	344
04:30		88	360	0	0	88	360		90	348	0	0	90	348
04:45		121	459	0	0	121	459		106	360	0	0	106	360
05:00		136	469	0	0	136	469		135	362	0	0	135	362
05:15		187	401	0	0	187	401		213	372	0	0	213	372
05:30		247	447	0	0	247	447		263	332	0	0	263	332
05:45		282	382	0	0	282	382		330	339	0	0	330	339
06:00		298	319	0	0	298	319		309	314	0	0	309	314
06:15		381	373	0	0	381	373		414	349	0	0	414	349
06:30		391	351	0	0	391	351		396	328	0	0	396	328
06:45		378	376	0	0	378	376		390	291	0	0	390	291
07:00		359	325	0	0	359	325		390	292	0	0	390	292
07:15		410	319	0	0	410	319		454	289	0	0	454	289
07:30		456	327	0	0	456	327		429	258	0	0	429	258
07:45		407	289	0	0	407	289		428	266	0	0	428	266
08:00		328	239	0	0	328	239		423	205	0	0	423	205
08:15		301	273	0	0	301	273		422	237	0	0	422	237
08:30		294	229	0	0	294	229		444	253	0	0	444	253
08:45		259	279	0	0	259	279		369	258	0	0	369	258
09:00		277	273	0	0	277	273		356	186	0	0	356	186
09:15		220	230	0	0	220	230		319	173	0	0	319	173
09:30		230	208	0	0	230	208		287	223	0	0	287	223
09:45		188	165	0	0	188	165		258	183	0	0	258	183
10:00		208	179	0	0	208	179		253	157	0	0	253	157
10:15		228	169	0	0	228	169		234	173	0	0	234	173
10:30		202	140	0	0	202	140		210	152	0	0	210	152
10:45		213	139	0	0	213	139		304	105	0	0	304	105
11:00		208	95	0	0	208	95		267	98	0	0	267	98
11:15		189	119	0	0	189	119		227	98	0	0	227	98
11:30		252	90	0	0	252	90		234	74	0	0	234	74
11:45		206	72	0	0	206	72		246	57	0	0	246	57
Total		8555	14105	0	0	8555	14105		9867	12626	0	0	9867	12626
Day Total		22660		0		22660			22493		0		22493	
% Total		37.8%	62.2%	0.0%	0.0%				43.9%	56.1%	0.0%	0.0%		
Peak		07:00	04:45			07:00	04:45		07:15	03:15			07:15	03:15
Vol.		1632	1776			1632	1776		1734	1453			1734	1453
P.H.F.		0.895	0.947			0.895	0.947		0.955	0.964			0.955	0.964

TechniQuest Corporation

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Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 1
Station ID: 12148
SR 36 between Broad ST & Grove Avenue

Latitude: 0' 0.000 Undefined

Start Time	20-Aug- Wed	WB		---		Combined		21-Aug- Thu	WB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		67	243	0	0	67	243		66	245	0	0	66	245
12:15		52	263	0	0	52	263		60	294	0	0	60	294
12:30		46	263	0	0	46	263		47	239	0	0	47	239
12:45		27	271	0	0	27	271		37	245	0	0	37	245
01:00		46	281	0	0	46	281		44	324	0	0	44	324
01:15		35	312	0	0	35	312		35	329	0	0	35	329
01:30		27	296	0	0	27	296		34	301	0	0	34	301
01:45		28	280	0	0	28	280		25	286	0	0	25	286
02:00		25	298	0	0	25	298		22	295	0	0	22	295
02:15		30	281	0	0	30	281		32	293	0	0	32	293
02:30		16	288	0	0	16	288		22	334	0	0	22	334
02:45		27	314	0	0	27	314		18	328	0	0	18	328
03:00		18	351	0	0	18	351		18	373	0	0	18	373
03:15		24	412	0	0	24	412		25	424	0	0	25	424
03:30		37	379	0	0	37	379		28	371	0	0	28	371
03:45		36	393	0	0	36	393		43	411	0	0	43	411
04:00		50	388	0	0	50	388		47	397	0	0	47	397
04:15		47	397	0	0	47	397		67	400	0	0	67	400
04:30		86	420	0	0	86	420		83	439	0	0	83	439
04:45		123	380	0	0	123	380		95	441	0	0	95	441
05:00		114	394	0	0	114	394		135	444	0	0	135	444
05:15		201	401	0	0	201	401		181	400	0	0	181	400
05:30		252	387	0	0	252	387		265	405	0	0	265	405
05:45		300	371	0	0	300	371		267	406	0	0	267	406
06:00		323	351	0	0	323	351		354	412	0	0	354	412
06:15		401	391	0	0	401	391		370	395	0	0	370	395
06:30		376	360	0	0	376	360		379	363	0	0	379	363
06:45		405	371	0	0	405	371		374	385	0	0	374	385
07:00		347	349	0	0	347	349		365	309	0	0	365	309
07:15		435	321	0	0	435	321		450	289	0	0	450	289
07:30		397	299	0	0	397	299		429	319	0	0	429	319
07:45		462	286	0	0	462	286		445	324	0	0	445	324
08:00		423	327	0	0	423	327		424	273	0	0	424	273
08:15		402	310	0	0	402	310		401	291	0	0	401	291
08:30		458	286	0	0	458	286		395	275	0	0	395	275
08:45		350	268	0	0	350	268		368	289	0	0	368	289
09:00		366	285	0	0	366	285		357	216	0	0	357	216
09:15		314	221	0	0	314	221		288	240	0	0	288	240
09:30		297	223	0	0	297	223		304	237	0	0	304	237
09:45		257	215	0	0	257	215		295	197	0	0	295	197
10:00		253	182	0	0	253	182		227	201	0	0	227	201
10:15		264	181	0	0	264	181		240	176	0	0	240	176
10:30		247	175	0	0	247	175		259	178	0	0	259	178
10:45		250	133	0	0	250	133		234	123	0	0	234	123
11:00		265	122	0	0	265	122		214	123	0	0	214	123
11:15		238	90	0	0	238	90		238	131	0	0	238	131
11:30		257	70	0	0	257	70		249	101	0	0	249	101
11:45		235	78	0	0	235	78		298	87	0	0	298	87
Total		9736	13957	0	0	9736	13957		9653	14358	0	0	9653	14358
Day Total		23693		0		23693			24011		0		24011	
% Total		41.1%	58.9%	0.0%	0.0%				40.2%	59.8%	0.0%	0.0%		
Peak		07:45	03:45			07:45	03:45		07:15	04:15			07:15	04:15
Vol.		1745	1598			1745	1598		1748	1724			1748	1724
P.H.F.		0.944	0.951			0.944	0.951		0.971	0.971			0.971	0.971

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 1
Station ID: 12148
SR 36 between Broad ST & Grove Avenue

Latitude: 0' 0.000 Undefined

Start Time	22-Aug-Fri	WB		---		Combined		23-Aug-Sat	WB		---		Combined		
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
12:00		65	251	0	0	65	251		97	249	0	0	97	249	
12:15		73	295	0	0	73	295		119	292	0	0	119	292	
12:30		56	298	0	0	56	298		111	296	0	0	111	296	
12:45		36	311	0	0	36	311		64	347	0	0	64	347	
01:00		42	321	0	0	42	321		54	355	0	0	54	355	
01:15		42	325	0	0	42	325		65	344	0	0	65	344	
01:30		33	309	0	0	33	309		50	322	0	0	50	322	
01:45		31	311	0	0	31	311		38	*	0	*	38	*	
02:00		33	325	0	0	33	325		46	*	0	*	46	*	
02:15		33	327	0	0	33	327		47	*	0	*	47	*	
02:30		22	378	0	0	22	378		40	*	0	*	40	*	
02:45		27	354	0	0	27	354		42	*	0	*	42	*	
03:00		21	391	0	0	21	391		31	*	0	*	31	*	
03:15		27	386	0	0	27	386		26	*	0	*	26	*	
03:30		32	389	0	0	32	389		35	*	0	*	35	*	
03:45		41	389	0	0	41	389		34	*	0	*	34	*	
04:00		36	452	0	0	36	452		31	*	0	*	31	*	
04:15		55	488	0	0	55	488		32	*	0	*	32	*	
04:30		82	440	0	0	82	440		44	*	0	*	44	*	
04:45		105	433	0	0	105	433		49	*	0	*	49	*	
05:00		118	477	0	0	118	477		52	*	0	*	52	*	
05:15		190	399	0	0	190	399		62	*	0	*	62	*	
05:30		246	434	0	0	246	434		103	*	0	*	103	*	
05:45		260	428	0	0	260	428		98	*	0	*	98	*	
06:00		288	413	0	0	288	413		105	*	0	*	105	*	
06:15		342	430	0	0	342	430		121	*	0	*	121	*	
06:30		393	379	0	0	393	379		129	*	0	*	129	*	
06:45		347	409	0	0	347	409		158	*	0	*	158	*	
07:00		339	404	0	0	339	404		142	*	0	*	142	*	
07:15		363	381	0	0	363	381		170	*	0	*	170	*	
07:30		427	301	0	0	427	301		171	*	0	*	171	*	
07:45		430	324	0	0	430	324		166	*	0	*	166	*	
08:00		416	334	0	0	416	334		198	*	0	*	198	*	
08:15		346	297	0	0	346	297		185	*	0	*	185	*	
08:30		383	323	0	0	383	323		210	*	0	*	210	*	
08:45		310	295	0	0	310	295		203	*	0	*	203	*	
09:00		331	230	0	0	331	230		202	*	0	*	202	*	
09:15		307	212	0	0	307	212		229	*	0	*	229	*	
09:30		249	232	0	0	249	232		228	*	0	*	228	*	
09:45		247	222	0	0	247	222		276	*	0	*	276	*	
10:00		255	200	0	0	255	200		281	*	0	*	281	*	
10:15		273	183	0	0	273	183		256	*	0	*	256	*	
10:30		244	189	0	0	244	189		248	*	0	*	248	*	
10:45		254	189	0	0	254	189		250	*	0	*	250	*	
11:00		241	166	0	0	241	166		260	*	0	*	260	*	
11:15		290	176	0	0	290	176		298	*	0	*	298	*	
11:30		235	130	0	0	235	130		285	*	0	*	285	*	
11:45		296	133	0	0	296	133		285	*	0	*	285	*	
Total		9312	15463	0	0	9312	15463		6426	2205	0	0	6426	2205	
Day Total		24775		0		24775			8631		0		8631		
% Total		37.6%	62.4%	0.0%	0.0%				74.5%	25.5%	0.0%	0.0%			
Peak		07:15	04:15			07:15	04:15		11:00	00:45			11:00	00:45	
Vol.		1636	1838			1636	1838		1128	1368			1128	1368	
P.H.F.		0.951	0.942			0.951	0.942		0.946	0.963			0.946	0.963	
ADT		ADT 22,958		AADT 22,958											

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 2
Station ID: 9803
Leonardville Rd b/w Main ST & Tindall Rd

Latitude: 0' 0.000 Undefined

Start Time	14-Aug-Thu	WB		---		Combined		15-Aug-Fri	WB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	113	*	0	*	113	10	130	0	0	10	130		
12:15	*	131	*	0	*	131	8	137	0	0	8	137		
12:30	*	133	*	0	*	133	15	144	0	0	15	144		
12:45	*	124	*	0	*	124	11	148	0	0	11	148		
01:00	*	129	*	0	*	129	14	160	0	0	14	160		
01:15	*	127	*	0	*	127	8	163	0	0	8	163		
01:30	*	135	*	0	*	135	8	131	0	0	8	131		
01:45	*	122	*	0	*	122	7	132	0	0	7	132		
02:00	*	123	*	0	*	123	9	181	0	0	9	181		
02:15	*	138	*	0	*	138	7	141	0	0	7	141		
02:30	*	139	*	0	*	139	7	141	0	0	7	141		
02:45	*	115	*	0	*	115	4	129	0	0	4	129		
03:00	*	120	*	0	*	120	4	127	0	0	4	127		
03:15	*	129	*	0	*	129	7	118	0	0	7	118		
03:30	*	115	*	0	*	115	4	121	0	0	4	121		
03:45	*	128	*	0	*	128	4	166	0	0	4	166		
04:00	*	126	*	0	*	126	6	144	0	0	6	144		
04:15	*	117	*	0	*	117	9	131	0	0	9	131		
04:30	*	152	*	0	*	152	16	134	0	0	16	134		
04:45	*	127	*	0	*	127	9	144	0	0	9	144		
05:00	*	137	*	0	*	137	24	168	0	0	24	168		
05:15	*	188	*	0	*	188	28	184	0	0	28	184		
05:30	*	147	*	0	*	147	45	148	0	0	45	148		
05:45	*	160	*	0	*	160	33	147	0	0	33	147		
06:00	*	137	*	0	*	137	68	121	0	0	68	121		
06:15	*	221	*	0	*	221	75	189	0	0	75	189		
06:30	*	129	*	0	*	129	78	126	0	0	78	126		
06:45	*	126	*	0	*	126	95	134	0	0	95	134		
07:00	*	163	*	0	*	163	85	181	0	0	85	181		
07:15	*	120	*	0	*	120	117	118	0	0	117	118		
07:30	*	95	*	0	*	95	100	92	0	0	100	92		
07:45	*	76	*	0	*	76	137	98	0	0	137	98		
08:00	*	140	*	0	*	140	112	116	0	0	112	116		
08:15	*	68	*	0	*	68	110	60	0	0	110	60		
08:30	*	69	*	0	*	69	111	68	0	0	111	68		
08:45	*	76	*	0	*	76	150	69	0	0	150	69		
09:00	*	71	*	0	*	71	149	69	0	0	149	69		
09:15	*	55	*	0	*	55	145	54	0	0	145	54		
09:30	*	53	*	0	*	53	103	50	0	0	103	50		
09:45		117	47	0	0	117	129	42	0	0	129	42		
10:00		121	59	0	0	121	124	55	0	0	124	55		
10:15		114	35	0	0	114	140	58	0	0	140	58		
10:30		128	35	0	0	128	140	51	0	0	140	51		
10:45		110	35	0	0	110	117	42	0	0	117	42		
11:00		124	29	0	0	124	139	27	0	0	139	27		
11:15		121	34	0	0	121	136	41	0	0	136	41		
11:30		143	32	0	0	143	126	33	0	0	126	33		
11:45		137	16	0	0	137	135	26	0	0	135	26		
Total		1115	5096	0	0	1115	5096	3118	5389	0	0	3118	5389	
Day Total		6211		0		6211		8507		0		8507		
% Total		18.0%	82.0%	0.0%	0.0%			36.7%	63.3%	0.0%	0.0%			
Peak		11:00	05:30			11:00	05:30	08:30	05:00			08:30	05:00	
Vol.		525	665			525	665	555	647			555	647	
P.H.F.		0.918	0.752			0.918	0.752	0.925	0.879			0.925	0.879	

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 2
Station ID: 9803
Leonardville Rd b/w Main ST & Tindall Rd

Latitude: 0' 0.000 Undefined

Start Time	16-Aug-Sat	WB		---		Combined		17-Aug-Sun	WB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		23	135	0	0	23	135		20	123	0	0	20	123
12:15		22	120	0	0	22	120		19	124	0	0	19	124
12:30		22	131	0	0	22	131		24	105	0	0	24	105
12:45		19	136	0	0	19	136		12	128	0	0	12	128
01:00		11	144	0	0	11	144		18	124	0	0	18	124
01:15		13	126	0	0	13	126		12	123	0	0	12	123
01:30		12	112	0	0	12	112		17	111	0	0	17	111
01:45		16	135	0	0	16	135		15	125	0	0	15	125
02:00		7	117	0	0	7	117		12	115	0	0	12	115
02:15		10	109	0	0	10	109		14	132	0	0	14	132
02:30		15	145	0	0	15	145		4	118	0	0	4	118
02:45		5	146	0	0	5	146		8	126	0	0	8	126
03:00		5	121	0	0	5	121		8	113	0	0	8	113
03:15		5	116	0	0	5	116		6	111	0	0	6	111
03:30		6	124	0	0	6	124		4	118	0	0	4	118
03:45		7	128	0	0	7	128		3	112	0	0	3	112
04:00		4	122	0	0	4	122		7	105	0	0	7	105
04:15		3	124	0	0	3	124		2	121	0	0	2	121
04:30		9	134	0	0	9	134		9	108	0	0	9	108
04:45		8	113	0	0	8	113		8	93	0	0	8	93
05:00		8	103	0	0	8	103		13	91	0	0	13	91
05:15		9	115	0	0	9	115		5	86	0	0	5	86
05:30		17	105	0	0	17	105		16	89	0	0	16	89
05:45		17	116	0	0	17	116		11	115	0	0	11	115
06:00		26	112	0	0	26	112		11	91	0	0	11	91
06:15		29	118	0	0	29	118		16	98	0	0	16	98
06:30		38	96	0	0	38	96		23	99	0	0	23	99
06:45		36	90	0	0	36	90		36	88	0	0	36	88
07:00		42	100	0	0	42	100		22	86	0	0	22	86
07:15		38	81	0	0	38	81		40	98	0	0	40	98
07:30		57	94	0	0	57	94		37	95	0	0	37	95
07:45		76	86	0	0	76	86		53	94	0	0	53	94
08:00		68	106	0	0	68	106		54	89	0	0	54	89
08:15		81	81	0	0	81	81		69	81	0	0	69	81
08:30		92	89	0	0	92	89		71	71	0	0	71	71
08:45		118	77	0	0	118	77		94	77	0	0	94	77
09:00		122	87	0	0	122	87		76	64	0	0	76	64
09:15		127	56	0	0	127	56		85	59	0	0	85	59
09:30		137	61	0	0	137	61		83	60	0	0	83	60
09:45		156	57	0	0	156	57		93	51	0	0	93	51
10:00		156	69	0	0	156	69		109	55	0	0	109	55
10:15		152	42	0	0	152	42		112	47	0	0	112	47
10:30		160	48	0	0	160	48		120	36	0	0	120	36
10:45		162	58	0	0	162	58		101	36	0	0	101	36
11:00		153	41	0	0	153	41		127	34	0	0	127	34
11:15		164	44	0	0	164	44		121	26	0	0	121	26
11:30		146	47	0	0	146	47		114	26	0	0	114	26
11:45		172	41	0	0	172	41		146	27	0	0	146	27
Total		2781	4758	0	0	2781	4758		2080	4304	0	0	2080	4304
Day Total		7539		0		7539			6384		0		6384	
% Total		36.9%	63.1%	0.0%	0.0%				32.6%	67.4%	0.0%	0.0%		
Peak		10:30	00:30			10:30	00:30		11:00	02:00			11:00	02:00
Vol.		639	537			639	537		508	491			508	491
P.H.F.		0.974	0.932			0.974	0.932		0.870	0.930			0.870	0.930

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 2
Station ID: 9803
Leonardville Rd b/w Main ST & Tindall Rd

Latitude: 0' 0.000 Undefined

Start Time	18-Aug-Mon	WB		---		Combined		19-Aug-Tue	WB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		18	122	0	0	18	122		16	139	0	0	16	139
12:15		14	127	0	0	14	127		20	149	0	0	20	149
12:30		12	135	0	0	12	135		10	136	0	0	10	136
12:45		8	135	0	0	8	135		6	164	0	0	6	164
01:00		5	158	0	0	5	158		11	133	0	0	11	133
01:15		8	140	0	0	8	140		9	123	0	0	9	123
01:30		5	107	0	0	5	107		9	150	0	0	9	150
01:45		6	139	0	0	6	139		5	127	0	0	5	127
02:00		3	127	0	0	3	127		7	135	0	0	7	135
02:15		7	119	0	0	7	119		4	142	0	0	4	142
02:30		7	116	0	0	7	116		2	119	0	0	2	119
02:45		4	118	0	0	4	118		3	117	0	0	3	117
03:00		0	121	0	0	0	121		4	103	0	0	4	103
03:15		2	119	0	0	2	119		4	114	0	0	4	114
03:30		2	108	0	0	2	108		6	118	0	0	6	118
03:45		7	145	0	0	7	145		4	156	0	0	4	156
04:00		5	108	0	0	5	108		4	125	0	0	4	125
04:15		11	131	0	0	11	131		12	119	0	0	12	119
04:30		12	143	0	0	12	143		14	149	0	0	14	149
04:45		21	145	0	0	21	145		17	138	0	0	17	138
05:00		20	111	0	0	20	111		26	134	0	0	26	134
05:15		32	157	0	0	32	157		19	165	0	0	19	165
05:30		31	124	0	0	31	124		40	121	0	0	40	121
05:45		57	135	0	0	57	135		51	124	0	0	51	124
06:00		72	129	0	0	72	129		73	142	0	0	73	142
06:15		67	206	0	0	67	206		74	192	0	0	74	192
06:30		94	150	0	0	94	150		73	112	0	0	73	112
06:45		122	107	0	0	122	107		121	112	0	0	121	112
07:00		77	187	0	0	77	187		96	180	0	0	96	180
07:15		101	106	0	0	101	106		103	115	0	0	103	115
07:30		124	109	0	0	124	109		129	117	0	0	129	117
07:45		123	90	0	0	123	90		144	101	0	0	144	101
08:00		125	121	0	0	125	121		122	150	0	0	122	150
08:15		120	93	0	0	120	93		130	94	0	0	130	94
08:30		124	86	0	0	124	86		130	77	0	0	130	77
08:45		123	87	0	0	123	87		134	83	0	0	134	83
09:00		109	59	0	0	109	59		107	84	0	0	107	84
09:15		138	49	0	0	138	49		116	69	0	0	116	69
09:30		123	53	0	0	123	53		121	69	0	0	121	69
09:45		153	42	0	0	153	42		131	62	0	0	131	62
10:00		128	51	0	0	128	51		126	72	0	0	126	72
10:15		130	31	0	0	130	31		135	55	0	0	135	55
10:30		122	47	0	0	122	47		137	62	0	0	137	62
10:45		125	43	0	0	125	43		132	32	0	0	132	32
11:00		106	42	0	0	106	42		116	24	0	0	116	24
11:15		122	33	0	0	122	33		110	35	0	0	110	35
11:30		128	26	0	0	128	26		129	27	0	0	129	27
11:45		122	27	0	0	122	27		150	22	0	0	150	22
Total		3075	5064	0	0	3075	5064		3142	5288	0	0	3142	5288
Day Total		8139		0		8139			8430		0		8430	
% Total		37.8%	62.2%	0.0%	0.0%				37.3%	62.7%	0.0%	0.0%		
Peak		09:15	06:15			09:15	06:15		10:00	06:15			10:00	06:15
Vol.		542	650			542	650		530	596			530	596
P.H.F.		0.886	0.789			0.886	0.789		0.967	0.776			0.967	0.776

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 3
Station ID: 12137
Kings Highway between Bowne Rd & Browns

Latitude: 0' 0.000 Undefined

Start Time	14-Aug-Thu		WB		Combined		15-Aug-Fri		WB		Combined		
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
12:00	*	0	*	29	*	29	0	0	8	32	8	32	
12:15	*	0	*	31	*	31	0	0	3	42	3	42	
12:30	*	0	*	40	*	40	0	0	1	37	1	37	
12:45	*	0	*	34	*	34	0	0	3	39	3	39	
01:00	*	0	*	49	*	49	0	0	4	42	4	42	
01:15	*	0	*	35	*	35	0	0	8	36	8	36	
01:30	*	0	*	38	*	38	0	0	3	34	3	34	
01:45	*	0	*	38	*	38	0	0	2	35	2	35	
02:00	*	0	*	45	*	45	0	0	5	57	5	57	
02:15	*	0	*	41	*	41	0	0	4	57	4	57	
02:30	*	0	*	53	*	53	0	0	5	37	5	37	
02:45	*	0	*	42	*	42	0	0	2	49	2	49	
03:00	*	0	*	36	*	36	0	0	1	40	1	40	
03:15	*	0	*	44	*	44	0	0	0	51	0	51	
03:30	*	0	*	30	*	30	0	0	1	47	1	47	
03:45	*	0	*	51	*	51	0	0	2	45	2	45	
04:00	*	0	*	39	*	39	0	0	0	45	0	45	
04:15	*	0	*	36	*	36	0	0	3	35	3	35	
04:30	*	0	*	50	*	50	0	0	2	39	2	39	
04:45	*	0	*	35	*	35	0	0	2	27	2	27	
05:00	*	0	*	52	*	52	0	0	1	55	1	55	
05:15	*	0	*	37	*	37	0	0	2	45	2	45	
05:30	*	0	*	68	*	68	0	0	9	48	9	48	
05:45	*	0	*	44	*	44	0	0	6	54	6	54	
06:00	*	0	*	53	*	53	0	0	12	37	12	37	
06:15	*	0	*	41	*	41	0	0	16	41	16	41	
06:30	*	0	*	35	*	35	0	0	23	39	23	39	
06:45	*	0	*	37	*	37	0	0	15	36	15	36	
07:00	*	0	*	35	*	35	0	0	18	36	18	36	
07:15	*	0	*	26	*	26	0	0	24	25	24	25	
07:30	*	0	*	35	*	35	0	0	34	33	34	33	
07:45	*	0	*	28	*	28	0	0	41	25	41	25	
08:00	*	0	*	26	*	26	0	0	34	14	34	14	
08:15	*	0	*	26	*	26	0	0	37	14	37	14	
08:30	*	0	*	22	*	22	0	0	42	20	42	20	
08:45	*	0	*	20	*	20	0	0	29	24	29	24	
09:00	*	0	*	16	*	16	0	0	41	21	41	21	
09:15	*	0	*	10	*	10	0	0	40	22	40	22	
09:30	*	0	*	11	*	11	0	0	38	14	38	14	
09:45	*	0	*	8	*	8	0	0	32	18	32	18	
10:00	0	0		37	15	37	15	0	0	38	11	38	
10:15	0	0		35	9	35	9	0	0	56	23	56	
10:30	0	0		33	13	33	13	0	0	43	15	43	
10:45	0	0		48	11	48	11	0	0	53	17	53	
11:00	0	0		38	4	38	4	0	0	35	4	35	
11:15	0	0		32	10	32	10	0	0	34	14	34	
11:30	0	0		36	4	36	4	0	0	38	7	38	
11:45	0	0		29	13	29	13	0	0	31	10	31	
Total	0	0		288	1505	288	1505	0	0	881	1548	881	1548
Day Total	0			1793		1793		0		2429		2429	
% Total	0.0%	0.0%		16.1%	83.9%			0.0%	0.0%	36.3%	63.7%		
Peak Vol.				10:15	05:30	10:15	05:30			10:00	05:00	10:00	05:00
P.H.F.				154	206	154	206			190	202	190	202
				0.802	0.757	0.802	0.757			0.848	0.886	0.848	0.886

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 3
Station ID: 12137
Kings Highway between Bowne Rd & Browns

Latitude: 0' 0.000 Undefined

Start Time	16-Aug-Sat	---		WB		Combined		17-Aug-Sun	---		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	9	39	9	39		0	0	14	41	14	41
12:15		0	0	7	48	7	48		0	0	6	49	6	49
12:30		0	0	9	24	9	24		0	0	10	37	10	37
12:45		0	0	9	31	9	31		0	0	7	44	7	44
01:00		0	0	7	37	7	37		0	0	5	38	5	38
01:15		0	0	2	40	2	40		0	0	2	36	2	36
01:30		0	0	2	38	2	38		0	0	7	42	7	42
01:45		0	0	2	35	2	35		0	0	10	47	10	47
02:00		0	0	4	48	4	48		0	0	0	35	0	35
02:15		0	0	2	38	2	38		0	0	8	47	8	47
02:30		0	0	1	42	1	42		0	0	4	33	4	33
02:45		0	0	2	47	2	47		0	0	5	51	5	51
03:00		0	0	0	42	0	42		0	0	0	48	0	48
03:15		0	0	1	53	1	53		0	0	0	42	0	42
03:30		0	0	2	42	2	42		0	0	3	41	3	41
03:45		0	0	0	50	0	50		0	0	3	50	3	50
04:00		0	0	1	49	1	49		0	0	1	36	1	36
04:15		0	0	1	47	1	47		0	0	0	38	0	38
04:30		0	0	1	44	1	44		0	0	0	50	0	50
04:45		0	0	1	42	1	42		0	0	0	47	0	47
05:00		0	0	3	60	3	60		0	0	0	39	0	39
05:15		0	0	0	47	0	47		0	0	1	43	1	43
05:30		0	0	3	45	3	45		0	0	2	64	2	64
05:45		0	0	4	36	4	36		0	0	5	28	5	28
06:00		0	0	4	46	4	46		0	0	3	33	3	33
06:15		0	0	7	31	7	31		0	0	4	46	4	46
06:30		0	0	11	48	11	48		0	0	2	29	2	29
06:45		0	0	3	32	3	32		0	0	1	39	1	39
07:00		0	0	9	34	9	34		0	0	4	29	4	29
07:15		0	0	13	24	13	24		0	0	7	26	7	26
07:30		0	0	17	40	17	40		0	0	5	29	5	29
07:45		0	0	7	29	7	29		0	0	10	23	10	23
08:00		0	0	9	28	9	28		0	0	13	49	13	49
08:15		0	0	18	39	18	39		0	0	10	35	10	35
08:30		0	0	20	40	20	40		0	0	16	44	16	44
08:45		0	0	26	30	26	30		0	0	23	17	23	17
09:00		0	0	22	24	22	24		0	0	22	36	22	36
09:15		0	0	23	34	23	34		0	0	27	23	27	23
09:30		0	0	27	25	27	25		0	0	15	13	15	13
09:45		0	0	40	33	40	33		0	0	36	25	36	25
10:00		0	0	31	24	31	24		0	0	23	16	23	16
10:15		0	0	34	30	34	30		0	0	43	11	43	11
10:30		0	0	35	19	35	19		0	0	24	8	24	8
10:45		0	0	48	25	48	25		0	0	31	7	31	7
11:00		0	0	47	25	47	25		0	0	43	10	43	10
11:15		0	0	49	28	49	28		0	0	36	11	36	11
11:30		0	0	38	17	38	17		0	0	39	9	39	9
11:45		0	0	36	16	36	16		0	0	44	10	44	10
Total Day		0	0	647	1745	647	1745		0	0	574	1604	574	1604
% Total		0.0%	0.0%	27.0%	73.0%				0.0%	0.0%	26.4%	73.6%		
Peak Vol.				10:45	03:15	10:45	03:15				11:00	04:45	11:00	04:45
P.H.F.				0.929	0.915	0.929	0.915				0.920	0.754	0.920	0.754

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 3
Station ID: 12137
Kings Highway between Bowne Rd & Browns

Latitude: 0' 0.000 Undefined

Start Time	18-Aug-Mon	---		WB		Combined		19-Aug-Tue	---		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	7	37	7	37		0	0	5	31	5	31
12:15		0	0	6	28	6	28		0	0	3	31	3	31
12:30		0	0	6	33	6	33		0	0	8	28	8	28
12:45		0	0	3	38	3	38		0	0	6	29	6	29
01:00		0	0	4	40	4	40		0	0	6	33	6	33
01:15		0	1	1	36	1	37		0	0	6	40	6	40
01:30		0	0	1	38	1	38		0	0	1	32	1	32
01:45		0	0	3	51	3	51		0	0	0	41	0	41
02:00		0	0	3	36	3	36		0	0	1	35	1	35
02:15		0	0	2	24	2	24		0	0	1	45	1	45
02:30		0	0	0	36	0	36		0	0	2	43	2	43
02:45		0	0	0	44	0	44		0	0	0	42	0	42
03:00		0	0	1	35	1	35		0	0	2	30	2	30
03:15		0	0	1	43	1	43		0	0	1	41	1	41
03:30		0	0	0	39	0	39		0	0	2	41	2	41
03:45		0	0	1	26	1	26		0	0	2	40	2	40
04:00		0	0	2	49	2	49		0	0	0	38	0	38
04:15		0	0	1	34	1	34		0	0	2	38	2	38
04:30		0	0	3	32	3	32		0	0	1	43	1	43
04:45		0	0	2	32	2	32		0	0	4	40	4	40
05:00		0	0	2	58	2	58		0	0	4	43	4	43
05:15		0	0	5	54	5	54		0	0	6	41	6	41
05:30		0	0	5	42	5	42		0	0	2	37	2	37
05:45		0	0	12	40	12	40		0	0	8	42	8	42
06:00		0	0	17	29	17	29		0	0	13	42	13	42
06:15		0	0	14	41	14	41		0	0	15	45	15	45
06:30		0	0	23	31	23	31		0	0	23	45	23	45
06:45		0	0	19	29	19	29		0	0	15	36	15	36
07:00		0	0	25	34	25	34		0	0	23	33	23	33
07:15		0	0	27	39	27	39		0	0	28	42	28	42
07:30		0	0	32	29	32	29		0	0	31	31	31	31
07:45		0	0	41	41	41	41		0	0	31	36	31	36
08:00		0	0	39	27	39	27		0	0	31	38	31	38
08:15		0	0	43	22	43	22		0	0	42	32	42	32
08:30		0	0	49	33	49	33		0	0	33	29	33	29
08:45		0	0	28	19	28	19		0	0	52	18	52	18
09:00		0	0	41	30	41	30		0	0	19	19	19	19
09:15		0	0	34	19	34	19		0	0	24	20	24	20
09:30		0	0	33	14	33	14		0	0	33	18	33	18
09:45		0	0	39	23	39	23		0	0	31	17	31	17
10:00		0	0	26	12	26	12		0	0	34	13	34	13
10:15		0	0	30	25	30	25		0	0	31	11	31	11
10:30		0	0	30	10	30	10		0	0	35	11	35	11
10:45		0	0	38	14	38	14		0	0	29	4	29	4
11:00		0	0	36	9	36	9		0	0	33	9	33	9
11:15		0	0	21	8	21	8		0	0	43	11	43	11
11:30		0	0	30	7	30	7		0	0	38	11	38	11
11:45		0	0	25	5	25	5		0	0	21	7	21	7
Total		0	1	811	1475	811	1476		0	0	781	1482	781	1482
Day Total		1		2286		2287			0		2263		2263	
% Total		0.0%	0.0%	35.5%	64.5%				0.0%	0.0%	34.5%	65.5%		
Peak			00:30	07:45	05:00	07:45	05:00				08:00	05:45	08:00	05:45
Vol.			1	172	194	172	194				158	174	158	174
P.H.F.			0.250	0.878	0.836	0.878	0.836				0.760	0.967	0.760	0.967

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 3
Station ID: 12137
Kings Highway between Bowne Rd & Browns

Latitude: 0' 0.000 Undefined

Start Time	20-Aug- Wed	---		WB		Combined		21-Aug- Thu	---		WB		Combined		
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
12:00		0	0	3	29	3	29		0	*	4	*	4	*	
12:15		0	0	8	33	8	33		0	*	7	*	7	*	
12:30		0	0	4	37	4	37		0	*	3	*	3	*	
12:45		0	0	2	33	2	33		0	*	5	*	5	*	
01:00		0	0	2	32	2	32		0	*	7	*	7	*	
01:15		0	0	1	38	1	38		0	*	4	*	4	*	
01:30		0	0	0	45	0	45		0	*	1	*	1	*	
01:45		0	0	2	30	2	30		0	*	1	*	1	*	
02:00		0	0	0	35	0	35		0	*	0	*	0	*	
02:15		0	0	0	26	0	26		0	*	0	*	0	*	
02:30		0	0	1	38	1	38		0	*	1	*	1	*	
02:45		0	0	2	42	2	42		0	*	1	*	1	*	
03:00		0	0	1	39	1	39		0	*	1	*	1	*	
03:15		0	0	1	48	1	48		0	*	0	*	0	*	
03:30		0	0	1	39	1	39		0	*	2	*	2	*	
03:45		0	0	4	43	4	43		0	*	1	*	1	*	
04:00		0	0	2	42	2	42		0	*	1	*	1	*	
04:15		0	0	0	45	0	45		0	*	1	*	1	*	
04:30		0	0	2	60	2	60		0	*	3	*	3	*	
04:45		0	0	8	35	8	35		0	*	0	*	0	*	
05:00		0	0	2	58	2	58		0	*	6	*	6	*	
05:15		0	0	2	52	2	52		0	*	4	*	4	*	
05:30		0	0	5	59	5	59		0	*	10	*	10	*	
05:45		0	0	11	44	11	44		0	*	14	*	14	*	
06:00		0	0	11	30	11	30		0	*	10	*	10	*	
06:15		0	0	14	46	14	46		0	*	14	*	14	*	
06:30		0	0	18	42	18	42		0	*	21	*	21	*	
06:45		0	0	19	34	19	34		0	*	20	*	20	*	
07:00		0	0	26	36	26	36		0	*	23	*	23	*	
07:15		0	0	19	26	19	26		0	*	26	*	26	*	
07:30		0	0	28	33	28	33		0	*	24	*	24	*	
07:45		0	0	34	40	34	40		0	*	42	*	42	*	
08:00		0	0	37	34	37	34		0	*	40	*	40	*	
08:15		0	0	49	28	49	28		0	*	47	*	47	*	
08:30		0	0	45	28	45	28		0	*	47	*	47	*	
08:45		0	0	40	33	40	33		0	*	46	*	46	*	
09:00		0	0	47	28	47	28		0	*	52	*	52	*	
09:15		0	0	32	27	32	27		0	*	36	*	36	*	
09:30		0	0	26	24	26	24		0	*	29	*	29	*	
09:45		0	0	24	18	24	18		0	*	26	*	26	*	
10:00		0	0	24	12	24	12		0	*	26	*	26	*	
10:15		0	0	44	15	44	15		0	*	47	*	47	*	
10:30		0	0	45	19	45	19		*	*	*	*	*	*	
10:45		0	0	30	12	30	12		*	*	*	*	*	*	
11:00		0	0	32	14	32	14		*	*	*	*	*	*	
11:15		0	0	34	10	34	10		*	*	*	*	*	*	
11:30		0	0	38	13	38	13		*	*	*	*	*	*	
11:45		0	0	36	7	36	7		*	*	*	*	*	*	
Total		0	0	816	1591	816	1591		0	0	653	0	653	0	
Day Total		0		2407		2407			0		653		653		
% Total		0.0%	0.0%	33.9%	66.1%				0.0%	0.0%	100.0%	0.0%			
Peak Vol.				08:15	05:00	08:15	05:00				08:15		08:15		
P.H.F.				181	213	181	213				192		192		
				0.923	0.903	0.923	0.903				0.923		0.923		
ADT	ADT 2,326	AADT 2,326													

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 4
Station ID: 12140
SR 35 b/w Harmony Rd & CR 516 Cherry Tre

Latitude: 0' 0.000 Undefined

Start Time	14-Aug-Thu	---		NB		Combined		15-Aug-Fri	---		NB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*		0	*	304	*	304	0	0	0	29	363	29	363
12:15	*		0	*	315	*	315	0	0	0	18	366	18	366
12:30	*		0	*	324	*	324	0	0	0	13	365	13	365
12:45	*		0	*	342	*	342	0	0	0	7	403	7	403
01:00	*		0	*	293	*	293	0	0	0	17	360	17	360
01:15	*		0	*	300	*	300	0	0	0	13	384	13	384
01:30	*		0	*	302	*	302	0	0	0	13	349	13	349
01:45	*		0	*	345	*	345	0	0	0	8	341	8	341
02:00	*		0	*	319	*	319	0	0	0	10	355	10	355
02:15	*		0	*	345	*	345	0	0	0	9	345	9	345
02:30	*		0	*	287	*	287	0	0	0	10	325	10	325
02:45	*		0	*	308	*	308	0	0	0	5	372	5	372
03:00	*		0	*	334	*	334	0	0	0	13	361	13	361
03:15	*		0	*	324	*	324	0	0	0	18	367	18	367
03:30	*		0	*	337	*	337	0	0	0	22	348	22	348
03:45	*		0	*	381	*	381	0	0	0	26	362	26	362
04:00	*		0	*	357	*	357	0	0	0	28	331	28	331
04:15	*		0	*	362	*	362	0	0	0	41	365	41	365
04:30	*		0	*	363	*	363	0	0	0	50	322	50	322
04:45	*		0	*	306	*	306	0	0	0	62	316	62	316
05:00	*		0	*	298	*	298	0	0	0	64	306	64	306
05:15	*		0	*	327	*	327	0	0	0	96	344	96	344
05:30	*		0	*	272	*	272	0	0	0	110	323	110	323
05:45	*		0	*	259	*	259	0	0	0	96	293	96	293
06:00	*		0	*	256	*	256	0	0	0	117	266	117	266
06:15	*		0	*	274	*	274	0	0	0	156	240	156	240
06:30	*		0	*	277	*	277	0	0	0	159	222	159	222
06:45	*		0	*	247	*	247	0	0	0	163	251	163	251
07:00	*		0	*	212	*	212	0	0	0	190	217	190	217
07:15	*		0	*	192	*	192	0	0	0	202	194	202	194
07:30	*		0	*	176	*	176	0	0	0	179	181	179	181
07:45	*		0	*	177	*	177	0	0	0	232	183	232	183
08:00	*		0	*	175	*	175	0	0	0	213	182	213	182
08:15	*		0	*	160	*	160	0	0	0	232	162	232	162
08:30	0		0	232	112	232	112	0	0	0	203	115	203	115
08:45	0		0	253	122	253	122	0	0	0	248	128	248	128
09:00	0		0	209	102	209	102	0	0	0	273	107	273	107
09:15	0		0	246	102	246	102	0	0	0	262	106	262	106
09:30	0		0	243	72	243	72	0	0	0	258	75	258	75
09:45	0		0	280	62	280	62	0	0	0	325	66	325	66
10:00	0		0	297	59	297	59	0	0	0	284	64	284	64
10:15	0		0	261	59	261	59	0	0	0	324	61	324	61
10:30	0		0	270	36	270	36	0	0	0	318	43	318	43
10:45	0		0	294	48	294	48	0	0	0	356	50	356	50
11:00	0		0	309	30	309	30	0	0	0	333	32	333	32
11:15	0		0	308	31	308	31	0	0	0	305	39	305	39
11:30	0		0	330	20	330	20	0	0	0	351	22	351	22
11:45	0		0	346	34	346	34	0	0	0	354	40	354	40
Total Day	0		0	3878	10739	3878	10739	0	0	0	6815	11412	6815	11412
% Total	0.0%		0.0%	26.5%	73.5%	26.5%	73.5%	0.0%	0.0%	0.0%	37.4%	62.6%	37.4%	62.6%
Peak Vol.				11:00	03:45	11:00	03:45				10:45	00:30	10:45	00:30
P.H.F.				1293	1463	1293	1463				1345	1512	1345	1512
				0.934	0.960	0.934	0.960				0.945	0.938	0.945	0.938

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 4
Station ID: 12140
SR 35 b/w Harmony Rd & CR 516 Cherry Tre

Latitude: 0' 0.000 Undefined

Start Time	16-Aug-Sat	---		NB		Combined		17-Aug-Sun	---		NB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	36	371	36	371		0	0	32	368	32	368
12:15		0	0	25	372	25	372		0	0	20	368	20	368
12:30		0	0	20	375	20	375		0	0	14	370	14	370
12:45		0	0	15	415	15	415		0	0	8	409	8	409
01:00		0	0	27	374	27	374		0	0	19	367	19	367
01:15		0	0	23	394	23	394		0	0	14	386	14	386
01:30		0	0	16	355	16	355		0	0	14	352	14	352
01:45		0	0	13	355	13	355		0	0	10	347	10	347
02:00		0	0	15	369	15	369		0	0	11	360	11	360
02:15		0	0	15	357	15	357		0	0	10	349	10	349
02:30		0	0	19	335	19	335		0	0	13	328	13	328
02:45		0	0	13	382	13	382		0	0	6	376	6	376
03:00		0	0	22	371	22	371		0	0	14	366	14	366
03:15		0	0	29	373	29	373		0	0	22	369	22	369
03:30		0	0	29	358	29	358		0	0	23	355	23	355
03:45		0	0	33	367	33	367		0	0	28	364	28	364
04:00		0	0	33	337	33	337		0	0	29	333	29	333
04:15		0	0	47	378	47	378		0	0	44	373	44	373
04:30		0	0	54	330	54	330		0	0	52	324	52	324
04:45		0	0	72	329	72	329		0	0	65	322	65	322
05:00		0	0	74	316	74	316		0	0	68	308	68	308
05:15		0	0	104	357	104	357		0	0	99	348	99	348
05:30		0	0	118	334	118	334		0	0	114	326	114	326
05:45		0	0	101	304	101	304		0	0	98	297	98	297
06:00		0	0	121	277	121	277		0	0	118	271	118	271
06:15		0	0	162	251	162	251		0	0	158	246	158	246
06:30		0	0	168	233	168	233		0	0	163	229	163	229
06:45		0	0	172	262	172	262		0	0	166	259	166	259
07:00		0	0	199	224	199	224		0	0	192	220	192	220
07:15		0	0	213	201	213	201		0	0	205	196	205	196
07:30		0	0	192	192	192	192		0	0	183	186	183	186
07:45		0	0	245	196	245	196		0	0	237	189	237	189
08:00		0	0	226	197	226	197		0	0	219	189	219	189
08:15		0	0	242	177	242	177		0	0	236	168	236	168
08:30		0	0	211	125	211	125		0	0	206	123	206	123
08:45		0	0	254	135	254	135		0	0	250	132	250	132
09:00		0	0	282	116	282	116		0	0	279	112	279	112
09:15		0	0	271	118	271	118		0	0	267	113	267	113
09:30		0	0	267	85	267	85		0	0	262	79	262	79
09:45		0	0	334	75	334	75		0	0	328	68	328	68
10:00		0	0	293	78	293	78		0	0	286	70	286	70
10:15		0	0	334	77	334	77		0	0	326	70	326	70
10:30		0	0	330	57	330	57		0	0	321	51	321	51
10:45		0	0	369	62	369	62		0	0	361	57	361	57
11:00		0	0	343	42	343	42		0	0	336	38	336	38
11:15		0	0	314	47	314	47		0	0	308	44	308	44
11:30		0	0	359	30	359	30		0	0	354	28	354	28
11:45		0	0	362	54	362	54		0	0	358	47	358	47
Total		0	0	7216	11919	7216	11919		0	0	6946	11650	6946	11650
Day Total		0		19135		19135			0		18596		18596	
% Total		0.0%	0.0%	37.7%	62.3%				0.0%	0.0%	37.4%	62.6%		
Peak				10:45	00:30	10:45	00:30				10:45	00:30	10:45	00:30
Vol.				1385	1558	1385	1558				1359	1532	1359	1532
P.H.F.				0.938	0.939	0.938	0.939				0.941	0.936	0.941	0.936

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 4
Station ID: 12140
SR 35 b/w Harmony Rd & CR 516 Cherry Tre

Latitude: 0' 0.000 Undefined

Start Time	18-Aug-Mon	---		NB		Combined		19-Aug-Tue	---		NB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	40	379	40	379		0	0	46	384	46	384
12:15		0	0	28	379	28	379		0	0	33	385	33	385
12:30		0	0	23	381	23	381		0	0	27	388	27	388
12:45		0	0	19	420	19	420		0	0	22	429	22	429
01:00		0	0	32	378	32	378		0	0	36	386	36	386
01:15		0	0	29	397	29	397		0	0	34	404	34	404
01:30		0	0	23	359	23	359		0	0	29	365	29	365
01:45		0	0	21	360	21	360		0	0	28	365	28	365
02:00		0	0	24	375	24	375		0	0	32	381	32	381
02:15		0	0	23	364	23	364		0	0	29	371	29	371
02:30		0	0	26	343	26	343		0	0	33	351	33	351
02:45		0	0	19	391	19	391		0	0	27	400	27	400
03:00		0	0	27	373	27	373		0	0	36	379	36	379
03:15		0	0	33	376	33	376		0	0	41	383	41	383
03:30		0	0	32	362	32	362		0	0	39	370	39	370
03:45		0	0	37	372	37	372		0	0	43	381	43	381
04:00		0	0	38	343	38	343		0	0	43	351	43	351
04:15		0	0	53	385	53	385		0	0	57	392	57	392
04:30		0	0	61	338	61	338		0	0	64	344	64	344
04:45		0	0	80	336	80	336		0	0	84	341	84	341
05:00		0	0	83	322	83	322		0	0	88	326	88	326
05:15		0	0	112	362	112	362		0	0	118	365	118	365
05:30		0	0	125	338	125	338		0	0	132	342	132	342
05:45		0	0	107	307	107	307		0	0	115	312	115	312
06:00		0	0	126	279	126	279		0	0	135	285	135	285
06:15		0	0	166	258	166	258		0	0	169	265	169	265
06:30		0	0	171	239	171	239		0	0	179	247	179	247
06:45		0	0	176	267	176	267		0	0	185	273	185	273
07:00		0	0	204	228	204	228		0	0	212	235	212	235
07:15		0	0	219	204	219	204		0	0	226	212	226	212
07:30		0	0	199	195	199	195		0	0	205	204	205	204
07:45		0	0	253	200	253	200		0	0	258	208	258	208
08:00		0	0	229	202	229	202		0	0	233	209	233	209
08:15		0	0	250	183	250	183		0	0	253	189	253	189
08:30		0	0	220	132	220	132		0	0	223	137	223	137
08:45		0	0	262	143	262	143		0	0	266	147	266	147
09:00		0	0	289	125	289	125		0	0	294	128	294	128
09:15		0	0	277	126	277	126		0	0	283	130	283	130
09:30		0	0	272	92	272	92		0	0	279	97	279	97
09:45		0	0	338	81	338	81		0	0	346	87	346	87
10:00		0	0	296	83	296	83		0	0	305	90	305	90
10:15		0	0	337	81	337	81		0	0	345	89	345	89
10:30		0	0	334	60	334	60		0	0	341	65	341	65
10:45		0	0	374	66	374	66		0	0	380	72	380	72
11:00		0	0	349	47	349	47		0	0	354	54	354	54
11:15		0	0	321	53	321	53		0	0	325	61	325	61
11:30		0	0	367	37	367	37		0	0	370	46	370	46
11:45		1	0	371	62	372	62		0	0	375	66	375	66
Total Day		1	0	7495	12183	7496	12183		0	0	7777	12491	7777	12491
% Total		0.0%	0.0%	38.1%	61.9%				0.0%	0.0%	38.4%	61.6%		
Peak Vol.		11:00		1411	1576	1411	1576				1429	1607	1429	1607
P.H.F.		0.250		0.943	0.938	0.943	0.938				0.940	0.936	0.940	0.936

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 4
Station ID: 12140
SR 35 b/w Harmony Rd & CR 516 Cherry Tre

Latitude: 0' 0.000 Undefined

Start Time	20-Aug- Wed	---		NB		Combined		21-Aug- Thu	---		NB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	42	376	42	376		0	0	47	382	47	382
12:15		0	0	32	376	32	376		0	0	38	383	38	383
12:30		0	0	28	378	28	378		0	0	32	384	32	384
12:45		0	0	24	420	24	420		0	0	27	428	27	428
01:00		0	0	29	380	29	380		0	0	31	384	31	384
01:15		0	0	26	401	26	401		0	0	32	406	32	406
01:30		0	0	20	363	20	363		0	0	25	370	25	370
01:45		0	0	18	364	18	364		0	0	22	368	22	368
02:00		0	0	21	373	21	373		0	0	24	375	24	375
02:15		0	0	22	362	22	362		0	0	24	368	24	368
02:30		0	0	27	341	27	341		0	0	29	350	29	350
02:45		0	0	20	389	20	389		0	0	23	397	23	397
03:00		0	0	28	379	28	379		0	0	33	386	33	386
03:15		0	0	34	382	34	382		0	0	37	388	37	388
03:30		0	0	33	360	33	360		0	0	36	365	36	365
03:45		0	0	36	370	36	370		0	0	39	376	39	376
04:00		0	0	35	341	35	341		0	0	39	348	39	348
04:15		0	0	54	383	54	383		0	0	59	391	59	391
04:30		0	0	60	336	60	336		0	0	62	345	62	345
04:45		0	0	77	336	77	336		0	0	82	340	82	340
05:00		0	0	78	324	78	324		0	0	84	329	84	329
05:15		0	0	107	364	107	364		0	0	114	370	114	370
05:30		0	0	123	340	123	340		0	0	125	347	125	347
05:45		0	0	107	309	107	309		0	0	110	317	110	317
06:00		0	0	128	281	128	281		0	0	134	290	134	290
06:15		0	0	170	254	170	254		0	0	175	256	175	256
06:30		0	0	177	235	177	235		0	0	181	238	181	238
06:45		0	0	176	269	176	269		0	0	179	273	179	273
07:00		0	0	204	230	204	230		0	0	208	235	208	235
07:15		0	0	219	206	219	206		0	0	224	212	224	212
07:30		0	0	199	196	199	196		0	0	201	203	201	203
07:45		0	0	253	199	253	199		0	0	260	207	260	207
08:00		0	0	235	199	235	199		0	0	237	206	237	206
08:15		0	0	244	179	244	179		0	0	246	185	246	185
08:30		0	0	214	127	214	127		0	0	222	132	222	132
08:45		0	0	258	139	258	139		0	0	260	143	260	143
09:00		0	0	287	118	287	118		0	0	293	121	293	121
09:15		0	0	277	120	277	120		0	0	279	122	279	122
09:30		0	0	274	87	274	87		0	0	278	94	278	94
09:45		0	0	342	78	342	78		0	0	345	84	345	84
10:00		0	0	300	80	300	80		0	0	304	85	304	85
10:15		0	0	340	79	340	79		0	0	345	83	345	83
10:30		0	0	335	59	335	59		0	0	341	62	341	62
10:45		0	0	373	64	373	64		0	0	380	67	380	67
11:00		0	0	346	46	346	46		0	0	354	50	354	50
11:15		0	0	316	51	316	51		0	0	319	56	319	56
11:30		0	0	366	33	366	33		0	0	368	39	368	39
11:45		0	0	368	56	368	56		0	0	373	63	373	63
Total		0	0	7482	12132	7482	12132		0	0	7680	12403	7680	12403
Day Total		0		19614		19614			0		20083		20083	
% Total		0.0%	0.0%	38.1%	61.9%				0.0%	0.0%	38.2%	61.8%		
Peak				10:45	00:30	10:45	00:30				10:45	00:30	10:45	00:30
Vol.				1401	1579	1401	1579				1421	1602	1421	1602
P.H.F.				0.939	0.940	0.939	0.940				0.935	0.936	0.935	0.936

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 5
Station ID: 19274
SR 36 West of CR 36 / Branchport

Latitude: 0' 0.000 Undefined

Start Time	14-Aug-Thu		WB		Combined		15-Aug-Fri		WB		Combined	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	0	*	116	*	116	0	0	22	133	22	133
12:15	*	0	*	102	*	102	0	0	31	115	31	115
12:30	*	0	*	127	*	127	0	0	18	140	18	140
12:45	*	0	*	139	*	139	0	0	22	114	22	114
01:00	*	0	*	110	*	110	0	0	10	118	10	118
01:15	*	0	*	116	*	116	0	0	15	128	15	128
01:30	*	0	*	101	*	101	0	0	9	124	9	124
01:45	*	0	*	136	*	136	0	0	13	118	13	118
02:00	*	0	*	121	*	121	0	0	16	141	16	141
02:15	*	0	*	130	*	130	0	0	9	141	9	141
02:30	*	0	*	135	*	135	0	0	7	125	7	125
02:45	*	0	*	182	*	182	0	0	4	207	4	207
03:00	*	0	*	145	*	145	0	0	7	130	7	130
03:15	*	0	*	162	*	162	0	0	9	142	9	142
03:30	*	0	*	153	*	153	0	0	9	129	9	129
03:45	*	0	*	136	*	136	0	0	6	129	6	129
04:00	*	0	*	147	*	147	0	0	8	126	8	126
04:15	*	0	*	179	*	179	0	0	1	128	1	128
04:30	*	0	*	153	*	153	0	0	13	114	13	114
04:45	*	0	*	196	*	196	0	0	12	110	12	110
05:00	*	0	*	152	*	152	0	0	15	126	15	126
05:15	*	0	*	117	*	117	0	0	18	116	18	116
05:30	*	0	*	141	*	141	0	0	28	122	28	122
05:45	*	0	*	147	*	147	0	0	37	85	37	85
06:00	*	0	*	122	*	122	0	0	41	128	41	128
06:15	*	0	*	109	*	109	0	0	43	127	43	127
06:30	*	0	*	133	*	133	0	0	54	119	54	119
06:45	*	0	*	115	*	115	0	0	61	108	61	108
07:00	*	0	*	117	*	117	0	0	66	120	66	120
07:15	*	0	*	100	*	100	0	0	100	122	100	122
07:30	*	0	*	109	*	109	0	0	94	124	94	124
07:45	*	0	*	92	*	92	0	0	106	102	106	102
08:00	*	0	*	107	*	107	0	0	110	160	110	160
08:15	*	0	*	109	*	109	0	0	142	103	142	103
08:30	*	0	*	103	*	103	0	0	120	69	120	69
08:45	*	0	*	90	*	90	0	0	124	73	124	73
09:00	*	0	*	103	*	103	0	0	126	84	126	84
09:15	*	0	*	83	*	83	0	0	130	100	130	100
09:30	*	0	*	83	*	83	0	0	119	94	119	94
09:45	*	0	*	74	*	74	0	0	114	77	114	77
10:00	*	0	*	81	*	81	0	0	97	74	97	74
10:15	*	0	*	84	*	84	0	0	111	91	111	91
10:30	*	0	*	71	*	71	0	0	112	88	112	88
10:45	0	0	101	65	101	65	0	0	129	77	129	77
11:00	0	0	106	39	106	39	0	0	122	81	122	81
11:15	0	0	114	44	114	44	0	0	129	82	129	82
11:30	0	0	126	31	126	31	0	0	124	76	124	76
11:45	0	0	143	31	143	31	0	0	140	58	140	58
Total	0	0	590	5438	590	5438	0	0	2853	5398	2853	5398
Day Total	0		6028		6028		0		8251		8251	
% Total	0.0%	0.0%	9.8%	90.2%			0.0%	0.0%	34.6%	65.4%		
Peak Vol.			11:00	04:15	11:00	04:15			11:00	02:00	11:00	02:00
P.H.F.			0.855	0.867	0.855	0.867			0.920	0.742	0.920	0.742

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 5
Station ID: 19274
SR 36 West of CR 36 / Branchport

Latitude: 0' 0.000 Undefined

Start Time	16-Aug-Sat	---		WB		Combined		17-Aug-Sun	---		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	54	107	54	107		0	0	138	120	138	120
12:15		0	0	51	114	51	114		0	0	94	132	94	132
12:30		0	0	37	136	37	136		0	0	82	114	82	114
12:45		0	0	28	107	28	107		0	0	73	135	73	135
01:00		0	0	30	120	30	120		0	0	55	135	55	135
01:15		0	0	18	122	18	122		0	0	53	163	53	163
01:30		0	0	14	123	14	123		0	0	46	146	46	146
01:45		0	0	22	119	22	119		0	0	57	160	57	160
02:00		0	0	20	119	20	119		0	0	34	163	34	163
02:15		0	0	25	125	25	125		0	0	56	200	56	200
02:30		0	0	19	129	19	129		0	0	47	198	47	198
02:45		0	0	8	144	8	144		0	0	29	221	29	221
03:00		0	0	5	153	5	153		0	0	17	226	17	226
03:15		0	0	7	172	7	172		0	0	16	208	16	208
03:30		0	0	11	161	11	161		0	0	16	203	16	203
03:45		0	0	5	156	5	156		0	0	7	188	7	188
04:00		0	0	3	171	3	171		0	0	9	194	9	194
04:15		0	0	5	177	5	177		0	0	6	203	6	203
04:30		0	0	9	176	9	176		0	0	14	179	14	179
04:45		0	0	4	180	4	180		0	0	6	165	6	165
05:00		0	0	13	187	13	187		0	0	12	201	12	201
05:15		0	0	11	181	11	181		0	0	12	171	12	171
05:30		0	0	16	168	16	168		0	0	8	151	8	151
05:45		0	0	28	164	28	164		0	0	13	148	13	148
06:00		0	0	18	151	18	151		0	0	17	198	17	198
06:15		0	0	19	166	19	166		0	0	20	180	20	180
06:30		0	0	32	184	32	184		0	0	18	167	18	167
06:45		0	0	37	172	37	172		0	0	26	224	26	224
07:00		0	0	29	177	29	177		0	0	25	183	25	183
07:15		0	0	41	177	41	177		0	0	27	209	27	209
07:30		0	0	54	161	54	161		0	0	39	198	39	198
07:45		0	0	63	185	63	185		0	0	40	194	40	194
08:00		0	0	57	169	57	169		0	0	64	210	64	210
08:15		0	0	84	160	84	160		0	0	46	190	46	190
08:30		0	0	78	178	78	178		0	0	52	220	52	220
08:45		0	0	78	158	78	158		0	0	69	214	69	214
09:00		0	0	111	167	111	167		0	0	73	195	73	195
09:15		0	0	135	172	135	172		0	0	74	153	74	153
09:30		0	0	121	149	121	149		0	0	85	165	85	165
09:45		0	0	128	137	128	137		0	0	93	140	93	140
10:00		0	0	106	133	106	133		0	0	92	117	92	117
10:15		0	0	119	231	119	231		0	0	100	113	100	113
10:30		0	0	131	224	131	224		0	0	116	90	116	90
10:45		0	0	116	185	116	185		0	0	119	78	119	78
11:00		0	0	100	154	100	154		0	0	115	80	115	80
11:15		0	0	121	136	121	136		0	0	94	92	94	92
11:30		0	0	126	172	126	172		0	0	112	87	112	87
11:45		0	0	105	194	105	194		0	0	115	64	115	64
Total		0	0	2452	7603	2452	7603		0	0	2531	7885	2531	7885
Day Total		0		10055		10055			0		10416		10416	
% Total		0.0%	0.0%	24.4%	75.6%				0.0%	0.0%	24.3%	75.7%		
Peak Vol.				09:00	10:15	09:00	10:15				10:15	02:45	10:15	02:45
P.H.F.				0.917	0.859	0.917	0.859				0.945	0.949	0.945	0.949

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 5
Station ID: 19274
SR 36 West of CR 36 / Branchport

Latitude: 0' 0.000 Undefined

Start Time	18-Aug-Mon	---		WB		Combined		19-Aug-Tue	---		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	40	108	40	108		0	0	24	103	24	103
12:15		0	0	56	121	56	121		0	0	16	109	16	109
12:30		0	0	36	129	36	129		0	0	11	134	11	134
12:45		0	0	22	104	22	104		0	0	9	119	9	119
01:00		0	0	29	114	29	114		0	0	12	116	12	116
01:15		0	0	15	124	15	124		0	0	14	124	14	124
01:30		0	0	17	135	17	135		0	0	6	116	6	116
01:45		0	0	15	126	15	126		0	0	5	128	5	128
02:00		0	1	11	143	11	144		0	0	9	122	9	122
02:15		0	0	16	154	16	154		0	0	8	145	8	145
02:30		0	0	10	163	10	163		0	0	4	155	4	155
02:45		0	0	6	157	6	157		0	0	10	136	10	136
03:00		0	0	2	159	2	159		0	0	5	154	5	154
03:15		0	0	13	177	13	177		0	0	5	165	5	165
03:30		0	0	3	183	3	183		0	0	3	157	3	157
03:45		0	0	6	200	6	200		0	0	4	152	4	152
04:00		0	0	5	210	5	210		0	0	3	147	3	147
04:15		0	0	6	222	6	222		0	0	11	152	11	152
04:30		0	0	9	197	9	197		0	0	7	141	7	141
04:45		0	0	19	197	19	197		0	0	9	150	9	150
05:00		0	0	17	177	17	177		0	0	13	130	13	130
05:15		0	0	21	180	21	180		0	0	19	124	19	124
05:30		0	0	30	182	30	182		0	0	29	144	29	144
05:45		0	0	49	169	49	169		0	0	38	122	38	122
06:00		0	0	37	126	37	126		0	0	40	116	40	116
06:15		0	0	52	155	52	155		0	0	54	123	54	123
06:30		0	0	56	131	56	131		0	0	50	101	50	101
06:45		0	0	73	155	73	155		0	0	62	102	62	102
07:00		0	0	90	130	90	130		0	0	69	113	69	113
07:15		0	0	75	136	75	136		0	0	90	111	90	111
07:30		0	0	96	156	96	156		0	0	111	112	111	112
07:45		0	0	96	115	96	115		0	0	119	118	119	118
08:00		0	0	123	135	123	135		0	0	110	109	110	109
08:15		0	0	99	134	99	134		0	0	112	117	112	117
08:30		0	0	118	138	118	138		0	0	138	105	138	105
08:45		0	0	97	107	97	107		0	0	111	121	111	121
09:00		0	0	115	81	115	81		0	0	109	99	109	99
09:15		0	0	95	93	95	93		0	0	128	107	128	107
09:30		0	0	107	77	107	77		0	0	76	80	76	80
09:45		0	0	90	80	90	80		0	0	104	92	104	92
10:00		0	0	98	76	98	76		0	0	90	84	90	84
10:15		0	0	105	88	105	88		0	0	84	62	84	62
10:30		0	0	113	59	113	59		0	0	111	57	111	57
10:45		0	0	101	40	101	40		0	0	119	80	119	80
11:00		0	0	93	55	93	55		0	0	127	42	127	42
11:15		0	0	108	38	108	38		0	0	107	32	107	32
11:30		0	0	116	32	116	32		0	0	109	34	109	34
11:45		0	0	108	22	108	22		0	0	104	25	104	25
Total		0	1	2714	6190	2714	6191		0	0	2608	5387	2608	5387
Day Total		1		8904		8905			0		7995		7995	
% Total		0.0%	0.0%	30.5%	69.5%				0.0%	0.0%	32.6%	67.4%		
Peak			01:15	08:00	03:45	08:00	03:45				08:30	03:00	08:30	03:00
Vol.			1	437	829	437	829				486	628	486	628
P.H.F.			0.250	0.888	0.934	0.888	0.934				0.880	0.952	0.880	0.952

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 6
Station ID: 12143
SR 36 between Wycoff Road & Grant Avenue

Latitude: 0' 0.000 Undefined

Start Time	14-Aug-Thu	WB		---		Combined		15-Aug-Fri	WB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*		376	*	0	*	376		87	399	0	0	87	399
12:15	*		393	*	0	*	393		80	432	0	0	80	432
12:30	*		416	*	0	*	416		48	443	0	0	48	443
12:45	*		407	*	0	*	407		65	435	0	0	65	435
01:00	*		418	*	0	*	418		57	445	0	0	57	445
01:15	*		393	*	0	*	393		40	421	0	0	40	421
01:30	*		421	*	0	*	421		36	429	0	0	36	429
01:45	*		422	*	0	*	422		53	430	0	0	53	430
02:00	*		458	*	0	*	458		38	476	0	0	38	476
02:15	*		458	*	0	*	458		23	470	0	0	23	470
02:30	*		493	*	0	*	493		24	505	0	0	24	505
02:45	*		471	*	0	*	471		32	493	0	0	32	493
03:00	*		489	*	0	*	489		25	493	0	0	25	493
03:15	*		502	*	0	*	502		22	525	0	0	22	525
03:30	*		648	*	0	*	648		32	569	0	0	32	569
03:45	*		523	*	0	*	523		24	520	0	0	24	520
04:00	*		618	*	0	*	618		33	561	0	0	33	561
04:15	*		605	*	0	*	605		37	602	0	0	37	602
04:30	*		647	*	0	*	647		40	522	0	0	40	522
04:45	*		620	*	0	*	620		48	610	0	0	48	610
05:00	*		695	*	0	*	695		90	663	0	0	90	663
05:15	*		672	*	0	*	672		112	592	0	0	112	592
05:30	*		610	*	0	*	610		128	489	0	0	128	489
05:45	*		551	*	0	*	551		189	495	0	0	189	495
06:00	*		483	*	0	*	483		207	537	0	0	207	537
06:15	*		454	*	0	*	454		272	431	0	0	272	431
06:30	*		454	*	0	*	454		335	422	0	0	335	422
06:45	*		404	*	0	*	404		271	371	0	0	271	371
07:00	*		375	*	0	*	375		351	352	0	0	351	352
07:15	*		333	*	0	*	333		377	325	0	0	377	325
07:30	*		321	*	0	*	321		496	333	0	0	496	333
07:45	*		333	*	0	*	333		401	313	0	0	401	313
08:00	*		362	*	0	*	362		470	326	0	0	470	326
08:15	*		334	*	0	*	334		456	317	0	0	456	317
08:30	*		309	*	0	*	309		455	229	0	0	455	229
08:45	*		291	*	0	*	291		372	314	0	0	372	314
09:00	*		307	*	0	*	307		396	283	0	0	396	283
09:15	*		276	*	0	*	276		379	252	0	0	379	252
09:30	*		312	*	0	*	312		329	290	0	0	329	290
09:45	*		282	*	0	*	282		337	284	0	0	337	284
10:00	*		244	*	0	*	244		308	263	0	0	308	263
10:15	*		193	*	0	*	193		351	192	0	0	351	192
10:30	*		186	*	0	*	186		348	221	0	0	348	221
10:45	*		156	*	0	*	156		412	184	0	0	412	184
11:00	*		149	*	0	*	149		394	203	0	0	394	203
11:15		391	119	0	0	391	119		381	158	0	0	381	158
11:30		379	103	0	0	379	103		405	166	0	0	405	166
11:45		356	110	0	0	356	110		383	135	0	0	383	135
Total Day		1126	19196	0	0	1126	19196		10249	18920	0	0	10249	18920
Total		20322		0		20322			29169		0		29169	
% Total		5.5%	94.5%	0.0%	0.0%				35.1%	64.9%	0.0%	0.0%		
Peak Vol.			04:30			04:30			07:30	04:15			07:30	04:15
P.H.F.			2634			2634			1823	2397			1823	2397
			0.947			0.947			0.919	0.904			0.919	0.904

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 6
Station ID: 12143
SR 36 between Wycoff Road & Grant Avenue

Latitude: 0' 0.000 Undefined

Start Time	16-Aug-Sat	WB		---		Combined		17-Aug-Sun	WB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		115	351	0	0	115	351		236	313	0	0	236	313
12:15		133	383	0	0	133	383		159	351	0	0	159	351
12:30		91	362	0	0	91	362		164	308	0	0	164	308
12:45		54	330	0	0	54	330		119	390	0	0	119	390
01:00		84	396	0	0	84	396		97	375	0	0	97	375
01:15		51	364	0	0	51	364		115	373	0	0	115	373
01:30		60	391	0	0	60	391		98	352	0	0	98	352
01:45		61	373	0	0	61	373		92	403	0	0	92	403
02:00		62	364	0	0	62	364		92	404	0	0	92	404
02:15		45	348	0	0	45	348		134	434	0	0	134	434
02:30		33	388	0	0	33	388		63	447	0	0	63	447
02:45		34	423	0	0	34	423		64	464	0	0	64	464
03:00		18	442	0	0	18	442		50	487	0	0	50	487
03:15		31	424	0	0	31	424		44	489	0	0	44	489
03:30		26	442	0	0	26	442		18	540	0	0	18	540
03:45		21	482	0	0	21	482		26	487	0	0	26	487
04:00		20	470	0	0	20	470		33	497	0	0	33	497
04:15		17	550	0	0	17	550		28	498	0	0	28	498
04:30		30	429	0	0	30	429		29	527	0	0	29	527
04:45		32	525	0	0	32	525		42	608	0	0	42	608
05:00		49	548	0	0	49	548		41	585	0	0	41	585
05:15		65	496	0	0	65	496		46	652	0	0	46	652
05:30		84	574	0	0	84	574		45	627	0	0	45	627
05:45		79	601	0	0	79	601		41	559	0	0	41	559
06:00		97	552	0	0	97	552		54	591	0	0	54	591
06:15		127	511	0	0	127	511		81	512	0	0	81	512
06:30		138	484	0	0	138	484		88	487	0	0	88	487
06:45		152	398	0	0	152	398		85	447	0	0	85	447
07:00		143	412	0	0	143	412		89	457	0	0	89	457
07:15		177	368	0	0	177	368		105	455	0	0	105	455
07:30		201	402	0	0	201	402		95	475	0	0	95	475
07:45		203	358	0	0	203	358		126	472	0	0	126	472
08:00		230	337	0	0	230	337		137	507	0	0	137	507
08:15		219	384	0	0	219	384		140	406	0	0	140	406
08:30		264	389	0	0	264	389		138	428	0	0	138	428
08:45		291	410	0	0	291	410		179	400	0	0	179	400
09:00		237	364	0	0	237	364		203	384	0	0	203	384
09:15		290	391	0	0	290	391		197	346	0	0	197	346
09:30		249	405	0	0	249	405		237	334	0	0	237	334
09:45		260	421	0	0	260	421		240	311	0	0	240	311
10:00		275	421	0	0	275	421		221	270	0	0	221	270
10:15		295	402	0	0	295	402		282	270	0	0	282	270
10:30		292	439	0	0	292	439		289	234	0	0	289	234
10:45		315	404	0	0	315	404		283	203	0	0	283	203
11:00		302	341	0	0	302	341		288	201	0	0	288	201
11:15		342	317	0	0	342	317		244	176	0	0	244	176
11:30		334	315	0	0	334	315		290	161	0	0	290	161
11:45		333	321	0	0	333	321		285	129	0	0	285	129
Total		7061	20002	0	0	7061	20002		6252	19826	0	0	6252	19826
Day Total		27063		0		27063			26078		0		26078	
% Total		26.1%	73.9%	0.0%	0.0%				24.0%	76.0%	0.0%	0.0%		
Peak		11:00	05:30			11:00	05:30		10:15	04:45			10:15	04:45
Vol.		1311	2238			1311	2238		1142	2472			1142	2472
P.H.F.		0.958	0.931			0.958	0.931		0.988	0.948			0.988	0.948

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 6
Station ID: 12143
SR 36 between Wycoff Road & Grant Avenue

Latitude: 0' 0.000 Undefined

Start Time	18-Aug- Mon	WB		---		Combined		19-Aug- Tue	WB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		132	393	0	0	132	393		77	395	0	0	77	395
12:15		111	431	0	0	111	431		51	402	0	0	51	402
12:30		81	391	0	0	81	391		49	420	0	0	49	420
12:45		60	416	0	0	60	416		40	397	0	0	40	397
01:00		66	421	0	0	66	421		38	424	0	0	38	424
01:15		38	395	0	0	38	395		24	419	0	0	24	419
01:30		32	434	0	0	32	434		27	408	0	0	27	408
01:45		37	443	0	0	37	443		20	412	0	0	20	412
02:00		29	440	0	0	29	440		28	444	0	0	28	444
02:15		40	441	0	0	40	441		24	449	0	0	24	449
02:30		20	457	0	0	20	457		24	514	0	0	24	514
02:45		17	475	0	0	17	475		21	464	0	0	21	464
03:00		21	464	0	0	21	464		17	472	0	0	17	472
03:15		19	525	0	0	19	525		21	503	0	0	21	503
03:30		28	621	0	0	28	621		30	609	0	0	30	609
03:45		21	540	0	0	21	540		15	545	0	0	15	545
04:00		31	612	0	0	31	612		30	591	0	0	30	591
04:15		38	620	0	0	38	620		46	579	0	0	46	579
04:30		46	604	0	0	46	604		41	606	0	0	41	606
04:45		73	565	0	0	73	565		57	554	0	0	57	554
05:00		92	617	0	0	92	617		87	631	0	0	87	631
05:15		125	559	0	0	125	559		121	576	0	0	121	576
05:30		145	589	0	0	145	589		153	580	0	0	153	580
05:45		239	565	0	0	239	565		176	485	0	0	176	485
06:00		277	622	0	0	277	622		258	512	0	0	258	512
06:15		316	495	0	0	316	495		309	441	0	0	309	441
06:30		337	417	0	0	337	417		314	394	0	0	314	394
06:45		350	403	0	0	350	403		287	364	0	0	287	364
07:00		391	389	0	0	391	389		385	359	0	0	385	359
07:15		399	381	0	0	399	381		412	336	0	0	412	336
07:30		500	399	0	0	500	399		478	355	0	0	478	355
07:45		439	369	0	0	439	369		458	305	0	0	458	305
08:00		512	378	0	0	512	378		479	362	0	0	479	362
08:15		483	367	0	0	483	367		468	360	0	0	468	360
08:30		541	329	0	0	541	329		510	308	0	0	510	308
08:45		403	301	0	0	403	301		415	298	0	0	415	298
09:00		460	333	0	0	460	333		415	318	0	0	415	318
09:15		386	308	0	0	386	308		372	270	0	0	372	270
09:30		430	264	0	0	430	264		372	277	0	0	372	277
09:45		403	259	0	0	403	259		353	212	0	0	353	212
10:00		391	191	0	0	391	191		345	226	0	0	345	226
10:15		402	173	0	0	402	173		355	194	0	0	355	194
10:30		389	160	0	0	389	160		365	179	0	0	365	179
10:45		355	126	0	0	355	126		356	145	0	0	356	145
11:00		402	153	0	0	402	153		381	139	0	0	381	139
11:15		402	105	0	0	402	105		362	109	0	0	362	109
11:30		402	100	0	0	402	100		395	91	0	0	395	91
11:45		395	76	0	0	395	76		383	98	0	0	383	98
Total		11306	19116	0	0	11306	19116		10444	18531	0	0	10444	18531
Day Total		30422		0		30422			28975		0		28975	
% Total		37.2%	62.8%	0.0%	0.0%				36.0%	64.0%	0.0%	0.0%		
Peak		07:45	04:15			07:45	04:15		07:45	04:15			07:45	04:15
Vol.		1975	2406			1975	2406		1915	2370			1915	2370
P.H.F.		0.913	0.970			0.913	0.970		0.939	0.939			0.939	0.939

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 6
Station ID: 12143
SR 36 between Wycoff Road & Grant Avenue

Latitude: 0' 0.000 Undefined

Start Time	20-Aug- Wed	WB		---		Combined		21-Aug- Thu	WB		---		Combined		
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
12:00		86	369	0	0	86	369		85	*	0	*	85	*	
12:15		76	415	0	0	76	415		52	*	0	*	52	*	
12:30		70	385	0	0	70	385		64	*	0	*	64	*	
12:45		47	376	0	0	47	376		40	*	0	*	40	*	
01:00		37	410	0	0	37	410		40	*	0	*	40	*	
01:15		54	395	0	0	54	395		51	*	0	*	51	*	
01:30		21	386	0	0	21	386		40	*	0	*	40	*	
01:45		23	409	0	0	23	409		22	*	0	*	22	*	
02:00		26	414	0	0	26	414		17	*	0	*	17	*	
02:15		27	458	0	0	27	458		24	*	0	*	24	*	
02:30		19	463	0	0	19	463		25	*	0	*	25	*	
02:45		21	498	0	0	21	498		25	*	0	*	25	*	
03:00		22	483	0	0	22	483		12	*	0	*	12	*	
03:15		24	542	0	0	24	542		23	*	0	*	23	*	
03:30		31	618	0	0	31	618		17	*	0	*	17	*	
03:45		27	609	0	0	27	609		19	*	0	*	19	*	
04:00		37	650	0	0	37	650		29	*	0	*	29	*	
04:15		44	637	0	0	44	637		39	*	0	*	39	*	
04:30		46	683	0	0	46	683		43	*	0	*	43	*	
04:45		51	684	0	0	51	684		47	*	0	*	47	*	
05:00		90	623	0	0	90	623		88	*	0	*	88	*	
05:15		125	673	0	0	125	673		123	*	0	*	123	*	
05:30		161	691	0	0	161	691		165	*	0	*	165	*	
05:45		209	579	0	0	209	579		175	*	0	*	175	*	
06:00		247	559	0	0	247	559		238	*	0	*	238	*	
06:15		276	526	0	0	276	526		293	*	0	*	293	*	
06:30		343	412	0	0	343	412		318	*	0	*	318	*	
06:45		314	432	0	0	314	432		294	*	0	*	294	*	
07:00		416	425	0	0	416	425		394	*	0	*	394	*	
07:15		428	434	0	0	428	434		442	*	0	*	442	*	
07:30		506	405	0	0	506	405		473	*	0	*	473	*	
07:45		437	372	0	0	437	372		467	*	0	*	467	*	
08:00		541	375	0	0	541	375		507	*	0	*	507	*	
08:15		454	344	0	0	454	344		478	*	0	*	478	*	
08:30		490	338	0	0	490	338		508	*	0	*	508	*	
08:45		438	308	0	0	438	308		447	*	0	*	447	*	
09:00		384	320	0	0	384	320		450	*	0	*	450	*	
09:15		358	312	0	0	358	312		365	*	0	*	365	*	
09:30		355	270	0	0	355	270		361	*	0	*	361	*	
09:45		395	239	0	0	395	239		403	*	0	*	403	*	
10:00		362	243	0	0	362	243		366	*	0	*	366	*	
10:15		343	212	0	0	343	212		348	*	0	*	348	*	
10:30		386	171	0	0	386	171		393	*	0	*	393	*	
10:45		360	129	0	0	360	129		364	*	0	*	364	*	
11:00		354	174	0	0	354	174		356	*	0	*	356	*	
11:15		378	124	0	0	378	124		384	*	0	*	384	*	
11:30		373	94	0	0	373	94		382	*	0	*	382	*	
11:45		399	98	0	0	399	98		*	*	*	*	*	*	
Total Day		10711	19766	0	0	10711	19766		10296	0	0	0	10296	0	
Total		30477		0		30477			10296		0		10296		
% Total		35.1%	64.9%	0.0%	0.0%				100.0%	0.0%	0.0%	0.0%			
Peak Vol.		07:30	04:45			07:30	04:45		07:45				07:45		
P.H.F.		1938	2671			1938	2671		1960				1960		
		0.896	0.966			0.896	0.966		0.965				0.965		
ADT		ADT 28,697		AADT 28,697											

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 7
Station ID: 12737
West Park Ave b/w Fanwood ST & Garrity P

Latitude: 0' 0.000 Undefined

Start Time	18-Aug-Mon	---		WB		Combined		19-Aug-Tue	---		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	*	*	*	0	0	14	126	14	126	
12:15	*	*	*	*	*	*	*	0	0	12	138	12	138	
12:30	*	*	*	*	*	*	*	0	0	12	154	12	154	
12:45	*	*	*	*	*	*	*	0	0	8	148	8	148	
01:00	*	*	*	*	*	*	*	0	0	11	142	11	142	
01:15	*	*	*	*	*	*	*	0	0	4	138	4	138	
01:30	*	*	*	*	*	*	*	0	0	8	122	8	122	
01:45	*	*	*	*	*	*	*	0	0	4	150	4	150	
02:00	*	*	*	*	*	*	*	0	0	0	148	0	148	
02:15	*	0	*	*	129	*	129	0	0	3	108	3	108	
02:30	*	0	*	*	135	*	135	0	0	5	145	5	145	
02:45	*	0	*	*	140	*	140	0	0	1	120	1	120	
03:00	*	0	*	*	169	*	169	0	0	6	169	6	169	
03:15	*	0	*	*	165	*	165	0	0	2	169	2	169	
03:30	*	0	*	*	149	*	149	0	0	7	150	7	150	
03:45	*	0	*	*	155	*	155	0	0	3	136	3	136	
04:00	*	0	*	*	155	*	155	0	0	4	140	4	140	
04:15	*	0	*	*	157	*	157	0	0	8	169	8	169	
04:30	*	0	*	*	171	*	171	0	0	6	164	6	164	
04:45	*	0	*	*	158	*	158	0	0	13	149	13	149	
05:00	*	0	*	*	184	*	184	0	0	25	195	25	195	
05:15	*	0	*	*	221	*	221	0	0	27	195	27	195	
05:30	*	0	*	*	188	*	188	0	0	18	151	18	151	
05:45	*	0	*	*	166	*	166	0	0	35	184	35	184	
06:00	*	0	*	*	162	*	162	0	0	44	146	44	146	
06:15	*	0	*	*	140	*	140	0	0	43	140	43	140	
06:30	*	0	*	*	120	*	120	0	0	79	129	79	129	
06:45	*	0	*	*	131	*	131	0	0	71	112	71	112	
07:00	*	0	*	*	113	*	113	0	0	68	122	68	122	
07:15	*	0	*	*	145	*	145	0	0	100	114	100	114	
07:30	*	0	*	*	110	*	110	0	0	129	126	129	126	
07:45	*	0	*	*	123	*	123	0	0	151	95	151	95	
08:00	*	0	*	*	103	*	103	0	0	130	137	130	137	
08:15	*	0	*	*	99	*	99	0	0	136	97	136	97	
08:30	*	0	*	*	78	*	78	0	0	158	74	158	74	
08:45	*	0	*	*	62	*	62	0	0	148	82	148	82	
09:00	*	0	*	*	58	*	58	0	0	156	81	156	81	
09:15	*	0	*	*	102	*	102	0	0	127	62	127	62	
09:30	*	0	*	*	60	*	60	0	0	151	52	151	52	
09:45	*	0	*	*	40	*	40	0	0	140	48	140	48	
10:00	*	0	*	*	33	*	33	0	0	136	35	136	35	
10:15	*	0	*	*	37	*	37	0	0	130	55	130	55	
10:30	*	0	*	*	37	*	37	0	0	135	37	135	37	
10:45	*	0	*	*	30	*	30	0	0	144	33	144	33	
11:00	*	0	*	*	27	*	27	0	0	143	43	143	43	
11:15	*	0	*	*	17	*	17	0	0	138	29	138	29	
11:30	*	0	*	*	21	*	21	0	0	135	28	135	28	
11:45	*	0	*	*	15	*	15	0	0	144	17	144	17	
Total		0	0	0	4305	0	4305	0	0	3172	5504	3172	5504	
Day Total		0		4305		4305		0		8676		8676		
% Total		0.0%	0.0%	0.0%	100.0%			0.0%	0.0%	36.6%	63.4%			
Peak				05:00		05:00				08:15	05:00	08:15	05:00	
Vol.				759		759				598	725	598	725	
P.H.F.				0.859		0.859				0.946	0.929	0.946	0.929	

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 7
Station ID: 12737
West Park Ave b/w Fanwood ST & Garrity P

Latitude: 0' 0.000 Undefined

Start Time	20-Aug- Wed	---		WB		Combined		21-Aug- Thu	---		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	12	147	12	147		0	0	6	146	6	146
12:15		0	0	14	124	14	124		0	0	11	188	11	188
12:30		0	0	11	132	11	132		0	0	11	161	11	161
12:45		0	0	13	153	13	153		0	0	11	132	11	132
01:00		0	0	13	118	13	118		0	0	6	147	6	147
01:15		0	0	12	129	12	129		0	0	5	133	5	133
01:30		0	0	7	132	7	132		0	0	3	132	3	132
01:45		0	0	5	132	5	132		0	0	7	141	7	141
02:00		0	0	6	121	6	121		0	0	5	113	5	113
02:15		0	0	4	143	4	143		0	0	5	125	5	125
02:30		0	0	3	140	3	140		0	0	4	120	4	120
02:45		0	0	2	115	2	115		0	0	3	146	3	146
03:00		0	0	3	144	3	144		0	0	2	169	2	169
03:15		0	0	3	145	3	145		0	0	0	147	0	147
03:30		0	0	4	144	4	144		0	0	2	156	2	156
03:45		0	0	1	152	1	152		0	0	3	137	3	137
04:00		0	0	4	129	4	129		0	0	5	154	5	154
04:15		0	0	5	165	5	165		0	0	9	135	9	135
04:30		0	0	6	163	6	163		0	0	7	173	7	173
04:45		0	0	16	167	16	167		0	0	9	170	9	170
05:00		0	0	18	196	18	196		0	0	18	205	18	205
05:15		0	0	21	206	21	206		0	0	16	203	16	203
05:30		0	0	29	171	29	171		0	0	23	178	23	178
05:45		0	0	29	176	29	176		0	0	33	170	33	170
06:00		0	0	31	163	31	163		0	0	33	169	33	169
06:15		0	0	41	145	41	145		0	0	37	150	37	150
06:30		0	0	79	135	79	135		0	0	80	129	80	129
06:45		0	0	76	134	76	134		0	0	64	104	64	104
07:00		0	0	64	146	64	146		0	0	66	134	66	134
07:15		0	0	86	113	86	113		0	0	79	128	79	128
07:30		0	0	111	125	111	125		0	0	107	114	107	114
07:45		0	0	126	116	126	116		0	0	122	100	122	100
08:00		0	0	147	109	147	109		0	0	127	110	127	110
08:15		0	0	155	88	155	88		0	0	158	105	158	105
08:30		0	0	149	73	149	73		0	0	159	86	159	86
08:45		0	0	191	76	191	76		0	0	159	110	159	110
09:00		0	0	127	61	127	61		0	0	134	100	134	100
09:15		0	0	147	67	147	67		0	0	140	69	140	69
09:30		0	0	128	62	128	62		0	0	148	75	148	75
09:45		0	0	144	45	144	45		0	0	180	54	180	54
10:00		0	0	153	45	153	45		0	0	178	57	178	57
10:15		0	0	161	40	161	40		0	0	149	28	149	28
10:30		0	0	156	29	156	29		0	0	140	36	140	36
10:45		0	0	119	25	119	25		0	0	143	33	143	33
11:00		0	0	136	26	136	26		0	0	160	32	160	32
11:15		0	0	119	16	119	16		0	0	140	15	140	15
11:30		0	0	132	13	132	13		0	0	139	29	139	29
11:45		0	0	144	23	144	23		0	0	141	16	141	16
Total		0	0	3163	5419	3163	5419		0	0	3187	5664	3187	5664
Day Total		0		8582		8582			0		8851		8851	
% Total		0.0%	0.0%	36.9%	63.1%				0.0%	0.0%	36.0%	64.0%		
Peak				08:00	05:00	08:00	05:00				09:30	04:45	09:30	04:45
Vol.				642	749	642	749				655	756	655	756
P.H.F.				0.840	0.909	0.840	0.909				0.910	0.922	0.910	0.922

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 7
Station ID: 12737
West Park Ave b/w Fanwood ST & Garrity P

Latitude: 0' 0.000 Undefined

Start Time	22-Aug-Fri	---		WB		Combined		23-Aug-Sat	---		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	15	173	15	173		0	0	16	94	16	94
12:15		0	0	12	139	12	139		0	0	11	96	11	96
12:30		0	0	11	159	11	159		0	0	10	101	10	101
12:45		0	0	14	147	14	147		0	0	14	103	14	103
01:00		0	0	8	141	8	141		0	0	12	113	12	113
01:15		0	0	10	121	10	121		0	0	9	92	9	92
01:30		0	0	4	139	4	139		0	0	4	95	4	95
01:45		0	0	10	116	10	116		0	0	6	108	6	108
02:00		0	0	3	138	3	138		0	0	9	105	9	105
02:15		0	0	11	155	11	155		0	0	15	101	15	101
02:30		0	0	9	144	9	144		0	0	10	120	10	120
02:45		0	0	3	136	3	136		0	0	3	97	3	97
03:00		0	0	0	161	0	161		0	0	3	100	3	100
03:15		0	0	6	179	6	179		0	0	4	99	4	99
03:30		0	0	3	149	3	149		0	0	3	116	3	116
03:45		0	0	6	173	6	173		0	0	3	114	3	114
04:00		0	0	8	164	8	164		0	0	5	115	5	115
04:15		0	0	5	157	5	157		0	0	4	117	4	117
04:30		0	0	9	179	9	179		0	0	8	120	8	120
04:45		0	0	8	181	8	181		0	0	7	122	7	122
05:00		0	0	15	196	15	196		0	0	7	118	7	118
05:15		0	0	13	227	13	227		0	0	8	114	8	114
05:30		0	0	28	196	28	196		0	0	10	101	10	101
05:45		0	0	28	173	28	173		0	0	13	110	13	110
06:00		0	0	35	135	35	135		0	0	15	99	15	99
06:15		0	0	54	125	54	125		0	0	21	91	21	91
06:30		0	0	62	128	62	128		0	0	27	79	27	79
06:45		0	0	66	118	66	118		0	0	26	71	26	71
07:00		0	0	73	112	73	112		0	0	32	77	32	77
07:15		0	0	91	110	91	110		0	0	37	69	37	69
07:30		0	0	108	117	108	117		0	0	53	56	53	56
07:45		0	0	106	89	106	89		0	0	63	78	63	78
08:00		0	0	152	66	152	66		0	0	68	57	68	57
08:15		0	0	151	66	151	66		0	0	86	63	86	63
08:30		0	0	168	56	168	56		0	0	107	67	107	67
08:45		0	0	189	44	189	44		0	0	94	77	94	77
09:00		0	0	133	53	133	53		0	0	89	74	89	74
09:15		0	0	119	70	119	70		0	0	101	67	101	67
09:30		0	0	125	44	125	44		0	0	104	58	104	58
09:45		0	0	143	48	143	48		0	0	102	61	102	61
10:00		0	0	135	49	135	49		0	0	103	52	103	52
10:15		0	0	146	37	146	37		0	0	116	59	116	59
10:30		0	0	132	23	132	23		0	0	132	52	132	52
10:45		0	0	137	34	137	34		0	0	127	46	127	46
11:00		0	0	125	34	125	34		0	0	125	49	125	49
11:15		0	0	136	25	136	25		0	0	129	45	129	45
11:30		0	0	161	20	161	20		0	0	126	39	126	39
11:45		0	0	137	19	137	19		0	0	121	34	121	34
Total		0	0	3123	5465	3123	5465		0	0	2198	4091	2198	4091
Day Total		0		8588		8588			0		6289		6289	
% Total		0.0%	0.0%	36.4%	63.6%				0.0%	0.0%	34.9%	65.1%		
Peak				08:00	04:45	08:00	04:45				10:30	04:15	10:30	04:15
Vol.				660	800	660	800				513	477	513	477
P.H.F.				0.873	0.881	0.873	0.881				0.972	0.977	0.972	0.977

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 8
Station ID: 9500
SR 71 b/w Springwood Ave & Cookman Ave

Latitude: 0' 0.000 Undefined

Start Time	18-Aug-Mon	NB		---		Combined		19-Aug-Tue	NB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		*	*	*	*	*	*		38	130	0	0	38	130
12:15		*	*	*	*	*	*		24	127	0	0	24	127
12:30		*	*	*	*	*	*		32	139	0	0	32	139
12:45		*	*	*	*	*	*		28	144	0	0	28	144
01:00		*	*	*	*	*	*		32	133	0	0	32	133
01:15		*	*	*	*	*	*		30	159	0	0	30	159
01:30		*	*	*	*	*	*		21	123	0	0	21	123
01:45		*	*	*	*	*	*		23	119	0	0	23	119
02:00		*	*	*	*	*	*		20	139	0	0	20	139
02:15		*	*	*	*	*	*		24	132	0	0	24	132
02:30		*	*	*	*	*	*		19	153	0	0	19	153
02:45		*	*	*	*	*	*		21	130	0	0	21	130
03:00		*	*	*	*	*	*		12	132	0	0	12	132
03:15		*	*	*	*	*	*		16	147	0	0	16	147
03:30		*	*	*	*	*	*		13	147	0	0	13	147
03:45		*	*	*	*	*	*		13	141	0	0	13	141
04:00		*	*	*	*	*	*		24	148	0	0	24	148
04:15		*	287	*	0	*	287		25	134	0	0	25	134
04:30		*	337	*	0	*	337		20	151	0	0	20	151
04:45		*	279	*	0	*	279		25	164	0	0	25	164
05:00		*	363	*	0	*	363		31	148	0	0	31	148
05:15		*	294	*	0	*	294		40	167	0	0	40	167
05:30		*	291	*	0	*	291		49	143	0	0	49	143
05:45		*	222	*	0	*	222		62	148	0	0	62	148
06:00		*	231	*	0	*	231		32	150	0	0	32	150
06:15		*	241	*	0	*	241		37	145	0	0	37	145
06:30		*	213	*	0	*	213		59	157	0	0	59	157
06:45		*	203	*	0	*	203		50	159	0	0	50	159
07:00		*	197	*	0	*	197		65	164	0	0	65	164
07:15		*	213	*	0	*	213		96	145	0	0	96	145
07:30		*	166	*	0	*	166		92	135	0	0	92	135
07:45		*	196	*	0	*	196		102	141	0	0	102	141
08:00		*	175	*	0	*	175		108	135	0	0	108	135
08:15		*	180	*	0	*	180		128	130	0	0	128	130
08:30		*	188	*	0	*	188		94	142	0	0	94	142
08:45		*	168	*	0	*	168		117	109	0	0	117	109
09:00		*	176	*	0	*	176		111	119	0	0	111	119
09:15		*	140	*	0	*	140		114	107	0	0	114	107
09:30		*	139	*	0	*	139		102	90	0	0	102	90
09:45		*	127	*	0	*	127		123	89	0	0	123	89
10:00		*	151	*	0	*	151		105	102	0	0	105	102
10:15		*	113	*	0	*	113		114	100	0	0	114	100
10:30		*	120	*	0	*	120		120	101	0	0	120	101
10:45		*	89	*	0	*	89		135	90	0	0	135	90
11:00		*	90	*	0	*	90		140	92	0	0	140	92
11:15		*	82	*	0	*	82		134	86	0	0	134	86
11:30		*	72	*	0	*	72		122	65	0	0	122	65
11:45		*	54	*	0	*	54		131	55	0	0	131	55
Total		0	5797	0	0	0	5797		3073	6206	0	0	3073	6206
Day Total		5797		0		5797		9279		0		9279		
% Total		0.0%	100.0%	0.0%	0.0%			33.1%	66.9%	0.0%	0.0%			
Peak			04:30				04:30		10:45	04:30			10:45	04:30
Vol.			1273				1273		531	630			531	630
P.H.F.			0.877				0.877		0.948	0.943			0.948	0.943

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 8
Station ID: 9500
SR 71 b/w Springwood Ave & Cookman Ave

Latitude: 0' 0.000 Undefined

Start Time	20-Aug- Wed	NB		---		Combined		21-Aug- Thu	NB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		61	129	0	0	61	129		45	124	0	0	45	124
12:15		50	122	0	0	50	122		32	151	0	0	32	151
12:30		40	136	0	0	40	136		41	122	0	0	41	122
12:45		37	125	0	0	37	125		32	104	0	0	32	104
01:00		38	118	0	0	38	118		37	131	0	0	37	131
01:15		37	106	0	0	37	106		36	136	0	0	36	136
01:30		34	112	0	0	34	112		28	141	0	0	28	141
01:45		50	141	0	0	50	141		31	131	0	0	31	131
02:00		28	134	0	0	28	134		29	141	0	0	29	141
02:15		32	129	0	0	32	129		26	105	0	0	26	105
02:30		11	159	0	0	11	159		22	132	0	0	22	132
02:45		18	121	0	0	18	121		25	143	0	0	25	143
03:00		17	144	0	0	17	144		17	148	0	0	17	148
03:15		23	141	0	0	23	141		22	117	0	0	22	117
03:30		17	146	0	0	17	146		20	145	0	0	20	145
03:45		19	126	0	0	19	126		21	134	0	0	21	134
04:00		20	130	0	0	20	130		31	153	0	0	31	153
04:15		18	130	0	0	18	130		31	125	0	0	31	125
04:30		20	132	0	0	20	132		25	129	0	0	25	129
04:45		14	136	0	0	14	136		29	133	0	0	29	133
05:00		15	141	0	0	15	141		34	157	0	0	34	157
05:15		14	146	0	0	14	146		42	133	0	0	42	133
05:30		20	149	0	0	20	149		56	138	0	0	56	138
05:45		22	150	0	0	22	150		68	118	0	0	68	118
06:00		30	158	0	0	30	158		37	150	0	0	37	150
06:15		34	154	0	0	34	154		41	119	0	0	41	119
06:30		41	154	0	0	41	154		62	160	0	0	62	160
06:45		43	176	0	0	43	176		55	117	0	0	55	117
07:00		40	144	0	0	40	144		71	137	0	0	71	137
07:15		54	148	0	0	54	148		103	122	0	0	103	122
07:30		47	150	0	0	47	150		100	116	0	0	100	116
07:45		73	136	0	0	73	136		111	118	0	0	111	118
08:00		59	157	0	0	59	157		112	118	0	0	112	118
08:15		91	134	0	0	91	134		133	120	0	0	133	120
08:30		65	155	0	0	65	155		100	89	0	0	100	89
08:45		78	127	0	0	78	127		124	108	0	0	124	108
09:00		100	132	0	0	100	132		119	102	0	0	119	102
09:15		101	116	0	0	101	116		123	113	0	0	123	113
09:30		106	117	0	0	106	117		104	95	0	0	104	95
09:45		117	113	0	0	117	113		126	87	0	0	126	87
10:00		101	137	0	0	101	137		103	81	0	0	103	81
10:15		128	146	0	0	128	146		101	75	0	0	101	75
10:30		107	129	0	0	107	129		121	90	0	0	121	90
10:45		144	140	0	0	144	140		83	74	0	0	83	74
11:00		135	110	0	0	135	110		92	92	0	0	92	92
11:15		130	76	0	0	130	76		108	136	0	0	108	136
11:30		155	98	0	0	155	98		138	60	0	0	138	60
11:45		136	80	0	0	136	80		123	44	0	0	123	44
Total		2770	6390	0	0	2770	6390		3170	5714	0	0	3170	5714
Day Total		9160		0		9160			8884		0		8884	
% Total		30.2%	69.8%	0.0%	0.0%				35.7%	64.3%	0.0%	0.0%		
Peak		10:45	06:00			10:45	06:00		08:15	04:45			08:15	04:45
Vol.		564	642			564	642		476	561			476	561
P.H.F.		0.910	0.912			0.910	0.912		0.895	0.893			0.895	0.893

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 8
Station ID: 9500
SR 71 b/w Springwood Ave & Cookman Ave

Latitude: 0' 0.000 Undefined

Start Time	22-Aug-Fri	NB		---		Combined		23-Aug-Sat	NB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		41	121	0	0	41	121		55	122	0	0	55	122
12:15		23	123	0	0	23	123		45	116	0	0	45	116
12:30		22	134	0	0	22	134		36	131	0	0	36	131
12:45		23	138	0	0	23	138		34	121	0	0	34	121
01:00		18	126	0	0	18	126		34	115	0	0	34	115
01:15		17	151	0	0	17	151		32	102	0	0	32	102
01:30		20	114	0	0	20	114		28	107	0	0	28	107
01:45		18	117	0	0	18	117		43	135	0	0	43	135
02:00		12	136	0	0	12	136		20	127	0	0	20	127
02:15		19	128	0	0	19	128		23	121	0	0	23	121
02:30		11	148	0	0	11	148		9	153	0	0	9	153
02:45		14	124	0	0	14	124		15	114	0	0	15	114
03:00		11	125	0	0	11	125		13	136	0	0	13	136
03:15		14	139	0	0	14	139		18	132	0	0	18	132
03:30		8	140	0	0	8	140		11	138	0	0	11	138
03:45		11	135	0	0	11	135		12	119	0	0	12	119
04:00		7	143	0	0	7	143		12	124	0	0	12	124
04:15		10	130	0	0	10	130		11	125	0	0	11	125
04:30		10	148	0	0	10	148		14	128	0	0	14	128
04:45		18	162	0	0	18	162		9	133	0	0	9	133
05:00		19	141	0	0	19	141		11	137	0	0	11	137
05:15		21	161	0	0	21	161		11	141	0	0	11	141
05:30		20	138	0	0	20	138		18	143	0	0	18	143
05:45		28	144	0	0	28	144		15	143	0	0	15	143
06:00		26	147	0	0	26	147		24	150	0	0	24	150
06:15		30	142	0	0	30	142		29	145	0	0	29	145
06:30		51	153	0	0	51	153		37	151	0	0	37	151
06:45		47	154	0	0	47	154		40	168	0	0	40	168
07:00		63	158	0	0	63	158		37	135	0	0	37	135
07:15		91	138	0	0	91	138		50	140	0	0	50	140
07:30		86	127	0	0	86	127		42	143	0	0	42	143
07:45		95	132	0	0	95	132		67	130	0	0	67	130
08:00		102	127	0	0	102	127		52	152	0	0	52	152
08:15		120	123	0	0	120	123		83	130	0	0	83	130
08:30		90	136	0	0	90	136		56	152	0	0	56	152
08:45		112	104	0	0	112	104		70	124	0	0	70	124
09:00		104	115	0	0	104	115		93	128	0	0	93	128
09:15		110	104	0	0	110	104		95	111	0	0	95	111
09:30		100	85	0	0	100	85		101	111	0	0	101	111
09:45		117	84	0	0	117	84		113	106	0	0	113	106
10:00		96	96	0	0	96	96		98	129	0	0	98	129
10:15		106	93	0	0	106	93		124	137	0	0	124	137
10:30		113	93	0	0	113	93		102	121	0	0	102	121
10:45		129	81	0	0	129	81		138	133	0	0	138	133
11:00		135	84	0	0	135	84		128	104	0	0	128	104
11:15		128	79	0	0	128	79		122	71	0	0	122	71
11:30		115	59	0	0	115	59		146	94	0	0	146	94
11:45		123	50	0	0	123	50		128	77	0	0	128	77
Total		2704	5930	0	0	2704	5930		2504	6105	0	0	2504	6105
Day Total		8634		0		8634			8609		0		8609	
% Total		31.3%	68.7%	0.0%	0.0%				29.1%	70.9%	0.0%	0.0%		
Peak Vol.		10:45	04:30			10:45	04:30		10:45	06:00			10:45	06:00
P.H.F.		507	612			507	612		534	614			534	614
		0.939	0.944			0.939	0.944		0.914	0.914			0.914	0.914

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 8
Station ID: 9500
SR 71 b/w Springwood Ave & Cookman Ave

Latitude: 0' 0.000 Undefined

Start Time	24-Aug-Sun	NB		---		Combined		25-Aug-Mon	NB		---		Combined		
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
12:00		65	121	0	0	65	121		24	128	0	0	24	128	
12:15		74	139	0	0	74	139		21	154	0	0	21	154	
12:30		65	133	0	0	65	133		16	126	0	0	16	126	
12:45		55	146	0	0	55	146		17	109	0	0	17	109	
01:00		41	117	0	0	41	117		12	133	0	0	12	133	
01:15		38	131	0	0	38	131		16	143	0	0	16	143	
01:30		30	118	0	0	30	118		7	143	0	0	7	143	
01:45		27	130	0	0	27	130		9	133	0	0	9	133	
02:00		35	105	0	0	35	105		11	149	0	0	11	149	
02:15		26	138	0	0	26	138		7	107	0	0	7	107	
02:30		26	108	0	0	26	108		7	138	0	0	7	138	
02:45		12	134	0	0	12	134		9	145	0	0	9	145	
03:00		15	119	0	0	15	119		7	152	0	0	7	152	
03:15		14	123	0	0	14	123		9	120	0	0	9	120	
03:30		16	123	0	0	16	123		5	149	0	0	5	149	
03:45		12	146	0	0	12	146		3	139	0	0	3	139	
04:00		11	140	0	0	11	140		11	159	0	0	11	159	
04:15		6	143	0	0	6	143		10	132	0	0	10	132	
04:30		10	126	0	0	10	126		9	137	0	0	9	137	
04:45		12	124	0	0	12	124		6	136	0	0	6	136	
05:00		17	129	0	0	17	129		14	*	0	*	14	*	
05:15		11	128	0	0	11	128		17	*	0	*	17	*	
05:30		12	151	0	0	12	151		22	*	0	*	22	*	
05:45		10	147	0	0	10	147		30	*	0	*	30	*	
06:00		17	131	0	0	17	131		34	*	0	*	34	*	
06:15		14	143	0	0	14	143		39	*	0	*	39	*	
06:30		24	144	0	0	24	144		63	*	0	*	63	*	
06:45		31	107	0	0	31	107		58	*	0	*	58	*	
07:00		29	122	0	0	29	122		64	*	0	*	64	*	
07:15		33	105	0	0	33	105		69	*	0	*	69	*	
07:30		38	107	0	0	38	107		90	*	0	*	90	*	
07:45		42	123	0	0	42	123		98	*	0	*	98	*	
08:00		48	109	0	0	48	109		109	*	0	*	109	*	
08:15		42	100	0	0	42	100		103	*	0	*	103	*	
08:30		69	109	0	0	69	109		104	*	0	*	104	*	
08:45		68	91	0	0	68	91		99	*	0	*	99	*	
09:00		74	93	0	0	74	93		118	*	0	*	118	*	
09:15		100	116	0	0	100	116		117	*	0	*	117	*	
09:30		86	101	0	0	86	101		129	*	0	*	129	*	
09:45		98	86	0	0	98	86		118	*	0	*	118	*	
10:00		102	98	0	0	102	98		97	*	0	*	97	*	
10:15		102	71	0	0	102	71		111	*	0	*	111	*	
10:30		131	75	0	0	131	75		105	*	0	*	105	*	
10:45		127	76	0	0	127	76		101	*	0	*	101	*	
11:00		124	35	0	0	124	35		100	*	0	*	100	*	
11:15		105	33	0	0	105	33		111	*	0	*	111	*	
11:30		127	44	0	0	127	44		144	*	0	*	144	*	
11:45		113	32	0	0	113	32		128	*	0	*	128	*	
Total		2384	5370	0	0	2384	5370		2608	2732	0	0	2608	2732	
Day Total		7754		0		7754			5340		0		5340		
% Total		30.7%	69.3%	0.0%	0.0%				48.8%	51.2%	0.0%	0.0%			
Peak		10:30	05:30			10:30	05:30		11:00	03:30			11:00	03:30	
Vol.		487	572			487	572		483	579			483	579	
P.H.F.		0.929	0.947			0.929	0.947		0.839	0.910			0.839	0.910	
ADT		ADT 19,941		AADT 19,941											

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 8
Station ID: 5751
SR 71 b/w Springwood Ave & Cookman Ave

Latitude: 0' 0.000 Undefined

Start Time	18-Aug-Mon	SB		---		Combined		19-Aug-Tue	SB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		*	*	*	*	*	*		24	181	0	0	24	181
12:15		*	*	*	*	*	*		19	183	0	0	19	183
12:30		*	*	*	*	*	*		25	174	0	0	25	174
12:45		*	*	*	*	*	*		21	190	0	0	21	190
01:00		*	*	*	*	*	*		16	187	0	0	16	187
01:15		*	*	*	*	*	*		16	177	0	0	16	177
01:30		*	*	*	*	*	*		18	192	0	0	18	192
01:45		*	*	*	*	*	*		10	195	0	0	10	195
02:00		*	*	*	*	*	*		15	204	0	0	15	204
02:15		*	*	*	*	*	*		14	180	0	0	14	180
02:30		*	*	*	*	*	*		10	170	0	0	10	170
02:45		*	*	*	*	*	*		11	215	0	0	11	215
03:00		*	*	*	*	*	*		13	186	0	0	13	186
03:15		*	*	*	*	*	*		9	202	0	0	9	202
03:30		*	*	*	*	*	*		10	194	0	0	10	194
03:45		*	*	*	*	*	*		7	189	0	0	7	189
04:00		*	*	*	*	*	*		12	186	0	0	12	186
04:15		*	187	*	0	*	187		14	208	0	0	14	208
04:30		*	192	*	0	*	192		11	220	0	0	11	220
04:45		*	195	*	0	*	195		19	210	0	0	19	210
05:00		*	191	*	0	*	191		13	235	0	0	13	235
05:15		*	206	*	0	*	206		18	221	0	0	18	221
05:30		*	180	*	0	*	180		24	209	0	0	24	209
05:45		*	164	*	0	*	164		42	220	0	0	42	220
06:00		*	173	*	0	*	173		30	223	0	0	30	223
06:15		*	176	*	0	*	176		47	169	0	0	47	169
06:30		*	153	*	0	*	153		61	214	0	0	61	214
06:45		*	157	*	0	*	157		57	204	0	0	57	204
07:00		*	133	*	0	*	133		87	194	0	0	87	194
07:15		*	154	*	0	*	154		94	207	0	0	94	207
07:30		*	132	*	0	*	132		93	164	0	0	93	164
07:45		*	140	*	0	*	140		132	198	0	0	132	198
08:00		*	131	*	0	*	131		97	175	0	0	97	175
08:15		*	131	*	0	*	131		107	146	0	0	107	146
08:30		*	131	*	0	*	131		120	152	0	0	120	152
08:45		*	126	*	0	*	126		144	181	0	0	144	181
09:00		*	113	*	0	*	113		114	147	0	0	114	147
09:15		*	118	*	0	*	118		136	133	0	0	136	133
09:30		*	99	*	0	*	99		107	148	0	0	107	148
09:45		*	93	*	0	*	93		150	133	0	0	150	133
10:00		*	95	*	0	*	95		143	149	0	0	143	149
10:15		*	74	*	0	*	74		144	177	0	0	144	177
10:30		*	75	*	0	*	75		144	156	0	0	144	156
10:45		*	63	*	0	*	63		168	158	0	0	168	158
11:00		*	61	*	0	*	61		177	142	0	0	177	142
11:15		*	52	*	0	*	52		174	98	0	0	174	98
11:30		*	59	*	0	*	59		179	106	0	0	179	106
11:45		*	46	*	0	*	46		171	84	0	0	171	84
Total		0	4000	0	0	0	4000		3267	8586	0	0	3267	8586
Day Total		4000		0		4000			11853		0		11853	
% Total		0.0%	100.0%	0.0%	0.0%				27.6%	72.4%	0.0%	0.0%		
Peak			04:30				04:30		11:00	04:30			11:00	04:30
Vol.			784				784		701	886			701	886
P.H.F.			0.951				0.951		0.979	0.943			0.979	0.943

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 8
Station ID: 5751
SR 71 b/w Springwood Ave & Cookman Ave

Latitude: 0' 0.000 Undefined

Start Time	20-Aug- Wed	SB		---		Combined		21-Aug- Thu	SB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		87	176	0	0	87	176		94	192	0	0	94	192
12:15		62	175	0	0	62	175		71	172	0	0	71	172
12:30		67	149	0	0	67	149		75	154	0	0	75	154
12:45		51	158	0	0	51	158		58	150	0	0	58	150
01:00		72	169	0	0	72	169		78	164	0	0	78	164
01:15		52	167	0	0	52	167		57	172	0	0	57	172
01:30		55	203	0	0	55	203		61	162	0	0	61	162
01:45		56	175	0	0	56	175		63	165	0	0	63	165
02:00		48	183	0	0	48	183		56	173	0	0	56	173
02:15		41	172	0	0	41	172		50	155	0	0	50	155
02:30		35	172	0	0	35	172		41	167	0	0	41	167
02:45		22	196	0	0	22	196		29	178	0	0	29	178
03:00		27	185	0	0	27	185		35	188	0	0	35	188
03:15		27	172	0	0	27	172		36	163	0	0	36	163
03:30		15	190	0	0	15	190		23	179	0	0	23	179
03:45		16	165	0	0	16	165		23	177	0	0	23	177
04:00		17	158	0	0	17	158		23	212	0	0	23	212
04:15		18	165	0	0	18	165		23	200	0	0	23	200
04:30		14	169	0	0	14	169		18	179	0	0	18	179
04:45		19	203	0	0	19	203		22	217	0	0	22	217
05:00		20	194	0	0	20	194		24	219	0	0	24	219
05:15		26	220	0	0	26	220		31	246	0	0	31	246
05:30		24	193	0	0	24	193		30	194	0	0	30	194
05:45		39	190	0	0	39	190		46	172	0	0	46	172
06:00		23	199	0	0	23	199		31	222	0	0	31	222
06:15		29	196	0	0	29	196		35	193	0	0	35	193
06:30		46	180	0	0	46	180		53	189	0	0	53	189
06:45		51	192	0	0	51	192		59	209	0	0	59	209
07:00		58	195	0	0	58	195		67	190	0	0	67	190
07:15		68	182	0	0	68	182		76	176	0	0	76	176
07:30		76	161	0	0	76	161		83	162	0	0	83	162
07:45		100	166	0	0	100	166		106	144	0	0	106	144
08:00		80	181	0	0	80	181		85	134	0	0	85	134
08:15		87	171	0	0	87	171		91	168	0	0	91	168
08:30		100	180	0	0	100	180		103	159	0	0	103	159
08:45		110	149	0	0	110	149		114	138	0	0	114	138
09:00		124	179	0	0	124	179		129	139	0	0	129	139
09:15		139	164	0	0	139	164		145	140	0	0	145	140
09:30		127	166	0	0	127	166		134	120	0	0	134	120
09:45		150	153	0	0	150	153		158	117	0	0	158	117
10:00		141	139	0	0	141	139		138	106	0	0	138	106
10:15		146	181	0	0	146	181		131	85	0	0	131	85
10:30		157	184	0	0	157	184		129	104	0	0	129	104
10:45		145	166	0	0	145	166		152	78	0	0	152	78
11:00		154	129	0	0	154	129		138	71	0	0	138	71
11:15		174	116	0	0	174	116		151	70	0	0	151	70
11:30		151	110	0	0	151	110		167	61	0	0	167	61
11:45		163	99	0	0	163	99		155	61	0	0	155	61
Total		3509	8237	0	0	3509	8237		3697	7586	0	0	3697	7586
Day Total		11746		0		11746			11283		0		11283	
% Total		29.9%	70.1%	0.0%	0.0%				32.8%	67.2%	0.0%	0.0%		
Peak		11:00	04:45			11:00	04:45		11:00	04:45			11:00	04:45
Vol.		642	810			642	810		611	876			611	876
P.H.F.		0.922	0.920			0.922	0.920		0.915	0.890			0.915	0.890

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 8
Station ID: 5751
SR 71 b/w Springwood Ave & Cookman Ave

Latitude: 0' 0.000 Undefined

Start Time	22-Aug-Fri	SB		---		Combined		23-Aug-Sat	SB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		53	180	0	0	53	180		83	171	0	0	83	171
12:15		36	181	0	0	36	181		57	171	0	0	57	171
12:30		27	170	0	0	27	170		61	146	0	0	61	146
12:45		31	187	0	0	31	187		44	155	0	0	44	155
01:00		29	185	0	0	29	185		64	165	0	0	64	165
01:15		25	174	0	0	25	174		49	162	0	0	49	162
01:30		31	188	0	0	31	188		47	197	0	0	47	197
01:45		17	190	0	0	17	190		47	168	0	0	47	168
02:00		25	198	0	0	25	198		40	175	0	0	40	175
02:15		28	176	0	0	28	176		34	163	0	0	34	163
02:30		19	167	0	0	19	167		29	164	0	0	29	164
02:45		11	213	0	0	11	213		17	189	0	0	17	189
03:00		7	180	0	0	7	180		23	179	0	0	23	179
03:15		9	197	0	0	9	197		24	167	0	0	24	167
03:30		10	190	0	0	10	190		12	186	0	0	12	186
03:45		8	186	0	0	8	186		12	162	0	0	12	162
04:00		11	184	0	0	11	184		12	154	0	0	12	154
04:15		8	206	0	0	8	206		12	160	0	0	12	160
04:30		5	217	0	0	5	217		7	163	0	0	7	163
04:45		14	205	0	0	14	205		11	196	0	0	11	196
05:00		11	232	0	0	11	232		11	186	0	0	11	186
05:15		21	218	0	0	21	218		18	211	0	0	18	211
05:30		26	206	0	0	26	206		17	185	0	0	17	185
05:45		23	216	0	0	23	216		33	183	0	0	33	183
06:00		27	218	0	0	27	218		18	193	0	0	18	193
06:15		45	167	0	0	45	167		25	191	0	0	25	191
06:30		60	209	0	0	60	209		43	176	0	0	43	176
06:45		56	198	0	0	56	198		47	189	0	0	47	189
07:00		85	187	0	0	85	187		53	191	0	0	53	191
07:15		93	205	0	0	93	205		62	177	0	0	62	177
07:30		92	161	0	0	92	161		69	155	0	0	69	155
07:45		130	192	0	0	130	192		92	159	0	0	92	159
08:00		96	170	0	0	96	170		71	173	0	0	71	173
08:15		106	142	0	0	106	142		85	168	0	0	85	168
08:30		117	149	0	0	117	149		97	172	0	0	97	172
08:45		143	177	0	0	143	177		106	140	0	0	106	140
09:00		113	142	0	0	113	142		119	171	0	0	119	171
09:15		132	131	0	0	132	131		133	157	0	0	133	157
09:30		106	141	0	0	106	141		120	160	0	0	120	160
09:45		148	131	0	0	148	131		142	148	0	0	142	148
10:00		142	147	0	0	142	147		134	135	0	0	134	135
10:15		141	169	0	0	141	169		140	178	0	0	140	178
10:30		142	154	0	0	142	154		152	181	0	0	152	181
10:45		165	152	0	0	165	152		141	162	0	0	141	162
11:00		173	140	0	0	173	140		151	124	0	0	151	124
11:15		171	94	0	0	171	94		172	110	0	0	172	110
11:30		175	103	0	0	175	103		144	103	0	0	144	103
11:45		169	80	0	0	169	80		157	91	0	0	157	91
Total Day		3312	8405	0	0	3312	8405		3237	7962	0	0	3237	7962
% Total		28.3%	71.7%	0.0%	0.0%				28.9%	71.1%	0.0%	0.0%		
Peak Vol.		11:00	04:30			11:00	04:30		11:00	04:45			11:00	04:45
P.H.F.		0.983	0.940			0.983	0.940		0.907	0.922			0.907	0.922

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 9
Station ID: 12740
CR 16 b/w Whitesville Rd & Drummond Ave

Latitude: 0' 0.000 Undefined

Start Time	18-Aug-Mon	---		EB		Combined		19-Aug-Tue	---		EB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	*	*	*	0	0	16	126	16	126	
12:15	*	*	*	*	*	*	*	0	0	6	131	6	131	
12:30	*	*	*	*	*	*	*	0	0	12	108	12	108	
12:45	*	*	*	*	*	*	*	0	0	7	113	7	113	
01:00	*	*	*	*	*	*	*	0	0	10	117	10	117	
01:15	*	*	*	*	*	*	*	0	0	10	118	10	118	
01:30	*	*	*	*	*	*	*	0	1	5	116	5	117	
01:45	*	*	*	*	*	*	*	0	0	6	117	6	117	
02:00	*	*	*	*	*	*	*	0	0	9	121	9	121	
02:15	*	*	*	*	*	*	*	0	0	5	85	5	85	
02:30	*	*	*	*	*	*	*	0	0	6	104	6	104	
02:45	*	*	*	*	*	*	*	0	0	4	113	4	113	
03:00	*	*	*	*	*	*	*	0	0	5	105	5	105	
03:15	*	*	*	*	*	*	*	0	0	16	73	16	73	
03:30	*	*	*	*	*	*	*	0	0	2	99	2	99	
03:45	*	0	*	162	*	162	*	0	0	4	127	4	127	
04:00	*	0	*	178	*	178	*	0	0	1	107	1	107	
04:15	*	0	*	164	*	164	*	0	0	5	116	5	116	
04:30	*	0	*	120	*	120	*	0	0	3	95	3	95	
04:45	*	0	*	112	*	112	*	0	0	5	103	5	103	
05:00	*	0	*	167	*	167	*	0	0	9	120	9	120	
05:15	*	0	*	162	*	162	*	0	0	7	79	7	79	
05:30	*	0	*	142	*	142	*	0	0	18	105	18	105	
05:45	*	0	*	121	*	121	*	0	0	26	127	26	127	
06:00	*	0	*	127	*	127	*	0	0	21	115	21	115	
06:15	*	0	*	105	*	105	*	0	0	28	108	28	108	
06:30	*	0	*	101	*	101	*	0	0	39	70	39	70	
06:45	*	0	*	101	*	101	*	0	0	54	87	54	87	
07:00	*	0	*	102	*	102	*	0	0	44	94	44	94	
07:15	*	0	*	83	*	83	*	0	0	57	81	57	81	
07:30	*	0	*	73	*	73	*	0	0	64	65	64	65	
07:45	*	0	*	76	*	76	*	0	0	84	75	84	75	
08:00	*	0	*	63	*	63	*	0	0	76	65	76	65	
08:15	*	0	*	52	*	52	*	0	0	88	64	88	64	
08:30	*	0	*	56	*	56	*	0	0	72	55	72	55	
08:45	*	0	*	65	*	65	*	0	0	90	46	90	46	
09:00	*	0	*	82	*	82	*	0	0	70	48	70	48	
09:15	*	0	*	58	*	58	*	0	0	63	57	63	57	
09:30	*	0	*	43	*	43	*	0	0	82	36	82	36	
09:45	*	0	*	40	*	40	*	0	0	80	41	80	41	
10:00	*	0	*	35	*	35	*	0	0	95	39	95	39	
10:15	*	0	*	32	*	32	*	0	0	68	31	68	31	
10:30	*	0	*	38	*	38	*	0	0	116	16	116	16	
10:45	*	0	*	27	*	27	*	0	0	111	22	111	22	
11:00	*	0	*	27	*	27	*	0	0	102	28	102	28	
11:15	*	0	*	19	*	19	*	0	0	98	19	98	19	
11:30	*	0	*	19	*	19	*	0	0	105	32	105	32	
11:45	*	0	*	25	*	25	*	0	0	109	29	109	29	
Total		0	0	0	2777	0	2777	0	1	2013	3948	2013	3949	
Day Total		0		2777		2777		1		5961		5962		
% Total		0.0%	0.0%	0.0%	100.0%			0.0%	0.0%	33.8%	66.2%			
Peak Vol.				03:45		03:45		00:45		10:30		12:00		
P.H.F.				624		624		1		427		478		
				0.876		0.876		0.250		0.920		0.912		

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 9
Station ID: 12740
CR 16 b/w Whitesville Rd & Drummond Ave

Latitude: 0' 0.000 Undefined

Start Time	20-Aug- Wed	---		EB		Combined		21-Aug- Thu	---		EB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	17	146	17	146		0	0	26	122	26	122
12:15		0	0	17	144	17	144		0	0	19	117	19	117
12:30		0	0	10	98	10	98		0	0	8	122	8	122
12:45		0	0	8	140	8	140		0	0	13	95	13	95
01:00		0	0	10	121	10	121		0	0	10	111	10	111
01:15		0	0	13	129	13	129		0	0	5	115	5	115
01:30		0	0	4	138	4	138		0	0	15	120	15	120
01:45		0	0	10	123	10	123		0	0	10	98	10	98
02:00		0	0	3	138	3	138		0	0	10	82	10	82
02:15		0	0	7	112	7	112		0	0	5	99	5	99
02:30		0	0	4	110	4	110		0	0	8	102	8	102
02:45		0	0	3	95	3	95		0	0	1	98	1	98
03:00		0	0	6	115	6	115		0	0	8	102	8	102
03:15		0	0	11	74	11	74		0	0	4	88	4	88
03:30		0	0	6	135	6	135		0	0	4	90	4	90
03:45		0	0	2	105	2	105		0	0	3	99	3	99
04:00		0	0	2	97	2	97		0	0	0	107	0	107
04:15		0	0	6	113	6	113		0	0	5	95	5	95
04:30		0	0	7	108	7	108		0	0	14	90	14	90
04:45		0	0	2	96	2	96		0	0	4	108	4	108
05:00		0	0	7	100	7	100		0	0	7	107	7	107
05:15		0	0	5	113	5	113		0	0	7	123	7	123
05:30		0	0	12	109	12	109		0	0	9	98	9	98
05:45		0	0	14	112	14	112		0	0	9	91	9	91
06:00		0	0	27	90	27	90		0	0	19	100	19	100
06:15		0	0	31	108	31	108		0	0	38	102	38	102
06:30		0	0	37	84	37	84		0	0	36	76	36	76
06:45		0	0	60	90	60	90		0	0	78	92	78	92
07:00		0	0	41	88	41	88		0	0	38	91	38	91
07:15		0	0	73	99	73	99		0	0	51	74	51	74
07:30		0	0	65	80	65	80		0	0	58	91	58	91
07:45		0	0	80	70	80	70		0	0	77	74	77	74
08:00		0	0	76	61	76	61		0	0	86	58	86	58
08:15		0	0	76	69	76	69		0	0	75	65	75	65
08:30		0	0	80	61	80	61		0	0	77	77	77	77
08:45		0	0	112	63	112	63		0	0	91	46	91	46
09:00		0	0	103	48	103	48		0	0	91	53	91	53
09:15		0	0	87	47	87	47		0	0	94	43	94	43
09:30		0	0	90	43	90	43		0	0	75	44	75	44
09:45		0	0	81	63	81	63		0	0	81	50	81	50
10:00		0	0	89	41	89	41		1	0	101	47	102	47
10:15		0	0	88	47	88	47		0	0	105	39	105	39
10:30		0	0	123	38	123	38		0	0	94	37	94	37
10:45		0	0	157	25	157	25		0	0	97	22	97	22
11:00		0	0	72	39	72	39		0	0	109	32	109	32
11:15		0	0	85	20	85	20		0	0	114	21	114	21
11:30		0	0	137	28	137	28		0	0	97	25	97	25
11:45		0	0	133	26	133	26		0	0	122	26	122	26
Total		0	0	2189	4199	2189	4199		1	0	2108	3864	2109	3864
Day Total		0		6388		6388			1		5972		5973	
% Total		0.0%	0.0%	34.3%	65.7%				0.0%	0.0%	35.3%	64.7%		
Peak Vol.				10:00	12:00	10:00	12:00		09:15		11:00	12:00	11:00	12:00
P.H.F.				0.728	0.904	0.728	0.904		0.250		0.906	0.934	0.906	0.934

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 9
Station ID: 12740
CR 16 b/w Whitesville Rd & Drummond Ave

Latitude: 0' 0.000 Undefined

Start Time	22-Aug-Fri		---		EB		Combined		23-Aug-Sat		---		EB		Combined	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	0	0			13	129	13	129	0	0	20	83	20	83		
12:15	0	0			15	137	15	137	0	0	24	79	24	79		
12:30	0	0			16	113	16	113	0	0	14	66	14	66		
12:45	0	0			14	117	14	117	0	0	11	64	11	64		
01:00	0	0			16	120	16	120	0	0	16	74	16	74		
01:15	0	0			7	122	7	122	0	0	13	73	13	73		
01:30	0	0			8	121	8	121	0	0	15	64	15	64		
01:45	0	0			13	119	13	119	0	0	14	74	14	74		
02:00	0	0			11	128	11	128	0	0	3	63	3	63		
02:15	0	0			6	100	6	100	0	0	4	66	4	66		
02:30	0	0			4	106	4	106	0	0	11	83	11	83		
02:45	0	0			4	121	4	121	0	0	4	69	4	69		
03:00	0	0			4	107	4	107	0	0	6	77	6	77		
03:15	0	0			6	83	6	83	0	0	5	76	5	76		
03:30	0	0			4	101	4	101	0	0	4	73	4	73		
03:45	0	0			8	131	8	131	0	0	8	68	8	68		
04:00	0	0			3	110	3	110	0	0	6	73	6	73		
04:15	0	0			5	120	5	120	0	0	6	69	6	69		
04:30	0	0			15	100	15	100	0	0	6	62	6	62		
04:45	0	0			4	109	4	109	0	0	2	74	2	74		
05:00	0	0			2	127	2	127	0	0	6	69	6	69		
05:15	0	0			3	90	3	90	0	0	7	67	7	67		
05:30	0	0			7	108	7	108	0	0	10	62	10	62		
05:45	0	0			13	129	13	129	0	0	8	67	8	67		
06:00	0	0			18	120	18	120	0	0	17	66	17	66		
06:15	0	0			26	114	26	114	0	0	18	77	18	77		
06:30	0	0			34	76	34	76	0	0	19	72	19	72		
06:45	0	0			44	69	44	69	0	0	25	64	25	64		
07:00	0	0			50	76	50	76	0	0	31	80	31	80		
07:15	0	0			53	76	53	76	0	0	25	70	25	70		
07:30	0	0			60	71	60	71	0	0	40	57	40	57		
07:45	0	0			74	73	74	73	0	0	42	57	42	57		
08:00	0	0			57	47	57	47	0	0	38	72	38	72		
08:15	0	0			70	56	70	56	0	0	46	58	46	58		
08:30	0	0			67	59	67	59	0	0	46	60	46	60		
08:45	0	0			79	47	79	47	0	0	55	56	55	56		
09:00	0	0			64	53	64	53	0	0	57	45	57	45		
09:15	0	0			74	53	74	53	0	0	74	45	74	45		
09:30	0	0			87	35	87	35	0	0	56	53	56	53		
09:45	0	0			88	42	88	42	0	0	58	43	58	43		
10:00	0	0			90	56	90	56	0	0	81	50	81	50		
10:15	0	0			86	40	86	40	0	0	64	45	64	45		
10:30	0	0			121	37	121	37	0	0	74	55	74	55		
10:45	0	0			113	46	113	46	0	0	58	39	58	39		
11:00	0	0			107	48	107	48	0	0	78	50	78	50		
11:15	0	0			104	21	104	21	0	0	83	49	83	49		
11:30	0	0			112	35	112	35	0	0	81	44	81	44		
11:45	0	0			111	41	111	41	0	0	67	29	67	29		
Total	0	0			1990	4139	1990	4139	0	0	1456	3031	1456	3031		
Day Total	0				6129		6129		0		4487		4487			
% Total	0.0%	0.0%			32.5%	67.5%			0.0%	0.0%	32.4%	67.6%				
Peak Vol.					10:30	12:00	10:30	12:00			11:00	02:30	11:00	02:30		
P.H.F.					0.919	0.905	0.919	0.905			0.931	0.919	0.931	0.919		

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 9
Station ID: 9805
CR 16 b/w Whitesville Rd & Drummond Ave

Latitude: 0' 0.000 Undefined

Start Time	18-Aug-Mon	WB		---		Combined		19-Aug-Tue	WB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		*	*	*	*	*	*		12	87	0	0	12	87
12:15		*	*	*	*	*	*		14	78	0	0	14	78
12:30		*	*	*	*	*	*		12	79	0	0	12	79
12:45		*	*	*	*	*	*		7	78	0	0	7	78
01:00		*	*	*	*	*	*		6	92	0	0	6	92
01:15		*	*	*	*	*	*		1	86	0	0	1	86
01:30		*	*	*	*	*	*		8	77	0	0	8	77
01:45		*	*	*	*	*	*		8	75	0	0	8	75
02:00		*	*	*	*	*	*		6	94	0	0	6	94
02:15		*	*	*	*	*	*		4	76	0	0	4	76
02:30		*	*	*	*	*	*		5	105	0	0	5	105
02:45		*	*	*	*	*	*		2	120	0	0	2	120
03:00		*	*	*	*	*	*		4	112	0	0	4	112
03:15		*	*	*	*	*	*		5	89	0	0	5	89
03:30		*	*	*	*	*	*		1	116	0	0	1	116
03:45		*	*	*	*	*	*		4	114	0	0	4	114
04:00		*	69	*	0	*	69		8	131	0	0	8	131
04:15		*	109	*	0	*	109		4	111	0	0	4	111
04:30		*	116	*	0	*	116		8	124	0	0	8	124
04:45		*	106	*	0	*	106		11	100	0	0	11	100
05:00		*	132	*	0	*	132		9	120	0	0	9	120
05:15		*	114	*	0	*	114		12	91	0	0	12	91
05:30		*	99	*	0	*	99		28	91	0	0	28	91
05:45		*	107	*	0	*	107		21	97	0	0	21	97
06:00		*	80	*	0	*	80		23	89	0	0	23	89
06:15		*	98	*	0	*	98		38	76	0	0	38	76
06:30		*	66	*	0	*	66		47	75	0	0	47	75
06:45		*	79	*	0	*	79		57	77	0	0	57	77
07:00		*	72	*	0	*	72		64	72	0	0	64	72
07:15		*	74	*	0	*	74		62	64	0	0	62	64
07:30		*	70	*	0	*	70		75	69	0	0	75	69
07:45		*	64	*	0	*	64		78	65	0	0	78	65
08:00		*	74	*	0	*	74		68	69	0	0	68	69
08:15		*	67	*	0	*	67		91	68	0	0	91	68
08:30		*	57	*	0	*	57		88	60	0	0	88	60
08:45		*	52	*	0	*	52		76	55	0	0	76	55
09:00		*	46	*	0	*	46		69	43	0	0	69	43
09:15		*	53	*	0	*	53		68	54	0	0	68	54
09:30		*	60	*	0	*	60		69	48	0	0	69	48
09:45		*	36	*	0	*	36		60	38	0	0	60	38
10:00		*	35	*	0	*	35		93	38	0	0	93	38
10:15		*	34	*	0	*	34		68	35	0	0	68	35
10:30		*	37	*	0	*	37		101	29	0	0	101	29
10:45		*	25	*	0	*	25		79	33	0	0	79	33
11:00		*	20	*	0	*	20		83	15	0	0	83	15
11:15		*	12	*	0	*	12		75	15	0	0	75	15
11:30		*	14	*	0	*	14		76	20	0	0	76	20
11:45		*	13	*	0	*	13		76	12	0	0	76	12
Total		0	2090	0	0	0	2090		1884	3562	0	0	1884	3562
Day Total		2090		0		2090		5446		0		5446		
% Total		0.0%	100.0%	0.0%	0.0%			34.6%	65.4%	0.0%	0.0%			
Peak			04:30				04:30		10:00	03:45			10:00	03:45
Vol.			468				468		341	480			341	480
P.H.F.			0.886				0.886		0.844	0.916			0.844	0.916

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 9
Station ID: 9805
CR 16 b/w Whitesville Rd & Drummond Ave

Latitude: 0' 0.000 Undefined

Start Time	20-Aug- Wed	WB		---		Combined		21-Aug- Thu	WB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		14	96	0	0	14	96		14	81	0	0	14	81
12:15		11	96	0	0	11	96		10	80	0	0	10	80
12:30		14	69	0	0	14	69		10	96	0	0	10	96
12:45		6	83	0	0	6	83		16	83	0	0	16	83
01:00		6	107	0	0	6	107		19	110	0	0	19	110
01:15		11	86	0	0	11	86		11	81	0	0	11	81
01:30		5	84	0	0	5	84		12	102	0	0	12	102
01:45		9	76	0	0	9	76		9	94	0	0	9	94
02:00		6	100	0	0	6	100		12	70	0	0	12	70
02:15		11	94	0	0	11	94		6	96	0	0	6	96
02:30		4	101	0	0	4	101		9	118	0	0	9	118
02:45		1	105	0	0	1	105		5	100	0	0	5	100
03:00		3	96	0	0	3	96		2	104	0	0	2	104
03:15		3	103	0	0	3	103		4	105	0	0	4	105
03:30		7	130	0	0	7	130		3	112	0	0	3	112
03:45		7	118	0	0	7	118		3	99	0	0	3	99
04:00		6	118	0	0	6	118		3	114	0	0	3	114
04:15		7	118	0	0	7	118		5	128	0	0	5	128
04:30		11	123	0	0	11	123		11	113	0	0	11	113
04:45		8	110	0	0	8	110		7	105	0	0	7	105
05:00		13	94	0	0	13	94		10	102	0	0	10	102
05:15		15	104	0	0	15	104		11	106	0	0	11	106
05:30		19	114	0	0	19	114		25	118	0	0	25	118
05:45		16	113	0	0	16	113		23	104	0	0	23	104
06:00		25	105	0	0	25	105		26	77	0	0	26	77
06:15		34	95	0	0	34	95		37	98	0	0	37	98
06:30		56	84	0	0	56	84		56	92	0	0	56	92
06:45		58	88	0	0	58	88		68	74	0	0	68	74
07:00		52	74	0	0	52	74		50	83	0	0	50	83
07:15		69	68	0	0	69	68		64	74	0	0	64	74
07:30		74	79	0	0	74	79		76	82	0	0	76	82
07:45		68	75	0	0	68	75		73	82	0	0	73	82
08:00		73	80	0	0	73	80		80	79	0	0	80	79
08:15		71	82	0	0	71	82		114	76	0	0	114	76
08:30		87	47	0	0	87	47		80	77	0	0	80	77
08:45		76	60	0	0	76	60		67	65	0	0	67	65
09:00		85	77	0	0	85	77		70	79	0	0	70	79
09:15		81	54	0	0	81	54		70	60	0	0	70	60
09:30		66	49	0	0	66	49		66	46	0	0	66	46
09:45		79	59	0	0	79	59		90	49	0	0	90	49
10:00		60	46	0	0	60	46		83	61	0	0	83	61
10:15		87	39	0	0	87	39		69	57	0	0	69	57
10:30		73	44	0	0	73	44		61	54	0	0	61	54
10:45		18	26	0	0	18	26		77	33	0	0	77	33
11:00		62	20	0	0	62	20		63	25	0	0	63	25
11:15		76	22	0	0	76	22		86	56	0	0	86	56
11:30		97	14	0	0	97	14		98	42	0	0	98	42
11:45		71	18	0	0	71	18		90	28	0	0	90	28
Total		1811	3843	0	0	1811	3843		1954	3970	0	0	1954	3970
Day Total		5654		0		5654			5924		0		5924	
% Total		32.0%	68.0%	0.0%	0.0%				33.0%	67.0%	0.0%	0.0%		
Peak		08:30	03:30			08:30	03:30		07:45	04:00			07:45	04:00
Vol.		329	484			329	484		347	460			347	460
P.H.F.		0.945	0.931			0.945	0.931		0.761	0.898			0.761	0.898

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 9
Station ID: 9805
CR 16 b/w Whitesville Rd & Drummond Ave

Latitude: 0' 0.000 Undefined

Start Time	22-Aug-Fri	WB		---		Combined		23-Aug-Sat	WB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		26	101	0	0	26	101		30	60	0	0	30	60
12:15		15	86	0	0	15	86		33	90	0	0	33	90
12:30		15	91	0	0	15	91		29	87	0	0	29	87
12:45		19	114	0	0	19	114		24	94	0	0	24	94
01:00		7	86	0	0	7	86		37	90	0	0	37	90
01:15		8	89	0	0	8	89		21	84	0	0	21	84
01:30		14	109	0	0	14	109		23	75	0	0	23	75
01:45		5	102	0	0	5	102		18	79	0	0	18	79
02:00		12	107	0	0	12	107		22	95	0	0	22	95
02:15		4	100	0	0	4	100		22	83	0	0	22	83
02:30		4	125	0	0	4	125		13	94	0	0	13	94
02:45		5	122	0	0	5	122		9	110	0	0	9	110
03:00		7	124	0	0	7	124		8	95	0	0	8	95
03:15		4	127	0	0	4	127		12	115	0	0	12	115
03:30		5	126	0	0	5	126		14	116	0	0	14	116
03:45		4	131	0	0	4	131		4	103	0	0	4	103
04:00		1	117	0	0	1	117		2	100	0	0	2	100
04:15		6	113	0	0	6	113		8	98	0	0	8	98
04:30		6	110	0	0	6	110		4	96	0	0	4	96
04:45		16	127	0	0	16	127		6	106	0	0	6	106
05:00		12	127	0	0	12	127		7	97	0	0	7	97
05:15		10	138	0	0	10	138		7	101	0	0	7	101
05:30		24	110	0	0	24	110		12	93	0	0	12	93
05:45		24	99	0	0	24	99		13	98	0	0	13	98
06:00		21	87	0	0	21	87		9	109	0	0	9	109
06:15		36	85	0	0	36	85		26	109	0	0	26	109
06:30		50	97	0	0	50	97		30	77	0	0	30	77
06:45		54	93	0	0	54	93		32	88	0	0	32	88
07:00		55	82	0	0	55	82		28	98	0	0	28	98
07:15		59	107	0	0	59	107		51	87	0	0	51	87
07:30		69	91	0	0	69	91		35	89	0	0	35	89
07:45		56	97	0	0	56	97		50	102	0	0	50	102
08:00		78	81	0	0	78	81		45	104	0	0	45	104
08:15		81	72	0	0	81	72		50	90	0	0	50	90
08:30		93	79	0	0	93	79		67	93	0	0	67	93
08:45		62	82	0	0	62	82		49	67	0	0	49	67
09:00		70	60	0	0	70	60		42	80	0	0	42	80
09:15		70	79	0	0	70	79		77	96	0	0	77	96
09:30		66	80	0	0	66	80		67	88	0	0	67	88
09:45		91	77	0	0	91	77		82	72	0	0	82	72
10:00		68	94	0	0	68	94		74	59	0	0	74	59
10:15		67	83	0	0	67	83		71	51	0	0	71	51
10:30		75	99	0	0	75	99		59	55	0	0	59	55
10:45		94	144	0	0	94	144		87	77	0	0	87	77
11:00		80	123	0	0	80	123		80	71	0	0	80	71
11:15		103	64	0	0	103	64		76	63	0	0	76	63
11:30		78	47	0	0	78	47		76	54	0	0	76	54
11:45		91	56	0	0	91	56		93	50	0	0	93	50
Total Day Total		1920	4740	0	0	1920	4740		1734	4188	0	0	1734	4188
% Total		28.8%	71.2%	0.0%	0.0%				29.3%	70.7%	0.0%	0.0%		
Peak Vol.		10:45	03:00			10:45	03:00		11:00	02:45			11:00	02:45
P.H.F.		0.862	0.969			0.862	0.969		0.874	0.940			0.874	0.940

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 10
Station ID: 12739
CR 16 b/w GSP & Green Grove Road

Latitude: 0' 0.000 Undefined

Start Time	18-Aug-Mon	EB		---		Combined		19-Aug-Tue	EB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		*	*	*	*	*	*		18	146	0	0	18	146
12:15		*	*	*	*	*	*		24	135	0	0	24	135
12:30		*	*	*	*	*	*		16	165	0	0	16	165
12:45		*	*	*	*	*	*		16	140	0	0	16	140
01:00		*	*	*	*	*	*		12	127	0	0	12	127
01:15		*	*	*	*	*	*		13	124	0	0	13	124
01:30		*	*	*	*	*	*		6	137	0	0	6	137
01:45		*	*	*	*	*	*		8	129	0	0	8	129
02:00		*	*	*	*	*	*		8	124	0	0	8	124
02:15		*	*	*	*	*	*		12	101	0	0	12	101
02:30		*	133	*	0	*	133		8	130	0	0	8	130
02:45		*	128	*	0	*	128		3	144	0	0	3	144
03:00		*	124	*	0	*	124		7	161	0	0	7	161
03:15		*	149	*	0	*	149		5	139	0	0	5	139
03:30		*	157	*	0	*	157		9	189	0	0	9	189
03:45		*	184	*	0	*	184		5	180	0	0	5	180
04:00		*	155	*	0	*	155		10	159	0	0	10	159
04:15		*	147	*	0	*	147		5	150	0	0	5	150
04:30		*	164	*	0	*	164		13	181	0	0	13	181
04:45		*	177	*	0	*	177		6	179	0	0	6	179
05:00		*	163	*	0	*	163		16	194	0	0	16	194
05:15		*	145	*	0	*	145		15	186	0	0	15	186
05:30		*	165	*	0	*	165		22	168	0	0	22	168
05:45		*	152	*	0	*	152		36	151	0	0	36	151
06:00		*	137	*	0	*	137		37	144	0	0	37	144
06:15		*	143	*	0	*	143		46	121	0	0	46	121
06:30		*	133	*	0	*	133		72	153	0	0	72	153
06:45		*	137	*	0	*	137		65	140	0	0	65	140
07:00		*	119	*	0	*	119		107	137	0	0	107	137
07:15		*	106	*	0	*	106		105	104	0	0	105	104
07:30		*	90	*	0	*	90		121	89	0	0	121	89
07:45		*	109	*	0	*	109		152	104	0	0	152	104
08:00		*	102	*	0	*	102		170	117	0	0	170	117
08:15		*	66	*	0	*	66		160	84	0	0	160	84
08:30		*	74	*	0	*	74		166	72	0	0	166	72
08:45		*	81	*	0	*	81		139	68	0	0	139	68
09:00		*	60	*	0	*	60		107	72	0	0	107	72
09:15		*	59	*	0	*	59		110	74	0	0	110	74
09:30		*	46	*	0	*	46		114	56	0	0	114	56
09:45		*	52	*	0	*	52		98	39	0	0	98	39
10:00		*	37	*	0	*	37		122	51	0	0	122	51
10:15		*	56	*	0	*	56		116	38	0	0	116	38
10:30		*	36	*	0	*	36		131	36	0	0	131	36
10:45		*	34	*	0	*	34		118	41	0	0	118	41
11:00		*	38	*	0	*	38		125	27	0	0	125	27
11:15		*	47	*	0	*	47		154	28	0	0	154	28
11:30		*	27	*	0	*	27		137	33	0	0	137	33
11:45		*	20	*	0	*	20		126	15	0	0	126	15
Total Day		0	3952	0	0	0	3952		3091	5482	0	0	3091	5482
% Total		0.0%	100.0%	0.0%	0.0%				36.1%	63.9%	0.0%	0.0%		
Peak Vol.			04:15				04:15		07:45	04:30			07:45	04:30
P.H.F.			0.919				0.919		0.953	0.954			0.953	0.954

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 10
Station ID: 12739
CR 16 b/w GSP & Green Grove Road

Latitude: 0' 0.000 Undefined

Start Time	20-Aug- Wed	EB		---		Combined		21-Aug- Thu	EB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		19	138	0	0	19	138		13	138	0	0	13	138
12:15		23	134	0	0	23	134		22	158	0	0	22	158
12:30		17	133	0	0	17	133		13	163	0	0	13	163
12:45		17	117	0	0	17	117		13	124	0	0	13	124
01:00		18	155	0	0	18	155		13	152	0	0	13	152
01:15		8	120	0	0	8	120		9	135	0	0	9	135
01:30		4	114	0	0	4	114		11	108	0	0	11	108
01:45		10	136	0	0	10	136		6	126	0	0	6	126
02:00		4	127	0	0	4	127		12	131	0	0	12	131
02:15		5	115	0	0	5	115		7	152	0	0	7	152
02:30		6	127	0	0	6	127		2	135	0	0	2	135
02:45		2	135	0	0	2	135		7	148	0	0	7	148
03:00		5	147	0	0	5	147		8	130	0	0	8	130
03:15		6	158	0	0	6	158		5	149	0	0	5	149
03:30		4	166	0	0	4	166		7	185	0	0	7	185
03:45		5	168	0	0	5	168		3	188	0	0	3	188
04:00		6	164	0	0	6	164		7	178	0	0	7	178
04:15		7	181	0	0	7	181		7	160	0	0	7	160
04:30		8	171	0	0	8	171		7	166	0	0	7	166
04:45		4	186	0	0	4	186		6	201	0	0	6	201
05:00		6	162	0	0	6	162		6	212	0	0	6	212
05:15		14	170	0	0	14	170		17	220	0	0	17	220
05:30		20	181	0	0	20	181		24	161	0	0	24	161
05:45		27	176	0	0	27	176		22	156	0	0	22	156
06:00		38	149	0	0	38	149		42	141	0	0	42	141
06:15		42	150	0	0	42	150		35	124	0	0	35	124
06:30		71	128	0	0	71	128		78	122	0	0	78	122
06:45		83	159	0	0	83	159		75	133	0	0	75	133
07:00		83	126	0	0	83	126		76	100	0	0	76	100
07:15		111	130	0	0	111	130		96	127	0	0	96	127
07:30		125	97	0	0	125	97		119	137	0	0	119	137
07:45		128	78	0	0	128	78		144	118	0	0	144	118
08:00		147	111	0	0	147	111		130	111	0	0	130	111
08:15		125	115	0	0	125	115		143	122	0	0	143	122
08:30		141	94	0	0	141	94		146	88	0	0	146	88
08:45		130	76	0	0	130	76		123	76	0	0	123	76
09:00		121	65	0	0	121	65		112	72	0	0	112	72
09:15		109	51	0	0	109	51		120	61	0	0	120	61
09:30		124	65	0	0	124	65		113	69	0	0	113	69
09:45		127	52	0	0	127	52		130	52	0	0	130	52
10:00		109	39	0	0	109	39		110	49	0	0	110	49
10:15		126	39	0	0	126	39		121	44	0	0	122	44
10:30		138	32	0	0	138	32		120	38	0	0	120	38
10:45		130	42	0	0	130	42		125	44	0	0	125	44
11:00		116	49	0	0	116	49		118	50	0	0	118	50
11:15		131	40	0	0	131	40		126	41	0	0	126	41
11:30		144	27	0	0	144	27		121	32	0	0	121	32
11:45		139	16	0	0	139	16		140	23	0	0	140	23
Total		2983	5511	0	0	2983	5511		2910	5750	1	0	2911	5750
Day Total		8494		0		8494			8660		1		8661	
% Total		35.1%	64.9%	0.0%	0.0%				33.6%	66.4%	0.0%	0.0%		
Peak		08:00	04:00			08:00	04:00		07:45	04:30	09:30		07:45	04:30
Vol.		543	702			543	702		563	799	1		563	799
P.H.F.		0.923	0.944			0.923	0.944		0.964	0.908	0.250		0.964	0.908

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 10
Station ID: 12739
CR 16 b/w GSP & Green Grove Road

Latitude: 0' 0.000 Undefined

Start Time	22-Aug-Fri	EB		---		Combined		23-Aug-Sat	EB		---		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		23	148	0	0	23	148		30	155	0	0	30	155
12:15		19	178	0	0	19	178		23	143	0	0	23	143
12:30		23	187	0	0	23	187		26	149	0	0	26	149
12:45		21	180	0	0	21	180		18	146	0	0	18	146
01:00		6	135	0	0	6	135		17	115	0	0	17	115
01:15		8	152	0	0	8	152		18	98	0	0	18	98
01:30		14	167	0	0	14	167		16	143	0	0	16	143
01:45		10	167	0	0	10	167		10	127	0	0	10	127
02:00		13	132	0	0	13	132		18	146	0	0	18	146
02:15		4	139	0	0	4	139		10	143	0	0	10	143
02:30		8	118	0	0	8	118		7	166	0	0	7	166
02:45		6	166	0	0	6	166		11	135	0	0	11	135
03:00		6	165	0	0	6	165		13	150	0	0	13	150
03:15		9	196	0	0	9	196		17	132	0	0	17	132
03:30		13	206	0	0	13	206		6	135	0	0	6	135
03:45		3	233	0	0	3	233		4	146	0	0	4	146
04:00		8	216	0	0	8	216		6	140	0	0	6	140
04:15		17	191	0	0	17	191		7	143	0	0	7	143
04:30		7	227	0	0	7	227		9	144	0	0	9	144
04:45		7	209	0	0	7	209		6	107	0	0	6	107
05:00		6	224	0	0	6	224		6	133	0	0	6	133
05:15		7	209	0	0	7	209		11	138	0	0	11	138
05:30		19	169	0	0	19	169		16	115	0	0	16	115
05:45		26	173	0	0	26	173		14	122	0	0	14	122
06:00		47	162	0	0	47	162		25	100	0	0	25	100
06:15		43	166	0	0	43	166		24	113	0	0	24	113
06:30		74	155	0	0	74	155		43	130	0	0	43	130
06:45		88	156	0	0	88	156		36	98	0	0	36	98
07:00		84	150	0	0	84	150		36	95	0	0	36	95
07:15		108	134	0	0	108	134		69	88	0	0	69	88
07:30		126	132	0	0	126	132		68	100	0	0	68	100
07:45		104	148	0	0	104	148		98	96	0	0	98	96
08:00		129	98	0	0	129	98		82	103	0	0	82	103
08:15		145	88	0	0	145	88		100	105	0	0	100	105
08:30		172	95	0	0	172	95		119	95	0	0	119	95
08:45		137	94	0	0	137	94		107	74	0	0	107	74
09:00		113	77	0	0	113	77		114	80	0	0	114	80
09:15		95	77	0	0	95	77		119	57	0	0	119	57
09:30		122	62	0	0	122	62		135	62	0	0	135	62
09:45		143	68	0	0	143	68		128	64	0	0	128	64
10:00		146	58	0	0	146	58		172	51	0	0	172	51
10:15		142	68	0	0	142	68		140	65	0	0	140	65
10:30		143	56	0	0	143	56		165	53	0	0	165	53
10:45		139	56	0	0	139	56		181	64	0	0	181	64
11:00		146	49	0	0	146	49		178	66	0	0	178	66
11:15		177	53	0	0	177	53		182	59	0	0	182	59
11:30		151	53	0	0	151	53		171	34	0	0	171	34
11:45		137	33	0	0	137	33		168	43	0	0	168	43
Total		3194	6575	0	0	3194	6575		2979	5166	0	0	2979	5166
Day Total		9769		0		9769			8145		0		8145	
% Total		32.7%	67.3%	0.0%	0.0%				36.6%	63.4%	0.0%	0.0%		
Peak		10:45	04:30			10:45	04:30		10:45	02:15			10:45	02:15
Vol.		613	869			613	869		712	594			712	594
P.H.F.		0.866	0.957			0.866	0.957		0.978	0.895			0.978	0.895

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 11
Station ID: 11946
SR 33 b/w Oxford Way & Walnut Street

Latitude: 0' 0.000 Undefined

Start Time	18-Aug-Mon		---		EB		Combined		19-Aug-Tue		---		EB		Combined	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	*	*	*	*	0	0	5	231	5	231		
12:15	*	*	*	*	*	*	*	*	0	0	20	196	20	196		
12:30	*	*	*	*	*	*	*	*	0	0	7	194	7	194		
12:45	*	*	*	*	*	*	*	*	0	0	19	210	19	210		
01:00	*	*	*	*	*	*	*	*	0	0	12	204	12	204		
01:15	*	*	*	*	*	*	*	*	0	0	8	215	8	215		
01:30	*	*	*	*	*	*	*	*	0	0	6	214	6	214		
01:45	*	*	*	*	*	*	*	*	0	0	11	217	11	217		
02:00	*	*	*	*	*	*	*	*	0	0	8	194	8	194		
02:15	*	*	*	*	*	*	*	*	0	0	13	221	13	221		
02:30	*	*	*	*	*	*	*	*	0	0	6	225	6	225		
02:45	*	*	*	*	*	*	*	*	0	0	8	208	8	208		
03:00	*	0	*	247	*	247	*	247	0	0	9	222	9	222		
03:15	*	0	*	229	*	229	*	229	0	0	9	230	9	230		
03:30	*	0	*	239	*	239	*	239	0	0	20	251	20	251		
03:45	*	0	*	231	*	231	*	231	0	0	21	257	21	257		
04:00	*	0	*	236	*	236	*	236	0	0	37	248	37	248		
04:15	*	0	*	225	*	225	*	225	0	0	30	274	30	274		
04:30	*	0	*	219	*	219	*	219	0	0	46	243	46	243		
04:45	*	0	*	197	*	197	*	197	0	0	66	245	66	245		
05:00	*	0	*	167	*	167	*	167	0	0	85	168	85	168		
05:15	*	0	*	158	*	158	*	158	0	0	132	199	132	199		
05:30	*	0	*	214	*	214	*	214	0	0	231	232	231	232		
05:45	*	0	*	224	*	224	*	224	0	0	288	212	288	212		
06:00	*	0	*	163	*	163	*	163	0	0	197	152	197	152		
06:15	*	0	*	163	*	163	*	163	0	0	237	173	237	173		
06:30	*	0	*	129	*	129	*	129	0	0	258	166	258	166		
06:45	*	0	*	127	*	127	*	127	0	0	300	141	300	141		
07:00	*	0	*	119	*	119	*	119	0	0	257	135	257	135		
07:15	*	0	*	118	*	118	*	118	0	0	243	105	243	105		
07:30	*	0	*	107	*	107	*	107	0	0	249	118	249	118		
07:45	*	0	*	95	*	95	*	95	0	0	277	95	277	95		
08:00	*	0	*	74	*	74	*	74	0	0	208	91	208	91		
08:15	*	0	*	92	*	92	*	92	0	0	217	80	217	80		
08:30	*	0	*	68	*	68	*	68	0	0	214	84	214	84		
08:45	*	0	*	75	*	75	*	75	0	0	215	63	215	63		
09:00	*	0	*	77	*	77	*	77	0	0	199	66	199	66		
09:15	*	0	*	72	*	72	*	72	0	0	230	56	230	56		
09:30	*	0	*	47	*	47	*	47	0	0	223	61	223	61		
09:45	*	0	*	58	*	58	*	58	0	0	262	46	262	46		
10:00	*	0	*	49	*	49	*	49	0	0	236	57	236	57		
10:15	*	0	*	37	*	37	*	37	0	0	250	41	250	41		
10:30	*	0	*	44	*	44	*	44	0	0	226	37	226	37		
10:45	*	0	*	34	*	34	*	34	0	0	231	33	231	33		
11:00	*	0	*	25	*	25	*	25	0	0	225	30	225	30		
11:15	*	0	*	19	*	19	*	19	0	0	225	12	225	12		
11:30	*	0	*	26	*	26	*	26	0	0	218	18	218	18		
11:45	*	0	*	13	*	13	*	13	0	0	245	16	245	16		
Total Day	0	0	0	4417	0	4417	0	4417	0	0	6739	7186	6739	7186		
% Total	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	48.4%	51.6%								
Peak Vol.				03:00		03:00		06:30		03:30		06:30		03:30		
P.H.F.				0.957		0.957		0.882		0.940		0.882		0.940		

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 11
Station ID: 11946
SR 33 b/w Oxford Way & Walnut Street

Latitude: 0' 0.000 Undefined

Start Time	20-Aug- Wed	---		EB		Combined		21-Aug- Thu	---		EB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	13	260	13	260		0	0	17	222	17	222
12:15		0	0	10	225	10	225		0	0	17	232	17	232
12:30		0	0	11	222	11	222		0	0	5	249	5	249
12:45		0	0	5	235	5	235		0	0	11	225	11	225
01:00		0	0	7	208	7	208		0	0	8	233	8	233
01:15		0	0	8	187	8	187		0	0	19	243	19	243
01:30		0	0	9	187	9	187		0	0	8	245	8	245
01:45		0	0	9	248	9	248		0	0	6	236	6	236
02:00		0	0	7	208	7	208		0	0	8	247	8	247
02:15		0	0	9	204	9	204		0	0	5	224	5	224
02:30		0	0	13	233	13	233		0	0	5	261	5	261
02:45		0	0	7	233	7	233		0	0	11	251	11	251
03:00		0	0	4	249	4	249		0	0	10	237	10	237
03:15		0	0	12	223	12	223		0	0	11	261	11	261
03:30		0	0	15	236	15	236		0	0	19	264	19	264
03:45		0	0	20	252	20	252		0	0	20	278	20	278
04:00		0	0	21	230	21	230		0	0	21	280	21	280
04:15		0	0	35	229	35	229		0	0	27	266	27	266
04:30		0	0	37	222	37	222		0	0	30	254	30	254
04:45		0	0	53	213	53	213		0	0	73	240	73	240
05:00		0	0	63	177	63	177		0	0	83	228	83	228
05:15		0	0	130	200	130	200		0	0	129	224	129	224
05:30		0	0	207	219	207	219		0	0	226	253	226	253
05:45		0	0	307	219	307	219		0	0	319	255	319	255
06:00		0	0	229	181	229	181		0	0	224	216	224	216
06:15		0	0	235	173	235	173		0	0	194	184	194	184
06:30		0	0	232	143	232	143		0	0	234	179	234	179
06:45		0	0	288	112	288	112		0	0	248	170	248	170
07:00		0	0	254	124	254	124		0	0	234	141	234	141
07:15		0	0	253	108	253	108		0	0	244	124	244	124
07:30		0	0	244	95	244	95		0	0	242	136	242	136
07:45		0	0	250	98	250	98		0	0	234	114	234	114
08:00		0	0	237	106	237	106		0	0	236	110	236	110
08:15		0	0	235	103	235	103		0	0	215	101	215	101
08:30		0	0	230	85	230	85		0	0	212	85	212	85
08:45		0	0	257	70	257	70		0	0	232	79	232	79
09:00		0	0	241	60	241	60		0	0	236	67	236	67
09:15		0	0	250	75	250	75		0	0	256	71	256	71
09:30		0	0	263	54	263	54		0	0	255	70	255	70
09:45		0	0	299	53	299	53		0	0	299	65	299	65
10:00		0	0	251	65	251	65		0	0	274	63	274	63
10:15		0	0	247	56	247	56		0	0	291	43	291	43
10:30		0	0	238	41	238	41		0	0	276	45	276	45
10:45		0	0	261	39	261	39		0	0	281	48	281	48
11:00		0	0	265	36	265	36		0	0	253	30	253	30
11:15		0	0	284	34	284	34		0	0	255	23	255	23
11:30		0	0	282	19	282	19		0	0	263	16	263	16
11:45		0	0	245	21	245	21		0	0	235	25	235	25
Total		0	0	7082	7270	7082	7270		0	0	7011	8113	7011	8113
Day Total		0		14352		14352			0		15124		15124	
% Total		0.0%	0.0%	49.3%	50.7%				0.0%	0.0%	46.4%	53.6%		
Peak				10:45	03:00	10:45	03:00				09:45	03:30	09:45	03:30
Vol.				1092	960	1092	960				1140	1088	1140	1088
P.H.F.				0.913	0.952	0.913	0.952				0.953	0.971	0.953	0.971

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 11
Station ID: 11946
SR 33 b/w Oxford Way & Walnut Street

Latitude: 0' 0.000 Undefined

Start Time	22-Aug-Fri	---		EB		Combined		23-Aug-Sat	---		EB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	18	246	18	246		0	0	27	213	27	213
12:15		0	0	20	272	20	272		0	0	26	213	26	213
12:30		0	0	10	268	10	268		0	0	28	215	28	215
12:45		0	0	8	233	8	233		0	0	23	222	23	222
01:00		0	0	11	233	11	233		0	0	14	241	14	241
01:15		0	0	9	219	9	219		0	0	16	212	16	212
01:30		0	0	7	235	7	235		0	0	13	220	13	220
01:45		0	0	15	241	15	241		0	0	9	202	9	202
02:00		0	0	12	219	12	219		0	0	13	201	13	201
02:15		0	0	8	235	8	235		0	0	7	171	7	171
02:30		0	0	14	251	14	251		0	0	11	202	11	202
02:45		0	0	13	249	13	249		0	0	4	201	4	201
03:00		0	0	14	279	14	279		0	0	7	204	7	204
03:15		0	0	10	221	10	221		0	0	11	188	11	188
03:30		0	0	16	245	16	245		0	0	13	200	13	200
03:45		0	0	26	271	26	271		0	0	17	199	17	199
04:00		0	0	22	243	22	243		0	0	20	190	20	190
04:15		0	0	26	262	26	262		0	0	12	178	12	178
04:30		0	0	43	224	43	224		0	0	30	175	30	175
04:45		0	0	52	235	52	235		0	0	24	158	24	158
05:00		0	0	77	223	77	223		0	0	40	183	40	183
05:15		0	0	116	224	116	224		0	0	55	177	55	177
05:30		0	0	210	260	210	260		0	0	99	169	99	169
05:45		0	0	275	235	275	235		0	0	154	206	154	206
06:00		0	0	220	199	220	199		0	0	79	176	79	176
06:15		0	0	207	187	207	187		0	0	86	161	86	161
06:30		0	0	226	167	226	167		0	0	98	145	98	145
06:45		0	0	284	186	284	186		0	0	101	119	101	119
07:00		0	0	233	153	233	153		0	0	123	121	123	121
07:15		0	0	227	137	227	137		0	0	110	119	110	119
07:30		0	0	242	139	242	139		0	0	146	108	146	108
07:45		0	0	257	113	257	113		0	0	176	97	176	97
08:00		0	0	253	119	253	119		0	0	224	75	224	75
08:15		0	0	255	102	255	102		0	0	219	93	219	93
08:30		0	0	234	103	234	103		0	0	252	70	252	70
08:45		0	0	274	102	274	102		0	0	256	76	256	76
09:00		0	0	276	102	276	102		0	0	245	78	245	78
09:15		0	0	304	88	304	88		0	0	251	75	251	75
09:30		0	0	301	93	301	93		0	0	246	48	246	48
09:45		0	0	272	77	272	77		0	0	260	59	260	59
10:00		0	0	295	74	295	74		0	0	244	53	244	53
10:15		0	0	285	52	285	52		0	0	244	38	244	38
10:30		0	0	307	64	307	64		0	0	259	46	259	46
10:45		0	0	307	56	307	56		0	0	249	35	249	35
11:00		0	0	259	46	259	46		0	0	222	28	222	28
11:15		0	0	291	42	291	42		0	0	268	21	268	21
11:30		0	0	292	32	292	32		0	0	232	29	232	29
11:45		0	0	265	26	265	26		0	0	192	17	192	17
Total		0	0	7398	8282	7398	8282		0	0	5455	6627	5455	6627
Day Total		0		15680		15680			0		12082		12082	
% Total		0.0%	0.0%	47.2%	52.8%				0.0%	0.0%	45.1%	54.9%		
Peak				10:00	03:30	10:00	03:30				09:45	00:45	09:45	00:45
Vol.				1194	1021	1194	1021				1007	895	1007	895
P.H.F.				0.972	0.915	0.972	0.915				0.968	0.928	0.968	0.928

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 11
Station ID: 11946
SR 33 b/w Oxford Way & Walnut Street

Latitude: 0' 0.000 Undefined

Start Time	24-Aug-Sun	---		EB		Combined		25-Aug-Mon	---		EB		Combined		
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
12:00		0	0	30	218	30	218		0	0	17	263	17	263	
12:15		0	0	28	215	28	215		0	0	15	229	15	229	
12:30		0	0	29	220	29	220		0	0	17	227	17	227	
12:45		0	0	24	228	24	228		0	0	12	241	12	241	
01:00		0	0	16	248	16	248		0	0	15	215	15	215	
01:15		0	0	17	214	17	214		0	0	17	195	17	195	
01:30		0	0	14	223	14	223		0	0	11	190	11	190	
01:45		0	0	11	208	11	208		0	0	12	256	12	256	
02:00		0	0	14	206	14	206		0	0	11	217	11	217	
02:15		0	0	8	175	8	175		0	0	14	212	14	212	
02:30		0	0	14	205	14	205		0	0	19	240	19	240	
02:45		0	0	5	205	5	205		0	0	14	239	14	239	
03:00		0	0	8	209	8	209		0	0	12	254	12	254	
03:15		0	0	15	190	15	190		0	0	19	227	19	227	
03:30		0	0	14	207	14	207		0	0	21	239	21	239	
03:45		0	0	19	201	19	201		0	*	25	*	25	*	
04:00		0	0	21	192	21	192		0	*	25	*	25	*	
04:15		0	0	15	186	15	186		0	*	38	*	38	*	
04:30		0	0	32	177	32	177		0	*	39	*	39	*	
04:45		0	0	27	164	27	164		0	*	60	*	60	*	
05:00		0	0	44	185	44	185		0	*	69	*	69	*	
05:15		0	0	58	181	58	181		0	*	135	*	135	*	
05:30		0	0	103	172	103	172		0	*	211	*	211	*	
05:45		0	0	156	210	156	210		0	*	310	*	310	*	
06:00		0	0	80	181	80	181		0	*	232	*	232	*	
06:15		0	0	88	167	88	167		0	*	239	*	239	*	
06:30		0	0	102	152	102	152		0	*	237	*	237	*	
06:45		0	0	104	127	104	127		0	*	294	*	294	*	
07:00		0	0	125	124	125	124		0	*	261	*	261	*	
07:15		0	0	113	121	113	121		0	*	261	*	261	*	
07:30		0	0	150	113	150	113		0	*	253	*	253	*	
07:45		0	0	181	103	181	103		0	*	258	*	258	*	
08:00		0	0	230	82	230	82		0	*	244	*	244	*	
08:15		0	0	223	99	223	99		0	*	241	*	241	*	
08:30		0	0	255	78	255	78		0	*	235	*	235	*	
08:45		0	0	258	80	258	80		0	*	261	*	261	*	
09:00		0	0	251	83	251	83		0	*	244	*	244	*	
09:15		0	0	256	82	256	82		0	*	254	*	254	*	
09:30		0	0	250	52	250	52		0	*	268	*	268	*	
09:45		0	0	263	61	263	61		0	*	305	*	305	*	
10:00		0	0	246	59	246	59		0	*	258	*	258	*	
10:15		0	0	246	47	246	47		0	*	255	*	255	*	
10:30		0	0	262	54	262	54		0	*	247	*	247	*	
10:45		0	0	254	42	254	42		0	*	269	*	269	*	
11:00		0	0	225	34	225	34		0	*	272	*	272	*	
11:15		0	0	271	26	271	26		0	*	290	*	290	*	
11:30		0	0	235	35	235	35		0	*	287	*	287	*	
11:45		0	0	196	24	196	24		0	*	249	*	249	*	
Total		0	0	5586	6865	5586	6865		0	0	7352	3444	7352	3444	
Day Total		0		12451		12451			0		10796		10796		
% Total		0.0%	0.0%	44.9%	55.1%				0.0%	0.0%	68.1%	31.9%			
Peak Vol.				08:30	00:45	08:30	00:45				10:45	12:00	10:45	12:00	
P.H.F.				1020	913	1020	913				1118	960	1118	960	
				0.988	0.920	0.988	0.920				0.916	0.913	0.916	0.913	
ADT	ADT 14,770	AADT 14,770													

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 11
Station ID: 9804
SR 33 b/w Oxford Way & Walnut Street

Latitude: 0' 0.000 Undefined

Start Time	18-Aug-Mon	---		WB		Combined		19-Aug-Tue	---		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	*	*	*	0	0	40	225	40	225	
12:15	*	*	*	*	*	*	*	0	0	26	206	26	206	
12:30	*	*	*	*	*	*	*	0	0	18	211	18	211	
12:45	*	*	*	*	*	*	*	0	0	26	228	26	228	
01:00	*	*	*	*	*	*	*	0	0	18	212	18	212	
01:15	*	*	*	*	*	*	*	0	0	13	228	13	228	
01:30	*	*	*	*	*	*	*	0	0	23	235	23	235	
01:45	*	*	*	*	*	*	*	0	0	16	226	16	226	
02:00	*	*	*	*	*	*	*	0	0	20	244	20	244	
02:15	*	*	*	*	*	*	*	0	0	10	237	10	237	
02:30	*	*	*	*	*	*	*	0	0	16	309	16	309	
02:45	*	*	*	*	*	*	*	0	0	8	304	8	304	
03:00	*	*	*	*	*	*	*	0	0	9	310	9	310	
03:15	*	*	*	*	*	*	*	0	0	15	329	15	329	
03:30	*	0	*	389	*	389	*	0	0	15	369	15	369	
03:45	*	0	*	409	*	409	*	0	0	9	416	9	416	
04:00	*	0	*	378	*	378	*	0	0	15	386	15	386	
04:15	*	0	*	382	*	382	*	0	0	17	298	17	298	
04:30	*	0	*	386	*	386	*	0	0	19	382	19	382	
04:45	*	0	*	378	*	378	*	0	0	26	295	26	295	
05:00	*	0	*	388	*	388	*	0	0	29	334	29	334	
05:15	*	0	*	372	*	372	*	0	0	37	291	37	291	
05:30	*	0	*	297	*	297	*	0	0	56	295	56	295	
05:45	*	0	*	257	*	257	*	0	0	59	222	59	222	
06:00	*	0	*	278	*	278	*	0	0	81	271	81	271	
06:15	*	0	*	231	*	231	*	0	0	93	219	93	219	
06:30	*	0	*	216	*	216	*	0	0	131	189	131	189	
06:45	*	0	*	221	*	221	*	0	0	149	199	149	199	
07:00	*	0	*	176	*	176	*	0	0	166	177	166	177	
07:15	*	0	*	198	*	198	*	0	0	168	204	168	204	
07:30	*	0	*	250	*	250	*	0	0	273	196	273	196	
07:45	*	0	*	206	*	206	*	0	0	245	184	245	184	
08:00	*	0	*	196	*	196	*	0	0	238	172	238	172	
08:15	*	0	*	186	*	186	*	0	0	216	157	216	157	
08:30	*	0	*	176	*	176	*	0	0	187	145	187	145	
08:45	*	0	*	139	*	139	*	0	0	202	155	202	155	
09:00	*	0	*	142	*	142	*	0	0	189	145	189	145	
09:15	*	0	*	138	*	138	*	0	0	179	130	179	130	
09:30	*	0	*	134	*	134	*	0	0	192	153	192	153	
09:45	*	0	*	107	*	107	*	0	0	194	110	194	110	
10:00	*	0	*	126	*	126	*	0	0	205	122	205	122	
10:15	*	0	*	64	*	64	*	0	0	178	97	178	97	
10:30	*	0	*	79	*	79	*	0	0	199	81	199	81	
10:45	*	0	*	66	*	66	*	0	0	177	70	177	70	
11:00	*	0	*	56	*	56	*	0	0	188	63	188	63	
11:15	*	0	*	57	*	57	*	0	0	196	59	196	59	
11:30	*	0	*	63	*	63	*	0	0	204	65	204	65	
11:45	*	0	*	53	*	53	*	0	0	232	43	232	43	
Total		0	0	0	7194	0	7194	0	0	5022	10198	5022	10198	
Day		0		7194		7194		0		15220		15220		
% Total		0.0%	0.0%	0.0%	100.0%			0.0%	0.0%	33.0%	67.0%			
Peak					03:30		03:30			07:30	03:15	07:30	03:15	
Vol.					1558		1558			972	1500	972	1500	
P.H.F.					0.952		0.952			0.890	0.901	0.890	0.901	

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 11
Station ID: 9804
SR 33 b/w Oxford Way & Walnut Street

Latitude: 0' 0.000 Undefined

Start Time	20-Aug- Wed	---		WB		Combined		21-Aug- Thu	---		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	40	228	40	228		0	0	26	214	26	214
12:15		0	0	28	206	28	206		0	0	34	197	34	197
12:30		0	0	21	183	21	183		0	0	28	216	28	216
12:45		0	0	18	220	18	220		0	0	30	210	30	210
01:00		0	0	13	210	13	210		0	0	21	233	21	233
01:15		0	0	17	214	17	214		0	0	21	213	21	213
01:30		0	0	15	259	15	259		0	0	14	211	14	211
01:45		0	0	17	222	17	222		0	0	13	224	13	224
02:00		0	0	15	236	15	236		0	0	11	249	11	249
02:15		0	0	14	269	14	269		0	0	12	251	12	251
02:30		0	0	16	299	16	299		0	0	11	290	11	290
02:45		0	0	7	255	7	255		0	0	11	314	11	314
03:00		0	0	15	334	15	334		0	0	8	319	8	319
03:15		0	0	18	325	18	325		0	0	14	309	14	309
03:30		0	0	9	376	9	376		0	0	19	356	19	356
03:45		0	0	15	372	15	372		0	0	8	367	8	367
04:00		0	0	9	346	9	346		0	0	10	351	10	351
04:15		0	0	19	324	19	324		0	0	14	329	14	329
04:30		0	0	15	349	15	349		0	0	23	347	23	347
04:45		0	0	21	302	21	302		0	0	20	326	20	326
05:00		0	0	30	363	30	363		0	0	30	348	30	348
05:15		0	0	34	324	34	324		0	0	38	307	38	307
05:30		0	0	45	296	45	296		0	0	54	286	54	286
05:45		0	0	65	284	65	284		0	0	73	254	73	254
06:00		0	0	78	225	78	225		0	0	66	268	66	268
06:15		0	0	100	208	100	208		0	0	94	250	94	250
06:30		0	0	143	207	143	207		0	0	138	253	138	253
06:45		0	0	162	207	162	207		0	0	158	196	158	196
07:00		0	0	152	199	152	199		0	0	170	206	170	206
07:15		0	0	183	182	183	182		0	0	165	194	165	194
07:30		0	0	225	215	225	215		0	0	238	237	238	237
07:45		0	0	262	204	262	204		0	0	239	210	239	210
08:00		0	0	215	200	215	200		0	0	228	199	228	199
08:15		0	0	197	163	197	163		0	0	214	205	214	205
08:30		0	0	220	140	220	140		0	0	207	151	207	151
08:45		0	0	203	153	203	153		0	0	187	166	187	166
09:00		0	0	181	169	181	169		0	0	191	158	191	158
09:15		0	0	184	154	184	154		0	0	192	142	192	142
09:30		0	0	195	128	195	128		0	0	146	146	146	146
09:45		0	0	182	94	182	94		0	0	172	110	172	110
10:00		0	0	186	113	186	113		0	0	180	133	180	133
10:15		0	0	215	111	215	111		0	0	200	118	200	118
10:30		0	0	200	85	200	85		0	0	183	117	183	117
10:45		0	0	202	72	202	72		0	0	207	86	207	86
11:00		0	0	234	68	234	68		0	0	203	74	203	74
11:15		0	0	205	58	205	58		0	0	190	187	190	187
11:30		0	0	207	76	207	76		0	0	195	168	195	168
11:45		0	0	231	48	231	48		0	0	202	72	202	72
Total		0	0	5078	10275	5078	10275		0	0	4908	10767	4908	10767
Day		0		15353		15353			0		15675		15675	
% Total		0.0%	0.0%	33.1%	66.9%				0.0%	0.0%	31.3%	68.7%		
Peak				07:30	03:15	07:30	03:15				07:30	03:30	07:30	03:30
Vol.				899	1419	899	1419				919	1403	919	1403
P.H.F.				0.858	0.943	0.858	0.943				0.961	0.956	0.961	0.956

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 11
Station ID: 9804
SR 33 b/w Oxford Way & Walnut Street

Latitude: 0' 0.000 Undefined

Start Time	22-Aug-Fri	---		WB		Combined		23-Aug-Sat	---		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	68	214	68	214		0	0	68	179	68	179
12:15		0	0	33	219	33	219		0	0	55	149	55	149
12:30		0	0	37	228	37	228		0	0	42	186	42	186
12:45		0	0	26	209	26	209		0	0	36	174	36	174
01:00		0	0	30	198	30	198		0	0	29	162	29	162
01:15		0	0	19	226	19	226		0	0	45	179	45	179
01:30		0	0	20	243	20	243		0	0	21	193	21	193
01:45		0	0	25	215	25	215		0	0	23	202	23	202
02:00		0	0	21	266	21	266		0	0	25	221	25	221
02:15		0	0	11	292	11	292		0	0	25	227	25	227
02:30		0	0	11	311	11	311		0	0	15	249	15	249
02:45		0	0	15	301	15	301		0	0	12	212	12	212
03:00		0	0	16	357	16	357		0	0	26	252	26	252
03:15		0	0	11	333	11	333		0	0	14	255	14	255
03:30		0	0	11	390	11	390		0	0	9	275	9	275
03:45		0	0	15	358	15	358		0	0	8	239	8	239
04:00		0	0	17	372	17	372		0	0	11	265	11	265
04:15		0	0	13	335	13	335		0	0	11	248	11	248
04:30		0	0	19	352	19	352		0	0	10	248	10	248
04:45		0	0	21	344	21	344		0	0	20	256	20	256
05:00		0	0	38	345	38	345		0	0	17	232	17	232
05:15		0	0	28	300	28	300		0	0	25	283	25	283
05:30		0	0	51	289	51	289		0	0	15	243	15	243
05:45		0	0	53	269	53	269		0	0	31	254	31	254
06:00		0	0	72	247	72	247		0	0	43	232	43	232
06:15		0	0	101	260	101	260		0	0	53	250	53	250
06:30		0	0	135	210	135	210		0	0	85	199	85	199
06:45		0	0	157	222	157	222		0	0	78	195	78	195
07:00		0	0	156	230	156	230		0	0	101	190	101	190
07:15		0	0	157	227	157	227		0	0	90	218	90	218
07:30		0	0	217	228	217	228		0	0	129	196	129	196
07:45		0	0	226	194	226	194		0	0	149	185	149	185
08:00		0	0	229	193	229	193		0	0	100	205	100	205
08:15		0	0	214	198	214	198		0	0	104	172	104	172
08:30		0	0	226	182	226	182		0	0	113	166	113	166
08:45		0	0	209	144	209	144		0	0	123	149	123	149
09:00		0	0	173	173	173	173		0	0	156	165	156	165
09:15		0	0	192	147	192	147		0	0	145	164	145	164
09:30		0	0	187	153	187	153		0	0	152	156	152	156
09:45		0	0	182	170	182	170		0	0	151	135	151	135
10:00		0	0	186	135	186	135		0	0	168	146	168	146
10:15		0	0	177	150	177	150		0	0	138	158	138	158
10:30		0	0	188	112	188	112		0	0	151	138	151	138
10:45		0	0	183	109	183	109		0	0	159	197	159	197
11:00		0	0	192	104	192	104		0	0	175	134	175	134
11:15		0	0	185	106	185	106		0	0	189	119	189	119
11:30		0	0	235	94	235	94		0	0	182	94	182	94
11:45		0	0	235	57	235	57		0	0	183	81	183	81
Total		0	0	5023	11011	5023	11011		0	0	3710	9427	3710	9427
Day Total		0		16034		16034			0		13137		13137	
% Total		0.0%	0.0%	31.3%	68.7%				0.0%	0.0%	28.2%	71.8%		
Peak				07:45	03:30	07:45	03:30				11:00	03:15	11:00	03:15
Vol.				895	1455	895	1455				729	1034	729	1034
P.H.F.				0.977	0.933	0.977	0.933				0.964	0.940	0.964	0.940

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 12
Station ID: 11940
SR 33 b/w Shaffo Road & SR 33/SR 34 Circ

Latitude: 0' 0.000 Undefined

Start Time	18-Aug-Mon	--		WB		Combined		19-Aug-Tue	--		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	*	*	*	0	0	29	194	29	194	
12:15	*	*	*	*	*	*	*	0	0	19	147	19	147	
12:30	*	*	*	*	*	*	*	0	0	20	173	20	173	
12:45	*	*	*	*	*	*	*	0	0	13	174	13	174	
01:00	*	*	*	*	*	*	*	0	0	15	190	15	190	
01:15	*	*	*	*	*	*	*	0	0	14	190	14	190	
01:30	*	*	*	*	*	*	*	0	0	9	187	9	187	
01:45	*	*	*	*	*	*	*	0	0	10	177	10	177	
02:00	*	*	*	*	*	*	*	0	0	8	201	8	201	
02:15	*	*	*	*	*	*	*	0	0	12	166	12	166	
02:30	*	*	*	*	*	*	*	0	0	11	192	11	192	
02:45	*	*	*	*	*	*	*	0	0	18	183	18	183	
03:00	*	*	*	*	*	*	*	0	0	6	195	6	195	
03:15	*	0	*	*	152	*	152	0	0	10	192	10	192	
03:30	*	0	*	*	235	*	235	0	0	19	263	19	263	
03:45	*	0	*	*	249	*	249	0	0	18	224	18	224	
04:00	*	0	*	*	244	*	244	0	0	8	286	8	286	
04:15	*	0	*	*	254	*	254	0	0	18	249	18	249	
04:30	*	0	*	*	258	*	258	0	0	36	266	36	266	
04:45	*	0	*	*	261	*	261	0	0	37	281	37	281	
05:00	*	0	*	*	266	*	266	0	0	46	283	46	283	
05:15	*	0	*	*	266	*	266	0	0	48	282	48	282	
05:30	*	0	*	*	262	*	262	0	0	67	265	67	265	
05:45	*	0	*	*	221	*	221	0	0	88	246	88	246	
06:00	*	0	*	*	204	*	204	0	0	114	230	114	230	
06:15	*	0	*	*	175	*	175	0	0	146	179	146	179	
06:30	*	0	*	*	178	*	178	0	0	213	166	213	166	
06:45	*	0	*	*	158	*	158	0	0	270	157	270	157	
07:00	*	0	*	*	146	*	146	0	0	237	142	237	142	
07:15	*	0	*	*	124	*	124	0	0	265	104	265	104	
07:30	*	0	*	*	112	*	112	0	0	276	130	276	130	
07:45	*	0	*	*	110	*	110	0	0	302	111	302	111	
08:00	*	0	*	*	120	*	120	0	0	286	111	286	111	
08:15	*	0	*	*	108	*	108	0	0	278	86	278	86	
08:30	*	0	*	*	82	*	82	0	0	274	107	274	107	
08:45	*	0	*	*	78	*	78	0	0	224	67	224	67	
09:00	*	0	*	*	99	*	99	0	0	224	90	224	90	
09:15	*	0	*	*	76	*	76	0	0	172	79	172	79	
09:30	*	0	*	*	69	*	69	0	0	187	71	187	71	
09:45	*	0	*	*	70	*	70	0	0	173	72	173	72	
10:00	*	0	*	*	64	*	64	0	0	178	56	178	56	
10:15	*	0	*	*	56	*	56	0	0	174	49	174	49	
10:30	*	0	*	*	45	*	45	0	0	165	55	165	55	
10:45	*	0	*	*	48	*	48	0	0	154	29	154	29	
11:00	*	0	*	*	36	*	36	0	0	181	35	181	35	
11:15	*	0	*	*	30	*	30	0	0	184	45	184	45	
11:30	*	0	*	*	37	*	37	0	0	126	36	126	36	
11:45	*	0	*	*	24	*	24	0	0	115	30	115	30	
Total Day	0	0	0	4917	0	4917	0	0	5497	7443	5497	7443		
% Total	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	42.5%	57.5%						
Peak Vol.				04:45		04:45			07:30	04:30	07:30	04:30		
P.H.F.				1055		1055			1142	1112	1142	1112		
				0.992		0.992			0.945	0.982	0.945	0.982		

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 12
Station ID: 11940
SR 33 b/w Shaffo Road & SR 33/SR 34 Circ

Latitude: 0' 0.000 Undefined

Start Time	20-Aug- Wed	--		WB		Combined		21-Aug- Thu	--		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	26	184	26	184		0	0	35	182	35	182
12:15		0	0	26	185	26	185		0	0	32	182	32	182
12:30		0	0	20	157	20	157		0	0	24	152	24	152
12:45		0	0	21	179	21	179		0	0	19	176	19	176
01:00		0	0	12	178	12	178		0	0	22	175	22	175
01:15		0	0	16	168	16	168		0	0	22	165	22	165
01:30		0	0	20	202	20	202		0	0	18	198	18	198
01:45		0	0	11	211	11	211		0	0	14	206	14	206
02:00		0	0	14	195	14	195		0	0	13	193	13	193
02:15		0	0	10	167	10	167		0	0	18	162	18	162
02:30		0	0	6	222	6	222		0	0	18	216	18	216
02:45		0	0	4	209	4	209		0	0	12	202	12	202
03:00		0	0	10	213	10	213		0	0	15	211	15	211
03:15		0	0	9	215	9	215		0	0	12	212	12	212
03:30		0	0	9	224	9	224		0	0	22	218	22	218
03:45		0	0	16	247	16	247		0	0	22	242	22	242
04:00		0	0	20	266	20	266		0	0	13	262	13	262
04:15		0	0	17	258	17	258		0	0	24	255	24	255
04:30		0	0	27	276	27	276		0	0	43	272	43	272
04:45		0	0	41	298	41	298		0	0	45	293	45	293
05:00		0	0	53	269	53	269		0	0	53	267	53	267
05:15		0	0	56	294	56	294		0	0	54	287	54	287
05:30		0	0	76	327	76	327		0	0	72	325	72	325
05:45		0	0	96	224	96	224		0	0	92	222	92	222
06:00		0	0	121	242	121	242		0	0	117	234	117	234
06:15		0	0	152	193	152	193		0	0	148	191	148	191
06:30		0	0	218	176	218	176		0	0	220	170	220	170
06:45		0	0	274	166	274	166		0	0	276	164	276	164
07:00		0	0	240	150	240	150		0	0	242	146	242	146
07:15		0	0	269	144	269	144		0	0	269	141	269	141
07:30		0	0	281	131	281	131		0	0	279	127	279	127
07:45		0	0	308	146	308	146		0	0	305	141	305	141
08:00		0	0	293	122	293	122		0	0	290	116	290	116
08:15		0	0	286	95	286	95		0	0	283	88	283	88
08:30		0	0	277	111	277	111		0	0	280	103	280	103
08:45		0	0	232	89	232	89		0	0	231	86	231	86
09:00		0	0	233	111	233	111		0	0	232	109	232	109
09:15		0	0	180	99	180	99		0	0	181	94	181	94
09:30		0	0	194	100	194	100		0	0	195	94	195	94
09:45		0	0	179	93	179	93		0	0	180	86	180	86
10:00		0	0	183	81	183	81		0	0	184	75	184	75
10:15		0	0	178	85	178	85		0	0	179	77	179	77
10:30		0	0	168	53	168	53		0	0	169	49	169	49
10:45		0	0	159	55	159	55		0	0	153	50	153	50
11:00		0	0	186	55	186	55		0	0	181	48	181	48
11:15		0	0	170	59	170	59		0	0	166	55	166	55
11:30		0	0	185	43	185	43		0	0	182	34	182	34
11:45		0	0	161	39	161	39		0	0	159	23	159	23
Total		0	0	5743	8006	5743	8006		0	0	5815	7776	5815	7776
Day		0		13749		13749			0		13591		13591	
% Total		0.0%	0.0%	41.8%	58.2%				0.0%	0.0%	42.8%	57.2%		
Peak				07:30	04:45	07:30	04:45				07:45	04:45	07:45	04:45
Vol.				1168	1188	1168	1188				1158	1172	1158	1172
P.H.F.				0.948	0.908	0.948	0.908				0.949	0.902	0.949	0.902

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 12
Station ID: 11940
SR 33 b/w Shaffo Road & SR 33/SR 34 Circ

Latitude: 0' 0.000 Undefined

Start Time	22-Aug-Fri		--		WB		Combined		23-Aug-Sat		--		WB		Combined	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	0	0	26	203	26	203	0	0	61	204	61	204				
12:15	0	0	28	207	28	207	0	0	43	157	43	157				
12:30	0	0	27	182	27	182	0	0	53	189	53	189				
12:45	0	0	15	158	15	158	0	0	29	188	29	188				
01:00	0	0	19	192	19	192	0	0	27	202	27	202				
01:15	0	0	19	196	19	196	0	0	20	200	20	200				
01:30	0	0	14	218	14	218	0	0	22	195	22	195				
01:45	0	0	15	180	15	180	0	0	24	184	24	184				
02:00	0	0	11	214	11	214	0	0	14	208	14	208				
02:15	0	0	8	218	8	218	0	0	13	175	13	175				
02:30	0	0	9	242	9	242	0	0	29	203	29	203				
02:45	0	0	4	219	4	219	0	0	20	196	20	196				
03:00	0	0	15	255	15	255	0	0	19	210	19	210				
03:15	0	0	19	257	19	257	0	0	31	209	31	209				
03:30	0	0	14	285	14	285	0	0	14	277	14	277				
03:45	0	0	28	322	28	322	0	0	14	238	14	238				
04:00	0	0	15	285	15	285	0	0	11	300	11	300				
04:15	0	0	21	284	21	284	0	0	21	263	21	263				
04:30	0	0	33	286	33	286	0	0	23	278	23	278				
04:45	0	0	40	307	40	307	0	0	26	291	26	291				
05:00	0	0	46	302	46	302	0	0	26	293	26	293				
05:15	0	0	61	319	61	319	0	0	38	292	38	292				
05:30	0	0	76	283	76	283	0	0	80	275	80	275				
05:45	0	0	106	227	106	227	0	0	101	256	101	256				
06:00	0	0	127	202	127	202	0	0	127	242	127	242				
06:15	0	0	136	176	136	176	0	0	157	193	157	193				
06:30	0	0	189	192	189	192	0	0	222	180	222	180				
06:45	0	0	252	135	252	135	0	0	283	171	283	171				
07:00	0	0	235	134	235	134	0	0	248	156	248	156				
07:15	0	0	238	100	238	100	0	0	274	118	274	118				
07:30	0	0	288	115	288	115	0	0	283	137	283	137				
07:45	0	0	285	119	285	119	0	0	309	122	309	122				
08:00	0	0	290	101	290	101	0	0	294	124	294	124				
08:15	0	0	255	101	255	101	0	0	288	99	288	99				
08:30	0	0	281	113	281	113	0	0	286	120	286	120				
08:45	0	0	248	87	248	87	0	0	238	80	238	80				
09:00	0	0	223	93	223	93	0	0	240	103	240	103				
09:15	0	0	193	73	193	73	0	0	182	86	182	86				
09:30	0	0	196	76	196	76	0	0	199	82	199	82				
09:45	0	0	164	87	164	87	0	0	185	84	185	84				
10:00	0	0	174	94	174	94	0	0	190	68	190	68				
10:15	0	0	185	89	185	89	0	0	186	61	186	61				
10:30	0	0	187	74	187	74	0	0	177	67	177	67				
10:45	0	0	173	51	173	51	0	0	166	41	166	41				
11:00	0	0	185	68	185	68	0	0	191	47	191	47				
11:15	0	0	158	55	158	55	0	0	194	57	194	57				
11:30	0	0	183	63	183	63	0	0	136	47	136	47				
11:45	0	0	194	48	194	48	0	0	125	41	125	41				
Total Day	0	0	5708	8287	5708	8287	0	0	5939	8009	5939	8009				
% Total	0.0%	0.0%	40.8%	59.2%	40.8%	59.2%	0.0%	0.0%	42.6%	57.4%	42.6%	57.4%				
Peak Vol.			07:30	04:30	07:30	04:30			07:45	04:30	07:45	04:30				
P.H.F.			1118	1214	1118	1214			1177	1154	1177	1154				
			0.964	0.951	0.964	0.951			0.952	0.985	0.952	0.985				

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 12
Station ID: 11940
SR 33 b/w Shaffo Road & SR 33/SR 34 Circ

Latitude: 0' 0.000 Undefined

Start Time	24-Aug-Sun	--		WB		Combined		25-Aug-Mon	--		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	53	197	53	197		0	0	18	193	18	193
12:15		0	0	34	149	34	149		0	0	14	189	14	189
12:30		0	0	45	180	45	180		0	0	12	162	12	162
12:45		0	0	22	180	22	180		0	0	9	185	9	185
01:00		0	0	21	195	21	195		0	0	8	185	8	185
01:15		0	0	15	194	15	194		0	0	9	176	9	176
01:30		0	0	18	190	18	190		0	0	8	211	8	211
01:45		0	0	21	180	21	180		0	0	7	213	7	213
02:00		0	0	10	205	10	205		0	0	8	198	8	198
02:15		0	0	8	171	8	171		0	0	7	171	7	171
02:30		0	0	23	198	23	198		0	0	6	227	6	227
02:45		0	0	13	190	13	190		0	0	8	215	8	215
03:00		0	0	11	203	11	203		0	0	18	220	18	220
03:15		0	0	22	201	22	201		0	0	18	223	18	223
03:30		0	0	12	271	12	271		0	0	15	231	15	231
03:45		0	0	11	231	11	231		0	0	23	253	23	253
04:00		0	0	7	292	7	292		0	0	28	271	28	271
04:15		0	0	16	254	16	254		0	0	26	262	26	262
04:30		0	0	17	270	17	270		0	*	35	*	35	*
04:45		0	0	19	284	19	284		0	*	48	*	48	*
05:00		0	0	18	287	18	287		0	*	59	*	59	*
05:15		0	0	31	287	31	287		0	*	61	*	61	*
05:30		0	0	74	271	74	271		0	*	80	*	80	*
05:45		0	0	96	253	96	253		0	*	99	*	99	*
06:00		0	0	123	238	123	238		0	*	125	*	125	*
06:15		0	0	154	188	154	188		0	*	157	*	157	*
06:30		0	0	220	174	220	174		0	*	224	*	224	*
06:45		0	0	276	164	276	164		0	*	281	*	281	*
07:00		0	0	242	148	242	148		0	*	248	*	248	*
07:15		0	0	269	109	269	109		0	*	275	*	275	*
07:30		0	0	279	134	279	134		0	*	288	*	288	*
07:45		0	0	306	114	306	114		0	*	316	*	316	*
08:00		0	0	291	115	291	115		0	*	302	*	302	*
08:15		0	0	284	91	284	91		0	*	294	*	294	*
08:30		0	0	281	113	281	113		0	*	284	*	284	*
08:45		0	0	232	74	232	74		0	*	238	*	238	*
09:00		0	0	233	98	233	98		0	*	238	*	238	*
09:15		0	0	174	82	174	82		0	*	184	*	184	*
09:30		0	0	190	79	190	79		0	*	197	*	197	*
09:45		0	0	177	81	177	81		0	*	183	*	183	*
10:00		0	0	183	64	183	64		0	*	188	*	188	*
10:15		0	0	180	56	180	56		0	*	184	*	184	*
10:30		0	0	172	61	172	61		0	*	175	*	175	*
10:45		0	0	162	34	162	34		0	*	167	*	167	*
11:00		0	0	188	39	188	39		0	*	191	*	191	*
11:15		0	0	190	48	190	48		0	*	176	*	176	*
11:30		0	0	131	27	131	27		0	*	192	*	192	*
11:45		0	0	119	21	119	21		0	*	169	*	169	*
Total		0	0	5673	7685	5673	7685		0	0	5900	3785	5900	3785
Day Total		0		13358		13358			0		9685		9685	
% Total		0.0%	0.0%	42.5%	57.5%				0.0%	0.0%	60.9%	39.1%		
Peak				07:45	04:45	07:45	04:45				07:30	03:30	07:30	03:30
Vol.				1162	1129	1162	1129				1200	1017	1200	1017
P.H.F.				0.949	0.983	0.949	0.983				0.949	0.938	0.949	0.938
ADT	ADT 12,940	AADT 12,940												

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 13
Station ID: 11945
SR 138 b/w New Bedford Rd & Maxwell Dr

Latitude: 0' 0.000 Undefined

Start Time	18-Aug-Mon	---		WB		Combined		19-Aug-Tue	---		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	*	*	*	0	0	18	163	18	163	
12:15	*	*	*	*	*	*	*	0	0	25	179	25	179	
12:30	*	*	*	*	*	*	*	0	0	26	181	26	181	
12:45	*	*	*	*	*	*	*	0	0	30	190	30	190	
01:00	*	*	*	*	*	*	*	0	0	9	171	9	171	
01:15	*	*	*	*	*	*	*	0	0	22	209	22	209	
01:30	*	*	*	*	*	*	*	0	0	16	187	16	187	
01:45	*	*	*	*	*	*	*	0	0	18	236	18	236	
02:00	*	*	*	*	*	*	*	0	0	19	222	19	222	
02:15	*	*	*	*	*	*	*	0	0	13	244	13	244	
02:30	*	*	*	*	*	*	*	0	0	6	234	6	234	
02:45	*	*	*	*	*	*	*	0	0	11	255	11	255	
03:00	*	*	*	*	*	*	*	0	0	11	263	11	263	
03:15	*	*	*	*	*	*	*	0	0	9	254	9	254	
03:30	*	*	*	*	*	*	*	0	0	12	259	12	259	
03:45	*	*	*	*	*	*	*	0	0	7	276	7	276	
04:00	*	*	*	*	*	*	*	0	0	13	310	13	310	
04:15	*	*	*	*	*	*	*	0	0	13	242	13	242	
04:30	*	*	*	*	*	*	*	0	0	29	250	29	250	
04:45	*	0	*	354	*	354	*	0	0	34	205	34	205	
05:00	*	0	*	389	*	389	*	0	0	37	266	37	266	
05:15	*	0	*	308	*	308	*	0	0	40	217	40	217	
05:30	*	0	*	272	*	272	*	0	0	61	214	61	214	
05:45	*	0	*	235	*	235	*	0	0	58	193	58	193	
06:00	*	0	*	249	*	249	*	0	0	83	174	83	174	
06:15	*	0	*	203	*	203	*	0	0	106	171	106	171	
06:30	*	0	*	216	*	216	*	0	0	146	189	146	189	
06:45	*	0	*	187	*	187	*	0	0	162	185	162	185	
07:00	*	0	*	172	*	172	*	0	0	178	140	178	140	
07:15	*	0	*	156	*	156	*	0	0	189	157	189	157	
07:30	*	0	*	142	*	142	*	0	0	219	140	219	140	
07:45	*	0	*	152	*	152	*	0	0	209	135	209	135	
08:00	*	0	*	152	*	152	*	0	0	228	118	228	118	
08:15	*	0	*	134	*	134	*	0	0	226	138	226	138	
08:30	*	0	*	140	*	140	*	0	0	191	126	191	126	
08:45	*	0	*	120	*	120	*	0	0	204	119	204	119	
09:00	*	0	*	107	*	107	*	0	0	153	136	153	136	
09:15	*	0	*	102	*	102	*	0	0	159	119	159	119	
09:30	*	0	*	107	*	107	*	0	0	172	86	172	86	
09:45	*	0	*	88	*	88	*	0	0	140	90	140	90	
10:00	*	0	*	75	*	75	*	0	0	169	98	169	98	
10:15	*	0	*	70	*	70	*	0	0	184	96	184	96	
10:30	*	0	*	66	*	66	*	0	0	173	99	173	99	
10:45	*	0	*	55	*	55	*	0	0	156	62	156	62	
11:00	*	0	*	45	*	45	*	0	0	151	80	151	80	
11:15	*	0	*	43	*	43	*	0	0	128	64	128	64	
11:30	*	0	*	42	*	42	*	0	0	175	61	175	61	
11:45	*	0	*	45	*	45	*	0	0	182	57	182	57	
Total	0	0	0	4426	0	4426	0	0	4620	8260	4620	8260		
Day	0		4426		4426		0		12880		12880			
% Total	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	35.9%	64.1%						
Peak			04:45	04:45		07:30	03:15	07:30	03:15					
Vol.			1323	1323		882	1099	882	1099					
P.H.F.			0.850	0.850		0.967	0.886	0.967	0.886					

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 13
Station ID: 11945
SR 138 b/w New Bedford Rd & Maxwell Dr

Latitude: 0' 0.000 Undefined

Start Time	20-Aug- Wed	---		WB		Combined		21-Aug- Thu	---		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	63	183	63	183		0	0	27	166	27	166
12:15		0	0	50	184	50	184		0	0	32	177	32	177
12:30		0	0	44	175	44	175		0	0	21	186	21	186
12:45		0	0	50	159	50	159		0	0	20	178	20	178
01:00		0	0	60	196	60	196		0	0	8	206	8	206
01:15		0	0	53	179	53	179		0	0	17	205	17	205
01:30		0	0	78	182	78	182		0	0	18	181	18	181
01:45		0	0	72	207	72	207		0	0	28	206	28	206
02:00		0	0	96	227	96	227		0	0	19	220	19	220
02:15		0	0	41	235	41	235		0	0	11	227	11	227
02:30		0	0	30	258	30	258		0	0	10	250	10	250
02:45		0	0	21	297	21	297		0	0	8	273	8	273
03:00		0	0	6	285	6	285		0	0	8	310	8	310
03:15		0	0	15	296	15	296		0	0	10	311	10	311
03:30		0	0	12	310	12	310		0	0	10	351	10	351
03:45		0	0	14	304	14	304		0	0	9	311	9	311
04:00		0	0	13	305	13	305		0	0	9	349	9	349
04:15		0	0	15	316	15	316		0	0	25	312	25	312
04:30		0	0	22	311	22	311		0	0	15	349	15	349
04:45		0	0	31	295	31	295		0	0	40	327	40	327
05:00		0	0	40	313	40	313		0	0	31	335	31	335
05:15		0	0	49	289	49	289		0	0	46	268	46	268
05:30		0	0	55	240	55	240		0	0	52	257	52	257
05:45		0	0	70	234	70	234		0	0	64	219	64	219
06:00		0	0	84	233	84	233		0	0	89	246	89	246
06:15		0	0	94	220	94	220		0	0	115	209	115	209
06:30		0	0	135	231	135	231		0	0	128	202	128	202
06:45		0	0	164	203	164	203		0	0	167	203	167	203
07:00		0	0	178	180	178	180		0	0	172	182	172	182
07:15		0	0	172	160	172	160		0	0	174	164	174	164
07:30		0	0	215	161	215	161		0	0	216	153	216	153
07:45		0	0	225	169	225	169		0	0	212	134	212	134
08:00		0	0	229	167	229	167		0	0	222	170	222	170
08:15		0	0	219	154	219	154		0	0	223	141	223	141
08:30		0	0	218	147	218	147		0	0	203	162	203	162
08:45		0	0	203	133	203	133		0	0	179	138	179	138
09:00		0	0	191	115	191	115		0	0	166	131	166	131
09:15		0	0	172	101	172	101		0	0	165	125	165	125
09:30		0	0	177	100	177	100		0	0	180	106	180	106
09:45		0	0	143	82	143	82		0	0	164	85	164	85
10:00		0	0	162	77	162	77		0	0	164	92	164	92
10:15		0	0	168	69	168	69		0	0	148	107	148	107
10:30		0	0	167	61	167	61		0	0	161	85	161	85
10:45		0	0	161	57	161	57		0	0	145	71	145	71
11:00		0	0	141	43	141	43		0	0	183	59	183	59
11:15		0	0	154	31	154	31		2	0	192	66	194	66
11:30		0	0	187	44	187	44		0	0	175	71	175	71
11:45		0	0	161	43	161	43		0	0	156	33	156	33
Total		0	0	5120	8961	5120	8961		2	0	4637	9309	4639	9309
Day Total		0		14081		14081			2		13946		13948	
% Total		0.0%	0.0%	36.4%	63.6%				0.0%	0.0%	33.2%	66.7%		
Peak				07:45	03:45	07:45	03:45		10:30		07:30	04:00	07:30	04:00
Vol.				891	1236	891	1236		2		873	1337	873	1337
P.H.F.				0.973	0.978	0.973	0.978		0.250		0.979	0.958	0.979	0.958

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 13
Station ID: 11945
SR 138 b/w New Bedford Rd & Maxwell Dr

Latitude: 0' 0.000 Undefined

Start Time	22-Aug-Fri		WB		Combined		23-Aug-Sat		WB		Combined	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	0	0	34	214	34	214	0	0	70	187	70	187
12:15	0	0	40	189	40	189	0	0	54	176	54	176
12:30	0	0	31	218	31	218	0	0	53	200	53	200
12:45	0	0	25	213	25	213	0	0	52	218	52	218
01:00	0	0	32	207	32	207	0	0	47	190	47	190
01:15	0	0	20	243	20	243	0	0	42	200	42	200
01:30	0	0	24	232	24	232	0	0	50	214	50	214
01:45	0	0	34	235	34	235	0	0	68	234	68	234
02:00	0	0	42	268	42	268	0	0	86	234	86	234
02:15	0	0	27	281	27	281	0	0	69	271	69	271
02:30	0	0	24	288	24	288	0	0	43	255	43	255
02:45	0	0	26	306	26	306	0	0	49	282	49	282
03:00	0	0	19	348	19	348	0	0	44	289	44	289
03:15	0	0	15	351	15	351	0	0	31	346	31	346
03:30	0	0	12	364	12	364	0	0	22	322	22	322
03:45	0	0	16	358	16	358	0	0	20	283	20	283
04:00	0	0	19	355	19	355	0	0	8	309	8	309
04:15	0	0	17	366	17	366	0	0	25	330	25	330
04:30	0	0	22	352	22	352	0	0	19	332	19	332
04:45	0	0	36	328	36	328	0	0	15	313	15	313
05:00	0	0	20	346	20	346	0	0	15	344	15	344
05:15	0	0	36	287	36	287	0	0	22	335	22	335
05:30	0	0	57	326	57	326	0	0	31	310	31	310
05:45	0	0	62	240	62	240	0	0	38	307	38	307
06:00	0	0	68	275	68	275	0	0	41	261	41	261
06:15	0	0	104	235	104	235	0	0	43	283	43	283
06:30	0	0	134	245	134	245	0	0	59	267	59	267
06:45	0	0	149	233	149	233	0	0	68	234	68	234
07:00	0	0	176	200	176	200	0	0	72	235	72	235
07:15	0	0	170	173	170	173	0	0	64	188	64	188
07:30	0	0	211	201	211	201	0	0	109	230	109	230
07:45	0	0	206	184	206	184	0	0	70	215	70	215
08:00	0	0	196	170	196	170	0	0	119	184	119	184
08:15	0	0	223	141	223	141	0	0	113	217	113	217
08:30	0	0	214	177	214	177	0	0	120	191	120	191
08:45	0	0	171	136	171	136	0	0	105	194	105	194
09:00	0	0	186	140	186	140	0	0	138	155	138	155
09:15	0	0	152	145	152	145	0	0	126	151	126	151
09:30	0	0	204	136	204	136	0	0	122	141	122	141
09:45	0	0	166	132	166	132	0	0	156	121	156	121
10:00	0	0	182	139	182	139	0	0	162	133	162	133
10:15	0	0	186	117	186	117	0	0	154	126	154	126
10:30	0	0	195	93	195	93	0	0	161	148	161	148
10:45	0	0	155	82	155	82	0	0	141	143	141	143
11:00	0	0	224	102	224	102	0	0	158	111	158	111
11:15	0	0	156	78	156	78	0	0	185	92	185	92
11:30	0	0	187	86	187	86	0	0	177	80	177	80
11:45	0	0	177	61	177	61	0	0	191	92	191	92
Total	0	0	4882	10596	4882	10596	0	0	3827	10673	3827	10673
Day Total	0		15478		15478		0		14500		14500	
% Total	0.0%	0.0%	31.5%	68.5%			0.0%	0.0%	26.4%	73.6%		
Peak			07:45	03:30	07:45	03:30			11:00	04:30	11:00	04:30
Vol.			839	1443	839	1443			711	1324	711	1324
P.H.F.			0.941	0.986	0.941	0.986			0.931	0.962	0.931	0.962

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 14
Station ID: 12364
CR 524 between Bedford Road & Bailey's C

Latitude: 0' 0.000 Undefined

Start Time	18-Aug-Mon	---		WB		Combined		19-Aug-Tue	---		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	*	*	*	0	0	6	60	6	60	
12:15	*	*	*	*	*	*	*	0	0	3	86	3	86	
12:30	*	*	*	*	*	*	*	0	0	4	77	4	77	
12:45	*	*	*	*	*	*	*	0	0	3	83	3	83	
01:00	*	*	*	*	*	*	*	0	0	3	98	3	98	
01:15	*	*	*	*	*	*	*	0	0	3	71	3	71	
01:30	*	*	*	*	*	*	*	0	0	3	79	3	79	
01:45	*	*	*	*	*	*	*	0	0	0	74	0	74	
02:00	*	*	*	*	*	*	*	0	0	1	96	1	96	
02:15	*	*	*	*	*	*	*	0	0	1	99	1	99	
02:30	*	*	*	*	*	*	*	0	0	4	87	4	87	
02:45	*	*	*	*	*	*	*	0	0	4	92	4	92	
03:00	*	*	*	*	*	*	*	0	0	2	97	2	97	
03:15	*	*	*	*	*	*	*	0	0	1	100	1	100	
03:30	*	*	*	*	*	*	*	0	0	0	103	0	103	
03:45	*	*	*	*	*	*	*	0	0	2	102	2	102	
04:00	*	*	*	*	*	*	*	0	0	4	98	4	98	
04:15	*	*	*	*	*	*	*	0	0	3	86	3	86	
04:30	*	*	*	*	*	*	*	0	0	5	93	5	93	
04:45	*	*	*	*	*	*	*	0	0	7	98	7	98	
05:00	*	0	*	143	*	143	*	0	0	6	103	6	103	
05:15	*	0	*	147	*	147	*	0	0	10	102	10	102	
05:30	*	0	*	119	*	119	*	0	0	14	75	14	75	
05:45	*	0	*	109	*	109	*	0	0	19	77	19	77	
06:00	*	0	*	101	*	101	*	0	0	26	83	26	83	
06:15	*	0	*	82	*	82	*	0	0	22	69	22	69	
06:30	*	0	*	70	*	70	*	0	0	29	65	29	65	
06:45	*	0	*	96	*	96	*	0	0	37	65	37	65	
07:00	*	0	*	73	*	73	*	0	0	33	63	33	63	
07:15	*	0	*	62	*	62	*	0	0	41	58	41	58	
07:30	*	0	*	47	*	47	*	0	0	41	50	41	50	
07:45	*	0	*	68	*	68	*	0	0	57	56	57	56	
08:00	*	0	*	70	*	70	*	0	0	63	50	63	50	
08:15	*	0	*	56	*	56	*	0	0	75	33	75	33	
08:30	*	0	*	50	*	50	*	0	0	66	39	66	39	
08:45	*	0	*	47	*	47	*	0	0	61	43	61	43	
09:00	*	0	*	35	*	35	*	0	0	77	31	77	31	
09:15	*	0	*	22	*	22	*	0	0	64	34	64	34	
09:30	*	0	*	15	*	15	*	0	0	56	26	56	26	
09:45	*	0	*	15	*	15	*	0	0	56	31	56	31	
10:00	*	0	*	19	*	19	*	0	0	70	20	70	20	
10:15	*	0	*	20	*	20	*	0	0	68	22	68	22	
10:30	*	0	*	18	*	18	*	0	0	59	16	59	16	
10:45	*	0	*	12	*	12	*	0	0	67	19	67	19	
11:00	*	0	*	5	*	5	*	0	0	72	11	72	11	
11:15	*	0	*	8	*	8	*	0	0	73	15	73	15	
11:30	*	0	*	9	*	9	*	0	0	67	9	67	9	
11:45	*	0	*	4	*	4	*	0	0	65	9	65	9	
Total	0	0	0	1522	0	1522	0	0	1453	3053	1453	3053		
Day	0			1522		1522	0		4506		4506			
% Total	0.0%	0.0%	0.0%	100.0%			0.0%	0.0%	32.2%	67.8%				
Peak				05:00		05:00			08:15	03:15	08:15	03:15		
Vol.				518		518			279	403	279	403		
P.H.F.				0.881		0.881			0.906	0.978	0.906	0.978		

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 14
Station ID: 12364
CR 524 between Bedford Road & Bailey's C

Latitude: 0' 0.000 Undefined

Start Time	20-Aug- Wed	---		WB		Combined		21-Aug- Thu	---		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	11	92	11	92		0	0	12	79	12	79
12:15		0	0	5	77	5	77		0	0	15	85	15	85
12:30		0	0	5	95	5	95		0	0	12	84	12	84
12:45		0	0	3	90	3	90		0	0	17	82	17	82
01:00		0	0	4	107	4	107		0	0	12	88	12	88
01:15		0	0	4	113	4	113		0	0	5	77	5	77
01:30		0	0	4	95	4	95		0	0	6	86	6	86
01:45		0	0	6	103	6	103		0	0	7	86	7	86
02:00		0	0	6	106	6	106		0	0	7	84	7	84
02:15		0	0	3	109	3	109		0	0	8	95	8	95
02:30		0	0	4	121	4	121		0	0	7	95	7	95
02:45		0	0	4	117	4	117		0	0	11	102	11	102
03:00		0	0	2	137	2	137		0	0	8	95	8	95
03:15		0	0	5	131	5	131		0	0	7	131	7	131
03:30		0	0	1	126	1	126		0	0	7	118	7	118
03:45		0	0	3	133	3	133		0	0	5	124	5	124
04:00		0	0	7	129	7	129		0	0	7	116	7	116
04:15		0	0	5	139	5	139		0	0	7	115	7	115
04:30		0	0	8	167	8	167		0	0	12	119	12	119
04:45		0	0	11	134	11	134		0	0	15	117	15	117
05:00		0	0	8	121	8	121		0	0	23	136	23	136
05:15		0	0	10	124	10	124		0	0	20	113	20	113
05:30		0	0	20	127	20	127		0	0	28	107	28	107
05:45		0	0	11	108	11	108		0	0	23	130	23	130
06:00		0	0	19	84	19	84		0	0	41	95	41	95
06:15		0	0	22	116	22	116		0	0	38	85	38	85
06:30		0	0	30	116	30	116		0	0	34	86	34	86
06:45		0	0	35	74	35	74		0	0	42	78	42	78
07:00		0	0	32	53	32	53		0	0	52	76	52	76
07:15		0	0	50	69	50	69		0	0	47	71	47	71
07:30		0	0	58	66	58	66		0	0	59	59	59	59
07:45		0	0	63	81	63	81		0	0	64	67	64	67
08:00		0	0	64	56	64	56		0	0	68	48	68	48
08:15		0	0	57	61	57	61		0	0	73	46	73	46
08:30		0	0	56	50	56	50		0	0	81	44	81	44
08:45		0	0	77	42	77	42		0	0	63	56	63	56
09:00		0	0	56	35	56	35		0	0	69	47	69	47
09:15		0	0	80	45	80	45		0	0	71	35	71	35
09:30		0	0	53	49	53	49		0	0	76	31	76	31
09:45		0	0	85	33	85	33		0	0	92	43	92	43
10:00		0	0	62	43	62	43		0	0	67	29	67	29
10:15		0	0	85	29	85	29		0	0	82	20	82	20
10:30		0	0	73	31	73	31		0	0	61	24	61	24
10:45		0	0	90	28	90	28		0	0	99	12	99	12
11:00		0	0	82	27	82	27		0	0	82	13	82	13
11:15		0	0	74	23	74	23		0	0	17	15	17	15
11:30		0	0	80	18	80	18		0	0	65	9	65	9
11:45		0	0	95	17	95	17		0	0	72	11	72	11
Total		0	0	1628	4047	1628	4047		0	0	1796	3564	1796	3564
Day Total		0		5675		5675			0		5360		5360	
% Total		0.0%	0.0%	28.7%	71.3%				0.0%	0.0%	33.5%	66.5%		
Peak				11:00	04:00	11:00	04:00				10:15	03:15	10:15	03:15
Vol.				331	569	331	569				324	489	324	489
P.H.F.				0.871	0.852	0.871	0.852				0.818	0.933	0.818	0.933

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 14
Station ID: 12364
CR 524 between Bedford Road & Bailey's C

Latitude: 0' 0.000 Undefined

Start Time	22-Aug-Fri		WB		Combined		23-Aug-Sat		WB		Combined	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	0	0	8	87	8	87	0	0	14	81	14	81
12:15	0	0	3	75	3	75	0	0	9	77	9	77
12:30	0	0	4	90	4	90	0	0	9	77	9	77
12:45	0	0	2	84	2	84	0	0	5	80	5	80
01:00	0	0	2	100	2	100	0	0	4	66	4	66
01:15	0	0	3	111	3	111	0	0	7	87	7	87
01:30	0	0	3	92	3	92	0	0	8	78	8	78
01:45	0	0	4	97	4	97	0	0	4	63	4	63
02:00	0	0	5	101	5	101	0	0	6	88	6	88
02:15	0	0	2	105	2	105	0	0	3	105	3	105
02:30	0	0	1	118	1	118	0	0	2	90	2	90
02:45	0	0	3	113	3	113	0	0	3	99	3	99
03:00	0	0	1	132	1	132	0	0	1	103	1	103
03:15	0	0	1	129	1	129	0	0	2	90	2	90
03:30	0	0	0	119	0	119	0	0	3	110	3	110
03:45	0	0	1	131	1	131	0	0	2	112	2	112
04:00	0	0	6	127	6	127	0	0	1	122	1	122
04:15	0	0	2	131	2	131	0	0	1	116	1	116
04:30	0	0	6	165	6	165	0	0	2	105	2	105
04:45	0	0	8	128	8	128	0	0	4	143	4	143
05:00	0	0	4	119	4	119	0	0	3	117	3	117
05:15	0	0	7	120	7	120	0	0	5	124	5	124
05:30	0	0	16	124	16	124	0	0	5	103	5	103
05:45	0	0	9	104	9	104	0	0	8	83	8	83
06:00	0	0	18	79	18	79	0	0	6	124	6	124
06:15	0	0	20	110	20	110	0	0	7	113	7	113
06:30	0	0	26	109	26	109	0	0	18	77	18	77
06:45	0	0	32	66	32	66	0	0	23	80	23	80
07:00	0	0	30	50	30	50	0	0	15	74	15	74
07:15	0	0	47	67	47	67	0	0	25	74	25	74
07:30	0	0	54	61	54	61	0	0	29	65	29	65
07:45	0	0	58	75	58	75	0	0	27	75	27	75
08:00	0	0	58	49	58	49	0	0	38	63	38	63
08:15	0	0	53	55	53	55	0	0	40	75	40	75
08:30	0	0	53	42	53	42	0	0	34	52	34	52
08:45	0	0	75	38	75	38	0	0	40	64	40	64
09:00	0	0	50	30	50	30	0	0	53	31	53	31
09:15	0	0	75	38	75	38	0	0	60	56	60	56
09:30	0	0	49	45	49	45	0	0	55	28	55	28
09:45	0	0	82	31	82	31	0	0	75	48	75	48
10:00	0	0	60	37	60	37	0	0	59	61	59	61
10:15	0	0	83	20	83	20	0	0	68	36	68	36
10:30	0	0	70	23	70	23	0	0	71	51	71	51
10:45	0	0	85	21	85	21	0	0	92	37	92	37
11:00	0	0	79	21	79	21	0	0	90	40	90	40
11:15	0	0	71	18	71	18	0	0	80	32	80	32
11:30	0	0	77	12	77	12	0	0	92	23	92	23
11:45	0	0	91	10	91	10	0	0	72	22	72	22
Total	0	0	1497	3809	1497	3809	0	0	1280	3720	1280	3720
Day Total	0		5306		5306		0		5000		5000	
% Total	0.0%	0.0%	28.2%	71.8%			0.0%	0.0%	25.6%	74.4%		
Peak Vol.			11:00	03:45	11:00	03:45			10:45	04:30	10:45	04:30
P.H.F.			0.874	0.839	0.874	0.839			0.962	0.855	0.962	0.855

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 15
Station ID: 12141
CR 524 b/w SR 34 & SR 35

Latitude: 0' 0.000 Undefined

Start Time	18-Aug- Mon	---		WB		Combined		19-Aug- Tue	---		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	*	*	*	0	0	13	138	13	138	
12:15	*	*	*	*	*	*	*	0	0	9	138	9	138	
12:30	*	*	*	*	*	*	*	0	0	10	108	10	108	
12:45	*	*	*	*	*	*	*	0	0	4	114	4	114	
01:00	*	*	*	*	*	*	*	0	0	5	120	5	120	
01:15	*	*	*	*	*	*	*	0	0	1	140	1	140	
01:30	*	*	*	*	*	*	*	0	0	8	161	8	161	
01:45	*	*	*	*	*	*	*	0	0	3	140	3	140	
02:00	*	*	*	*	*	*	*	0	0	1	137	1	137	
02:15	*	*	*	*	*	*	*	0	0	3	140	3	140	
02:30	*	*	*	*	*	*	*	0	0	5	112	5	112	
02:45	*	*	*	*	*	*	*	0	0	0	193	0	193	
03:00	*	*	*	*	*	*	*	0	0	4	153	4	153	
03:15	*	*	*	*	*	*	*	0	0	0	127	0	127	
03:30	*	*	*	*	*	*	*	0	0	1	106	1	106	
03:45	*	*	*	*	*	*	*	0	0	7	145	7	145	
04:00	*	*	*	*	*	*	*	0	0	4	165	4	165	
04:15	*	*	*	*	*	*	*	0	0	8	155	8	155	
04:30	*	*	*	*	*	*	*	0	0	13	132	13	132	
04:45	*	*	*	*	*	*	*	0	0	21	127	21	127	
05:00	*	*	*	*	*	*	*	0	0	21	144	21	144	
05:15	*	0	*	119	*	119	*	0	0	36	155	36	155	
05:30	*	0	*	125	*	125	*	0	0	41	106	41	106	
05:45	*	0	*	128	*	128	*	0	0	57	127	57	127	
06:00	*	0	*	134	*	134	*	0	0	64	86	64	86	
06:15	*	0	*	109	*	109	*	0	0	89	88	89	88	
06:30	*	0	*	86	*	86	*	0	0	88	87	88	87	
06:45	*	0	*	107	*	107	*	0	0	118	70	118	70	
07:00	*	0	*	79	*	79	*	0	0	109	82	109	82	
07:15	*	0	*	68	*	68	*	0	0	126	73	126	73	
07:30	*	0	*	56	*	56	*	0	0	137	71	137	71	
07:45	*	0	*	75	*	75	*	0	0	201	76	201	76	
08:00	*	0	*	66	*	66	*	0	0	198	76	198	76	
08:15	*	0	*	53	*	53	*	0	0	172	87	172	87	
08:30	*	0	*	56	*	56	*	0	0	172	64	172	64	
08:45	*	0	*	49	*	49	*	0	0	190	61	190	61	
09:00	*	0	*	64	*	64	*	0	0	186	50	186	50	
09:15	*	0	*	37	*	37	*	0	0	123	46	123	46	
09:30	*	0	*	32	*	32	*	0	0	113	46	113	46	
09:45	*	0	*	41	*	41	*	0	0	115	44	115	44	
10:00	*	0	*	24	*	24	*	0	0	107	36	107	36	
10:15	*	0	*	22	*	22	*	0	0	113	22	113	22	
10:30	*	0	*	14	*	14	*	0	0	125	31	125	31	
10:45	*	0	*	13	*	13	*	0	0	113	17	113	17	
11:00	*	0	*	9	*	9	*	0	0	126	22	126	22	
11:15	*	0	*	17	*	17	*	0	0	104	22	104	22	
11:30	*	0	*	19	*	19	*	0	0	124	17	124	17	
11:45	*	0	*	18	*	18	*	0	0	150	13	150	13	
Total		0	0	0	1620	0	1620	0	0	3438	4570	3438	4570	
Day		0		1620		1620		0		8008		8008		
% Total		0.0%	0.0%	0.0%	100.0%			0.0%	0.0%	42.9%	57.1%			
Peak				05:15		05:15				07:45	02:15	07:45	02:15	
Vol.				506		506				743	598	743	598	
P.H.F.				0.944		0.944				0.924	0.775	0.924	0.775	

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 15
Station ID: 12141
CR 524 b/w SR 34 & SR 35

Latitude: 0' 0.000 Undefined

Start Time	20-Aug- Wed	---		WB		Combined		21-Aug- Thu	---		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	9	139	9	139		0	0	9	136	9	136
12:15		0	0	13	129	13	129		0	0	13	118	13	118
12:30		0	0	3	129	3	129		0	0	6	129	6	129
12:45		0	0	8	135	8	135		0	0	5	132	5	132
01:00		0	0	1	148	1	148		0	0	2	147	2	147
01:15		0	0	6	120	6	120		0	0	6	118	6	118
01:30		0	0	8	145	8	145		0	0	4	129	4	129
01:45		0	0	4	123	4	123		0	0	4	143	4	143
02:00		0	0	4	133	4	133		0	0	7	141	7	141
02:15		0	0	4	123	4	123		0	0	6	146	6	146
02:30		0	0	2	135	2	135		0	0	4	143	4	143
02:45		0	0	0	162	0	162		0	0	2	148	2	148
03:00		0	0	4	150	4	150		0	0	1	167	1	167
03:15		0	0	2	140	2	140		0	0	2	148	2	148
03:30		0	0	5	154	5	154		0	0	3	141	3	141
03:45		0	0	6	149	6	149		0	0	4	140	4	140
04:00		0	0	6	166	6	166		0	0	4	173	4	173
04:15		0	0	7	139	7	139		0	0	6	167	6	167
04:30		0	0	18	155	18	155		0	0	19	146	19	146
04:45		0	0	25	147	25	147		0	0	20	145	20	145
05:00		0	0	37	120	37	120		0	0	24	140	24	140
05:15		0	0	35	144	35	144		0	0	27	149	27	149
05:30		0	0	29	127	29	127		0	0	47	143	47	143
05:45		0	0	53	118	53	118		0	0	44	119	44	119
06:00		0	0	61	111	61	111		0	0	78	140	78	140
06:15		0	0	98	105	98	105		0	0	87	131	87	131
06:30		0	0	113	84	113	84		0	0	96	84	96	84
06:45		0	0	120	92	120	92		0	0	114	75	114	75
07:00		0	0	108	85	108	85		0	0	127	68	127	68
07:15		0	0	136	71	136	71		0	0	126	70	126	70
07:30		0	0	142	68	142	68		0	0	145	77	145	77
07:45		0	0	169	81	169	81		0	0	180	66	180	66
08:00		0	0	190	65	190	65		0	0	180	62	180	62
08:15		0	0	194	53	194	53		0	0	153	70	153	70
08:30		0	0	184	74	184	74		0	0	165	57	165	57
08:45		0	0	198	65	198	65		0	0	192	66	192	66
09:00		0	0	201	61	201	61		0	0	183	66	183	66
09:15		0	0	133	56	133	56		0	0	140	48	140	48
09:30		0	0	130	44	130	44		0	0	108	68	108	68
09:45		0	0	110	51	110	51		0	0	99	49	99	49
10:00		0	0	120	26	120	26		0	0	117	50	117	50
10:15		0	0	119	35	119	35		0	0	111	40	111	40
10:30		0	0	115	18	115	18		0	0	131	27	131	27
10:45		0	0	112	29	112	29		0	0	116	26	116	26
11:00		0	0	130	23	130	23		0	0	105	24	105	24
11:15		0	0	134	21	134	21		0	0	108	12	108	12
11:30		0	0	134	22	134	22		0	0	130	14	130	14
11:45		0	0	151	12	151	12		0	0	171	10	171	10
Total		0	0	3591	4682	3591	4682		0	0	3431	4808	3431	4808
Day Total		0		8273		8273			0		8239		8239	
% Total		0.0%	0.0%	43.4%	56.6%				0.0%	0.0%	41.6%	58.4%		
Peak				08:15	03:15	08:15	03:15				08:15	04:00	08:15	04:00
Vol.				777	609	777	609				693	631	693	631
P.H.F.				0.966	0.917	0.966	0.917				0.902	0.912	0.902	0.912

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 15
Station ID: 12141
CR 524 b/w SR 34 & SR 35

Latitude: 0' 0.000 Undefined

Start Time	22-Aug-Fri	---		WB		Combined		23-Aug-Sat	---		WB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	0	6	129	6	129		0	0	15	111	15	111
12:15		0	0	12	131	12	131		0	0	10	112	10	112
12:30		0	0	9	121	9	121		0	0	13	114	13	114
12:45		0	0	9	136	9	136		0	0	15	94	15	94
01:00		0	0	6	135	6	135		0	0	14	107	14	107
01:15		0	0	5	120	5	120		0	0	9	93	9	93
01:30		0	0	6	143	6	143		0	0	10	124	10	124
01:45		0	0	4	136	4	136		0	0	5	113	5	113
02:00		0	0	4	141	4	141		0	0	15	105	15	105
02:15		0	0	6	119	6	119		0	0	10	106	10	106
02:30		0	0	5	151	5	151		0	0	8	115	8	115
02:45		0	0	7	154	7	154		0	0	7	148	7	148
03:00		0	0	7	173	7	173		0	0	16	130	16	130
03:15		0	0	4	156	4	156		0	0	7	120	7	120
03:30		0	0	3	143	3	143		0	0	3	133	3	133
03:45		0	0	3	141	3	141		0	0	6	125	6	125
04:00		0	0	4	137	4	137		0	0	6	120	6	120
04:15		0	0	8	153	8	153		0	0	4	142	4	142
04:30		0	0	14	143	14	143		0	0	10	145	10	145
04:45		0	0	15	159	15	159		0	0	11	118	11	118
05:00		0	0	27	140	27	140		0	0	11	145	11	145
05:15		0	0	42	123	42	123		0	0	5	106	5	106
05:30		0	0	36	112	36	112		0	0	8	91	8	91
05:45		0	0	55	119	55	119		0	0	19	96	19	96
06:00		0	0	58	119	58	119		0	0	17	110	17	110
06:15		0	0	80	103	80	103		0	0	31	102	31	102
06:30		0	0	92	107	92	107		0	0	23	85	23	85
06:45		0	0	124	84	124	84		0	0	47	78	47	78
07:00		0	0	104	92	104	92		0	0	43	66	43	66
07:15		0	0	119	63	119	63		0	0	73	74	73	74
07:30		0	0	128	59	128	59		0	0	62	69	62	69
07:45		0	0	174	60	174	60		0	0	88	68	88	68
08:00		0	0	173	62	173	62		0	0	75	72	75	72
08:15		0	0	182	67	182	67		0	0	76	60	76	60
08:30		0	0	183	59	183	59		0	0	92	75	92	75
08:45		0	0	194	70	194	70		0	0	129	67	129	67
09:00		0	0	196	46	196	46		0	0	115	48	115	48
09:15		0	0	127	57	127	57		0	0	92	49	92	49
09:30		0	0	119	44	119	44		0	0	98	55	98	55
09:45		0	0	126	50	126	50		0	0	114	47	114	47
10:00		0	0	126	41	126	41		0	0	126	47	126	47
10:15		0	0	126	38	126	38		0	0	80	44	80	44
10:30		0	0	130	26	130	26		0	0	99	50	99	50
10:45		0	0	135	27	135	27		0	0	124	56	124	56
11:00		0	0	128	28	128	28		0	0	124	30	124	30
11:15		0	0	142	34	142	34		0	0	108	30	108	30
11:30		0	0	137	28	137	28		0	0	95	41	95	41
11:45		0	0	119	19	119	19		0	0	107	27	107	27
Total		0	0	3519	4698	3519	4698		0	0	2275	4263	2275	4263
Day Total		0		8217		8217			0		6538		6538	
% Total		0.0%	0.0%	42.8%	57.2%				0.0%	0.0%	34.8%	65.2%		
Peak				08:15	02:30	08:15	02:30				10:30	04:15	10:30	04:15
Vol.				755	634	755	634				455	550	455	550
P.H.F.				0.963	0.916	0.963	0.916				0.903	0.948	0.903	0.948

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-01-AM
 Site Code : 1
 Start Date : 8/19/2008
 Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

Start Time	Union Avenue / CR 39 Southbound					Route 36 Westbound					Union Avenue / CR 39 Northbound					Route 36 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
08:00 AM	34	31	25	0	90	0	316	3	0	319	12	15	12	0	39	0	183	15	0	198	646
08:15 AM	30	34	30	0	94	0	308	5	0	313	10	17	13	0	40	0	185	12	0	197	644
08:30 AM	28	35	26	0	89	0	305	1	0	306	12	17	11	0	40	0	180	13	0	193	628
08:45 AM	23	31	15	0	69	0	259	0	0	259	12	19	11	0	42	0	151	16	0	167	537
Total	115	131	96	0	342	0	1188	9	0	1197	46	68	47	0	161	0	699	56	0	755	2455
09:00 AM	18	39	17	0	74	0	229	4	0	233	19	32	7	0	58	0	186	18	0	204	569
09:15 AM	21	34	18	0	73	0	232	2	0	234	20	24	14	0	58	0	179	19	0	198	563
09:30 AM	23	48	17	0	88	0	142	1	0	143	30	41	12	0	83	0	150	17	0	167	481
09:45 AM	23	54	8	0	85	0	266	1	0	267	16	40	13	0	69	0	211	14	0	225	646
Total	85	175	60	0	320	0	869	8	0	877	85	137	46	0	268	0	726	68	0	794	2259
10:00 AM	18	26	11	0	55	0	168	4	0	172	24	32	11	0	67	0	232	14	0	246	540
10:15 AM	20	33	12	0	65	0	203	2	0	205	18	27	10	0	55	0	255	12	0	267	592
10:30 AM	32	40	16	0	88	0	185	4	0	189	41	42	6	0	89	0	248	11	0	259	625
10:45 AM	23	47	10	0	80	0	222	2	0	224	18	34	20	0	72	0	263	10	0	273	649
Total	93	146	49	0	288	0	778	12	0	790	101	135	47	0	283	0	998	47	0	1045	2406
11:00 AM	24	42	11	0	77	0	155	2	0	157	28	41	20	0	89	0	263	15	0	278	601
11:15 AM	24	37	13	0	74	0	177	2	0	179	17	49	16	0	82	0	254	12	0	266	601
11:30 AM	21	31	17	0	69	0	146	2	0	148	22	36	19	0	77	0	238	16	0	254	548
11:45 AM	38	34	13	0	85	0	149	1	0	150	21	45	10	0	76	0	222	22	0	244	555
Total	107	144	54	0	305	0	627	7	0	634	88	171	65	0	324	0	977	65	0	1042	2305
Grand Total	400	596	259	0	1255	0	3462	36	0	3498	320	511	205	0	1036	0	3400	236	0	3636	9425
Apprch %	31.9	47.5	20.6	0		0	99	1	0		30.9	49.3	19.8	0		0	93.5	6.5	0		
Total %	4.2	6.3	2.7	0	13.3	0	36.7	0.4	0	37.1	3.4	5.4	2.2	0	11	0	36.1	2.5	0	38.6	
Cars	389	588	250	0	1227	0	3336	27	0	3363	312	489	195	0	996	0	3242	232	0	3474	9060
% Cars	97.2	98.7	96.5	0	97.8	0	96.4	75	0	96.1	97.5	95.7	95.1	0	96.1	0	95.4	98.3	0	95.5	96.1
Light Trucks	6	7	6	0	19	0	54	6	0	60	6	17	5	0	28	0	90	4	0	94	201
% Light Trucks	1.5	1.2	2.3	0	1.5	0	1.6	16.7	0	1.7	1.9	3.3	2.4	0	2.7	0	2.6	1.7	0	2.6	2.1

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-01-AM
 Site Code : 1
 Start Date : 8/19/2008
 Page No : 2

Groups Printed- Cars - Light Trucks - Heavy Trucks

	Union Avenue / CR 39 Southbound					Route 36 Westbound					Union Avenue / CR 39 Northbound					Route 36 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Heavy Trucks	5	1	3	0	9	0	72	3	0	75	2	5	5	0	12	0	68	0	0	68	164
% Heavy Trucks	1.2	0.2	1.2	0	0.7	0	2.1	8.3	0	2.1	0.6	1	2.4	0	1.2	0	2	0	0	1.9	1.7

Start Time	Union Avenue / CR 39 Southbound					Route 36 Westbound					Union Avenue / CR 39 Northbound					Route 36 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 08:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 10:30 AM																					
10:30 AM	32	40	16	0	88	0	185	4	0	189	41	42	6	0	89	0	248	11	0	259	625
10:45 AM	23	47	10	0	80	0	222	2	0	224	18	34	20	0	72	0	263	10	0	273	649
11:00 AM	24	42	11	0	77	0	155	2	0	157	28	41	20	0	89	0	263	15	0	278	601
11:15 AM	24	37	13	0	74	0	177	2	0	179	17	49	16	0	82	0	254	12	0	266	601
Total Volume	103	166	50	0	319	0	739	10	0	749	104	166	62	0	332	0	1028	48	0	1076	2476
% App. Total	32.3	52	15.7	0		0	98.7	1.3	0		31.3	50	18.7	0		0	95.5	4.5	0		
PHF	.805	.883	.781	.000	.906	.000	.832	.625	.000	.836	.634	.847	.775	.000	.933	.000	.977	.800	.000	.968	.954

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-01-PM
 Site Code : 1
 Start Date : 8/14/2008
 Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

Start Time	Union Avenue / SR 39 Southbound					Route 36 Westbound					Union Avenue / SR 39 Northbound					Route 36 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
02:00 PM	30	55	12	0	97	0	233	5	0	238	23	60	20	0	103	0	245	13	0	258	696
02:15 PM	26	52	13	0	91	0	234	5	0	239	22	57	18	0	97	0	242	14	0	256	683
02:30 PM	25	50	12	0	87	0	219	3	0	222	19	52	20	0	91	0	240	13	0	253	653
02:45 PM	23	43	17	0	83	0	237	3	0	240	23	46	15	0	84	0	238	11	0	249	656
Total	104	200	54	0	358	0	923	16	0	939	87	215	73	0	375	0	965	51	0	1016	2688
03:00 PM	24	29	12	0	65	0	242	4	0	246	23	34	17	0	74	0	174	15	0	189	574
03:15 PM	21	44	12	0	77	0	298	6	0	304	17	40	14	0	71	0	280	34	0	314	766
03:30 PM	28	36	13	0	77	0	331	9	0	340	27	55	27	0	109	0	233	26	0	259	785
03:45 PM	34	47	21	0	102	0	290	4	0	294	17	37	13	0	67	0	275	10	0	285	748
Total	107	156	58	0	321	0	1161	23	0	1184	84	166	71	0	321	0	962	85	0	1047	2873
04:00 PM	23	32	14	0	69	0	215	7	0	222	13	41	20	0	74	0	215	17	0	232	597
04:15 PM	13	27	9	0	49	0	208	12	0	220	13	29	13	0	55	0	226	12	0	238	562
04:30 PM	39	46	14	0	99	0	279	10	0	289	26	44	17	0	87	0	332	17	0	349	824
04:45 PM	40	68	20	0	128	0	287	5	0	292	22	37	23	0	82	0	352	19	0	371	873
Total	115	173	57	0	345	0	989	34	0	1023	74	151	73	0	298	0	1125	65	0	1190	2856
05:00 PM	38	44	12	0	94	0	286	5	0	291	38	62	21	0	121	0	325	18	0	343	849
05:15 PM	39	50	8	0	97	0	254	11	0	265	19	59	16	0	94	0	374	23	0	397	853
05:30 PM	24	37	10	0	71	0	268	8	0	276	36	52	18	0	106	0	345	22	0	367	820
05:45 PM	42	56	26	0	124	0	234	2	0	236	30	53	11	0	94	0	357	26	0	383	837
Total	143	187	56	0	386	0	1042	26	0	1068	123	226	66	0	415	0	1401	89	0	1490	3359
Grand Total	469	716	225	0	1410	0	4115	99	0	4214	368	758	283	0	1409	0	4453	290	0	4743	11776
Apprch %	33.3	50.8	16	0		0	97.7	2.3	0		26.1	53.8	20.1	0		0	93.9	6.1	0		
Total %	4	6.1	1.9	0	12	0	34.9	0.8	0	35.8	3.1	6.4	2.4	0	12	0	37.8	2.5	0	40.3	
Cars	451	701	215	0	1367	0	3901	93	0	3994	359	748	276	0	1383	0	4347	287	0	4634	11378
% Cars	96.2	97.9	95.6	0	97	0	94.8	93.9	0	94.8	97.6	98.7	97.5	0	98.2	0	97.6	99	0	97.7	96.6
Light Trucks	17	13	8	0	38	0	144	6	0	150	8	9	7	0	24	0	64	3	0	67	279
% Light Trucks	3.6	1.8	3.6	0	2.7	0	3.5	6.1	0	3.6	2.2	1.2	2.5	0	1.7	0	1.4	1	0	1.4	2.4

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-01-PM
 Site Code : 1
 Start Date : 8/14/2008
 Page No : 2

Groups Printed- Cars - Light Trucks - Heavy Trucks

	Union Avenue / SR 39 Southbound					Route 36 Westbound					Union Avenue / SR 39 Northbound					Route 36 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Heavy Trucks	1	2	2	0	5	0	70	0	0	70	1	1	0	0	2	0	42	0	0	42	119
% Heavy Trucks	0.2	0.3	0.9	0	0.4	0	1.7	0	0	1.7	0.3	0.1	0	0	0.1	0	0.9	0	0	0.9	1

Start Time	Union Avenue / SR 39 Southbound					Route 36 Westbound					Union Avenue / SR 39 Northbound					Route 36 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	39	46	14	0	99	0	279	10	0	289	26	44	17	0	87	0	332	17	0	349	824
04:45 PM	40	68	20	0	128	0	287	5	0	292	22	37	23	0	82	0	352	19	0	371	873
05:00 PM	38	44	12	0	94	0	286	5	0	291	38	62	21	0	121	0	325	18	0	343	849
05:15 PM	39	50	8	0	97	0	254	11	0	265	19	59	16	0	94	0	374	23	0	397	853
Total Volume	156	208	54	0	418	0	1106	31	0	1137	105	202	77	0	384	0	1383	77	0	1460	3399
% App. Total	37.3	49.8	12.9	0		0	97.3	2.7	0		27.3	52.6	20.1	0		0	94.7	5.3	0		
PHF	.975	.765	.675	.000	.816	.000	.963	.705	.000	.973	.691	.815	.837	.000	.793	.000	.924	.837	.000	.919	.973

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-02-AM
 Site Code : 2
 Start Date : 8/19/2008
 Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

Start Time	Main Street / CR 7 Southbound					Route 36 Westbound					Main Street / CR 7 Northbound					Route 36 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
08:00 AM	33	49	32	0	114	0	225	1	0	226	20	44	4	0	68	0	130	0	0	130	538
08:15 AM	29	48	29	0	106	0	223	0	0	223	18	47	5	0	70	0	126	1	0	127	526
08:30 AM	29	43	27	0	99	0	231	2	0	233	19	48	4	0	71	0	139	0	0	139	542
08:45 AM	25	49	20	0	94	0	221	1	0	222	22	31	2	0	55	0	143	1	0	144	515
Total	116	189	108	0	413	0	900	4	0	904	79	170	15	0	264	0	538	2	0	540	2121
09:00 AM	21	67	27	0	115	0	219	1	0	220	17	41	3	0	61	0	139	0	0	139	535
09:15 AM	15	41	28	0	84	0	200	1	0	201	19	27	1	0	47	0	159	0	0	159	491
09:30 AM	18	42	23	0	83	0	123	2	0	125	12	39	2	0	53	0	125	0	0	125	386
09:45 AM	22	38	28	0	88	0	181	1	0	182	14	50	2	0	66	0	170	0	0	170	506
Total	76	188	106	0	370	0	723	5	0	728	62	157	8	0	227	0	593	0	0	593	1918
10:00 AM	24	51	15	0	90	0	138	0	0	138	10	49	5	0	64	0	167	0	0	167	459
10:15 AM	25	57	21	0	103	0	183	0	0	183	12	47	2	0	61	0	171	2	0	173	520
10:30 AM	25	40	30	0	95	0	148	0	0	148	12	29	2	0	43	0	197	0	0	197	483
10:45 AM	12	39	20	0	71	0	165	1	0	166	27	45	2	0	74	0	219	0	0	219	530
Total	86	187	86	0	359	0	634	1	0	635	61	170	11	0	242	0	754	2	0	756	1992
11:00 AM	26	48	22	0	96	0	112	2	0	114	21	68	4	0	93	0	195	0	0	195	498
11:15 AM	23	38	16	0	77	0	126	2	0	128	23	38	5	0	66	0	196	1	0	197	468
11:30 AM	36	47	17	0	100	0	108	1	0	109	16	54	7	0	77	0	175	0	0	175	461
11:45 AM	18	36	19	0	73	0	133	4	0	137	24	51	4	0	79	0	252	1	0	253	542
Total	103	169	74	0	346	0	479	9	0	488	84	211	20	0	315	0	818	2	0	820	1969
Grand Total	381	733	374	0	1488	0	2736	19	0	2755	286	708	54	0	1048	0	2703	6	0	2709	8000
Apprch %	25.6	49.3	25.1	0		0	99.3	0.7	0		27.3	67.6	5.2	0		0	99.8	0.2	0		
Total %	4.8	9.2	4.7	0	18.6	0	34.2	0.2	0	34.4	3.6	8.9	0.7	0	13.1	0	33.8	0.1	0	33.9	
Cars	362	708	353	0	1423	0	2644	15	0	2659	271	667	46	0	984	0	2549	6	0	2555	7621
% Cars	95	96.6	94.4	0	95.6	0	96.6	78.9	0	96.5	94.8	94.2	85.2	0	93.9	0	94.3	100	0	94.3	95.3
Light Trucks	10	16	18	0	44	0	63	4	0	67	10	36	8	0	54	0	103	0	0	103	268
% Light Trucks	2.6	2.2	4.8	0	3	0	2.3	21.1	0	2.4	3.5	5.1	14.8	0	5.2	0	3.8	0	0	3.8	3.3

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-02-AM
 Site Code : 2
 Start Date : 8/19/2008
 Page No : 2

Groups Printed- Cars - Light Trucks - Heavy Trucks

	Main Street / CR 7 Southbound					Route 36 Westbound					Main Street / CR 7 Northbound					Route 36 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Heavy Trucks	9	9	3	0	21	0	29	0	0	29	5	5	0	0	10	0	51	0	0	51	111
% Heavy Trucks	2.4	1.2	0.8	0	1.4	0	1.1	0	0	1.1	1.7	0.7	0	0	1	0	1.9	0	0	1.9	1.4

Start Time	Main Street / CR 7 Southbound					Route 36 Westbound					Main Street / CR 7 Northbound					Route 36 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 08:00 AM to 11:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	33	49	32	0	114	0	225	1	0	226	20	44	4	0	68	0	130	0	0	130	538
08:15 AM	29	48	29	0	106	0	223	0	0	223	18	47	5	0	70	0	126	1	0	127	526
08:30 AM	29	43	27	0	99	0	231	2	0	233	19	48	4	0	71	0	139	0	0	139	542
08:45 AM	25	49	20	0	94	0	221	1	0	222	22	31	2	0	55	0	143	1	0	144	515
Total Volume	116	189	108	0	413	0	900	4	0	904	79	170	15	0	264	0	538	2	0	540	2121
% App. Total	28.1	45.8	26.2	0		0	99.6	0.4	0		29.9	64.4	5.7	0		0	99.6	0.4	0		
PHF	.879	.964	.844	.000	.906	.000	.974	.500	.000	.970	.898	.885	.750	.000	.930	.000	.941	.500	.000	.938	.978

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-02-PM
 Site Code : 2
 Start Date : 8/19/2008
 Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

Start Time	Main Street / Palmer Avenue Southbound					CR 36 Westbound					Main Street / Palmer Avenue Northbound					CR 36 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
02:00 PM	31	47	23	0	101	0	187	5	0	192	19	71	7	0	97	0	184	0	0	184	574
02:15 PM	25	57	34	0	116	0	200	1	0	201	31	71	7	0	109	0	180	0	0	180	606
02:30 PM	27	50	24	0	101	0	169	2	0	171	36	82	3	0	121	0	218	0	0	218	611
02:45 PM	25	54	28	0	107	0	230	1	0	231	29	64	2	0	95	0	174	2	0	176	609
Total	108	208	109	0	425	0	786	9	0	795	115	288	19	0	422	0	756	2	0	758	2400
03:00 PM	29	58	26	0	113	0	185	1	0	186	31	88	7	0	126	0	234	0	0	234	659
03:15 PM	30	42	45	0	117	0	193	4	0	197	28	86	3	0	117	0	203	2	0	205	636
03:30 PM	32	54	32	0	118	0	206	2	0	208	44	91	3	0	138	0	245	0	0	245	709
03:45 PM	24	46	28	0	98	0	282	2	0	284	37	101	4	0	142	0	202	0	0	202	726
Total	115	200	131	0	446	0	866	9	0	875	140	366	17	0	523	0	884	2	0	886	2730
04:00 PM	20	43	23	0	86	0	232	6	0	238	36	130	7	0	173	0	251	1	0	252	749
04:15 PM	20	61	30	0	111	0	243	6	0	249	33	111	7	0	151	0	311	2	0	313	824
04:30 PM	26	78	26	0	130	0	237	1	0	238	33	115	7	0	155	0	271	1	0	272	795
04:45 PM	23	59	22	0	104	0	193	1	0	194	23	99	5	0	127	0	229	0	0	229	654
Total	89	241	101	0	431	0	905	14	0	919	125	455	26	0	606	0	1062	4	0	1066	3022
05:00 PM	18	53	28	0	99	0	208	7	0	215	41	131	4	0	176	0	282	0	0	282	772
05:15 PM	28	50	24	0	102	0	231	0	0	231	38	94	4	0	136	0	271	1	0	272	741
05:30 PM	20	38	24	0	82	0	199	2	0	201	34	137	3	0	174	0	275	2	0	277	734
05:45 PM	22	61	34	0	117	0	194	1	0	195	14	104	4	0	122	0	275	1	0	276	710
Total	88	202	110	0	400	0	832	10	0	842	127	466	15	0	608	0	1103	4	0	1107	2957
Grand Total	400	851	451	0	1702	0	3389	42	0	3431	507	1575	77	0	2159	0	3805	12	0	3817	11109
Apprch %	23.5	50	26.5	0		0	98.8	1.2	0		23.5	73	3.6	0		0	99.7	0.3	0		
Total %	3.6	7.7	4.1	0	15.3	0	30.5	0.4	0	30.9	4.6	14.2	0.7	0	19.4	0	34.3	0.1	0	34.4	
Cars	389	834	436	0	1659	0	3284	41	0	3325	492	1552	75	0	2119	0	3727	10	0	3737	10840
% Cars	97.2	98	96.7	0	97.5	0	96.9	97.6	0	96.9	97	98.5	97.4	0	98.1	0	98	83.3	0	97.9	97.6
Light Trucks	7	17	12	0	36	0	63	1	0	64	11	18	2	0	31	0	54	2	0	56	187
% Light Trucks	1.8	2	2.7	0	2.1	0	1.9	2.4	0	1.9	2.2	1.1	2.6	0	1.4	0	1.4	16.7	0	1.5	1.7

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-02-PM
 Site Code : 2
 Start Date : 8/19/2008
 Page No : 2

Groups Printed- Cars - Light Trucks - Heavy Trucks

	Main Street / Palmer Avenue Southbound					CR 36 Westbound					Main Street / Palmer Avenue Northbound					CR 36 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Heavy Trucks	4	0	3	0	7	0	42	0	0	42	4	5	0	0	9	0	24	0	0	24	82
% Heavy Trucks	1	0	0.7	0	0.4	0	1.2	0	0	1.2	0.8	0.3	0	0	0.4	0	0.6	0	0	0.6	0.7

Start Time	Main Street / Palmer Avenue Southbound					CR 36 Westbound					Main Street / Palmer Avenue Northbound					CR 36 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:45 PM																					
03:45 PM	24	46	28	0	98	0	282	2	0	284	37	101	4	0	142	0	202	0	0	202	726
04:00 PM	20	43	23	0	86	0	232	6	0	238	36	130	7	0	173	0	251	1	0	252	749
04:15 PM	20	61	30	0	111	0	243	6	0	249	33	111	7	0	151	0	311	2	0	313	824
04:30 PM	26	78	26	0	130	0	237	1	0	238	33	115	7	0	155	0	271	1	0	272	795
Total Volume	90	228	107	0	425	0	994	15	0	1009	139	457	25	0	621	0	1035	4	0	1039	3094
% App. Total	21.2	53.6	25.2	0		0	98.5	1.5	0		22.4	73.6	4	0		0	99.6	0.4	0		
PHF	.865	.731	.892	.000	.817	.000	.881	.625	.000	.888	.939	.879	.893	.000	.897	.000	.832	.500	.000	.830	.939

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-03-AM
 Site Code : 3
 Start Date : 8/20/2008
 Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

Start Time	CR 71 / Main Street Southbound					CR 16 / Asbury Avenue Westbound					CR 71 / Main Street Northbound					CR 16 / Asbury Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
08:00 AM	1	93	8	0	102	3	11	2	0	16	13	71	5	0	89	10	12	6	0	28	235
08:15 AM	1	95	10	0	106	2	12	3	0	17	14	73	6	0	93	10	11	7	0	28	244
08:30 AM	0	76	10	0	86	4	12	1	0	17	21	79	4	0	104	10	10	20	0	40	247
08:45 AM	0	105	17	0	122	8	13	0	0	21	13	100	3	0	116	11	15	12	0	38	297
Total	2	369	45	0	416	17	48	6	0	71	61	323	18	0	402	41	48	45	0	134	1023
09:00 AM	0	109	13	0	122	5	6	1	0	12	27	77	7	0	111	11	18	18	0	47	292
09:15 AM	3	95	13	0	111	3	11	2	0	16	25	74	0	0	99	15	10	14	0	39	265
09:30 AM	2	92	20	0	114	2	9	3	0	14	22	84	2	0	108	11	11	16	0	38	274
09:45 AM	3	96	12	0	111	3	12	2	0	17	14	95	5	0	114	10	17	18	0	45	287
Total	8	392	58	0	458	13	38	8	0	59	88	330	14	0	432	47	56	66	0	169	1118
10:00 AM	2	119	9	0	130	5	11	1	0	17	19	85	4	0	108	14	12	21	0	47	302
10:15 AM	2	116	8	0	126	4	10	0	0	14	13	74	5	0	92	16	14	22	0	52	284
10:30 AM	2	121	14	0	137	1	8	2	0	11	13	89	2	0	104	5	12	15	0	32	284
10:45 AM	3	112	15	0	130	5	13	5	0	23	18	89	3	0	110	11	20	22	2	55	318
Total	9	468	46	0	523	15	42	8	0	65	63	337	14	0	414	46	58	80	2	186	1188
11:00 AM	3	137	10	0	150	5	8	2	0	15	19	69	1	0	89	18	21	25	0	64	318
11:15 AM	2	120	14	0	136	5	9	4	0	18	20	84	2	0	106	11	18	19	0	48	308
11:30 AM	2	111	16	0	129	6	13	3	0	22	15	98	0	0	113	17	21	10	0	48	312
11:45 AM	1	114	19	0	134	5	11	1	0	17	18	101	4	0	123	15	34	25	0	74	348
Total	8	482	59	0	549	21	41	10	0	72	72	352	7	0	431	61	94	79	0	234	1286
Grand Total	27	1711	208	0	1946	66	169	32	0	267	284	1342	53	0	1679	195	256	270	2	723	4615
Apprch %	1.4	87.9	10.7	0		24.7	63.3	12	0		16.9	79.9	3.2	0		27	35.4	37.3	0.3		
Total %	0.6	37.1	4.5	0	42.2	1.4	3.7	0.7	0	5.8	6.2	29.1	1.1	0	36.4	4.2	5.5	5.9	0	15.7	
Cars	25	1641	191	0	1857	65	153	31	0	249	255	1276	48	0	1579	181	241	253	2	677	4362
% Cars	92.6	95.9	91.8	0	95.4	98.5	90.5	96.9	0	93.3	89.8	95.1	90.6	0	94	92.8	94.1	93.7	100	93.6	94.5
Light Trucks	1	54	11	0	66	1	15	1	0	17	27	52	5	0	84	11	13	17	0	41	208
% Light Trucks	3.7	3.2	5.3	0	3.4	1.5	8.9	3.1	0	6.4	9.5	3.9	9.4	0	5	5.6	5.1	6.3	0	5.7	4.5

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-03-AM
 Site Code : 3
 Start Date : 8/20/2008
 Page No : 2

Groups Printed- Cars - Light Trucks - Heavy Trucks

	CR 71 / Main Street Southbound					CR 16 / Asbury Avenue Westbound					CR 71 / Main Street Northbound					CR 16 / Asbury Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Heavy Trucks	1	16	6	0	23	0	1	0	0	1	2	14	0	0	16	3	2	0	0	5	45
% Heavy Trucks	3.7	0.9	2.9	0	1.2	0	0.6	0	0	0.4	0.7	1	0	0	1	1.5	0.8	0	0	0.7	1

Start Time	CR 71 / Main Street Southbound					CR 16 / Asbury Avenue Westbound					CR 71 / Main Street Northbound					CR 16 / Asbury Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 08:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:00 AM																					
11:00 AM	3	137	10	0	150	5	8	2	0	15	19	69	1	0	89	18	21	25	0	64	318
11:15 AM	2	120	14	0	136	5	9	4	0	18	20	84	2	0	106	11	18	19	0	48	308
11:30 AM	2	111	16	0	129	6	13	3	0	22	15	98	0	0	113	17	21	10	0	48	312
11:45 AM	1	114	19	0	134	5	11	1	0	17	18	101	4	0	123	15	34	25	0	74	348
Total Volume	8	482	59	0	549	21	41	10	0	72	72	352	7	0	431	61	94	79	0	234	1286
% App. Total	1.5	87.8	10.7	0		29.2	56.9	13.9	0		16.7	81.7	1.6	0		26.1	40.2	33.8	0		
PHF	.667	.880	.776	.000	.915	.875	.788	.625	.000	.818	.900	.871	.438	.000	.876	.847	.691	.790	.000	.791	.924

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-03-PM
 Site Code : 3
 Start Date : 8/20/2008
 Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

Start Time	CR 71 / Main Street Southbound					CR 16 / Asbury Avenue Westbound					CR 71 / Main Street Northbound					CR 16 / Asbury Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
02:00 PM	2	132	12	0	146	5	13	6	0	24	26	95	5	0	126	20	22	16	0	58	354
02:15 PM	3	129	9	0	141	4	14	8	0	26	25	93	6	0	124	18	22	17	0	57	348
02:30 PM	3	121	18	0	142	3	13	5	0	21	26	98	2	0	126	23	25	19	0	67	356
02:45 PM	2	114	19	0	135	1	12	4	0	17	19	82	2	0	103	8	17	19	0	44	299
Total	10	496	58	0	564	13	52	23	0	88	96	368	15	0	479	69	86	71	0	226	1357
03:00 PM	3	131	19	0	153	2	19	6	0	27	11	94	2	0	107	10	28	22	0	60	347
03:15 PM	1	122	17	0	140	7	25	2	0	34	24	94	7	0	125	13	25	23	0	61	360
03:30 PM	2	108	14	0	124	9	11	2	0	22	31	113	6	0	150	14	28	22	0	64	360
03:45 PM	5	115	21	0	141	3	23	1	0	27	22	92	0	0	114	13	20	25	0	58	340
Total	11	476	71	0	558	21	78	11	0	110	88	393	15	0	496	50	101	92	0	243	1407
04:00 PM	1	148	23	0	172	5	13	1	0	19	29	94	1	0	124	16	16	24	0	56	371
04:15 PM	1	139	15	0	155	4	30	0	0	34	24	100	3	0	127	5	22	21	0	48	364
04:30 PM	0	137	23	0	160	3	30	4	0	37	18	112	3	0	133	21	18	24	0	63	393
04:45 PM	2	147	13	0	162	7	27	3	0	37	30	101	2	0	133	13	25	22	0	60	392
Total	4	571	74	0	649	19	100	8	0	127	101	407	9	0	517	55	81	91	0	227	1520
05:00 PM	1	147	14	0	162	8	20	0	0	28	18	101	0	0	119	5	13	22	0	40	349
05:15 PM	6	148	13	0	167	6	20	3	0	29	27	99	6	0	132	14	19	19	0	52	380
05:30 PM	0	189	14	0	203	2	13	1	0	16	23	120	7	0	150	17	31	30	0	78	447
05:45 PM	2	142	23	0	167	3	27	2	0	32	21	84	5	0	110	14	21	23	0	58	367
Total	9	626	64	0	699	19	80	6	0	105	89	404	18	0	511	50	84	94	0	228	1543
Grand Total	34	2169	267	0	2470	72	310	48	0	430	374	1572	57	0	2003	224	352	348	0	924	5827
Apprch %	1.4	87.8	10.8	0		16.7	72.1	11.2	0		18.7	78.5	2.8	0		24.2	38.1	37.7	0		
Total %	0.6	37.2	4.6	0	42.4	1.2	5.3	0.8	0	7.4	6.4	27	1	0	34.4	3.8	6	6	0	15.9	
Cars	32	2097	248	0	2377	72	297	42	0	411	352	1521	54	0	1927	213	340	332	0	885	5600
% Cars	94.1	96.7	92.9	0	96.2	100	95.8	87.5	0	95.6	94.1	96.8	94.7	0	96.2	95.1	96.6	95.4	0	95.8	96.1
Light Trucks	2	68	17	0	87	0	10	5	0	15	19	42	3	0	64	9	8	15	0	32	198
% Light Trucks	5.9	3.1	6.4	0	3.5	0	3.2	10.4	0	3.5	5.1	2.7	5.3	0	3.2	4	2.3	4.3	0	3.5	3.4

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-03-PM
 Site Code : 3
 Start Date : 8/20/2008
 Page No : 2

Groups Printed- Cars - Light Trucks - Heavy Trucks

	CR 71 / Main Street Southbound					CR 16 / Asbury Avenue Westbound					CR 71 / Main Street Northbound					CR 16 / Asbury Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Heavy Trucks	0	4	2	0	6	0	3	1	0	4	3	9	0	0	12	2	4	1	0	7	29
% Heavy Trucks	0	0.2	0.7	0	0.2	0	1	2.1	0	0.9	0.8	0.6	0	0	0.6	0.9	1.1	0.3	0	0.8	0.5

Start Time	CR 71 / Main Street Southbound					CR 16 / Asbury Avenue Westbound					CR 71 / Main Street Northbound					CR 16 / Asbury Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	2	147	13	0	162	7	27	3	0	37	30	101	2	0	133	13	25	22	0	60	392
05:00 PM	1	147	14	0	162	8	20	0	0	28	18	101	0	0	119	5	13	22	0	40	349
05:15 PM	6	148	13	0	167	6	20	3	0	29	27	99	6	0	132	14	19	19	0	52	380
05:30 PM	0	189	14	0	203	2	13	1	0	16	23	120	7	0	150	17	31	30	0	78	447
Total Volume	9	631	54	0	694	23	80	7	0	110	98	421	15	0	534	49	88	93	0	230	1568
% App. Total	1.3	90.9	7.8	0		20.9	72.7	6.4	0		18.4	78.8	2.8	0		21.3	38.3	40.4	0		
PHF	.375	.835	.964	.000	.855	.719	.741	.583	.000	.743	.817	.877	.536	.000	.890	.721	.710	.775	.000	.737	.877

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-04-AM
 Site Code : 4
 Start Date : 8/21/2008
 Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

Start Time	CR 71 / Main Street Southbound					SR 33 / Corlies Avenue Westbound					CR 71 / Main Street Northbound					SR 33 / Corlies Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
08:00 AM	2	52	52	0	106	4	7	2	0	13	15	61	9	0	85	45	22	21	0	88	292
08:15 AM	4	46	50	0	100	5	9	4	0	18	19	71	11	0	101	41	21	17	0	79	298
08:30 AM	3	48	44	0	95	5	6	6	0	17	18	75	10	0	103	38	16	15	0	69	284
08:45 AM	3	56	57	1	117	2	7	4	0	13	18	88	9	0	115	45	29	18	0	92	337
Total	12	202	203	1	418	16	29	16	0	61	70	295	39	0	404	169	88	71	0	328	1211
09:00 AM	7	68	56	0	131	3	9	3	0	15	21	96	8	0	125	67	34	22	0	123	394
09:15 AM	2	50	51	0	103	5	7	5	0	17	26	98	8	0	132	48	31	31	0	110	362
09:30 AM	4	57	45	0	106	3	8	4	0	15	27	92	9	0	128	51	29	22	0	102	351
09:45 AM	3	66	63	0	132	2	10	2	0	14	39	85	8	0	132	42	28	33	0	103	381
Total	16	241	215	0	472	13	34	14	0	61	113	371	33	0	517	208	122	108	0	438	1488
10:00 AM	4	60	43	1	108	4	7	5	0	16	44	74	9	0	127	45	37	14	0	96	347
10:15 AM	6	74	55	0	135	3	8	9	0	20	32	57	6	0	95	48	61	35	0	144	394
10:30 AM	4	81	61	0	146	4	13	5	0	22	25	76	10	0	111	58	38	29	0	125	404
10:45 AM	3	79	40	0	122	2	9	12	0	23	39	63	4	0	106	62	47	45	0	154	405
Total	17	294	199	1	511	13	37	31	0	81	140	270	29	0	439	213	183	123	0	519	1550
11:00 AM	5	86	67	0	158	0	11	9	0	20	34	67	5	0	106	60	61	36	0	157	441
11:15 AM	4	78	54	0	136	0	10	5	0	15	28	58	5	0	91	72	56	52	0	180	422
11:30 AM	9	88	55	0	152	1	20	10	0	31	31	68	3	0	102	59	60	40	0	159	444
11:45 AM	7	80	32	0	119	2	6	7	0	15	24	71	1	0	96	58	59	41	0	158	388
Total	25	332	208	0	565	3	47	31	0	81	117	264	14	0	395	249	236	169	0	654	1695
Grand Total	70	1069	825	2	1966	45	147	92	0	284	440	1200	115	0	1755	839	629	471	0	1939	5944
Apprch %	3.6	54.4	42	0.1		15.8	51.8	32.4	0		25.1	68.4	6.6	0		43.3	32.4	24.3	0		
Total %	1.2	18	13.9	0	33.1	0.8	2.5	1.5	0	4.8	7.4	20.2	1.9	0	29.5	14.1	10.6	7.9	0	32.6	
Cars	67	1012	788	0	1867	41	138	88	0	267	414	1145	115	0	1674	804	610	449	0	1863	5671
% Cars	95.7	94.7	95.5	0	95	91.1	93.9	95.7	0	94	94.1	95.4	100	0	95.4	95.8	97	95.3	0	96.1	95.4
Light Trucks	3	45	29	2	79	4	7	4	0	15	21	40	0	0	61	33	14	19	0	66	221
% Light Trucks	4.3	4.2	3.5	100	4	8.9	4.8	4.3	0	5.3	4.8	3.3	0	0	3.5	3.9	2.2	4	0	3.4	3.7

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-04-AM
 Site Code : 4
 Start Date : 8/21/2008
 Page No : 2

Groups Printed- Cars - Light Trucks - Heavy Trucks

	CR 71 / Main Street Southbound					SR 33 / Corlies Avenue Westbound					CR 71 / Main Street Northbound					SR 33 / Corlies Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Heavy Trucks	0	12	8	0	20	0	2	0	0	2	5	15	0	0	20	2	5	3	0	10	52
% Heavy Trucks	0	1.1	1	0	1	0	1.4	0	0	0.7	1.1	1.2	0	0	1.1	0.2	0.8	0.6	0	0.5	0.9

Start Time	CR 71 / Main Street Southbound					SR 33 / Corlies Avenue Westbound					CR 71 / Main Street Northbound					SR 33 / Corlies Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 08:00 AM to 11:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 10:45 AM																					
10:45 AM	3	79	40	0	122	2	9	12	0	23	39	63	4	0	106	62	47	45	0	154	405
11:00 AM	5	86	67	0	158	0	11	9	0	20	34	67	5	0	106	60	61	36	0	157	441
11:15 AM	4	78	54	0	136	0	10	5	0	15	28	58	5	0	91	72	56	52	0	180	422
11:30 AM	9	88	55	0	152	1	20	10	0	31	31	68	3	0	102	59	60	40	0	159	444
Total Volume	21	331	216	0	568	3	50	36	0	89	132	256	17	0	405	253	224	173	0	650	1712
% App. Total	3.7	58.3	38	0		3.4	56.2	40.4	0		32.6	63.2	4.2	0		38.9	34.5	26.6	0		
PHF	.583	.940	.806	.000	.899	.375	.625	.750	.000	.718	.846	.941	.850	.000	.955	.878	.918	.832	.000	.903	.964

TechniQuest Corporation

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File Name : 38-04-PM
 Site Code : 4
 Start Date : 8/21/2008
 Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

Start Time	CR 71 / Main Street Southbound					CR 33 / Corlies Avenue Westbound					CR 71 / Main Street Northbound					CR 33 / Corlies Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
02:00 PM	10	81	71	0	162	5	9	7	0	21	19	88	7	0	114	51	45	29	0	125	422
02:15 PM	13	85	75	0	173	4	7	9	0	20	21	86	5	0	112	50	46	27	0	123	428
02:30 PM	5	75	69	0	149	5	9	14	0	28	17	64	6	0	87	39	50	20	0	109	373
02:45 PM	5	79	85	0	169	8	2	6	0	16	17	84	2	0	103	55	41	32	0	128	416
Total	33	320	300	0	653	22	27	36	0	85	74	322	20	0	416	195	182	108	0	485	1639
03:00 PM	4	78	87	0	169	6	14	6	0	26	28	101	2	0	131	64	48	26	0	138	464
03:15 PM	7	90	83	0	180	20	15	6	0	41	30	59	5	0	94	49	56	31	0	136	451
03:30 PM	8	95	82	0	185	3	15	10	0	28	13	41	2	0	56	68	37	36	0	141	410
03:45 PM	4	75	90	0	169	0	16	4	0	20	25	57	3	0	85	60	42	31	0	133	407
Total	23	338	342	0	703	29	60	26	0	115	96	258	12	0	366	241	183	124	0	548	1732
04:00 PM	12	77	92	0	181	8	12	12	0	32	30	68	4	0	102	74	37	36	0	147	462
04:15 PM	3	83	94	0	180	1	18	12	0	31	57	71	4	0	132	75	43	43	0	161	504
04:30 PM	5	101	104	1	211	1	18	12	0	31	25	72	9	0	106	58	37	31	0	126	474
04:45 PM	9	85	94	0	188	7	18	11	0	36	41	59	2	0	102	56	28	24	0	108	434
Total	29	346	384	1	760	17	66	47	0	130	153	270	19	0	442	263	145	134	0	542	1874
05:00 PM	4	95	108	0	207	4	8	11	0	23	31	67	4	0	102	47	29	37	0	113	445
05:15 PM	7	87	110	0	204	4	17	8	0	29	29	65	7	0	101	66	43	29	0	138	472
05:30 PM	12	117	116	0	245	7	11	6	0	24	41	77	5	0	123	63	44	34	0	141	533
05:45 PM	8	122	117	0	247	1	13	6	0	20	37	89	4	0	130	55	39	36	0	130	527
Total	31	421	451	0	903	16	49	31	0	96	138	298	20	0	456	231	155	136	0	522	1977
Grand Total	116	1425	1477	1	3019	84	202	140	0	426	461	1148	71	0	1680	930	665	502	0	2097	7222
Apprch %	3.8	47.2	48.9	0		19.7	47.4	32.9	0		27.4	68.3	4.2	0		44.3	31.7	23.9	0		
Total %	1.6	19.7	20.5	0	41.8	1.2	2.8	1.9	0	5.9	6.4	15.9	1	0	23.3	12.9	9.2	7	0	29	
Cars	110	1385	1451	1	2947	81	200	133	0	414	443	1103	67	0	1613	910	655	488	0	2053	7027
% Cars	94.8	97.2	98.2	100	97.6	96.4	99	95	0	97.2	96.1	96.1	94.4	0	96	97.8	98.5	97.2	0	97.9	97.3
Light Trucks	5	33	18	0	56	3	2	7	0	12	17	37	4	0	58	12	10	10	0	32	158
% Light Trucks	4.3	2.3	1.2	0	1.9	3.6	1	5	0	2.8	3.7	3.2	5.6	0	3.5	1.3	1.5	2	0	1.5	2.2

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-04-PM
 Site Code : 4
 Start Date : 8/21/2008
 Page No : 2

Groups Printed- Cars - Light Trucks - Heavy Trucks

	CR 71 / Main Street Southbound					CR 33 / Corlies Avenue Westbound					CR 71 / Main Street Northbound					CR 33 / Corlies Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Heavy Trucks	1	7	8	0	16	0	0	0	0	0	1	8	0	0	9	8	0	4	0	12	37
% Heavy Trucks	0.9	0.5	0.5	0	0.5	0	0	0	0	0	0.2	0.7	0	0	0.5	0.9	0	0.8	0	0.6	0.5

Start Time	CR 71 / Main Street Southbound					CR 33 / Corlies Avenue Westbound					CR 71 / Main Street Northbound					CR 33 / Corlies Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	4	95	108	0	207	4	8	11	0	23	31	67	4	0	102	47	29	37	0	113	445
05:15 PM	7	87	110	0	204	4	17	8	0	29	29	65	7	0	101	66	43	29	0	138	472
05:30 PM	12	117	116	0	245	7	11	6	0	24	41	77	5	0	123	63	44	34	0	141	533
05:45 PM	8	122	117	0	247	1	13	6	0	20	37	89	4	0	130	55	39	36	0	130	527
Total Volume	31	421	451	0	903	16	49	31	0	96	138	298	20	0	456	231	155	136	0	522	1977
% App. Total	3.4	46.6	49.9	0		16.7	51	32.3	0		30.3	65.4	4.4	0		44.3	29.7	26.1	0		
PHF	.646	.863	.964	.000	.914	.571	.721	.705	.000	.828	.841	.837	.714	.000	.877	.875	.881	.919	.000	.926	.927

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 1
Station ID: 17877-NB
SR 36 East of Beacon Hill Road

Latitude: 0' 0.000 Undefined

Start Time	01-Dec-08		Tue		Wed		Thu		Fri		Sat		Sun		Average Day	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	20	196	25	134	12	153	41	222	54	153	30	172
12:15	*	*	*	*	18	163	8	129	9	160	47	199	43	161	25	162
12:30	*	*	*	*	16	147	7	142	7	189	36	217	29	194	19	178
12:45	*	*	*	161	10	136	9	129	8	161	48	176	31	189	21	159
01:00	*	*	*	177	11	184	8	123	7	161	26	180	29	159	16	164
01:15	*	*	*	158	12	178	10	151	6	150	29	189	28	159	17	164
01:30	*	*	*	181	9	183	12	195	7	187	24	181	31	152	17	180
01:45	*	*	*	170	10	160	9	157	6	207	27	187	23	142	15	170
02:00	*	*	*	188	7	214	10	196	5	184	16	182	25	155	13	186
02:15	*	*	*	200	9	190	5	206	6	183	21	192	26	149	13	187
02:30	*	*	*	195	5	168	13	199	5	202	18	191	21	152	12	184
02:45	*	*	*	224	9	214	7	229	4	206	16	199	16	141	10	202
03:00	*	*	*	220	5	204	6	227	5	271	12	210	8	135	7	211
03:15	*	*	*	252	6	222	8	255	7	226	9	212	7	128	7	216
03:30	*	*	*	217	6	307	11	225	8	256	13	207	12	139	10	225
03:45	*	*	*	190	8	230	13	194	4	218	10	195	9	136	9	194
04:00	*	*	*	193	16	234	13	196	5	177	13	199	6	153	11	192
04:15	*	*	*	220	25	212	18	229	11	225	18	175	6	152	16	202
04:30	*	*	*	193	26	212	34	198	21	210	10	177	13	167	21	193
04:45	*	*	*	192	39	210	35	199	29	206	12	178	9	121	25	184
05:00	*	*	*	218	51	206	58	221	36	179	24	161	17	102	37	181
05:15	*	*	*	191	72	216	48	199	49	205	25	183	15	115	42	185
05:30	*	*	*	161	93	180	64	165	63	192	16	134	10	126	49	160
05:45	*	*	*	162	79	152	57	168	58	166	31	144	26	120	50	152
06:00	*	*	*	156	103	166	84	162	87	156	22	154	15	94	62	148
06:15	*	*	*	160	127	143	94	169	97	194	39	123	19	99	75	148
06:30	*	*	*	136	149	118	87	145	89	170	37	121	23	94	77	131
06:45	*	*	*	122	156	135	111	133	115	157	56	119	34	89	94	126
07:00	*	*	*	123	136	121	106	130	112	140	50	137	38	99	88	125
07:15	*	*	*	96	189	113	116	101	122	145	69	116	52	81	110	109
07:30	*	*	*	131	213	126	137	140	141	112	91	111	47	82	126	117
07:45	*	*	*	88	243	92	152	96	154	103	92	109	67	88	142	96
08:00	*	*	*	85	205	103	146	93	146	92	115	119	76	92	138	97
08:15	*	*	*	70	206	79	167	78	168	109	107	85	77	80	145	84
08:30	*	*	*	75	212	62	139	87	140	112	110	81	97	64	140	80
08:45	*	*	*	57	210	80	146	64	147	82	117	65	82	63	140	68
09:00	*	*	*	65	167	85	122	72	120	78	140	69	109	60	132	72
09:15	*	*	*	74	160	72	115	84	115	82	172	84	113	56	135	75
09:30	*	*	*	80	153	74	112	88	114	105	181	80	121	47	136	79
09:45	*	*	*	72	156	64	115	79	119	68	193	89	130	30	143	67
10:00	*	*	*	56	143	68	119	68	125	87	139	83	142	51	134	69
10:15	*	*	*	41	144	54	127	54	134	87	157	90	155	49	143	62
10:30	*	*	*	47	145	68	123	58	128	69	169	104	138	30	141	63
10:45	*	*	*	32	156	23	122	41	124	64	186	93	118	34	141	48
11:00	*	*	*	41	152	38	119	53	122	74	188	79	149	23	146	51
11:15	*	*	*	20	179	27	143	30	145	59	210	84	149	27	165	41
11:30	*	*	*	29	158	19	104	26	105	73	204	85	186	21	151	42
11:45	*	*	*	27	170	14	124	21	123	61	212	54	166	14	159	32
Total	0	0	0	5946	4594	6662	3418	6538	3370	7153	3598	6824	2797	4967	3555	6433
Day Total	0		5946	11256	9956	10523	10422	7764	9988							
% Splits	0.0%	0.0%	0.0%	100.0%	40.8%	59.2%	34.3%	65.7%	32.0%	68.0%	34.5%	65.5%	36.0%	64.0%	35.6%	64.4%
Peak Vol.			02:45	913	07:30	867	03:15	993	07:45	604	02:45	936	07:30	609	03:00	971
P.H.F.			0.906	0.892	0.809	0.904	0.918	0.906	0.896	0.960	0.954	0.874	0.906	0.941	0.949	

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 1
Station ID: 17877-NB
SR 36 East of Beacon Hill Road

Latitude: 0' 0.000 Undefined

Start Time	08-Dec-08		Tue		Wed		Thu		Fri		Sat		Sun		Average Day	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	9	163	22	129	22	129	22	*	*	*	*	*	*	19	140	
12:15	11	159	12	129	6	127	20	*	*	*	*	*	*	12	138	
12:30	8	142	14	118	6	137	11	*	*	*	*	*	*	10	132	
12:45	6	146	15	135	12	123	8	*	*	*	*	*	*	10	135	
01:00	5	159	12	130	10	116	7	*	*	*	*	*	*	8	135	
01:15	9	161	6	119	9	149	6	*	*	*	*	*	*	8	143	
01:30	11	173	16	119	11	192	7	*	*	*	*	*	*	11	161	
01:45	8	158	3	125	7	151	8	*	*	*	*	*	*	6	145	
02:00	7	167	11	127	9	191	7	*	*	*	*	*	*	8	162	
02:15	6	205	7	140	4	202	8	*	*	*	*	*	*	6	182	
02:30	9	145	9	131	10	196	9	*	*	*	*	*	*	9	157	
02:45	7	182	7	153	6	225	11	*	*	*	*	*	*	8	187	
03:00	4	162	7	155	5	222	12	*	*	*	*	*	*	7	180	
03:15	7	147	5	139	4	253	8	*	*	*	*	*	*	6	180	
03:30	7	143	5	152	10	218	9	*	*	*	*	*	*	8	171	
03:45	13	136	12	151	11	192	14	*	*	*	*	*	*	12	160	
04:00	17	146	10	135	12	194	21	*	*	*	*	*	*	15	158	
04:15	28	132	26	156	15	221	29	*	*	*	*	*	*	24	170	
04:30	32	145	20	139	32	196	29	*	*	*	*	*	*	28	160	
04:45	36	162	28	160	32	193	43	*	*	*	*	*	*	35	172	
05:00	62	146	45	147	54	219	56	*	*	*	*	*	*	54	171	
05:15	82	120	51	145	45	195	74	*	*	*	*	*	*	63	153	
05:30	81	134	59	206	60	162	100	*	*	*	*	*	*	75	167	
05:45	87	98	61	203	55	164	81	*	*	*	*	*	*	71	155	
06:00	90	108	81	205	83	157	105	*	*	*	*	*	*	90	157	
06:15	120	110	89	205	92	163	135	*	*	*	*	*	*	109	159	
06:30	138	86	91	146	83	138	151	*	*	*	*	*	*	116	123	
06:45	146	76	95	138	108	125	162	*	*	*	*	*	*	128	113	
07:00	160	118	102	142	104	127	138	*	*	*	*	*	*	126	129	
07:15	178	90	132	109	113	99	193	*	*	*	*	*	*	154	99	
07:30	182	82	152	92	133	135	216	*	*	*	*	*	*	171	103	
07:45	216	90	154	90	147	90	247	*	*	*	*	*	*	191	90	
08:00	178	75	141	82	140	86	210	*	*	*	*	*	*	167	81	
08:15	217	65	158	76	163	72	212	*	*	*	*	*	*	188	71	
08:30	185	67	140	60	136	79	219	*	*	*	*	*	*	170	69	
08:45	175	52	123	43	144	60	218	*	*	*	*	*	*	165	52	
09:00	187	51	123	58	116	67	170	*	*	*	*	*	*	149	59	
09:15	181	50	110	42	110	77	162	*	*	*	*	*	*	141	56	
09:30	131	51	95	50	108	84	158	*	*	*	*	*	*	123	62	
09:45	139	39	104	32	112	77	162	*	*	*	*	*	*	129	49	
10:00	142	43	139	37	117	62	150	*	*	*	*	*	*	137	47	
10:15	145	26	134	38	125	45	150	*	*	*	*	*	*	138	36	
10:30	148	30	123	43	120	50	153	*	*	*	*	*	*	136	41	
10:45	176	27	142	26	117	34	160	*	*	*	*	*	*	149	29	
11:00	160	16	108	36	116	47	157	*	*	*	*	*	*	135	33	
11:15	160	22	110	17	140	25	186	*	*	*	*	*	*	149	21	
11:30	145	25	114	25	101	33	162	*	*	*	*	*	*	130	28	
11:45	170	19	128	13	120	30	172	*	*	*	*	*	*	148	21	
Total	4421	5049	3351	5248	3295	6329	4748	0	0	0	0	0	0	3952	5542	
Day Total	9470		8599		9624		4748		0		0		0		9494	
% Splits	46.7%	53.3%	39.0%	61.0%	34.2%	65.8%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	41.6%	58.4%	
Peak	07:45	01:30	07:30	05:30	07:45	02:45	07:45							07:30	02:45	
Vol.	796	703	605	819	586	918	888							717	718	
P.H.F.	0.917	0.857	0.957	0.994	0.899	0.907	0.899							0.938	0.960	

ADT ADT 9,702 AADT 9,702

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-01-AM
 Site Code : 1
 Start Date : 11/20/2008
 Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

Start Time	Route 35 Southbound					West Park Avenue Westbound					Route 35 Northbound					West Park Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
08:00 AM	0	225	3	0	228	0	176	18	0	194	0	334	9	0	343	74	142	14	0	230	995
08:15 AM	0	246	2	0	248	0	170	20	0	190	0	325	8	0	333	84	112	16	0	212	983
08:30 AM	0	211	1	0	212	0	162	27	0	189	0	300	19	0	319	95	135	11	0	241	961
08:45 AM	0	260	1	0	261	0	145	23	0	168	0	280	9	0	289	95	110	17	0	222	940
Total	0	942	7	0	949	0	653	88	0	741	0	1239	45	0	1284	348	499	58	0	905	3879
09:00 AM	0	267	1	0	268	0	153	25	0	178	0	252	8	0	260	89	92	16	0	197	903
09:15 AM	0	236	3	0	239	0	163	24	0	187	0	218	19	0	237	80	100	15	0	195	858
09:30 AM	0	245	3	0	248	0	137	24	0	161	0	234	7	0	241	73	125	22	0	220	870
09:45 AM	0	240	1	0	241	0	139	28	0	167	0	220	16	0	236	88	87	19	0	194	838
Total	0	988	8	0	996	0	592	101	0	693	0	924	50	0	974	330	404	72	0	806	3469
10:00 AM	0	206	1	0	207	0	129	26	0	155	0	224	10	0	234	69	89	23	0	181	777
10:15 AM	0	262	0	0	262	0	126	28	0	154	0	224	12	0	236	74	92	12	0	178	830
10:30 AM	0	294	0	0	294	0	156	22	0	178	0	243	8	0	251	70	97	24	0	191	914
10:45 AM	0	325	0	0	325	0	170	14	0	184	0	273	12	3	288	60	81	20	0	161	958
Total	0	1087	1	0	1088	0	581	90	0	671	0	964	42	3	1009	273	359	79	0	711	3479
11:00 AM	0	319	0	0	319	0	121	18	0	139	0	222	11	0	233	58	75	19	0	152	843
11:15 AM	0	303	0	0	303	0	140	15	0	155	0	246	6	0	252	66	96	21	0	183	893
11:30 AM	0	335	0	0	335	0	121	17	0	138	0	255	11	0	266	67	108	18	0	193	932
11:45 AM	0	318	0	0	318	0	161	28	0	189	0	299	10	0	309	72	107	16	0	195	1011
Total	0	1275	0	0	1275	0	543	78	0	621	0	1022	38	0	1060	263	386	74	0	723	3679
Grand Total	0	4292	16	0	4308	0	2369	357	0	2726	0	4149	175	3	4327	1214	1648	283	0	3145	14506
Apprch %	0	99.6	0.4	0		0	86.9	13.1	0		0	95.9	4	0.1		38.6	52.4	9	0		
Total %	0	29.6	0.1	0	29.7	0	16.3	2.5	0	18.8	0	28.6	1.2	0	29.8	8.4	11.4	2	0	21.7	
Cars	0	4073	16	0	4089	0	2270	345	0	2615	0	4018	156	3	4177	1157	1552	265	0	2974	13855
% Cars	0	94.9	100	0	94.9	0	95.8	96.6	0	95.9	0	96.8	89.1	100	96.5	95.3	94.2	93.6	0	94.6	95.5
Light Trucks	0	162	0	0	162	0	82	8	0	90	0	93	18	0	111	46	78	15	0	139	502
% Light Trucks	0	3.8	0	0	3.8	0	3.5	2.2	0	3.3	0	2.2	10.3	0	2.6	3.8	4.7	5.3	0	4.4	3.5

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-01-AM
 Site Code : 1
 Start Date : 11/20/2008
 Page No : 2

Groups Printed- Cars - Light Trucks - Heavy Trucks

	Route 35 Southbound					West Park Avenue Westbound					Route 35 Northbound					West Park Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Heavy Trucks	0	57	0	0	57	0	17	4	0	21	0	38	1	0	39	11	18	3	0	32	149
% Heavy Trucks	0	1.3	0	0	1.3	0	0.7	1.1	0	0.8	0	0.9	0.6	0	0.9	0.9	1.1	1.1	0	1	1

Start Time	Route 35 Southbound					West Park Avenue Westbound					Route 35 Northbound					West Park Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 08:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	225	3	0	228	0	176	18	0	194	0	334	9	0	343	74	142	14	0	230	995
08:15 AM	0	246	2	0	248	0	170	20	0	190	0	325	8	0	333	84	112	16	0	212	983
08:30 AM	0	211	1	0	212	0	162	27	0	189	0	300	19	0	319	95	135	11	0	241	961
08:45 AM	0	260	1	0	261	0	145	23	0	168	0	280	9	0	289	95	110	17	0	222	940
Total Volume	0	942	7	0	949	0	653	88	0	741	0	1239	45	0	1284	348	499	58	0	905	3879
% App. Total	0	99.3	0.7	0		0	88.1	11.9	0		0	96.5	3.5	0		38.5	55.1	6.4	0		
PHF	.000	.906	.583	.000	.909	.000	.928	.815	.000	.955	.000	.927	.592	.000	.936	.916	.879	.853	.000	.939	.975

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-04-PM
 Site Code : 4
 Start Date : 12/2/2008
 Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

Start Time	Branch AVenue Southbound					Rumson Road Westbound					Branch AVenue Northbound					Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
02:00 PM	50	48	0	0	98	26	0	36	0	62	0	72	48	0	120	0	0	0	0	0	280
02:15 PM	31	49	0	0	80	35	0	41	0	76	0	83	40	0	123	0	0	0	0	0	279
02:30 PM	27	88	0	0	115	35	0	25	0	60	0	69	51	0	120	0	0	0	0	0	295
02:45 PM	42	59	0	0	101	38	0	45	0	83	0	80	49	0	129	0	0	0	0	0	313
Total	150	244	0	0	394	134	0	147	0	281	0	304	188	0	492	0	0	0	0	0	1167
03:00 PM	39	70	0	0	109	28	0	36	0	64	0	90	60	0	150	0	0	0	0	0	323
03:15 PM	48	85	0	0	133	33	0	22	0	55	0	95	54	0	149	0	0	0	0	0	337
03:30 PM	28	75	0	0	103	38	0	50	0	88	0	100	50	0	150	0	0	0	0	0	341
03:45 PM	45	79	0	0	124	28	0	42	0	70	0	127	56	0	183	0	0	0	0	0	377
Total	160	309	0	0	469	127	0	150	0	277	0	412	220	0	632	0	0	0	0	0	1378
04:00 PM	35	79	0	0	114	39	0	37	0	76	0	118	49	0	167	0	0	0	0	0	357
04:15 PM	37	65	0	0	102	30	0	48	0	78	0	109	42	0	151	0	0	0	0	0	331
04:30 PM	46	83	0	0	129	23	0	32	0	55	0	90	51	0	141	0	0	0	0	0	325
04:45 PM	31	60	0	0	91	20	0	46	0	66	0	99	64	0	163	0	0	0	0	0	320
Total	149	287	0	0	436	112	0	163	0	275	0	416	206	0	622	0	0	0	0	0	1333
05:00 PM	32	89	0	0	121	11	0	23	0	34	0	120	53	0	173	0	0	0	0	0	328
05:15 PM	37	80	0	0	117	21	0	39	0	60	0	100	47	0	147	0	0	0	0	0	324
05:30 PM	48	83	0	0	131	24	0	29	0	53	0	102	42	0	144	0	0	0	0	0	328
05:45 PM	37	55	0	0	92	25	0	24	0	49	0	103	51	0	154	0	0	0	0	0	295
Total	154	307	0	0	461	81	0	115	0	196	0	425	193	0	618	0	0	0	0	0	1275
Grand Total	613	1147	0	0	1760	454	0	575	0	1029	0	1557	807	0	2364	0	0	0	0	0	5153
Apprch %	34.8	65.2	0	0		44.1	0	55.9	0		0	65.9	34.1	0		0	0	0	0	0	
Total %	11.9	22.3	0	0	34.2	8.8	0	11.2	0	20	0	30.2	15.7	0	45.9	0	0	0	0	0	
Cars	600	1138	0	0	1738	441	0	566	0	1007	0	1528	789	0	2317	0	0	0	0	0	5062
% Cars	97.9	99.2	0	0	98.8	97.1	0	98.4	0	97.9	0	98.1	97.8	0	98	0	0	0	0	0	98.2
Light Trucks	9	9	0	0	18	12	0	8	0	20	0	25	15	0	40	0	0	0	0	0	78
% Light Trucks	1.5	0.8	0	0	1	2.6	0	1.4	0	1.9	0	1.6	1.9	0	1.7	0	0	0	0	0	1.5

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-04-AM
 Site Code : 4
 Start Date : 12/2/2008
 Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

Start Time	Branch AVenue Southbound					Rumson Road Westbound					Branch AVenue Northbound					Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
08:00 AM	30	99	0	0	129	27	0	33	0	60	0	84	23	0	107	0	0	0	0	0	296
08:15 AM	32	107	0	0	139	34	0	42	0	76	0	94	28	0	122	0	0	0	0	0	337
08:30 AM	37	111	0	0	148	29	0	38	0	67	0	97	28	0	125	0	0	0	0	0	340
08:45 AM	27	118	0	0	145	40	0	31	0	71	0	107	25	0	132	0	0	0	0	0	348
Total	126	435	0	0	561	130	0	144	0	274	0	382	104	0	486	0	0	0	0	0	1321
09:00 AM	31	95	0	0	126	39	0	42	0	81	0	94	34	0	128	0	0	0	0	0	335
09:15 AM	30	86	0	0	116	41	0	34	0	75	0	71	33	0	104	0	0	0	0	0	295
09:30 AM	29	67	0	0	96	34	0	36	0	70	0	56	27	0	83	0	0	0	0	0	249
09:45 AM	25	82	0	0	107	37	0	40	0	77	0	79	26	0	105	0	0	0	0	0	289
Total	115	330	0	0	445	151	0	152	0	303	0	300	120	0	420	0	0	0	0	0	1168
10:00 AM	27	67	0	0	94	33	0	25	0	58	0	57	23	0	80	0	0	0	0	0	232
10:15 AM	38	66	0	0	104	42	0	42	0	84	0	44	24	0	68	0	0	0	0	0	256
10:30 AM	33	60	0	0	93	29	0	25	0	54	0	66	36	0	102	0	0	0	0	0	249
10:45 AM	34	70	0	0	104	31	0	43	0	74	0	63	37	0	100	0	0	0	0	0	278
Total	132	263	0	0	395	135	0	135	0	270	0	230	120	0	350	0	0	0	0	0	1015
11:00 AM	35	80	0	0	115	29	0	32	0	61	0	66	30	0	96	0	0	0	0	0	272
11:15 AM	28	64	0	0	92	33	0	48	0	81	0	76	45	0	121	0	0	0	0	0	294
11:30 AM	33	84	0	0	117	30	0	31	0	61	0	66	31	0	97	0	0	0	0	0	275
11:45 AM	34	88	0	0	122	31	0	37	0	68	0	61	35	0	96	0	0	0	0	0	286
Total	130	316	0	0	446	123	0	148	0	271	0	269	141	0	410	0	0	0	0	0	1127
Grand Total	503	1344	0	0	1847	539	0	579	0	1118	0	1181	485	0	1666	0	0	0	0	0	4631
Apprch %	27.2	72.8	0	0		48.2	0	51.8	0		0	70.9	29.1	0		0	0	0	0		
Total %	10.9	29	0	0	39.9	11.6	0	12.5	0	24.1	0	25.5	10.5	0	36	0	0	0	0	0	
Cars	472	1305	0	0	1777	518	0	550	0	1068	0	1155	464	0	1619	0	0	0	0	0	4464
% Cars	93.8	97.1	0	0	96.2	96.1	0	95	0	95.5	0	97.8	95.7	0	97.2	0	0	0	0	0	96.4
Light Trucks	23	34	0	0	57	19	0	20	0	39	0	21	14	0	35	0	0	0	0	0	131
% Light Trucks	4.6	2.5	0	0	3.1	3.5	0	3.5	0	3.5	0	1.8	2.9	0	2.1	0	0	0	0	0	2.8

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 4
Station ID: 12150-NB
8A on the Oceanic Bridge

Latitude: 0' 0.000 Undefined

Start Time	01-Dec-08		Tue		Wed		Thu		Fri		Sat		Sun		Average Day	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	6	68	12	95	11	95	14	79	17	57	12	79
12:15	*	*	*	*	4	78	9	94	6	95	22	105	10	57	10	86
12:30	*	*	*	*	5	87	2	78	8	88	17	97	10	70	8	84
12:45	*	*	*	*	5	58	3	92	2	70	12	91	7	82	6	79
01:00	*	*	*	67	4	72	5	69	3	79	13	98	7	74	6	76
01:15	*	*	*	73	3	72	3	54	2	98	11	94	7	75	5	78
01:30	*	*	*	89	1	70	3	88	1	96	7	86	3	75	3	84
01:45	*	*	*	79	4	76	3	62	1	112	3	94	8	62	4	81
02:00	*	*	*	73	2	77	1	94	5	87	10	84	13	72	6	81
02:15	*	*	*	65	0	80	2	77	3	99	1	96	6	62	2	80
02:30	*	*	*	81	4	86	2	94	2	110	2	108	7	56	3	89
02:45	*	*	*	96	1	103	0	91	0	103	6	91	1	69	2	92
03:00	*	*	*	75	3	91	2	120	1	113	3	101	4	61	3	94
03:15	*	*	*	80	3	103	2	113	5	134	5	87	2	63	3	97
03:30	*	*	*	163	2	116	3	121	7	118	3	79	4	58	4	109
03:45	*	*	*	128	3	130	3	108	2	108	0	92	2	59	2	104
04:00	*	*	*	122	6	137	2	134	3	122	1	88	1	71	3	112
04:15	*	*	*	138	1	114	2	119	1	156	5	85	2	90	2	117
04:30	*	*	*	120	5	131	7	129	7	108	4	73	3	47	5	101
04:45	*	*	*	109	7	111	6	130	8	127	3	83	0	60	5	103
05:00	*	*	*	136	7	120	5	131	6	108	4	66	1	58	5	103
05:15	*	*	*	134	27	121	29	118	27	124	2	73	2	52	17	104
05:30	*	*	*	100	59	109	34	104	36	99	2	72	1	51	26	89
05:45	*	*	*	97	31	93	38	90	31	112	6	74	3	47	22	86
06:00	*	*	*	91	26	88	16	94	17	105	1	84	7	45	13	84
06:15	*	*	*	86	36	81	26	94	23	96	4	70	3	55	18	80
06:30	*	*	*	78	53	70	82	73	69	96	9	67	5	58	44	74
06:45	*	*	*	52	74	68	68	55	49	71	12	88	9	45	42	63
07:00	*	*	*	61	61	57	62	70	55	53	16	74	12	53	41	61
07:15	*	*	*	57	60	60	57	61	46	66	29	67	18	30	42	57
07:30	*	*	*	53	126	59	112	53	85	65	27	45	18	36	74	52
07:45	*	*	*	44	83	51	79	54	74	46	35	48	21	40	58	47
08:00	*	*	*	49	81	53	82	46	99	49	39	52	29	41	66	48
08:15	*	*	*	42	94	49	90	39	95	45	58	41	19	36	71	42
08:30	*	*	*	46	108	48	85	34	100	52	45	39	33	29	74	41
08:45	*	*	*	37	95	43	91	38	93	46	40	29	33	35	70	38
09:00	*	*	*	42	72	42	56	32	77	40	61	34	44	22	62	35
09:15	*	*	*	35	62	36	73	48	84	49	55	44	35	21	62	39
09:30	*	*	*	46	54	40	88	43	69	43	62	35	33	16	61	37
09:45	*	*	*	24	82	37	58	30	66	36	93	33	43	19	68	30
10:00	*	*	*	27	47	39	52	24	76	47	76	29	46	21	59	31
10:15	*	*	*	20	75	21	58	22	66	42	76	42	55	11	66	26
10:30	*	*	*	25	59	20	63	28	69	46	73	43	66	14	66	29
10:45	*	*	*	13	72	17	65	19	71	38	77	43	58	8	69	23
11:00	*	*	*	18	54	14	53	24	68	31	95	46	62	9	66	24
11:15	*	*	*	17	74	13	71	13	64	42	78	22	59	8	69	19
11:30	*	*	*	11	63	13	55	12	94	37	80	28	75	11	73	19
11:45	*	*	*	4	84	9	71	13	79	22	91	23	75	6	80	13
Total	0	0	0	3003	1888	3331	1791	3424	1866	3824	1388	3222	979	2197	1578	3220
Day Total	0		3003		5219		5215		5690		4610		3176		4798	
% Splits	0.0%	0.0%	0.0%	100.0%	36.2%	63.8%	34.3%	65.7%	32.8%	67.2%	30.1%	69.9%	30.8%	69.2%	32.9%	67.1%
Peak Vol.			03:30	551	07:30	384	03:45	512	07:30	363	04:00	512	08:00	387	04:00	513
P.H.F.			0.845	0.762	0.934	0.810	0.955	0.968	0.822	0.905	0.917	0.903	0.933	0.900	0.944	

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 4
Station ID: 12150-NB
8A on the Oceanic Bridge

Latitude: 0' 0.000 Undefined

Start Time	08-Dec-08		Tue		Wed		Thu		Fri		Sat		Sun		Average Day	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	0	81	3	86	9	62	13	100	*	*	*	*	*	*	6	82
12:15	1	70	1	75	1	69	13	*	*	*	*	*	*	*	4	71
12:30	4	55	2	68	5	81	3	*	*	*	*	*	*	*	4	68
12:45	1	79	4	66	1	78	5	*	*	*	*	*	*	*	3	74
01:00	1	67	1	53	2	75	6	*	*	*	*	*	*	*	2	65
01:15	4	65	0	58	2	66	6	*	*	*	*	*	*	*	3	63
01:30	0	103	3	73	2	80	5	*	*	*	*	*	*	*	2	85
01:45	1	83	4	84	3	61	6	*	*	*	*	*	*	*	4	76
02:00	2	73	5	58	1	80	5	*	*	*	*	*	*	*	3	70
02:15	0	76	1	88	0	66	5	*	*	*	*	*	*	*	2	77
02:30	3	69	2	106	4	99	6	*	*	*	*	*	*	*	4	91
02:45	0	87	2	100	4	87	2	*	*	*	*	*	*	*	2	91
03:00	2	73	1	94	4	90	3	*	*	*	*	*	*	*	2	86
03:15	4	121	4	123	3	111	4	*	*	*	*	*	*	*	4	118
03:30	3	124	3	140	4	148	7	*	*	*	*	*	*	*	4	137
03:45	1	96	2	118	1	106	6	*	*	*	*	*	*	*	2	107
04:00	1	112	3	127	4	128	4	*	*	*	*	*	*	*	3	122
04:15	6	109	2	139	2	118	5	*	*	*	*	*	*	*	4	122
04:30	6	135	3	120	6	109	11	*	*	*	*	*	*	*	6	121
04:45	10	133	8	122	6	124	11	*	*	*	*	*	*	*	9	126
05:00	7	128	7	131	5	112	11	*	*	*	*	*	*	*	8	124
05:15	36	117	36	115	29	105	33	*	*	*	*	*	*	*	34	112
05:30	45	89	48	121	38	84	37	*	*	*	*	*	*	*	42	98
05:45	26	97	35	135	26	78	40	*	*	*	*	*	*	*	32	103
06:00	24	77	31	198	27	92	22	*	*	*	*	*	*	*	26	122
06:15	27	78	24	167	26	68	31	*	*	*	*	*	*	*	27	104
06:30	75	61	88	138	83	56	86	*	*	*	*	*	*	*	83	85
06:45	47	51	42	105	51	49	71	*	*	*	*	*	*	*	53	68
07:00	55	69	65	57	63	39	64	*	*	*	*	*	*	*	62	55
07:15	70	61	61	72	57	32	59	*	*	*	*	*	*	*	62	55
07:30	114	53	106	43	92	24	115	*	*	*	*	*	*	*	107	40
07:45	70	47	88	46	83	28	84	*	*	*	*	*	*	*	81	40
08:00	86	72	76	36	113	29	85	*	*	*	*	*	*	*	90	46
08:15	78	63	81	51	82	21	93	*	*	*	*	*	*	*	84	45
08:30	93	42	97	17	115	19	88	*	*	*	*	*	*	*	98	26
08:45	76	48	95	26	81	24	95	*	*	*	*	*	*	*	87	33
09:00	64	46	66	18	70	27	61	*	*	*	*	*	*	*	65	30
09:15	71	37	83	20	79	32	75	*	*	*	*	*	*	*	77	30
09:30	65	39	60	15	69	41	93	*	*	*	*	*	*	*	72	32
09:45	58	22	53	22	55	38	64	*	*	*	*	*	*	*	58	27
10:00	60	19	73	20	62	41	59	*	*	*	*	*	*	*	64	27
10:15	59	20	63	16	57	22	60	*	*	*	*	*	*	*	60	19
10:30	53	10	49	10	72	21	66	*	*	*	*	*	*	*	60	14
10:45	47	11	61	4	62	19	71	*	*	*	*	*	*	*	60	11
11:00	60	14	67	9	74	15	58	*	*	*	*	*	*	*	65	13
11:15	131	9	76	15	65	14	75	*	*	*	*	*	*	*	87	13
11:30	83	11	83	8	83	16	58	*	*	*	*	*	*	*	77	12
11:45	76	4	83	9	82	10	75	*	*	*	*	*	*	*	79	8
Total	1806	3206	1851	3522	1865	2994	1955	100	0	0	0	0	0	0	1873	3244
Day Total	5012		5373		4859		2055		0		0		0		5117	
% Splits	36.0%	64.0%	34.5%	65.5%	38.4%	61.6%	95.1%	4.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	36.6%	63.4%
Peak	11:00	04:30	07:30	05:45	07:45	03:30	07:30								07:30	04:15
Vol.	350	513	351	638	393	500	377								362	493
P.H.F.	0.668	0.950	0.828	0.806	0.854	0.845	0.820								0.846	0.978

ADT ADT 4,894 AADT 4,894

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-03-PM
 Site Code : 3
 Start Date : 11/20/2008
 Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

Start Time	Branchport Avenue Southbound					Route 36 / Joline Avenue Westbound					Branchport Avenue Northbound					Route 36 / Joline Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
02:00 PM	7	42	29	0	78	8	103	5	0	116	10	35	9	0	54	43	122	29	0	194	442
02:15 PM	8	32	27	0	67	6	112	2	0	120	10	24	19	0	53	41	159	19	0	219	459
02:30 PM	7	53	22	0	82	19	117	8	0	144	6	37	4	0	47	66	157	18	0	241	514
02:45 PM	8	35	23	0	66	13	118	4	0	135	8	33	7	0	48	55	163	21	0	239	488
Total	30	162	101	0	293	46	450	19	0	515	34	129	39	0	202	205	601	87	0	893	1903
03:00 PM	10	35	28	0	73	18	122	4	0	144	12	43	8	0	63	44	159	20	0	223	503
03:15 PM	4	44	27	0	75	14	97	8	0	119	8	21	6	0	35	60	170	21	0	251	480
03:30 PM	11	37	47	0	95	10	112	4	0	126	10	21	14	0	45	55	143	25	0	223	489
03:45 PM	12	27	26	0	65	9	86	6	0	101	8	32	7	0	47	52	147	14	0	213	426
Total	37	143	128	0	308	51	417	22	0	490	38	117	35	0	190	211	619	80	0	910	1898
04:00 PM	8	43	33	0	84	5	87	2	0	94	12	38	7	0	57	45	151	29	0	225	460
04:15 PM	8	45	23	0	76	2	111	3	0	116	14	36	5	0	55	58	164	20	0	242	489
04:30 PM	8	58	48	0	114	8	81	0	0	89	14	24	10	0	48	70	172	17	0	259	510
04:45 PM	13	45	33	0	91	6	97	4	0	107	9	38	11	0	58	78	170	12	0	260	516
Total	37	191	137	0	365	21	376	9	0	406	49	136	33	0	218	251	657	78	0	986	1975
05:00 PM	12	41	28	0	81	10	107	2	0	119	5	13	5	0	23	77	178	22	0	277	500
05:15 PM	17	55	23	0	95	15	96	6	0	117	12	39	12	0	63	69	177	18	0	264	539
05:30 PM	8	44	28	0	80	10	103	3	0	116	9	26	10	0	45	79	198	20	0	297	538
05:45 PM	6	30	31	0	67	14	132	5	0	151	5	27	6	0	38	56	197	16	0	269	525
Total	43	170	110	0	323	49	438	16	0	503	31	105	33	0	169	281	750	76	0	1107	2102
Grand Total	147	666	476	0	1289	167	1681	66	0	1914	152	487	140	0	779	948	2627	321	0	3896	7878
Apprch %	11.4	51.7	36.9	0		8.7	87.8	3.4	0		19.5	62.5	18	0		24.3	67.4	8.2	0		
Total %	1.9	8.5	6	0	16.4	2.1	21.3	0.8	0	24.3	1.9	6.2	1.8	0	9.9	12	33.3	4.1	0	49.5	
Cars	138	627	447	0	1212	162	1605	61	0	1828	148	468	133	0	749	913	2538	307	0	3758	7547
% Cars	93.9	94.1	93.9	0	94	97	95.5	92.4	0	95.5	97.4	96.1	95	0	96.1	96.3	96.6	95.6	0	96.5	95.8
Light Trucks	8	34	16	0	58	0	20	1	0	21	1	9	1	0	11	20	68	13	0	101	191
% Light Trucks	5.4	5.1	3.4	0	4.5	0	1.2	1.5	0	1.1	0.7	1.8	0.7	0	1.4	2.1	2.6	4	0	2.6	2.4

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-03-PM
 Site Code : 3
 Start Date : 11/20/2008
 Page No : 2

Groups Printed- Cars - Light Trucks - Heavy Trucks

	Branchport Avenue Southbound					Route 36 / Joline Avenue Westbound					Branchport Avenue Northbound					Route 36 / Joline Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Heavy Trucks	1	5	13	0	19	5	56	4	0	65	3	10	6	0	19	15	21	1	0	37	140
% Heavy Trucks	0.7	0.8	2.7	0	1.5	3	3.3	6.1	0	3.4	2	2.1	4.3	0	2.4	1.6	0.8	0.3	0	0.9	1.8

Start Time	Branchport Avenue Southbound					Route 36 / Joline Avenue Westbound					Branchport Avenue Northbound					Route 36 / Joline Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	12	41	28	0	81	10	107	2	0	119	5	13	5	0	23	77	178	22	0	277	500
05:15 PM	17	55	23	0	95	15	96	6	0	117	12	39	12	0	63	69	177	18	0	264	539
05:30 PM	8	44	28	0	80	10	103	3	0	116	9	26	10	0	45	79	198	20	0	297	538
05:45 PM	6	30	31	0	67	14	132	5	0	151	5	27	6	0	38	56	197	16	0	269	525
Total Volume	43	170	110	0	323	49	438	16	0	503	31	105	33	0	169	281	750	76	0	1107	2102
% App. Total	13.3	52.6	34.1	0		9.7	87.1	3.2	0		18.3	62.1	19.5	0		25.4	67.8	6.9	0		
PHF	.632	.773	.887	.000	.850	.817	.830	.667	.000	.833	.646	.673	.688	.000	.671	.889	.947	.864	.000	.932	.975

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-03-AM
 Site Code : 3
 Start Date : 11/20/2008
 Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

Start Time	Branchport Avenue Southbound					Route 36 / Joline Avenue Westbound					Branchport Avenue Northbound					Route 36 / Joline Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
08:00 AM	6	36	27	0	69	15	142	7	0	164	25	39	7	0	71	13	124	12	0	149	453
08:15 AM	9	26	41	0	76	9	153	14	0	176	16	34	11	0	61	36	131	13	0	180	493
08:30 AM	10	23	36	0	69	9	176	10	0	195	15	31	5	0	51	29	118	9	0	156	471
08:45 AM	5	36	35	0	76	5	134	9	0	148	19	32	6	0	57	27	143	9	0	179	460
Total	30	121	139	0	290	38	605	40	0	683	75	136	29	0	240	105	516	43	0	664	1877
09:00 AM	5	25	26	0	56	6	121	3	0	130	18	30	12	0	60	19	119	16	0	154	400
09:15 AM	7	16	25	0	48	7	107	3	0	117	2	27	6	0	35	31	92	20	0	143	343
09:30 AM	9	32	34	0	75	9	87	8	0	104	17	28	8	0	53	23	97	24	0	144	376
09:45 AM	5	21	40	0	66	6	123	4	0	133	16	24	8	0	48	27	108	12	0	147	394
Total	26	94	125	0	245	28	438	18	0	484	53	109	34	0	196	100	416	72	0	588	1513
10:00 AM	6	26	39	0	71	8	109	4	0	121	6	29	9	0	44	25	101	19	0	145	381
10:15 AM	7	26	18	0	51	14	99	9	0	122	9	20	3	0	32	26	122	13	0	161	366
10:30 AM	9	28	27	0	64	9	104	5	0	118	14	19	3	0	36	34	100	14	0	148	366
10:45 AM	2	20	36	0	58	5	109	4	0	118	10	19	2	0	31	32	127	11	0	170	377
Total	24	100	120	0	244	36	421	22	0	479	39	87	17	0	143	117	450	57	0	624	1490
11:00 AM	7	29	20	0	56	5	83	5	0	93	10	24	4	0	38	35	107	14	0	156	343
11:15 AM	3	23	19	0	45	8	117	8	0	133	11	20	8	0	39	26	104	20	0	150	367
11:30 AM	6	28	28	0	62	14	105	10	0	129	7	19	11	0	37	29	102	15	0	146	374
11:45 AM	13	25	38	0	76	6	101	6	0	113	8	23	9	0	40	37	129	18	0	184	413
Total	29	105	105	0	239	33	406	29	0	468	36	86	32	0	154	127	442	67	0	636	1497
Grand Total	109	420	489	0	1018	135	1870	109	0	2114	203	418	112	0	733	449	1824	239	0	2512	6377
Apprch %	10.7	41.3	48	0		6.4	88.5	5.2	0		27.7	57	15.3	0		17.9	72.6	9.5	0		
Total %	1.7	6.6	7.7	0	16	2.1	29.3	1.7	0	33.2	3.2	6.6	1.8	0	11.5	7	28.6	3.7	0	39.4	
Cars	100	384	465	0	949	122	1727	96	0	1945	189	392	101	0	682	421	1661	227	0	2309	5885
% Cars	91.7	91.4	95.1	0	93.2	90.4	92.4	88.1	0	92	93.1	93.8	90.2	0	93	93.8	91.1	95	0	91.9	92.3
Light Trucks	7	27	17	0	51	7	69	7	0	83	9	14	10	0	33	17	103	11	0	131	298
% Light Trucks	6.4	6.4	3.5	0	5	5.2	3.7	6.4	0	3.9	4.4	3.3	8.9	0	4.5	3.8	5.6	4.6	0	5.2	4.7

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-03-AM
 Site Code : 3
 Start Date : 11/20/2008
 Page No : 2

Groups Printed- Cars - Light Trucks - Heavy Trucks

	Branchport Avenue Southbound					Route 36 / Joline Avenue Westbound					Branchport Avenue Northbound					Route 36 / Joline Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Heavy Trucks	2	9	7	0	18	6	74	6	0	86	5	12	1	0	18	11	60	1	0	72	194
% Heavy Trucks	1.8	2.1	1.4	0	1.8	4.4	4	5.5	0	4.1	2.5	2.9	0.9	0	2.5	2.4	3.3	0.4	0	2.9	3

Start Time	Branchport Avenue Southbound					Route 36 / Joline Avenue Westbound					Branchport Avenue Northbound					Route 36 / Joline Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 08:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	6	36	27	0	69	15	142	7	0	164	25	39	7	0	71	13	124	12	0	149	453
08:15 AM	9	26	41	0	76	9	153	14	0	176	16	34	11	0	61	36	131	13	0	180	493
08:30 AM	10	23	36	0	69	9	176	10	0	195	15	31	5	0	51	29	118	9	0	156	471
08:45 AM	5	36	35	0	76	5	134	9	0	148	19	32	6	0	57	27	143	9	0	179	460
Total Volume	30	121	139	0	290	38	605	40	0	683	75	136	29	0	240	105	516	43	0	664	1877
% App. Total	10.3	41.7	47.9	0		5.6	88.6	5.9	0		31.2	56.7	12.1	0		15.8	77.7	6.5	0		
PHF	.750	.840	.848	.000	.954	.633	.859	.714	.000	.876	.750	.872	.659	.000	.845	.729	.902	.827	.000	.922	.952

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 3
Station ID: 12739-NB
SR 18 North of CR 16 in Neptune Twp

Latitude: 0' 0.000 Undefined

Start Time	01-Dec-08		Tue		Wed		Thu		Fri		Sat		Sun		Average Day	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	50	336	32	349	29	310	56	372	70	307	47	335
12:15	*	*	*	*	31	352	32	369	35	361	76	351	67	341	48	355
12:30	*	*	*	*	30	375	27	343	34	357	55	361	62	331	42	353
12:45	*	*	*	*	23	342	18	343	27	400	45	330	39	312	30	345
01:00	*	*	*	*	18	358	23	346	16	357	37	343	32	311	25	343
01:15	*	*	*	*	19	354	15	372	15	344	37	315	38	288	25	335
01:30	*	*	*	*	13	346	16	359	18	404	24	369	36	315	21	359
01:45	*	*	*	24	22	335	20	332	14	409	30	374	36	314	24	298
02:00	*	*	*	362	18	310	13	348	20	369	31	343	22	298	21	338
02:15	*	*	*	357	7	372	17	390	16	400	21	316	34	306	19	357
02:30	*	*	*	401	9	441	14	409	21	460	21	343	15	276	16	388
02:45	*	*	*	376	24	378	13	454	20	427	15	355	23	274	19	377
03:00	*	*	*	393	6	435	19	432	21	432	12	351	28	305	17	391
03:15	*	*	*	445	22	395	28	428	22	420	13	381	22	276	21	391
03:30	*	*	*	403	22	425	22	437	17	399	15	341	17	295	19	383
03:45	*	*	*	432	20	416	22	430	18	433	11	354	11	287	16	392
04:00	*	*	*	410	25	414	16	415	24	430	15	342	9	277	18	381
04:15	*	*	*	414	33	417	23	453	30	443	19	324	7	280	22	388
04:30	*	*	*	418	47	446	41	441	43	451	26	348	12	249	34	392
04:45	*	*	*	409	41	435	52	487	58	451	25	354	18	265	39	400
05:00	*	*	*	471	69	490	53	456	46	495	27	372	11	251	41	422
05:15	*	*	*	507	75	516	89	540	72	475	35	340	21	220	58	433
05:30	*	*	*	442	123	464	139	461	123	450	55	312	21	223	92	392
05:45	*	*	*	401	195	392	204	405	157	408	55	313	25	218	127	356
06:00	*	*	*	358	224	361	223	386	224	366	46	340	28	198	149	335
06:15	*	*	*	378	322	344	335	351	324	355	83	280	41	208	221	319
06:30	*	*	*	343	486	330	510	303	471	340	121	314	79	203	333	306
06:45	*	*	*	309	593	292	568	282	534	324	137	266	69	154	380	271
07:00	*	*	*	282	593	280	601	251	588	311	145	236	67	168	399	255
07:15	*	*	*	270	655	233	721	227	648	259	174	215	62	148	452	225
07:30	*	*	*	243	813	214	783	217	764	240	214	202	101	154	535	212
07:45	*	*	*	199	809	206	827	222	821	216	239	185	89	152	557	197
08:00	*	*	*	198	795	210	761	207	761	233	195	173	94	163	521	197
08:15	*	*	*	181	809	166	738	192	734	186	233	180	100	124	523	172
08:30	*	*	*	162	712	152	648	177	665	172	281	147	137	120	489	155
08:45	*	*	*	155	657	165	644	144	665	144	311	140	143	118	484	144
09:00	*	*	*	137	473	161	493	175	447	153	236	150	157	106	361	147
09:15	*	*	*	154	462	159	519	171	454	167	268	131	201	92	381	146
09:30	*	*	*	106	439	142	451	182	462	132	296	125	196	93	369	130
09:45	*	*	*	130	365	113	387	127	350	154	310	145	232	84	329	126
10:00	*	*	*	108	351	112	332	106	348	140	277	133	221	76	306	112
10:15	*	*	*	87	371	100	312	108	331	146	274	133	202	75	298	108
10:30	*	*	*	93	333	100	338	111	345	137	331	132	258	67	321	107
10:45	*	*	*	69	355	86	333	81	331	139	354	111	226	70	320	93
11:00	*	*	*	74	346	69	312	60	360	157	291	128	240	37	310	88
11:15	*	*	*	63	337	51	313	64	362	104	353	95	265	52	326	72
11:30	*	*	*	55	345	62	316	69	373	89	396	75	265	35	339	64
11:45	*	*	*	54	342	42	343	50	376	91	363	82	297	26	344	58
Total	0	0	0	10873	12929	13694	12756	14062	12634	14640	6684	12422	4446	9542	9888	12943
Day Total	0			10873	26623		26818		27274		19106		13988		22831	
% Splits	0.0%	0.0%	0.0%	100.0%	48.6%	51.4%	47.6%	52.4%	46.3%	53.7%	35.0%	65.0%	31.8%	68.2%	43.3%	56.7%
Peak Vol.				04:45	07:30	04:45	07:30	04:45	07:30	04:30	11:00	02:30	11:00	00:15	07:30	04:30
P.H.F.				0.902	0.992	0.923	0.940	0.900	0.938	0.945	0.886	0.938	0.898	0.949	0.959	0.951

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 3
Station ID: 12739-NB
SR 18 North of CR 16 in Neptune Twp

Latitude: 0' 0.000 Undefined

Start Time	08-Dec-08		Tue		Wed		Thu		Fri		Sat		Sun		Average Day	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	22	330	36	342	31	322	55	339	*	*	*	*	*	*	36	333
12:15	32	318	32	357	23	343	35	356	*	*	*	*	*	*	30	344
12:30	17	329	22	330	23	355	33	380	*	*	*	*	*	*	24	348
12:45	17	333	29	336	22	376	25	*	*	*	*	*	*	*	23	348
01:00	17	337	16	330	13	377	25	*	*	*	*	*	*	*	18	348
01:15	11	364	12	362	13	384	25	*	*	*	*	*	*	*	15	370
01:30	19	388	16	352	13	399	18	*	*	*	*	*	*	*	16	380
01:45	18	351	23	385	15	345	26	*	*	*	*	*	*	*	20	360
02:00	9	340	13	345	18	368	21	*	*	*	*	*	*	*	15	351
02:15	7	383	11	385	20	364	10	*	*	*	*	*	*	*	12	377
02:30	11	412	18	438	19	409	13	*	*	*	*	*	*	*	15	420
02:45	5	411	23	375	19	379	29	*	*	*	*	*	*	*	19	388
03:00	14	356	12	384	11	401	12	*	*	*	*	*	*	*	12	380
03:15	24	410	12	423	12	454	29	*	*	*	*	*	*	*	19	429
03:30	15	399	19	408	19	411	30	*	*	*	*	*	*	*	21	406
03:45	14	428	18	414	25	439	29	*	*	*	*	*	*	*	22	427
04:00	16	428	13	425	20	416	33	*	*	*	*	*	*	*	20	423
04:15	32	442	30	409	27	419	40	*	*	*	*	*	*	*	32	423
04:30	43	438	45	432	43	422	53	*	*	*	*	*	*	*	46	431
04:45	41	404	58	443	50	412	46	*	*	*	*	*	*	*	49	420
05:00	62	461	60	487	50	474	73	*	*	*	*	*	*	*	61	474
05:15	77	478	81	476	92	511	78	*	*	*	*	*	*	*	82	488
05:30	149	487	138	436	136	447	127	*	*	*	*	*	*	*	138	457
05:45	165	382	173	506	181	407	200	*	*	*	*	*	*	*	180	432
06:00	224	340	260	431	239	365	230	*	*	*	*	*	*	*	238	379
06:15	316	325	314	456	350	386	329	*	*	*	*	*	*	*	327	389
06:30	442	325	521	397	475	352	494	*	*	*	*	*	*	*	483	358
06:45	570	287	550	288	548	317	602	*	*	*	*	*	*	*	568	297
07:00	601	256	608	260	585	289	601	*	*	*	*	*	*	*	599	268
07:15	666	235	710	192	694	276	662	*	*	*	*	*	*	*	683	234
07:30	787	221	807	197	813	248	819	*	*	*	*	*	*	*	806	222
07:45	854	202	795	166	798	203	814	*	*	*	*	*	*	*	815	190
08:00	761	193	827	191	817	201	799	*	*	*	*	*	*	*	801	195
08:15	742	184	796	160	779	185	812	*	*	*	*	*	*	*	782	176
08:30	675	137	723	147	741	167	716	*	*	*	*	*	*	*	714	150
08:45	628	141	681	128	589	161	662	*	*	*	*	*	*	*	640	143
09:00	497	143	496	124	489	144	479	*	*	*	*	*	*	*	490	137
09:15	446	136	433	106	486	162	469	*	*	*	*	*	*	*	458	135
09:30	471	112	504	100	418	115	447	*	*	*	*	*	*	*	460	109
09:45	389	105	391	91	380	132	368	*	*	*	*	*	*	*	382	109
10:00	320	102	336	100	312	111	359	*	*	*	*	*	*	*	332	104
10:15	324	83	383	77	348	91	380	*	*	*	*	*	*	*	359	84
10:30	385	80	347	66	347	98	341	*	*	*	*	*	*	*	355	81
10:45	319	66	321	58	332	75	362	*	*	*	*	*	*	*	334	66
11:00	350	72	309	63	358	81	352	*	*	*	*	*	*	*	342	72
11:15	338	50	332	64	357	71	342	*	*	*	*	*	*	*	342	62
11:30	330	52	324	61	352	62	349	*	*	*	*	*	*	*	339	58
11:45	312	27	338	38	368	60	345	*	*	*	*	*	*	*	341	42
Total	12584	13283	13016	13541	12870	13986	13198	1075	0	0	0	0	0	0	12915	13617
Day Total	25867		26557		26856		14273		0		0		0		26532	
% Splits	48.6%	51.4%	49.0%	51.0%	47.9%	52.1%	92.5%	7.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	48.7%	51.3%
Peak	07:30	04:45	07:30	05:00	07:30	04:45	07:30								07:30	05:00
Vol.	3144	1830	3225	1905	3207	1844	3244								3204	1851
P.H.F.	0.920	0.939	0.975	0.941	0.981	0.902	0.990								0.983	0.948

ADT ADT 24,136 AADT 24,136

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-02-PM
 Site Code : 2
 Start Date : 11/20/2008
 Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

Start Time	SR 15 / Monmouth Road Southbound					Park Avenue Westbound					SR 15 / Monmouth Road Northbound					Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
02:00 PM	22	123	0	0	145	11	0	38	0	49	0	90	13	0	103	0	0	0	0	0	297
02:15 PM	21	123	0	0	144	8	0	33	0	41	0	91	13	0	104	0	0	0	0	0	289
02:30 PM	17	118	0	0	135	9	0	37	0	46	0	91	14	0	105	0	0	0	0	0	286
02:45 PM	18	84	0	0	102	14	0	31	0	45	0	95	6	0	101	0	0	0	0	0	248
Total	78	448	0	0	526	42	0	139	0	181	0	367	46	0	413	0	0	0	0	0	1120
03:00 PM	26	107	0	0	133	11	0	26	0	37	0	114	10	0	124	0	0	0	0	0	294
03:15 PM	29	109	0	0	138	15	0	50	0	65	0	95	12	0	107	0	0	0	0	0	310
03:30 PM	23	99	0	0	122	18	0	38	0	56	0	101	8	0	109	0	0	0	0	0	287
03:45 PM	23	104	0	0	127	18	0	51	0	69	0	98	15	0	113	0	0	0	0	0	309
Total	101	419	0	0	520	62	0	165	0	227	0	408	45	0	453	0	0	0	0	0	1200
04:00 PM	25	104	0	0	129	11	0	52	0	63	0	102	26	0	128	0	0	0	0	0	320
04:15 PM	14	100	0	0	114	18	0	42	0	60	0	75	34	0	109	0	0	0	0	0	283
04:30 PM	17	130	0	0	147	13	0	44	0	57	0	106	12	0	118	0	0	0	0	0	322
04:45 PM	12	130	0	0	142	16	0	44	0	60	0	85	11	0	96	0	0	0	0	0	298
Total	68	464	0	0	532	58	0	182	0	240	0	368	83	0	451	0	0	0	0	0	1223
05:00 PM	22	101	0	0	123	8	0	38	0	46	0	107	9	0	116	0	0	0	0	0	285
05:15 PM	23	131	0	0	154	11	0	35	0	46	0	121	10	0	131	0	0	0	0	0	331
05:30 PM	9	111	0	0	120	13	0	33	0	46	0	105	14	0	119	0	0	0	0	0	285
05:45 PM	28	100	0	0	128	24	0	39	0	63	0	101	11	0	112	0	0	0	0	0	303
Total	82	443	0	0	525	56	0	145	0	201	0	434	44	0	478	0	0	0	0	0	1204
Grand Total	329	1774	0	0	2103	218	0	631	0	849	0	1577	218	0	1795	0	0	0	0	0	4747
Apprch %	15.6	84.4	0	0		25.7	0	74.3	0		0	87.9	12.1	0		0	0	0	0		
Total %	6.9	37.4	0	0	44.3	4.6	0	13.3	0	17.9	0	33.2	4.6	0	37.8	0	0	0	0	0	
Cars	319	1731	0	0	2050	209	0	614	0	823	0	1534	211	0	1745	0	0	0	0	0	4618
% Cars	97	97.6	0	0	97.5	95.9	0	97.3	0	96.9	0	97.3	96.8	0	97.2	0	0	0	0	0	97.3
Light Trucks	10	30	0	0	40	7	0	14	0	21	0	32	6	0	38	0	0	0	0	0	99
% Light Trucks	3	1.7	0	0	1.9	3.2	0	2.2	0	2.5	0	2	2.8	0	2.1	0	0	0	0	0	2.1

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-02-AM
 Site Code : 2
 Start Date : 11/20/2008
 Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

Start Time	SR 15 / Monmouth Road Southbound					Park Avenue Westbound					SR 15 / Monmouth Road Northbound					Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
08:00 AM	36	66	0	0	102	5	0	28	0	33	0	90	27	0	117	0	0	0	0	0	252
08:15 AM	41	65	0	0	106	6	0	30	0	36	0	94	30	0	124	0	0	0	0	0	266
08:30 AM	21	79	0	0	100	10	0	25	0	35	0	85	24	0	109	0	0	0	0	0	244
08:45 AM	12	84	0	0	96	4	0	29	0	33	0	115	16	0	131	0	0	0	0	0	260
Total	110	294	0	0	404	25	0	112	0	137	0	384	97	0	481	0	0	0	0	0	1022
09:00 AM	26	88	0	0	114	9	0	19	0	28	0	109	15	0	124	0	0	0	0	0	266
09:15 AM	23	72	0	0	95	12	0	27	0	39	0	75	18	0	93	0	0	0	0	0	227
09:30 AM	20	69	0	0	89	10	0	36	0	46	0	59	23	0	82	0	0	0	0	0	217
09:45 AM	18	89	0	0	107	9	0	38	0	47	0	97	23	0	120	0	0	0	0	0	274
Total	87	318	0	0	405	40	0	120	0	160	0	340	79	0	419	0	0	0	0	0	984
10:00 AM	15	79	0	0	94	15	0	22	0	37	0	82	22	0	104	0	0	0	0	0	235
10:15 AM	19	89	0	0	108	5	0	21	0	26	0	62	5	0	67	0	0	0	0	0	201
10:30 AM	13	72	0	0	85	9	0	18	0	27	0	68	8	0	76	0	0	0	0	0	188
10:45 AM	12	61	0	0	73	9	0	24	0	33	0	57	10	0	67	0	0	0	0	0	173
Total	59	301	0	0	360	38	0	85	0	123	0	269	45	0	314	0	0	0	0	0	797
11:00 AM	16	62	0	0	78	6	0	18	0	24	0	61	11	0	72	0	0	0	0	0	174
11:15 AM	20	73	0	0	93	16	0	20	0	36	0	78	25	0	103	0	0	0	0	0	232
11:30 AM	19	102	0	0	121	13	0	23	0	36	0	68	18	0	86	0	0	0	0	0	243
11:45 AM	19	87	0	0	106	11	0	21	0	32	0	75	11	0	86	0	0	0	0	0	224
Total	74	324	0	0	398	46	0	82	0	128	0	282	65	0	347	0	0	0	0	0	873
Grand Total	330	1237	0	0	1567	149	0	399	0	548	0	1275	286	0	1561	0	0	0	0	0	3676
Apprch %	21.1	78.9	0	0		27.2	0	72.8	0		0	81.7	18.3	0		0	0	0	0	0	
Total %	9	33.7	0	0	42.6	4.1	0	10.9	0	14.9	0	34.7	7.8	0	42.5	0	0	0	0	0	
Cars	316	1157	0	0	1473	145	0	382	0	527	0	1211	280	0	1491	0	0	0	0	0	3491
% Cars	95.8	93.5	0	0	94	97.3	0	95.7	0	96.2	0	95	97.9	0	95.5	0	0	0	0	0	95
Light Trucks	8	48	0	0	56	4	0	8	0	12	0	45	4	0	49	0	0	0	0	0	117
% Light Trucks	2.4	3.9	0	0	3.6	2.7	0	2	0	2.2	0	3.5	1.4	0	3.1	0	0	0	0	0	3.2

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 2
Station ID: 12365-WB
12A b/w Hollow DR & The Oceanic Bridge

Latitude: 0' 0.000 Undefined

Start Time	01-Dec-08		Tue		Wed		Thu		Fri		Sat		Sun		Average Day	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	4	22	2	32	4	21	10	37	5	34	5	29
12:15	*	*	*	*	2	36	0	42	7	34	13	52	7	32	6	39
12:30	*	*	*	*	2	42	1	33	6	44	4	37	6	27	4	37
12:45	*	*	*	*	0	25	2	31	1	35	6	32	3	36	2	32
01:00	*	*	*	*	1	33	1	30	1	39	4	36	2	40	2	36
01:15	*	*	*	38	0	32	0	29	0	30	4	39	6	44	2	35
01:30	*	*	*	42	0	41	1	30	1	59	1	39	4	44	1	42
01:45	*	*	*	37	2	25	2	36	2	39	1	28	3	30	2	32
02:00	*	*	*	26	0	34	2	22	3	43	5	44	3	25	3	32
02:15	*	*	*	27	0	44	3	32	2	36	5	38	1	24	2	34
02:30	*	*	*	42	0	32	1	37	2	46	0	44	5	30	2	38
02:45	*	*	*	46	0	53	0	54	1	56	2	46	2	32	1	48
03:00	*	*	*	48	0	41	0	65	0	63	3	41	1	28	1	48
03:15	*	*	*	44	2	46	1	59	1	43	0	36	1	27	1	42
03:30	*	*	*	50	0	61	0	47	0	47	1	31	0	22	0	43
03:45	*	*	*	43	0	44	0	40	1	40	0	38	1	34	0	40
04:00	*	*	*	56	1	48	2	50	1	51	1	35	0	24	1	44
04:15	*	*	*	43	2	54	2	49	3	43	1	37	1	30	2	43
04:30	*	*	*	27	4	36	3	44	4	37	1	31	3	34	3	35
04:45	*	*	*	31	2	34	3	42	0	49	3	32	5	24	3	35
05:00	*	*	*	38	5	38	3	41	4	30	1	29	0	28	3	34
05:15	*	*	*	35	0	38	4	36	1	39	0	23	2	17	1	31
05:30	*	*	*	28	7	42	2	30	5	33	9	22	0	24	5	30
05:45	*	*	*	36	10	35	11	27	9	34	4	25	1	21	7	30
06:00	*	*	*	29	11	38	11	28	11	28	3	32	2	17	8	29
06:15	*	*	*	32	13	27	19	33	18	39	3	28	5	17	12	29
06:30	*	*	*	40	16	34	21	32	14	39	4	22	4	22	12	32
06:45	*	*	*	24	27	21	34	17	30	34	9	25	11	28	22	25
07:00	*	*	*	34	25	31	28	20	18	32	12	26	4	23	17	28
07:15	*	*	*	19	42	19	29	18	31	32	16	28	7	19	25	22
07:30	*	*	*	27	46	26	45	23	33	34	15	22	9	17	30	25
07:45	*	*	*	19	48	18	47	18	46	21	12	16	5	13	32	18
08:00	*	*	*	20	48	17	61	22	45	19	23	23	12	14	38	19
08:15	*	*	*	15	51	18	47	13	55	11	36	16	12	13	40	14
08:30	*	*	*	16	47	14	41	12	50	18	25	11	14	12	35	14
08:45	*	*	*	13	58	18	42	11	51	21	18	14	15	14	37	15
09:00	*	*	*	12	42	12	47	16	33	18	25	15	19	9	33	14
09:15	*	*	*	9	38	16	30	13	27	20	38	17	27	8	32	14
09:30	*	*	*	7	41	9	30	10	34	18	35	13	28	14	34	12
09:45	*	*	*	10	41	16	31	6	44	12	39	17	23	9	36	12
10:00	*	*	*	5	39	13	22	14	32	25	37	15	22	7	30	13
10:15	*	*	*	7	28	11	27	6	33	15	35	11	35	4	32	9
10:30	*	*	*	12	37	8	25	15	31	12	29	23	34	7	31	13
10:45	*	*	*	7	33	11	35	4	37	16	42	12	38	7	37	10
11:00	*	*	*	8	22	3	34	6	28	10	42	12	24	5	30	7
11:15	*	*	*	4	30	4	22	3	28	20	40	23	31	1	30	9
11:30	*	*	*	7	29	9	28	3	38	14	26	15	40	2	32	8
11:45	*	*	*	3	33	6	39	1	40	20	51	13	28	2	38	8
Total	0	0	0	1116	889	1335	841	1282	866	1519	694	1301	511	995	762	1288
Day Total	0			1116		2224		2123		2385		1995		1506		2050
% Splits	0.0%	0.0%	0.0%	100.0%	40.0%	60.0%	39.6%	60.4%	36.3%	63.7%	34.8%	65.2%	33.9%	66.1%	37.2%	62.8%
Peak Vol.				03:15	08:00	03:30	07:30	02:45	08:00	02:45	11:00	02:00	10:45	00:45	08:00	02:45
P.H.F.				0.862	0.879	0.848	0.820	0.865	0.914	0.829	0.779	0.827	0.831	0.932	0.938	0.943

TechniQuest Corporation

4105 US Route 1, Suite #14, Monmouth Junction, NJ 08852
Phone: 732-274-9500 Fax: 732-274-9510

Site Code: 2
Station ID: 12365-WB
12A b/w Hollow DR & The Oceanic Bridge

Latitude: 0' 0.000 Undefined

Start Time	08-Dec-08		Tue		Wed		Thu		Fri		Sat		Sun		Average Day	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	1	31	6	30	4	37	31	6	*	*	*	*	*	*	10	26
12:15	3	25	0	28	1	35	40	*	*	*	*	*	*	*	11	29
12:30	2	29	5	28	0	27	47	*	*	*	*	*	*	*	14	28
12:45	0	32	2	31	1	38	31	*	*	*	*	*	*	*	8	34
01:00	2	41	1	32	0	23	40	*	*	*	*	*	*	*	11	32
01:15	4	26	2	23	4	40	40	*	*	*	*	*	*	*	12	30
01:30	1	33	1	42	1	30	50	*	*	*	*	*	*	*	13	35
01:45	2	39	2	31	0	38	27	*	*	*	*	*	*	*	8	36
02:00	2	39	2	27	2	31	37	*	*	*	*	*	*	*	11	32
02:15	0	40	2	44	0	41	48	*	*	*	*	*	*	*	12	42
02:30	0	43	1	31	1	41	37	*	*	*	*	*	*	*	10	38
02:45	0	45	0	52	0	67	59	*	*	*	*	*	*	*	15	55
03:00	1	40	2	50	1	48	48	*	*	*	*	*	*	*	13	46
03:15	0	38	1	36	1	48	54	*	*	*	*	*	*	*	14	41
03:30	0	46	0	48	0	56	68	*	*	*	*	*	*	*	17	50
03:45	1	39	0	40	0	36	50	*	*	*	*	*	*	*	13	38
04:00	1	45	1	63	0	36	53	*	*	*	*	*	*	*	14	48
04:15	3	55	2	40	3	40	58	*	*	*	*	*	*	*	16	45
04:30	3	40	2	45	3	36	39	*	*	*	*	*	*	*	12	40
04:45	2	40	4	29	2	22	36	*	*	*	*	*	*	*	11	30
05:00	4	43	5	39	3	36	45	*	*	*	*	*	*	*	14	39
05:15	3	31	2	42	4	23	44	*	*	*	*	*	*	*	13	32
05:30	6	45	6	27	3	40	47	*	*	*	*	*	*	*	16	37
05:45	9	31	11	36	4	29	39	*	*	*	*	*	*	*	16	32
06:00	8	32	16	46	9	24	41	*	*	*	*	*	*	*	18	34
06:15	16	32	18	31	14	34	30	*	*	*	*	*	*	*	20	32
06:30	19	26	16	42	17	26	38	*	*	*	*	*	*	*	22	31
06:45	26	24	20	23	34	40	26	*	*	*	*	*	*	*	26	29
07:00	26	25	26	26	30	24	37	*	*	*	*	*	*	*	30	25
07:15	35	25	31	27	24	32	26	*	*	*	*	*	*	*	29	28
07:30	39	23	42	26	40	38	34	*	*	*	*	*	*	*	39	29
07:45	44	14	49	15	42	24	27	*	*	*	*	*	*	*	40	18
08:00	44	22	60	12	55	38	25	*	*	*	*	*	*	*	46	24
08:15	58	25	55	10	63	35	25	*	*	*	*	*	*	*	50	23
08:30	35	17	55	15	35	25	20	*	*	*	*	*	*	*	36	19
08:45	40	19	44	16	52	31	23	*	*	*	*	*	*	*	40	22
09:00	30	12	45	10	30	21	16	*	*	*	*	*	*	*	30	14
09:15	45	11	38	4	42	22	19	*	*	*	*	*	*	*	36	12
09:30	31	10	31	9	25	12	13	*	*	*	*	*	*	*	25	10
09:45	28	14	25	9	33	16	21	*	*	*	*	*	*	*	27	13
10:00	37	8	36	4	27	25	19	*	*	*	*	*	*	*	30	12
10:15	34	3	39	2	31	31	18	*	*	*	*	*	*	*	30	12
10:30	29	15	32	4	28	44	16	*	*	*	*	*	*	*	26	21
10:45	25	4	21	4	44	39	20	*	*	*	*	*	*	*	28	16
11:00	34	1	25	2	30	27	13	*	*	*	*	*	*	*	26	10
11:15	111	4	27	5	28	36	11	*	*	*	*	*	*	*	44	15
11:30	36	3	39	4	34	36	15	*	*	*	*	*	*	*	31	14
11:45	28	4	33	3	36	41	11	*	*	*	*	*	*	*	27	16
Total	908	1289	883	1243	841	1619	1612	6	0	0	0	0	0	0	1060	1374
Day Total	2197		2126		2460		1618		0		0		0		2434	
% Splits	41.3%	58.7%	41.5%	58.5%	34.2%	65.8%	99.6%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	43.5%	56.5%
Peak	11:00	03:30	07:45	03:30	08:00	02:45	02:45								07:30	02:45
Vol.	209	185	219	191	205	219	229								175	192
P.H.F.	0.471	0.841	0.913	0.758	0.813	0.817	0.842								0.875	0.873

ADT ADT 2,127 AADT 2,127

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-01-PM
 Site Code : 1
 Start Date : 11/20/2008
 Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

Start Time	Route 35 Southbound					West Park Avenue Westbound					Route 35 Northbound					West Park Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
02:00 PM	0	336	2	0	338	0	219	20	0	239	0	302	26	0	328	80	123	18	0	221	1126
02:15 PM	0	377	1	0	378	0	195	36	0	231	0	258	15	0	273	81	120	29	0	230	1112
02:30 PM	0	389	3	0	392	0	178	22	0	200	0	288	17	0	305	79	143	16	0	238	1135
02:45 PM	0	339	2	0	341	0	199	17	0	216	0	327	23	0	350	93	148	25	0	266	1173
Total	0	1441	8	0	1449	0	791	95	0	886	0	1175	81	0	1256	333	534	88	0	955	4546
03:00 PM	0	387	0	0	387	0	210	23	0	233	0	331	11	0	342	84	154	24	0	262	1224
03:15 PM	0	373	1	0	374	0	209	24	0	233	0	358	13	0	371	75	142	20	0	237	1215
03:30 PM	0	406	0	0	406	0	195	31	0	226	0	293	23	0	316	88	155	18	0	261	1209
03:45 PM	0	403	1	0	404	0	207	22	0	229	0	297	23	0	320	74	149	32	0	255	1208
Total	0	1569	2	0	1571	0	821	100	0	921	0	1279	70	0	1349	321	600	94	0	1015	4856
04:00 PM	0	392	1	0	393	0	228	32	0	260	0	227	17	0	244	70	147	29	0	246	1143
04:15 PM	0	399	1	0	400	0	200	21	0	221	0	235	2	0	237	63	141	11	0	215	1073
04:30 PM	0	422	0	0	422	0	197	31	0	228	0	253	4	0	257	79	179	21	0	279	1186
04:45 PM	0	411	0	0	411	0	227	30	0	257	0	273	2	0	275	89	157	25	0	271	1214
Total	0	1624	2	0	1626	0	852	114	0	966	0	988	25	0	1013	301	624	86	0	1011	4616
05:00 PM	0	425	3	0	428	0	256	20	0	276	0	347	15	0	362	80	170	28	0	278	1344
05:15 PM	0	398	0	0	398	0	214	22	0	236	0	321	13	0	334	92	173	20	0	285	1253
05:30 PM	0	392	1	0	393	0	179	15	0	194	0	267	11	0	278	74	166	18	0	258	1123
05:45 PM	0	397	1	0	398	0	258	16	0	274	0	291	13	0	304	91	157	22	0	270	1246
Total	0	1612	5	0	1617	0	907	73	0	980	0	1226	52	0	1278	337	666	88	0	1091	4966
Grand Total	0	6246	17	0	6263	0	3371	382	0	3753	0	4668	228	0	4896	1292	2424	356	0	4072	18984
Apprch %	0	99.7	0.3	0		0	89.8	10.2	0		0	95.3	4.7	0		31.7	59.5	8.7	0		
Total %	0	32.9	0.1	0	33	0	17.8	2	0	19.8	0	24.6	1.2	0	25.8	6.8	12.8	1.9	0	21.4	
Cars	0	6132	14	0	6146	0	3281	373	0	3654	0	4597	210	0	4807	1260	2336	350	0	3946	18553
% Cars	0	98.2	82.4	0	98.1	0	97.3	97.6	0	97.4	0	98.5	92.1	0	98.2	97.5	96.4	98.3	0	96.9	97.7
Light Trucks	0	81	3	0	84	0	76	9	0	85	0	54	18	0	72	26	80	5	0	111	352
% Light Trucks	0	1.3	17.6	0	1.3	0	2.3	2.4	0	2.3	0	1.2	7.9	0	1.5	2	3.3	1.4	0	2.7	1.9

**MONMOUTH COUNTY EVACUATION ROUTE IMPROVEMENT STUDY
APPENDIX F
TREATMENT DATABASE**

<u>Route #</u>	<u>Name</u>
1	CR 39 between Florence Avenue and SR 36,
2	CR 7/CR 56 between Beachway, Campview Point and SR 36,
3	SR 36 between Highlands Bridge Over Shrewsbury River and the GSP,
4	CR 516/CR 50 between SR 36 and SR 35,
5	CR 8A/12A/12
6	CR 520 between Ocean Avenue and GSP,
7	SR 36 (near Oceanport) between the SR 36/CR 57 junction and GSP,
8	Park Avenue between SR 71 and SR 18,
9	CR 16 between SR 71 and GSP and SR 66 between CR 16 and SR 33,
10	SR 33 between SR 71 and SR 34,
11	CR 524 between SR 71 and I-195 and
12	CR 524 Spur between SR 71 and I-CR 524.

RouteNO	Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including	Lead Organization	Comment	LOCATION 1 LATITUDE	LOCATION 1 LONGITUDE	LOCATION 2 LATITUDE	LOCATION 2 LONGITUDE	LOCATION 3 LATITUDE	LOCATION 3 LONGITUDE
1	Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$2,400	County							
1	Capacity	Corridor Wide	Physical	NA	Widen to 42 feet	Long	\$400,000	County							
1	Capacity	Corridor Wide	Physical	NA	Install Coastal Evacuation Route Signs	Short	\$1,500	County							
1	Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,300	Municipality	Daily						
1	Capacity	Corridor Wide	System Management	NA	Plan to focus on Intense Inundation Areas	Short	\$0	MCOEM							
1	Flooding	Flat Creek Bridge (Bridge R-7)	Physical	1	New Bridge	Short	\$0	N/A	Project is Completed	40° 26' 50.37"	74° 9' 59.94"				
1	Flooding	East Creek	Physical	3	Elevate Roadway, Improve Drainage	Long	\$10,000,000	State		40° 26' 17.86"	74° 9' 53.03"				
1	Capacity	Washington Avenue to SR 36	Physical	2	Hard Running Shoulder	Intermediate	\$50,000	State/County		40° 26' 17.26"	74° 9' 44.11"				
1	Capacity	Washington Avenue to SR 36	Physical	2	Relocate Utilities	Intermediate	\$35,000	State/County		40° 26' 17.26"	74° 9' 44.11"				
1	Capacity	Hemlock Street	Operational	4	Two-phase signal during evacuations. Divert NB Traffic.	During Evacuations	\$4,000	County/Local	Daily	40° 26' 11.28"	74° 9' 51.74"				
1	Flooding	SR 36/Union Ave	Technological	5	LED and Backup Power for Signals	Intermediate	\$7,000	State	location	40° 26' 16.81"	74° 9' 52.38"				
1	Flooding	SR 36/Union Ave	Technological	5	Upgrade signals for wireless control	Intermediate	\$23,000	State/County	location	40° 26' 16.81"	74° 9' 52.38"				
2	Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$1,400	County/MCOEM							
2	Capacity	Corridor Wide	Physical	NA	Install Coastal Evacuation Route Signing at Critical Intersections	Short	\$2,000	County/MCOEM							
2	Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality							
2	Capacity	Corridor Wide	Operational	NA	Coordinate Existing Highway Advisory System	Short	\$0	State/County OEM							
2	Flooding	Corridor Wide	System Management	NA	Plan to focus on Intense Inundation Areas	During Evacuation	\$0	MCOEM							
2	Capacity	Carr Ave	Operational	1	Close Circuit Street	During Evacuation	\$1,000	Municipality	Daily	40° 26' 52.75"	74° 8' 0.45"				
2	Capacity	Carr Ave	Physical	2	Re-stripe	Short	\$27,000	County		40° 26' 34.49"	74° 7' 55.28"				
2	Capacity	Church St., Rt. 36, Pt. Monmouth Rd.	Technological	3	LED and Backup Power for Signals	Intermediate	\$21,000	State/County	Location	40° 26' 30.36"	74° 7' 53.41"	40° 26' 07.52"	74° 7' 52.61"	74° 7' 26.71"	40° 26' 48.29"
2	Capacity	Church St., Rt. 36, Pt. Monmouth Rd.	Technological	3	Upgrade signals for wireless control	Intermediate	\$69,000	State/County	Location	40° 26' 07.52"	74° 7' 53.41"	40° 26' 07.52"	74° 7' 52.61"	74° 7' 26.71"	40° 26' 48.29"
2	Capacity	Church St.	Operational	4	Use parking lane as a through street - Police	During Evacuation	\$500	Municipality	Daily	40° 26' 30.51"	74° 7' 51.60"				
2	Capacity	Main St./Henry Hudson Bike	Operational	5	Control Crossing Using Police	During Evacuation	\$500	Municipality	Daily	40° 26' 24.81"	74° 7' 48.73"				
2	Capacity	Main St./SR 36	Physical	6	Widen to create full shoulder	Intermediate	\$300,000	State		40° 26' 22.25"	74° 7' 49.36"				
2	Capacity	Main St./SR 36	Operational	6	Control Crossing Using Police	During Evacuation	\$500	Municipality	Daily	40° 26' 22.25"	74° 7' 49.36"				
3	Capacity	Corridor Wide	Physical	NA	Widen WB roadway to create a full shoulder	Long	\$30,000,000	State							

RouteNO	Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including	Lead Organization	Comment	LOCATION 1 LATITUDE	LOCATION 1 LONGITUDE	LOCATION 2 LATITUDE	LOCATION 2 LONGITUDE	LOCATION 3 LATITUDE	LOCATION 3 LONGITUDE
3	Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$10,400	County with State Approval							
3	Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	Daily						
3	Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuation	\$5,000	Municipality	Daily						
3	Capacity	Corridor Wide	Technological	NA	LED and Backup Power for Signals	Intermediate	\$154,000	State							
3	Capacity	Corridor Wide	Technological	NA	Upgrade signals for wireless control	Intermediate	\$506,000	State							
3	Capacity	Corridor Wide	Operational	NA	Coordinate Existing Highway Advisory System	Short	\$0	Municipalities with MCOEM							
3	Capacity	Corridor Wide	System Management	NA	Plan to focus on Intense Inundation Areas	Short	\$0	MCOEM							
3	Capacity	Highlands/Sea Bright	Physical	1	New Bridge	Under Construction	\$0	State		40° 23' 46.56"	73° 58' 45.63"				
3	Capacity	CR8A	Physical	2	Install Dynamic Message Sign	Intermediate	\$30,000	State		40° 24' 9.93"	73° 59' 45.65"				
3	Capacity	CR 8A	Physical	3	Reconfigure Intersection	Long	\$170,000	State/County		40° 24' 18.92"	74° 0' 17.68"				
3	Capacity	Normandy Road Underpass	Physical	6	Create one-lane bypass under bridge	Intermediate	\$600,000	State		40° 24' 59.86"	74° 4' 12.88"				
3	Capacity	Broad Street	Physical	7	Widen at Intersection	Intermediate	\$4,000,000	State/County		40° 25' 37.15"	74° 11' 48.2"				
3	Flooding	Lupatatong Creek	Physical	4	Elevate Roadway, Improve Drainage	Long	\$6,500,000	State/County		40° 24' 37.02"	74° 2' 35.48"				
3	Flooding	Many Mind / Wagner Creek	Physical	5	Elevate Roadway, Improve Drainage	Intermediate	\$6,500,000	State		40° 24' 47.86"	74° 3' 7.39"				
4	Capacity	Corridor Wide	Physical	NA	Widen WB roadway to create a full shoulder	Long	\$6,000,000	County	Not including Harmony Road (below)						
4	Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$2,100	County							
4	Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	Daily						
4	Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuation	\$5,000	Municipality	Daily						
4	Capacity	Corridor Wide	Physical	NA	Add Evacuation Route signing at key locations	Short	\$1,600	County							
4	Capacity	East Road, Main Street, Cherry Tree Farm Road	Technological	1	LED and Backup Power for Signals	Intermediate	\$28,000	County		40° 24' 52.53"	74° 5' 13.89"	40° 24' 53.09"	74° 5' 40.95"	40° 24' 42.94"	74° 6' 10.49"
4	Capacity	East Road, Main Street, Cherry Tree Farm Road	Technological	1	Upgrade signals for wireless control	Intermediate	\$92,000	County		40° 24' 52.53"	74° 5' 13.89"	40° 24' 53.09"	74° 5' 40.95"	40° 24' 42.94"	74° 6' 10.49"
4	Capacity	Church Street	Operational	2	Close a portion of Church Street in the SB Direction, Install temporary detour signs	During Evacuation	\$2,000	Municipality		40° 24' 45.86"	74° 6' 4.75"				
4	Capacity	SR 35 / CR 50	Physical	4	Widen roadbed between CR 50 and Harmony	Long	\$1,500,000	State/County		40° 23' 46.56"	74° 6' 47.03"				
4	Capacity	Parking Lot, SR 36	Operational	3	Close southerly driveway entrance	During Evacuation	\$500	Municipality		40° 23' 56.64"	74° 6' 48.58"				

RouteNO	Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including)	Lead Organization	Comment	LOCATION 1 LATITUDE	LOCATION 1 LONGITUDE	LOCATION 2 LATITUDE	LOCATION 2 LONGITUDE	LOCATION 3 LATITUDE	LOCATION 3 LONGITUDE
5	Capacity	Corridor Wide	Physical	NA	Widen WB roadway to create a full shoulder	Long	\$12,500,000	County							
5	Capacity	Corridor Wide	Physical	NA	Install Coastal Evacuation Route signing throughout route	Short	\$4,500	County							
5	Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuation	\$5,000	Municipality							
5	Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality							
5	Capacity	Corridor Wide	Technological	NA	LED and Backup Power for Signals	Intermediate	\$42,000	County							
5	Capacity	Corridor Wide	Technological	NA	Upgrade signals for wireless control	Intermediate	\$138,000	County							
5	Flooding	Corridor Wide	System Management	NA	Plan to focus on Intense Inundation Areas	During Evacuation	\$0	MCOEM							
5	Capacity	Oceanic Bridge	Physical	1	Reconstruct Bridge	Long	\$50,000,000	County/State/Federal		40° 22' 52.73"	74° 0' 50.46"				
5	Capacity	NJ GSP Exit 114	Operational	2	Close connecting ramp between GSP on-and off ramps; reverse GSP southbound Exit Ramp to Red Hill Rd.	During Evacuation	\$8,000	Municipality	Daily	40° 22' 25.29"	74° 8' 53.57"				
5	Capacity	NJ GSP Exit 114	System Management	3	Coordinate GSP ramp reversal activities with NJMCOEM and NJDOT	Short	\$0	MCOEM		40° 22' 25.29"	74° 8' 53.57"				
6	Capacity	Corridor Wide	Physical	NA	Widen WB roadway to create a full shoulder	Long	\$16,500,000	County							
6	Capacity	Corridor Wide	Operational	NA	Initiate Emergency Service Patrol Program	During Evacuation	\$4,000	Municipality	Daily						
6	Capacity	Corridor Wide	Technological	NA	LED and Backup Power for Signals	Intermediate	\$70,000	Municipality							
6	Capacity	Corridor Wide	Technological	NA	Upgrade signals for wireless control	Intermediate	\$230,000	County							
6	Capacity	Corridor Wide	System Management	NA	Plan to focus on Intense Inundation Areas	Short	\$0	MCOEM							
6	Capacity	Rumson Bridge	Physical	1	Reconstruct Bridge	Short	\$80,000,000	County		40° 21' 56.89"	73° 58' 31.94"				
6	Capacity	Rumson Bridge	Operational	1	Coordinate with police. Create additional lane using drums.	Short	\$0	MCOEM		40° 21' 56.89"	73° 58' 31.94"				
6	Capacity	Pinckney Road	Physical	2	Add "No Parking During Evacuation" Placards	Short	\$6,000	County		40° 20' 26.81"	74° 3' 24.09"				
6	Capacity	Pinckney Road	Operational	2	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	Daily	40° 20' 26.81"	74° 3' 24.09"				
6	Capacity	CR 520 sections of Branch Ave., Broad St., Pinckney Rd.	Physical	3	Major capital improvement connecting Rumson Rd. and Newman Springs Rd.	Long	\$30,000,000	County / Municipality / State		40° 20' 14.98"	74° 2' 56.15"	40° 20' 17.47"	74° 3' 49.35"	40° 20' 9.27"	74° 3' 16.55"
6	Capacity	CR 520 sections of Branch Ave., Broad St., Pinckney Rd.	System Management	3	Coordinate road enhancement program in the vicinity of the Broad Street / SR 35 Intersection.	Intermediate	\$0	County / NJTPA / State		40° 20' 14.98"	74° 2' 56.15"	40° 20' 17.47"	74° 3' 49.35"	40° 20' 9.27"	74° 3' 16.55"

RouteNO	Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including	Lead Organization	Comment	LOCATION 1 LATITUDE	LOCATION 1 LONGITUDE	LOCATION 2 LATITUDE	LOCATION 2 LONGITUDE	LOCATION 3 LATITUDE	LOCATION 3 LONGITUDE
6	Capacity	CR 520 sections of Branch Ave., Broad St., Pinckney Rd.	Operational	3	Detour Rumson Rd. WB traffic to White Rd. and SR 35 NB to access Newman Springs Rd. and provide "Alt" Signing	During Evac	\$2,000	Municipality		40° 20' 14.98"	74° 2' 56.15"	40° 20' 17.47"	74° 3' 49.35"	40° 20' 9.27"	74° 3' 16.55"
6	Capacity	CR 520 sections of Branch Ave., Broad St., Pinckney Rd.	Operational	3	Upgrade White Rd., as necessary to function as a portal section and install Coastal Evacuation route signs	Long	\$1,900,000	Municipality		40° 20' 14.98"	74° 2' 56.15"	40° 20' 17.47"	74° 3' 49.35"	40° 20' 9.27"	74° 3' 16.55"
6	Capacity	NJ GSP Exit 109 SB entrance ramp	Physical	4	Construct cross-over ramp section that would connect GSP SB entrance ramp to the GSP SB exit ramp; reverse direction of exit ramp from SB to NB	Intermediate	\$198,000	State		40° 20' 11.44"	74° 6' 9.24"				
6	Capacity	NJ GSP Exit 109 SB entrance ramp	Operational	4	Close ramp, provide police enforcement	During Evac	\$5,000	State	Daily	40° 20' 11.44"	74° 6' 9.24"				
6	Capacity	NJ GSP Exit 109	System Management	4	Coordinate GSP ramp reversal activities with NJMCOEM and NJDOT	Short	\$0	State/MCOEM		40° 20' 11.44"	74° 6' 9.24"				
7	Capacity	Corridor Wide	Physical	NA	Widen WB roadway to create a full shoulder	Long	\$14,000,000	State							
7	Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$5,000	County with State Approval							
7	Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	Daily						
7	Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuation	\$4,000	Municipality	Daily						
7	Capacity	Corridor Wide	Technological	NA	LED and Backup Power for Signals	Intermediate	\$98,000	State							
7	Capacity	Corridor Wide	Technological	NA	Upgrade signals for wireless control	Intermediate	\$322,000	State							
7	Capacity	Corridor Wide	System Management	NA	Plan to focus on Intense Inundation Areas	Short	\$0	MCOEM							
7	Capacity	SR 36 between Clifton Ave. and Washington Street	Physical	1	RE-stripe to provide one additional WB lane	Short	\$30,000	State		40° 18' 48.28"	73° 58' 51.55"				
7	Capacity	SR 36/Florence Ave. unsignalized	Operational	2	Deploy police resources Close Florence Close	During Evacuation	\$500	Municipality	Daily	40° 18' 47.64"	73° 59' 9.29"				
7	Capacity	Florence Ave. between MacArthur Ave. and SR 36	Operational	2	Florence Ave. SB between MacArthur Way and SR 36 (option to deploying police as	During Evacuation	\$0	Municipality		40° 18' 47.64"	73° 59' 9.29"				
7	Capacity	Bridge over Troutmans Creek	Physical	3	Option - Widen Bridge to 42 feet and provide one travel lane and full hard running shoulder in each direction	Long	\$44,000	State		40° 18' 45.06"	73° 59' 12.44"				

RouteNO	Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including	Lead Organization	Comment	LOCATION 1 LATITUDE	LOCATION 1 LONGITUDE	LOCATION 2 LATITUDE	LOCATION 2 LONGITUDE	LOCATION 3 LATITUDE	LOCATION 3 LONGITUDE
7	Capacity	SR 36 connections at Clifton Ave., Long Branch Ave., Liberty St., Rockwell Ave., Seventh Ave., Washington St.	Operational	5	Prohibit left-turn in WB direction; deploy police at each intersection.	During Evacuation	\$3,000	Municipality	Daily	40° 18' 21.73"	74° 0' 14.72"	40° 18' 25.14"	74° 0' 5.67"		
7	Capacity	At-grade RR crossing near Washington St.	System Management	4	Coordinate portal improvements near RR crossing with NJ Transit	Long	\$0	NJ TRANSIT / MCOEM		40° 18' 25.14"	74° 0' 5.67"	40° 17' 26.89"	74° 4' 12.96"		
7	Flooding	(MP 4.4 to MP5.5 - Long Branch Ave.)	System Management	4	Coordinate this future candidate drainage project with NJ Transit	Long	\$0	STATE / COUNTY/ NJ TRANSIT		40° 18' 25.14"	74° 0' 5.67"	40° 17' 26.89"	74° 4' 12.96"		
7	Capacity	SR 36 between Branchport Ave. and Victor Ave.	Operational	5	Create two temporary WB lanes using traffic control devices and deployment of police.	During Evacuation	\$1,000	MCOEM/ Municipality		40° 18' 21.73"	74° 0' 14.72"	40° 18' 25.14"	74° 0' 5.67"	40° 17' 26.89"	74° 4' 12.96"
7	Capacity	SR 36 between Washington St. and Victor Ave.	Operational	6	Narrow grassy median, install third WB travel lane	Long	\$5,000,000	State		40° 17' 26.89"	74° 4' 12.96"				
7	Capacity	NJ GSP Exit105	Operational	7	Reverse direction and function of GSP Exit ramp to SR 36 EB; make it an on-ramp to GSP and change its direction from SB to NB	Short	\$5,000	State	Daily	40° 17' 26.89"	74° 4' 12.96"				
8	Capacity	Corridor Wide	Physical	NA	Widen WB roadway to create a full shoulder	Long	\$3,300,000	County							
8	Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$2,400	County							
8	Capacity	Corridor Wide	Physical	NA	Install Coastal Evacuation Route signing throughout route	Short	\$8,000	County							
8	Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	Daily						
8	Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuation	\$5,000	Municipality							
8	Capacity	Corridor Wide	Operational	NA	Coordinate Highway Advisory Radio Messages through nearby systems	Short	\$0	MCOEM/ Municipality							
8	Capacity	Corridor Wide	System Management	NA	Where appropriate, coordinate corridor improvements with NJTPA 2030 Plan	Long	\$0	State/ County/ NJTPA							
8	Capacity	Corridor Wide	System Management	NA	Provide evacuees with emergency information through a public communication program	Short	\$0	MCOEM							
8	Capacity	NJ Coast Line Crossing, West of Lincoln Ave.	System Management	1	Coordinate improvements with NJ Transit to account for Evacuation	Long	\$0	County/ NJ Transit		40° 16' 11.64"	73° 59' 43.7"				

RouteNO	Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including)	Lead Organization	Comment	LOCATION 1 LATITUDE	LOCATION 1 LONGITUDE	LOCATION 2 LATITUDE	LOCATION 2 LONGITUDE	LOCATION 3 LATITUDE	LOCATION 3 LONGITUDE
8	Capacity	Park Ave./CR 15 and West Park Ave./CR 15 unsignalized intersections	Technological	2	Provide Portable Traffic Signals	Intermediate	\$60,000	County/ Municipality		40° 16' 15.41"	74° 0' 56.89"	40° 16' 10.21"	74° 0' 55.38"		
8	Capacity	Park Ave./CR 15 and West Park Ave./CR 15 unsignalized intersections	Operational	2	Provide police enforcement	During Evacuation	\$4,000	Municipality	Daily	40° 16' 15.41"	74° 0' 56.89"	40° 16' 10.21"	74° 0' 55.38"		
8	Capacity	Corridor Wide	Technological	2	LED and Backup Power for Signals	Intermediate	\$35,000	County		40° 16' 15.41"	74° 0' 56.89"	40° 16' 10.21"	74° 0' 55.38"		
8	Capacity	Corridor Wide	Technological	2	Upgrade signals for wireless control	Intermediate	\$115,000	County		40° 16' 15.41"	74° 0' 56.89"	40° 16' 10.21"	74° 0' 55.38"		
9	Capacity	Corridor Wide	Physical	NA	Widen to create full shoulder	Long	\$9,000,000	County							
9	Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$3,400	County							
9	Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuation	\$5,000	Municipality	Daily						
9	Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	Daily						
9	Capacity	Corridor Wide	Technological	NA	LED and Backup Power for Signals	Intermediate	\$105,000	County/ State							
9	Capacity	Corridor Wide	Technological	NA	Upgrade signals for wireless control	Intermediate	\$345,000	County/ State							
9	Capacity	Corridor Wide	System Management	NA	Provide Highway Advisory Radio for this and other nearby corridors	Intermediate	\$35,000	MCOEM							
9	Capacity	Seaview Sq. Mall entrances to CR 16	Operational	1	Allow only one exit ramp from the mall onto CR 16	During Evacuation	\$5,000	Municipality	Daily	40° 13' 40.55"	74° 2' 44"				
9	Capacity	Wayside Rd. to Jumping Brook Rd.	Physical	2	Widen State Route 66	Long	\$3,800,000	State		40° 13' 46.41"	74° 3' 47.88"				
9	Capacity	Asbury Park between Essex Rd. and Green Grove Rd.	Operational	3	Close business driveways located on south side of Asbury Ave. Provide police enforcement	During Evacuation	\$2,000	Municipality	Daily	40° 14' 3.96"	74° 4' 38.76"				
9	Capacity	Asbury Ave./Essex Rd. unsignalized intersection	Operational	4	Provide police enforcement	During Evacuation	\$2,000	Municipality	Location is to be re-aligned and signalized in the near future.	40° 14' 12.01"	74° 4' 54.03"				
9	Capacity	NJ GSP Exit 102 CR 16/Foxchase Drive	Operational	5	Close GSP entrance ramp and reverse direction of GSP exit ramp; provide police enforcement	During Evacuation	\$2,000	State	Daily	40° 40' 14.26"	74° 5' 24.89"				
9	Capacity	unsignalized intersection	Operational	6	Provide police enforcement	During Evacuation	\$2,000	Municipality	Daily	40° 40' 14.37"	74° 5' 38.91"				

RouteNO	Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including	Lead Organization	Comment	LOCATION 1 LATITUDE	LOCATION 1 LONGITUDE	LOCATION 2 LATITUDE	LOCATION 2 LONGITUDE	LOCATION 3 LATITUDE	LOCATION 3 LONGITUDE
9	Capacity	CR 16/CR 547 intersection	Physical	7	Widen CR 16 westbound approach to provide full shoulder; also widen intersection's west leg to provide two departure lanes	Long	\$500,000	County		40° 40' 49.2"	74° 6' 1.72"				
10	Capacity	Corridor Wide	Physical	NA	Widen to create full shoulder	Long	\$10,000,000	State							
10	Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$3,700	County with State Approval							
10	Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuations	\$2,000	Municipality	Daily						
10	Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuations	\$5,000	Municipality	Daily						
10	Capacity	Corridor Wide	Technological	NA	LED and Backup Power for Signals	Intermediate	\$105,000	State							
10	Capacity	Corridor Wide	Technological	NA	Upgrade signals for wireless control	Intermediate	\$345,000	State							
10	Capacity	Corridor Wide	System Management	NA	Plan to focus on Intense Inundation Areas	During Evacuation	\$0	MCOEM							
10	Capacity	Corridor Wide	System Management	NA	institute public communication program through multi-media sources to provide evacuees with information about emergency shelters	During Evacuation	\$0	MCOEM							
10	Capacity	Corridor Wide	Physical	NA	Promote coordination with the new HAR proposed for Neptune in this report.	Intermediate	\$0	MCOEM							
10	Capacity	SR 33 WB between Atkins Ave. and Myrtle Ave.	Physical	1	Provide second westbound lane through a combination of pavement re-striping, narrowing center median, and	Long	\$250,000	State		40° 12' 36.52"	74° 1' 17.5"				
10	Capacity	SR 33 at NJ GSP Exit 100A	Physical	2	Construct crossover between GSP on-ramp and exit ramp	Long	\$750,000	State							
10	Capacity	SR 33 at NJ GSP Exit 100A	Operational	3	Provide police enforcement	During Evacuation	\$4,000	Municipality	Daily						
11	Capacity	Corridor Wide	Physical	NA	Widen WB roadway to create a full shoulder	Long	\$7,700,000	County							
11	Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$3,000	County							
11	Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuation	\$5,000	Municipality	Daily						
11	Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	Daily						
11	Capacity	Intersection of CR 524 at SR 35, Warren Ave. and Baily's	Technological	1	LED and Backup Power for Signals	Intermediate	\$21,000	County		40° 9' 15.61"	74° 3' 17.54"	40° 9' 13.32"	74° 3' 30.54"	40° 9' 8.90"	74° 4' 21.05"

RouteNO	Issue	Location	Treatment Category	Map Code	Treatment	Timeframe	Estimated Cost (Not including	Lead Organization	Comment	LOCATION 1 LATITUDE	LOCATION 1 LONGITUDE	LOCATION 2 LATITUDE	LOCATION 2 LONGITUDE	LOCATION 3 LATITUDE	LOCATION 3 LONGITUDE
11	Capacity	Intersection of CR 524 at SR 35, Warren Ave. and Baily's	Technological	1	Upgrade signals for wireless control	Intermediate	\$69,000	State		40° 9' 15.61"	74° 3' 17.54"	40° 9' 13.32"	74° 3' 30.54"	40° 9' 8.90"	74° 4' 21.05"
11	Capacity	SR 34, between Traffic Circle and Allenwood Rd.	Physical	3	Install third travel lane in northbound direction between traffic circle and Allenwood Rd.	Long	\$1,100,000	State		40° 9' 14.43"	74° 5' 52.94"				
11	Capacity	SR 34 Traffic Circle	Physical	2	Convert traffic circle into signalized intersection	Long	\$10,000,000	Municipality		40° 9' 0.41"	74° 5' 45.57"				
11	Capacity	CR 524/Allenwood Rd./Ridgewood	Operational	4	Control traffic flow using police	During Evacuation	\$500	County	Daily	40° 8' 58.09"	74° 6' 8.48"				
11	Capacity	CR 524/Allenwood Rd./Ridgewood	Technological	4	Install flashing beacons to control traffic flow through intersection	Short	\$10,000	County		40° 8' 58.09"	74° 6' 8.48"				
12	Capacity	Corridor Wide	Physical	NA	Widen WB roadway to create a full shoulder	Long	\$8,800,000	County							
12	Capacity	Corridor Wide	Physical	NA	Add "No Parking During Evacuation" Placards	Short	\$3,200	County							
12	Capacity	Corridor Wide	Operational	NA	Enforce "No Parking During Evacuations"	During Evacuation	\$2,000	Municipality	na						
12	Capacity	Corridor Wide	Operational	NA	Emergency Service Patrols	During Evacuation	\$5,000	Municipality	Daily						
12	Capacity	CR 20 (Broad Street)	Technological	1	LED and Backup Power for Signals	Intermediate	\$7,000	County		40° 7' 34.61"	74° 2' 57"				
12	Capacity	CR 20 (Broad Street)	Technological	1	Upgrade signals for wireless control	Intermediate	\$23,000	State		40° 7' 34.61"	74° 2' 57"				
12	Capacity	SR 35/CR 524 Spur Traffic	Physical	2	Eliminate traffic circle	Long	\$10,000,000	Municipality		40° 7' 56.54"	74° 3' 54.88"				
12	Capacity	Tilton Corner Road	Operational	3	Close road and detour traffic to Ridgewood Road	During Evacuation	\$4,000	Municipality	Daily	40° 8' 27.92"	74° 3' 5.01"				
12	Capacity	CR 524 Spur at Ramshorn Drive	Operational	4	Deploy police at unsignalized intersection	During Evacuation	\$500	Municipality	Daily	40° 8' 30.78"	74° 3' 59.6"				

TechniQuest Corporation

4105 US Route 1, Suite # 14
 Monmouth Junction, NJ 08852
 Phone: 732-274-9500 Fax: 732-274-9510

File Name : 38-01-PM
 Site Code : 1
 Start Date : 11/20/2008
 Page No : 2

Groups Printed- Cars - Light Trucks - Heavy Trucks

	Route 35 Southbound					West Park Avenue Westbound					Route 35 Northbound					West Park Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Heavy Trucks	0	33	0	0	33	0	14	0	0	14	0	17	0	0	17	6	8	1	0	15	79
% Heavy Trucks	0	0.5	0	0	0.5	0	0.4	0	0	0.4	0	0.4	0	0	0.3	0.5	0.3	0.3	0	0.4	0.4

Start Time	Route 35 Southbound					West Park Avenue Westbound					Route 35 Northbound					West Park Avenue Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	422	0	0	422	0	197	31	0	228	0	253	4	0	257	79	179	21	0	279	1186
04:45 PM	0	411	0	0	411	0	227	30	0	257	0	273	2	0	275	89	157	25	0	271	1214
05:00 PM	0	425	3	0	428	0	256	20	0	276	0	347	15	0	362	80	170	28	0	278	1344
05:15 PM	0	398	0	0	398	0	214	22	0	236	0	321	13	0	334	92	173	20	0	285	1253
Total Volume	0	1656	3	0	1659	0	894	103	0	997	0	1194	34	0	1228	340	679	94	0	1113	4997
% App. Total	0	99.8	0.2	0		0	89.7	10.3	0		0	97.2	2.8	0		30.5	61	8.4	0		
PHF	.000	.974	.250	.000	.969	.000	.873	.831	.000	.903	.000	.860	.567	.000	.848	.924	.948	.839	.000	.976	.930

STAKEHOLDER MEETINGS

**STAKEHOLDER MEETING – INTRODUCTORY COMMENTS BY NORA
SHEPARD, SENIOR TRANSPORTATION PLANNER, MONMOUTH COUNTY
PLANNING BOARD**

INTRODUCTIONS

Staff

TAC Members

MCTC Members

Consultants

Audience Introductions (if a small group)

REVIEW OF AGENDA

REVIEW OF HANDOUT MATERIAL

COMMENT FORM

BACKGROUND:

- Study is a Subregional Study with federal funding through the North Jersey transportation Planning Authority. Monmouth County contributes 50% of the cost of the study.
- Every 2 years, Counties can apply for funding for studies that further the goals of improving transportation. This study is a 2 year study that will be complete by June 30, 2009
- Monmouth County Planning Board staff acts as the project manager, Jacobs engineering is the consultant doing the work and we have formed a Technical Advisory Committee comprised of County and State departments and agencies that give input to the consultant on a regular basis
- There is also a Stakeholders group. Each of the 41 municipalities in the study area was asked to assign up to 3 people to participate as stakeholders. These folks are usually police, or OEM personnel. The stakeholders are broken up into 3 geographical groups. One meeting has been held with each of the 3 groups to discuss the analysis of existing conditions and deficiencies performed by the consultants. We have scheduled another round of stakeholder meetings in the next 2 weeks to discussed preliminary ideas for improvements to make coastal evacuation more efficient.
- This session is to give the public some background information on the Study and for us to hear comments. There will be at least 1 other public hearing as some of the recommended improvements are refined.

WHAT THIS STUDY DOES AND DOES NOT DO:

- The name of this study is "Coastal evacuation route improvement study."
- It is not an evacuation plan for you community

- The purpose of the study is to evaluate existing and potentially new evacuation routes, evaluate the existing conditions, analyze what would happen during an evacuation and recommend improvements that will help make the routes function better.
- There is currently no funding for the improvements, but the recommendations could then be included in capital improvements planning and be included in the “pipeline” for funding through NJTPA and others.
- The recommendations for improvements will be on all levels from additional signs to road widening. Some of the improvements could be done fairly easily and quickly, while others may take many years to get funding to complete. In the final report, the improvements will be prioritized and presented so that we can see how we can get “the biggest bang for the buck”. This is just a planning study at this point

EXPECTED OUTCOMES AND PRODUCTS FOR MUNICIPALITIES

- Study will give municipalities information on evacuation route existing conditions to assist in developing local evacuation plans
- The Study also provides a significant amount of information that will be available to municipalities, including traffic counts, photographs.

MEETING TONIGHT

This is a public meeting to let you know what is going on and to provide input. If you have specific knowledge about any of the studied routes, that information would be helpful.

WHAT'S NEXT

- A preliminary report is being developed to lay out a “tool kit” of improvements.
- Stakeholders meetings will be held in the next 2 weeks to get input on those ideas
- The Consultant will consider that input and will further refine the recommendations.
- A 2nd public hearing will be held on the potential improvements that may make sense for each of the routes studied
- A final report will be generated followed by meetings with municipalities and another public meeting.

Turn time over to consultants.

COASTAL EVACUATION ROUTES STUDY



Coastal Evacuation Route Improvement Study Stakeholder Meeting Summary October 23, 2008

Meeting Location: Middletown Town Hall

Municipalities Invited

- Aberdeen
- Atlantic Highlands
- Hazlet
- Highlands
- Holmdel
- Keansburg
- Keyport
- Matawan
- Middletown
- Union Beach
- Bayshore Region Implementation Collaborative (BRIC) stakeholders

Municipalities Represented:

- Aberdeen – John Powers
- Atlantic Highlands – Martin Hawley
- Hazlet – Ken Marr Jr. (OEM)
- Holmdel – Mike Simpson
- Keansburg – Ray O'Hare, Jim Pigott (OEM)
- Keyport – Robert Ludwig, Tom Gallo (OEM)
- Matawan – Thomas J. Falco (OEM)
- Middletown – Craig Weber, C. Rogers III, Jason Greenspan
- Union Beach – Victor Tuberton, Tom Luminoso, Michael Harriott
- BRIC – Melissa Gaffney, Cliff Moore

Others in Attendance:

- Margaret Murnane, Monmouth County OEM
- Daria Jakimowska, Monmouth County Engineering
- Henry Nicholson, Monmouth County Department of Transportation
- Nora Shepard, Anthony Gamallo, Monmouth County Planning Board
- Jeff Vernick, MCTC
- Jackie DeFelice, JCP&L
- Robert Brakman, Jacobs Engineering

Agenda: See attached
Introduction and comments by Nora Shepard on the Study and the process
Presentation by Bob Brakman

Comments and Input from Attendees:

- Kings Highway – Floods often, especially at Rte 12 and 35
 - Historic Character is a concern
 - Scenic Roads (Byways) conflict
 - Middletown Historic District
- Is 12A to 12 (Navesink River Rd) to GSP
- Could Normandy Road be used?
- Concern over how first responders get in?
- Rte 35/36/GSP – need to widen on-ramps, portable median to allow 2 vehicles side by side
- Reversing traffic flow on 35 or 36 would be difficult due to numerous access points
- DMV may have info on registered vehicles in the area to get an idea of #'s
- Rte 39 and Front Street – 2 low areas could be raised to establish a complete evac route
- Keyport area – Matawan Creek
- Flooding is a problem - Rte 35 north by water tower, under Hudson Trail
- Clark Street is used, but it is a marsh area
- Broad Street and Atlantic can also flood
- Getting to Broadway is difficult
- Elevate Rte 516 bridge
- Jug Handle @ Rte 36 in Union Beach floods (behind Bank, Washington and Union)
- Rte 39 in Union Beach would be totally impassable – could be raised behind bank and then it would be passable
- 36 in Keyport – NPP – designated study area
- Once people get to the GSP, then what? Where are people going? Rte 35/36 and GSP gets backed up – choke point
- Need signs for alternate routes
- Need to address Senior Citizen areas
- Aberdeen – County Rte 6 is designated by the town as an evac route
- Parts of Middletown have elevation and could shelter people in place or provide shelters
- Inundation maps are not accurate – in reality it is a lot worse than shown
- Hwy 35 to the coast would all be inundated
- What happens to traffic lights during power outages?
- U-turn off north bound to south bound – turn in median, allow during emergencies

- Rte 36 in front of IHOP – emergency U-turn should be designated
- Large old trees could cause road blockages and electricity outages
- Utilities should be strengthened at key intersections
- There are utility lines over some of the routes that may come down

Nora Shepard thanked the group for their participation and indicated that when Tech Memo one is finalized, it will be available on-line.

COASTAL EVACUATION ROUTES STUDY



Coastal Evacuation Route Improvement Study Stakeholder Meeting Summary October 28, 2008

Meeting Location: Monmouth University

Municipalities Invited

- Allenhurst
- Deal
- Eatontown
- Fair Haven
- Interlaken
- Little Silver
- Loch Arbour
- Long Branch
- Monmouth Beach
- Ocean
- Oceanport
- Red Bank
- Rumson
- Sea Bright
- Shrewsbury Borough
- Shrewsbury
- Tinton Falls
- West Long Branch

Municipalities Represented:

- Allenhurst – Michael Schneider (Police)
- Eatontown – Troy Fowlkes (Police)
- Fair Haven – Joe McGovern
- Little Silver – Shannon Gibun, Gary LaBruno (Police)
- Long Branch – Charles Shirley
- Monmouth Beach – Jerry Chismhr, Cranston VanBloom
- Ocean – Gerald Spanarkel
- Red Bank – Pete DeFazio
- Sea Bright – William J. Keeler

Others in Attendance:

- Nora Shepard, Anthony Gamallo, Monmouth County Planning Board
- Mike Oppegaard, Monmouth County OEM
- Jennifer DeLorenzo, Urban Coast Institute

- Joe Toniolo, Jacobs Engineering

Agenda: See attached

Introduction by Nora Shepard

Comments by Nora Shepard on the Study and the process

Comments by Mike Oppegaard on Statewide OEM efforts

Presentation by Joe Toniolo

Comments and Input from Attendees:

- GSP goes through a low area, how will that be handled?
- Where do routes end up?
- Will there be recommendations on where shelters should go?
- Rte 36 and Florence Ave – road is impassable in a rain event
- Portable traffic lights may help along CR520
- Who would “own” portable lights and could they be used for other uses – special events?
- Police officers will be needed to direct traffic – manpower!
- West Park Ave is a mess during normal conditions. School conflicts
- Trains coming through towns is an impediment. At Broad and CR 520, when the train is in the station, 3 road crossings are closed. 40 trains/day
- Newman Springs Road and Rte 35
- Eatontown is centrally located and has the major intersection of Rte 35 and 36, major bottleneck
- Only evacuate out of vulnerable areas, shelter in place when possible
- Some of the identified evac routes flood out of Sea Bright and Monmouth Beach
- Rte 36 – raise road near Union Beach

Nora Shepard thanked the group for their participation and indicated that when Tech Memo one is finalized, it will be available on-line.

COASTAL EVACUATION ROUTES STUDY



Coastal Evacuation Route Improvement Study Stakeholder Meeting Summary October 22, 2008

Meeting Location: Neptune Community Center

Municipalities Invited

- Asbury Park
- Avon by the Sea
- Belmar
- Bradley Beach
- Brielle
- Lake Como
- Manasquan
- Neptune
- Neptune City
- Sea Girt
- Spring Lake
- Spring Lake Heights
- Wall

Municipalities Represented:

- Asbury Park – Kevin Keddy
- Avon by the Sea – Terry Mahon
- Belmar – Dennis Ryan (OEM), Andy Meuerle (DPW)
- Bradley Beach – Stephen Fahnholz (Police)
- Lake Como – Basil Wolfe, Louise Mekosh, Rosman Cash
- Manasquan – Tom Carroll
- Neptune Township – LeAnne Hoffman, Anthony Gualario (Police), Mary Beth Jahn, Michael Dileo
- Neptune City – John Matthews (Police)
- Sea Girt – Timothy Harmon
- Spring Lake – Robert Dawson, Jim Mullen
- Spring Lake Heights – William Graetz (OEM), Mark Steets
- Wall – Robert Brice (OEM)

Others in Attendance:

- Mike Oppegaard, Monmouth County OEM
- Pete Imperiale, Monmouth County Engineering

- Nora Shepard, Bonnie Goldschlag, Anthony Gamallo, Monmouth County Planning Board
- Robert Brakman, Jacobs Engineering

Agenda: See attached

Introduction by Bonnie Goldschlag

Comments by Nora Shepard on the Study and the process

Comments by Mike Oppegaard on Statewide OEM efforts

Presentation by Bob Brakman

Comments and Input from Attendees:

- No one will leave until it is critical. People will wait until the last minute
- Intersection of 524A and Rte 34 – no way to get to Rte 34 north
- 524 and 524A crossing 34 – traffic circle is a hang up. Not accurately represented on map – it is a 5 way intersection
- 195 is a given route for evacuation - contraflow crossover is east of Allaire Road
- 5 evacuation routes converge in 1 circle
- Where are we trying to get people? Where will people end up?
- Need to look at shelters closer in
- Rte 66 – 1 lane going west, can't handle traffic
- Rte 66 – ROW and drainage facilities are already there for expansion
- How do volumes deal with the circles, like 33/66 area
- There is already flooding in the summer on Rte 66 in Neptune
- Parts of the GSP flood
- Rte 35 and 3rd Ave is a problem
- Rte 71 in Spring Lake Heights between 544 and Warren Ave is a problem
- Manpower is a huge issue
- Ability for 1st responders to get in is a real concern
- Need to get info out the public on routes
- Mass transit is an important component
- Need sign directing people where to go
- Data should be available to municipalities

Nora Shepard thanked the group for their participation and indicated that when Tech Memo one is finalized, it will be available on-line.

COASTAL EVACUATION ROUTES STUDY



Coastal Evacuation Route Improvement Study Stakeholder Meeting Summary

March 4, 2009 7pm

Meeting Location: Monmouth University

In Attendance:

Nora Shepard, MC Planning Board Staff
Anthony Gamallo, MC Planning Board Staff
Bob Brakman, Jacobs Engineering
Mike Oppgaard, MCOEM and TAC member
Jeff Vernick, NJTPA and TAC member
Jennifer DiLorenzo, UCI – Monmouth University
Shannon Giblin, Little Silver police
Bill Balanza, Oceanport Boro
Jim McGovern, Fair Haven Boro

1. Brief Introduction by Nora Shepard
2. Power Point Presentation by Bob Brakman
3. Comments:
 - Need to check with FEMERPA about roadway changes associated with future redevelopment
 - All Hazards Mitigation Funds may be available for some of the improvements now that the County has an All Hazard Mitigation Plan. Some of the improvement suggested are already mentioned in the All Hazards Plan
 - The train crossing is a real issue with Newman Springs Road
 - Are the number of people evacuated from an area taken into consideration?
 - The end of Pickney Road, at Foodtown is a nightmare of an intersection
 - Temporary traffic lights would help as well as battery backup
 - The County is putting in 2 temporary lights to do bridgework. Perhaps those lights could stay.
 - Navesink River Road would be tough to widen. What about River Road?

- Did you look at Wall Street to Industrial Way as a route?
- Just having battery back-up for the traffic lights would be a huge improvement. There are not enough police officers to be at every intersection
- If signals are operated remotely, who controls them?
- There would have to be an operation protocol established for various types of emergencies for remote control of traffic signals
- Will there be cameras to monitor traffic so that a central control area could see what is going on in order to control lights?
- Raising the road – expensive option. What else could be done in places like Monmouth Beach?
- Need to prioritize evacuation or areas like Monmouth Beach and Sea Bright
- This study may provide additional rationale for funding for operations
- Will there be permanent Variable Message Boards installed?
- Long term plan for the Pickney/Rumson area is needed
- The train is the real issue
- It may be better to split the traffic and direct some to White Road to avoid the Newman Springs intersection altogether.

The meeting adjourned at 8:30pm

COASTAL EVACUATION ROUTES STUDY



Coastal Evacuation Route Improvement Study Stakeholder Meeting Summary

March 16, 2009 7pm

Meeting Location: Neptune Community Center

In Attendance:

Nora Shepard, MC Planning Board Staff
Anthony Gamallo, MC Planning Board Staff
Bob Brakman, Jacobs Engineering
Al Hilla, Brielle
Tom Gironda, Ashury Park
Rosman Cash, Lake Como
Anthony Gualario, Neptune Township
Stephen Fahnholz, Bradley Beach OEM
William Graetz, Spring Lake Heights OEM

4. Brief Introduction by Nora Shepard
5. Power Point Presentation by Bob Brakman
6. Comments:
 - Route 16 is a mess today, and everyday. Anytime there is any kind of an event, Asbury Ave backs up.
 - Get People to 33
 - Evacuate Bradley Beach by getting them to 35 to 138 to 195. Highway 35 south of Belmar floods (Shark River)
 - Need to know when and where to send people. How to get people to the best routes
 - Unless there is improvement to 35 in Belmar, people will just go to 33
 - Are County roads going to be reversed?
 - How will traffic control devices be coordinated?
 - How long will these recommendations stay in place?
 - Where does the \$\$ come from?
 - Limitations from Allaire Road to 34. Directing people onto 34 is a good way to go north before they get to the Parkway
 - Route 18 is another possible Northwest route
 - If we get people off on 18, Asbury Ave could see some relief

- Recommend permanent solar variable message boards in key locations
- AM Radio Station – that needs to be coordinated as well
- Can Hazard Mitigation Funds be used for some of these improvements to prevent roadways from flooding?

The meeting Adjourned at 8:15