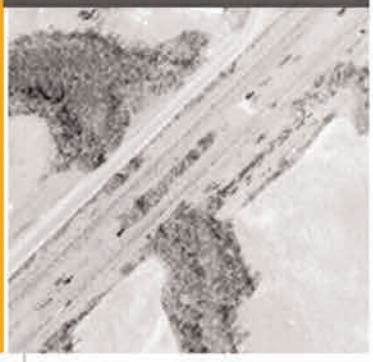

October 2002

I-295/US 130 Riverfront Transportation Corridor Study

Gloucester County, New Jersey

Delaware Valley Regional
Planning Commission

I-295/US 130 Riverfront Transportation Corridor Study

October 2002

Delaware Valley Regional Planning Commission
The Bourse Building - 8th Floor
111 South Independence Mall East
Philadelphia, PA 19106
www.dvrpc.org

Created in 1965, the Delaware Valley Regional Planning Commission (DVRPC) is an interstate, intercounty and intercity agency that provides continuing, comprehensive and coordinated planning to shape a vision for the future growth of the Delaware Valley region. The region includes Bucks, Chester, Delaware, and Montgomery counties as well as the City of Philadelphia, in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer counties in New Jersey. DVRPC provides technical assistance and services; conducts high priority studies that respond to the requests and demands of member state and local governments; fosters cooperation among various constituents to forge a consensus on diverse regional issues; determines and meets the needs of the private sector; and practices public outreach efforts to promote two-way communication and public awareness of regional issues and the Commission.

Our logo is adapted from the official DVRPC seal, and is designed as a stylized image of the Delaware Valley. The outer ring symbolizes the region as a whole while the diagonal bar signifies the Delaware River. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey.

DVRPC is funded by a variety of funding sources including federal grants from the U.S. Department of Transportation's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), the Pennsylvania and New Jersey departments of transportation, as well as by DVRPC's state and local member governments. The authors, however, are solely responsible for its findings and conclusions, which may not represent the official views or policies of the funding agencies.

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EXECUTIVE SUMMARY

This is a transportation corridor study of I-295/US 130 riverfront corridor in Gloucester County. The study identifies and addresses the transportation needs facing the riverfront communities. The study area consist of seven municipalities, Westville, Woodbury, Greenwich, Logan, Paulsboro, National Park and West Deptford. It encompasses 17 miles of I-295 from Westville in the north to Logan in the south.

Land use type and density in the riverfront communities varies. Significant employment is generated in the corridor by several large industrial uses along the river and several major industrial parks located along I-295. In addition to this industrial sector, residential growth is strong in portions the corridor. The study evaluates the corridorís highway and transit needs.

Although generally highway access to the corridor is good and has worked as a catalyst to the rapid development experienced in several of the riverfront communities; there exists localized problem areas in the network. Interchange 10 on I-295 is one such problem area in the existing network. The strategic location of the Pureland Industrial Complex, the largest facility of its kind in the northeastern United States, around this interchange helps to exacerbate the problem.

The problems at this interchange falls into two main categories, safety and traffic congestion. It is recommended that a complete traffic analysis be done at the interchange towards implementation of traffic signals at the exit ramps from I-295 at Center Square Road. A primary issue is sight distance related to the crown of the bridge on Center Square Road. During peak periods traffic backs-up from the exit ramps on to the mainline I-295. Suggested improvements range from installation of warning signs on approaches to the creation of a jughandle on Center Square Road to handle left-turning traffic exiting I-295.

Transit service for employees and the growing number of residents of the corridor is lacking. Transit access to industrial areas, serving both the established and growing residential areas in the corridor and establishing a transportation center in Woodbury is given priority. Currently, there are seven NJ Transit fixed route bus service in the study area. Along with the Camden County Improvement Authority shuttle which runs to Pureland Industrial Complex in Logan from Camden, these services are analyzed for efficiency, in terms of their service to existing industrial parks in the study area.

During peak periods all the bus routes in the study area run on headways greater than 30 minutes southbound. Services are geared towards the northbound commuter. Land use density in the study area makes it difficult for traditional transit on its own to provide the required service needs. Therefore in addition to proposing increased frquency on existing NJ Transit bus routes and adjusting bus schedules to accommodate timed

transfers in Woodbury, coordinated shuttle services are recommended. Additionally, it is suggested that the full resources of the regionís Transportation Management Association (TMA) be utilized.

In order to facilitate timed-transfer and coordinated shuttle service to increase the efficiency of the transit network, a bus transfer center in Woodbury is recommended. Four proposed locations in Woodbury are analyzed. The Hunter Street location meets or exceeds the stated analysis criteria. This site has the potential to accommodate a parking garage compatible with the cityís environment. The bus transfer center and its accompanying amenities would be at street level. It is suggested that a detailed feasibility study be done to determine parking supply and demand as well as transportation infrastructure requirements and costs. Funding for this type of project is available from a number of sources.

Over the last decade there has been rapid residential and commercial/industrial development in the riverfront communities, this has mainly concentrated around the larger municipalities. In the smaller established municipalities in the riverfront area there has been a decline in the economy and stagnation in growth. Paulsboro, hit by economic decline in the last decade has now embarked on a joint redevelopment project with BP Oil Company. The plan is to redevelop 190 acres of brownfield in the northwestern section of the borough. The completion of this project which will potentially consist of port terminal and industrial/commercial development, will increase the boroughís ratebles and strengthen its economic base. The overall success of this project is dependent on access to the site. It is recommended that access to the site be from CR 656 which would include the construction of a bridge or overpass across the Mantua Creek.

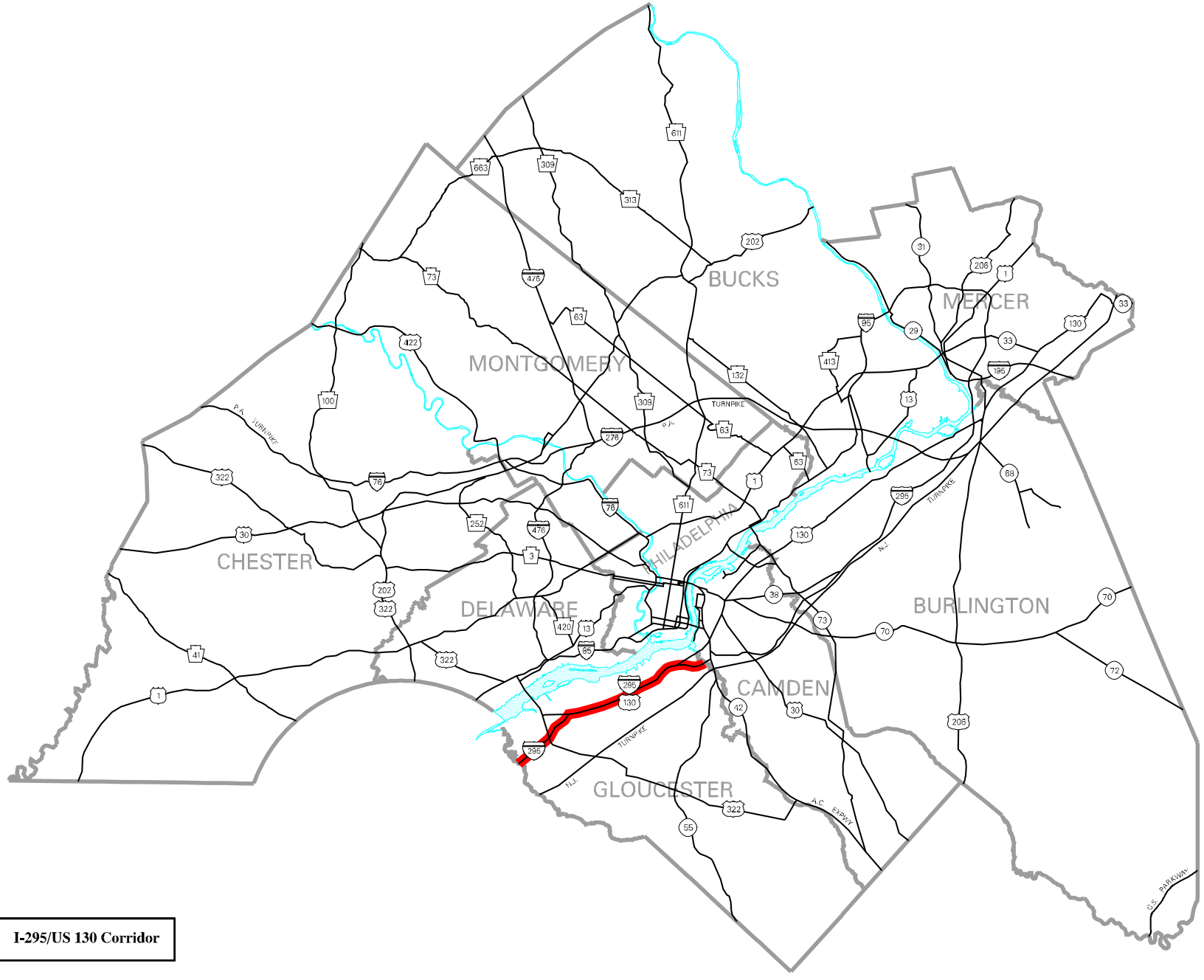
SECTION I
INTRODUCTION

This study is a transportation corridor planning study of the I-295/US 130 Riverfront communities in Gloucester county. This study was initiated by the Gloucester County Planning Department and was intended to study the transportation needs and identify potential improvements in the corridor. The Countyís main concerns were getting a more efficient public transportation network to serve the ever growing industrial parks in the region. This area has been traditionally under-served by conventional mass transit due to low densities in scattered developments. As development takes place the need for transit becomes more acute. With an increase in jobs and its accompanying demand for transportation to these jobs in the region, it has become even more important for an examination of the service potential and need.

Figure 1, shows the study area in relation to DVRPCís region. The study area encompasses approximately 17 miles of I-295 in Gloucester County. It is bordered on the west by the Delaware River, on the north by Camden County, on the south by Salem County and on the west by the municipal boundaries. It includes the following seven municipalities, Borough of Westville, West Deptford Township, Borough of National Park, City of Woodbury, Borough of Paulsboro, Greenwich Township and Logan Township. *Figure 2,* shows the study area and surrounding region.

The corridor is in varying stages of development and as such has a variety of transportation/land use issues. Most of the riverfront municipalities are older communities. Westville, National Park, Paulsboro and Woodbury are older traditional industrial based communities at or near build-out. Whereas, Logan, West Deptford and Greenwich are experiencing increasing residential and commercial development, there are areas of traditional development especially in the westerly sections of West Deptford and Greenwich.

Over the last five years there have been a number of studies undertaken in Gloucester County to address the transportation needs of the county. Where available, these studies were examined. In conducting this study, some of the same needs were identified and some of the recommendations could be echoed. This study re-visits evaluations and recommendations which are still appropriate but also in some cases further analyzed and taken into a sketch-planning pre-feasibility stage.



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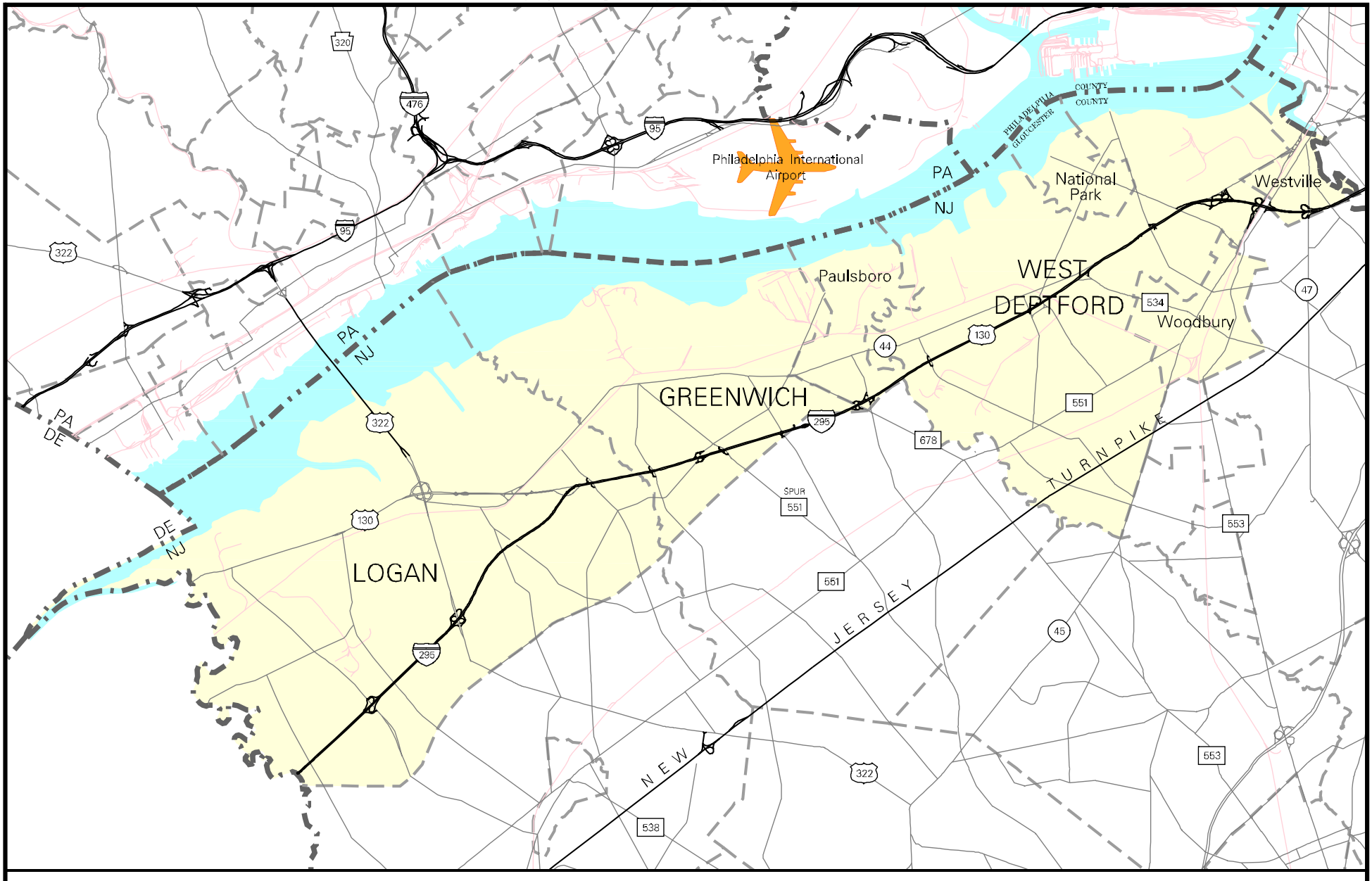
Regional Setting

Figure: 1



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Study Area

Figure: 2

REGIONAL BACKGROUND

Demographics

Between the 1990 and 2000 census, the population in New Jersey increased by 8.9 percent, the population in Gloucester County increased by 10.7 percent but the population in the study area decreased by 1.2 percent. Of the seven municipalities, only Logan experienced an increase in population during this period and their increase was 17.2 percent. This percentage increase is above the state and county growth rates. Over the twenty-year period between the 1980 and 2000 census the population of Logan has almost doubled and there was a dramatic 67 percent increase in population in the township between 1980 and 1990.

Table 1
Population Change

Geographic Area	1980 Census	1990 Census	2000 Census	Absolute Change 1980-1990	Absolute Change 1990-2000	Percent Change 1980-1990	Percent Change 1990-2000
Greenwich	5,406	5,102	4,879	-304	-223	-5.62	-4.37
Logan	3,078	5,147	6,032	2069	885	67.22	17.19
National Park	3,552	3,413	3,205	-139	-208	-3.91	-6.09
Paulsboro	6,944	6,577	6,160	-367	-417	-5.29	-6.34
West Deptford	18,002	19,380	19,368	1378	-12	7.65	-0.06
Westville	4,786	4,573	4,500	-213	-73	-4.45	-1.60
Woodbury	10,353	10,904	10,307	551	-597	5.32	-5.48
Gloucester County	199,917	230,082	254,673	30,165	24,591	15.09	10.70

Source: US Census 1980, 1990, 2000

All the other municipalities experienced varying magnitude of population loss between the 1990 and 2000 censuses. West Deptford had a 0.06 percent loss, which is in absolute population loss, 12 persons. The boroughs of Paulsboro and National Park had the highest percentage loss in the study area at 6.3 percent and 6.1 percent respectively and Woodbury had the highest number of loss, 597. Of the study area municipalities, these three municipalities showed a higher percentage of population loss between the 1990 and 2000 census than between 1980 and 1990 census.

Figure 3, shows the population change for the study area and adjacent municipalities.

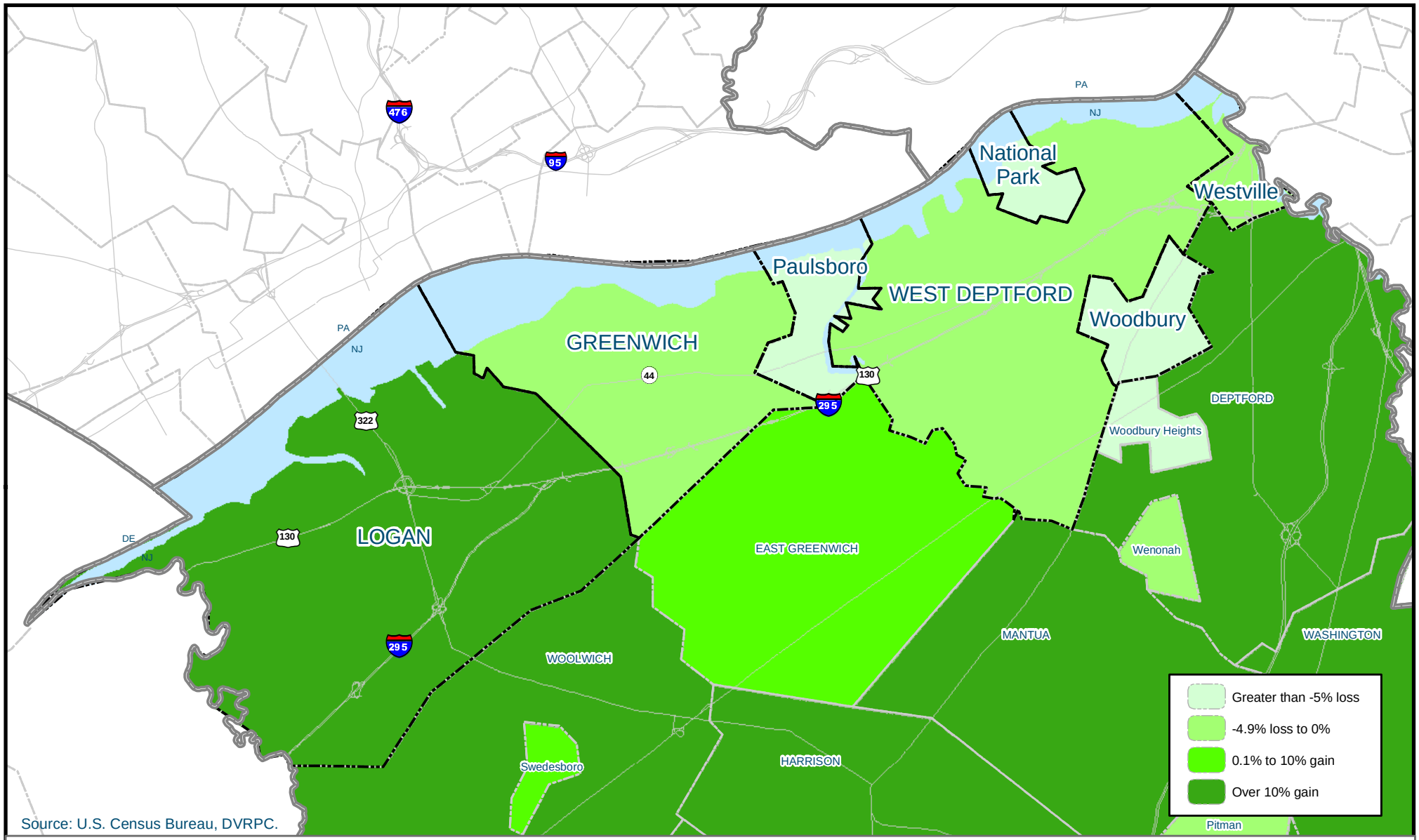
DVRPCís population forecast for the year 2025 indicates that existing trends in population change is expected to continue.

Table 2
DVRPC Forecasted Population Change

Geographic Area	2000 Census	2025 Population Forecast	2000-2025 Absolute Change	2000-2025 Percent Change
Greenwich	4,879	4640	-239	-5
Logan	6,032	7190	1,158	19
National Park	3,205	3,130	-75	-2
Paulsboro	6,160	5750	-410	-7
West Deptford	19,368	23,350	3,982	21
Westville	4,500	4,640	140	3
Woodbury	10,307	9,730	-577	-6
Gloucester County	254,673	322,520	67,847	27

According to the US Census Bureau figures for 2000, the municipalities which are losing population are the ones which are the most densely populated. Woodbury, Westville, National Park and Paulsboro are the most densely populated municipalities, not only in the study area but also in the county with population densities of 4,961.4, 4,666.1, 3,219 and 3,140.8 persons per square mile respectively. The population density of Logan Township is among the lowest in the county with 266.7 persons per square mile. The municipalities with the highest densities tend to be older established communities which are small in size.

Gloucester County employment will increase by 23 percent between 2000 and 2025 according to DVRPC year 2025 forecast. The study area employment is expected to increase by 18.3 percent by the year 2025. Although these overall figures are positive, this translates into less than 1 percent per year growth. By the year 2025, in five of the study areaís seven municipalities, employment would have declined or remained constant. Employment in National Park is forecasted to remain at the current level over the 25 year forecast period of 2000 to 2025. Paulsboro and Westville are expected to have the highest decline (17.9 and 17.5 percent respectively) over that period and Logan Township and West Deptford Township are forecasted to increase by 50 percent. However Paulsboroís numbers could be different if its redevelopment project (see Section V) is successful.



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Population Change
(1990 - 2000)

Figure: 3

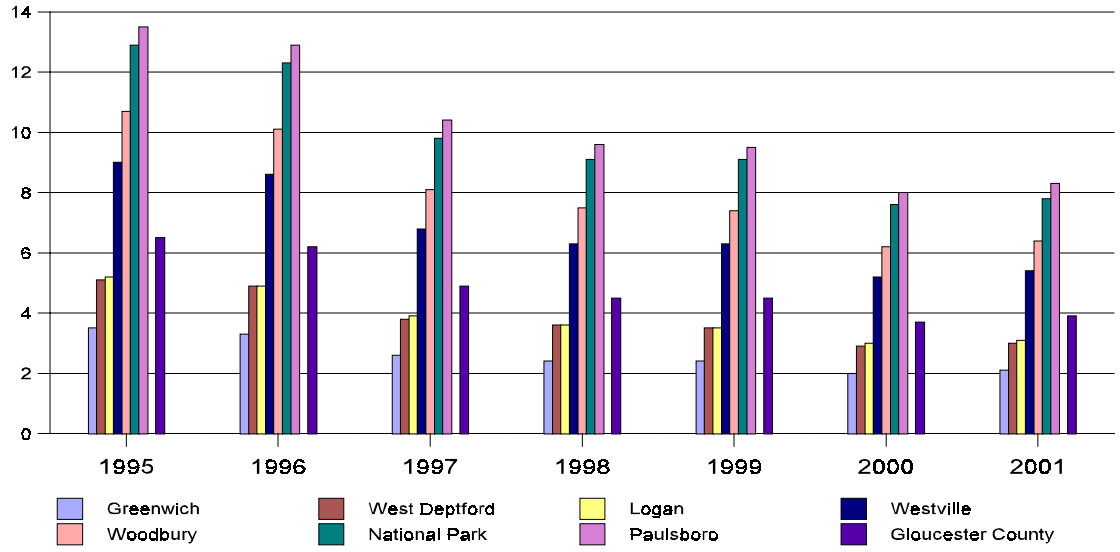
Table 3

DVRPC Forecasted Employment Change

Geographic Area	Total Employment 1990 Census	Employment 2000 Forecast	Employment 2025 Forecast	2000-2025 Absolute Change	2000-2025 Percent Change
Greenwich	3,283	3,250	3,100	-150	-4.6
Logan	2,980	5,000	8,200	3,200	64.0
National Park	374	400	400	0	0.0
Paulsboro	3,728	3,350	2,750	-600	-17.9
West Deptford	6,333	8,650	13,050	4,400	50.9
Westville	2,906	2,850	2,350	-500	-17.5
Woodbury	10,103	10,400	10,250	-150	-1.4
Gloucester County	86,079	99,700	122,650	22,950	23.0

The chart below shows the trend in unemployment rates over the last seven years for the study area municipalities.

Table 4: Average Annual Unemployment Rate



Source: New Jersey Department of Labor

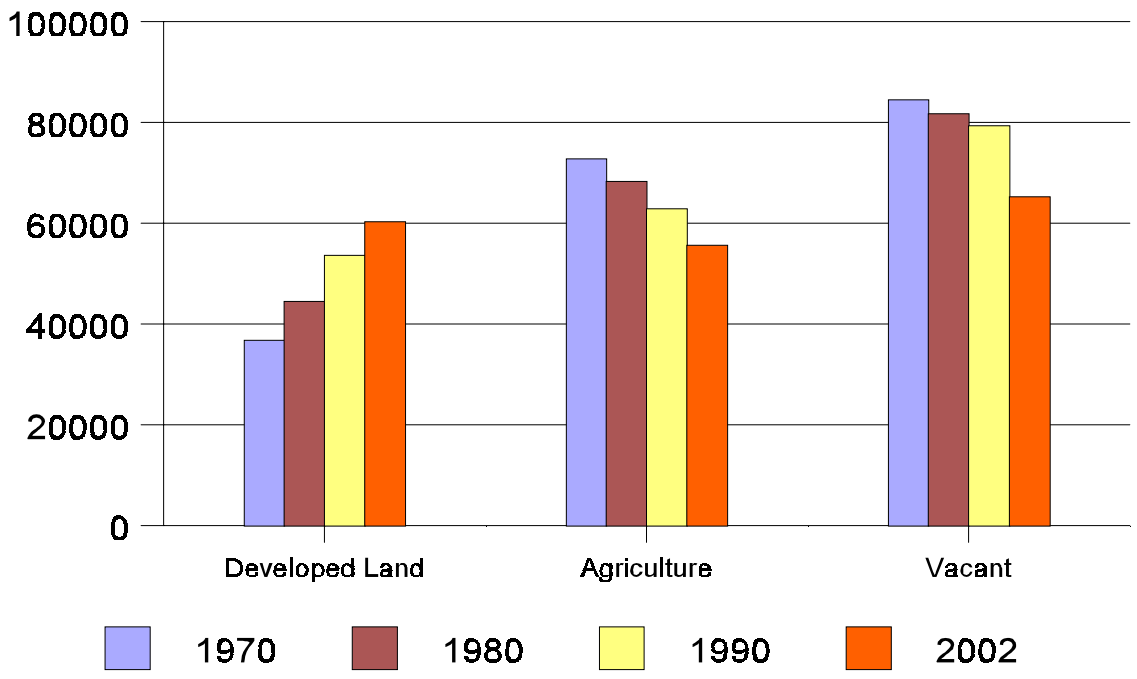
Unemployment figures for the study area follow the same pattern. The highest unemployment rates are in the older developed municipalities. In 2001 according to the New Jersey Bureau of Labor Force Statistics, Paulsboro had the highest unemployment rate with 8.3 percent, National Park a close second with 7.8 percent, Westville and Woodbury with 5.4 and 6.4 percent respectively. Logan, Greenwich and West Deptford were below the county rate of 3.9 percent.

Land Use

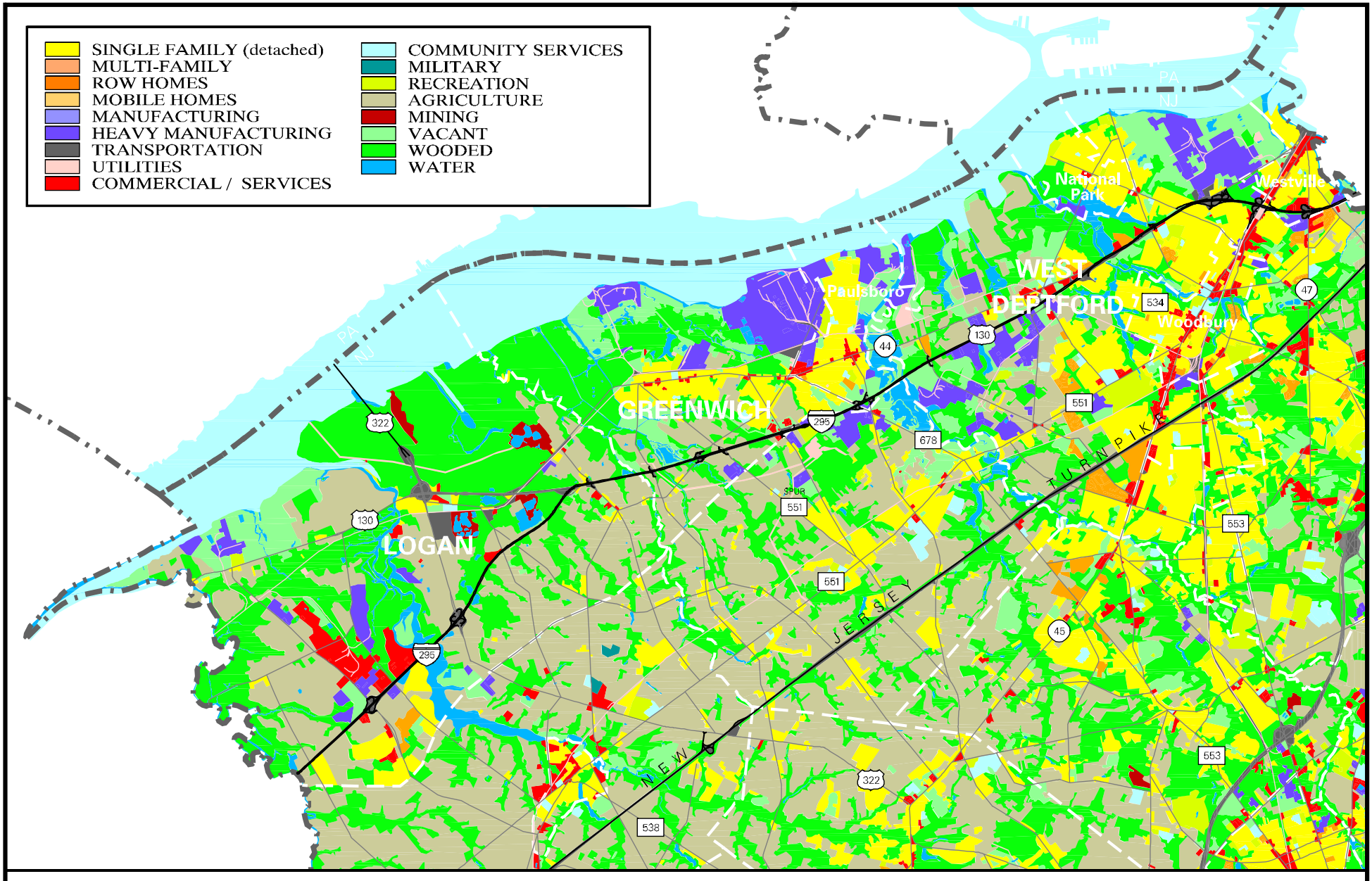
Like most of New Jersey, Gloucester County experienced rapid development in the late 1990's and it has continued into the new millennium. As a result, the county which was largely rural has become a force to be reckoned with in providing residential housing and commercial facilities in an economy where unemployment rates were decreasing. *Figure 4*, represents the 1995 land use in the study area.

The chart below shows the relative rate of developed land consumption for development against decline of agriculture and vacant land.

Table 5: Gloucester County Land Use (Acreage)



Of the seven municipalities in the study area, Westville , National Park, Paulsboro and Woodbury are older traditional mixed use development communities with residential, retail and commercial developments within walking distance from each other. These



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1995 Land Use

Figure: 4

municipalities have reached or are very close to built-out and range between 1 and 2 square miles in size. Logan, West Deptford and Greenwich are 22.8, 15.9 and 9.3 square miles in area respectively. Development in these municipalities tends to be more scattered with defined clusters of residential, retail and commercial uses. Though residential and commercial development have taken over a lot of farmland in this area, portions can still be referred to as being rural. There are also large tracts of undevelopable land and preserved land for open space and farming within the study area.

Table 6 shows a comparison of housing density in the state and county against the study region and individual municipalities.

Table 6
Housing Density

Geographic Area	**Housing Density** Housing units per square mile of land area
New Jersey	446.3
Gloucester County	328.8
Study Area	409.7
Greenwich	208.7
Logan	91.8
National Park	1170.1
Paulsboro	1339.9
West Deptford	503.2
Westville	2009.5
Woodbury	2074.7

Source: US Census Bureau, Census 2000 Summary File 1

Gloucester County currently boasts 14 major industrial parks. Of that number, eight are located within the study area. The Pureland Industrial Park which covers three thousand acres, located in Logan Township is the largest business parks on the northeast coast of the United States. The Northeast Business Center which sits on eleven hundred acres and Commodore 295 Industrial Park with three hundred and ninety-eight

acres are also located in Logan. Forest Park Corporate Center, Kings Point Commerce Center and MidAtlantic Corporate Center which together are over three hundred and fifty acres are located in West Deptford Township. Westgrove Industrial Park and I-295 Industrial Park, together account for twenty-two acres and are located in Westville.

Figure 5 shows the locations of the major business parks in the study region. These industrial parks are strategically located along I-295. They are easily accessible to markets in the New York Metropolitan Area and points further north and also the Baltimore-Washington Metropolitan Area and points further south via the I-95 corridor. Access to global markets are within easy reach of this area, utilizing the ports of Philadelphia, Camden and Wilmington along the Delaware River. With its extensive cargo facility, Philadelphia Airport is within a few miles of this area.

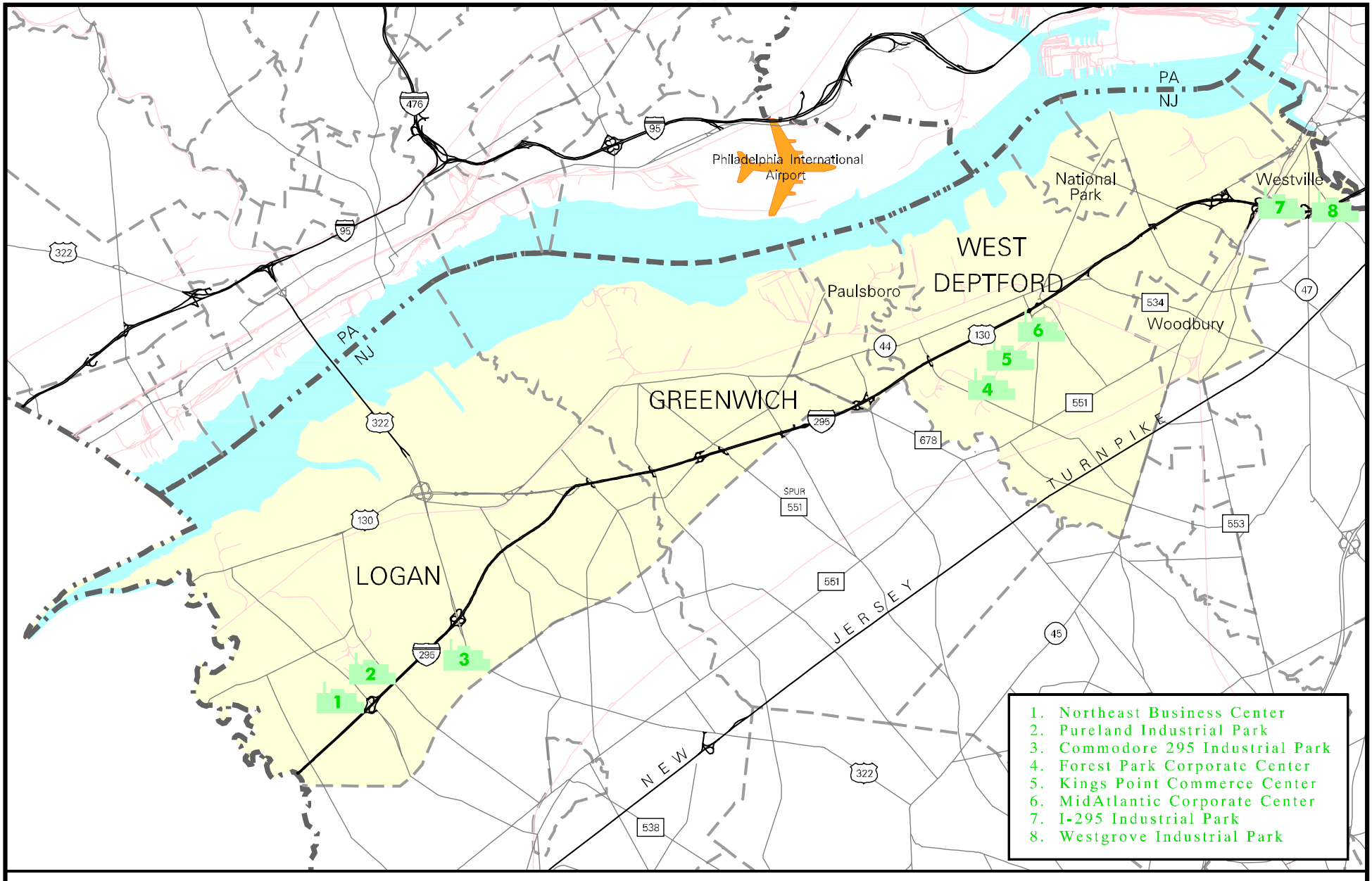
Commercial and industrial development continues to grow in the study area and adjacent communities. In 1996, Gloucester County approved site plans totaling 1,718,427 square feet. Logan and West Deptford accounted for one third of that total, all of which were for commercial and industrial use. In 1997, Logan Township alone accounted for more than half of the 2,962,161 square footage approved in the county; all of which was for industrial use.

Transportation

Highways

The economic potential of the region is vast and diverse. The transportation infrastructure works as a catalyst in the regionís economic development. Existing major north/south highways makes access to major markets uncomplicated. *Figure 2*, shows the major highway network in the study area.

The major highway in the study area is I-295 which runs in a north-south direction. It extends from US 1 in Mercer County in the north to Salem County in the south. The functional class of this highway within Greenwich Township is a rural interstate. North of Greenwich Township it is classified as an urban interstate. I-295 for the most part in the study area is a 6-lane highway with shoulders and grass median. It combines with US 130 in West Deptford just outside of Westville and continues co-designated for approximately 9.6 miles where it divides again into two separate highways. At the point of separation, I-295 becomes a 4-lane highway. Over the 17 miles of I-295 which traverse the study area there are approximately 17 access/egress points from local communities. Available records show an Average Annual Daily Traffic (AADT) of 51,275 in Logan Township (between US 322 and CR620) in 2000, at the same location in 1998, 40,140 was recorded. In West Deptford (between US 130 and NJ 45) records show AADT of 67,060 and in Westville (between NJ 45 and NJ 47), 57,435 in 1998.



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Major Industrial Parks

Figure: 5

The New Jersey Turnpike, a major interstate highway just east of the study area, extends from northern New Jersey to the state of Delaware. There is one full interchange (Interchange 2) which provides access to the study area. This interchange is at US 322 which runs through Logan to the Commodore Barry Bridge.

US 130 extends from the intersection with US 1 in Middlesex County in the north to Pennsville Township in Salem County in the south. US 130 is classified as a rural minor arterial and a rural principal arterial in Logan Township. In Westville Borough, it is classified as an urban principal arterial. The number of lanes ranges from four to six lanes. The AADT ranges from 1999 volumes of 20,577 in Westville (2 miles north of NJ 45) to 15,179 in West Deptford (between Colonial Avenue and Chestnut Street). In Logan (between High Hill Road and Cadwalder Road), AADT for 2001 is 13,231.

Other north-south roadways in the study area includes NJ 44 which services local communities along the riverfront. This facility is mainly a 2-lane roadway which is widened in some areas to 3 or 4 lanes. NJ 45 runs through Westville, West Deptford and Woodbury. Its width and function varies from one community to another.

East-west access in the region with the exception of US 322 and NJ 47 is limited to a number of county routes which for the most part are local in nature. US 322 connects the region to the major north-south thorofares. US 322 is a rural principal arterial that connects the study area to Chester, Pennsylvania. It is also a direct conduit for traffic destined for Atlantic City. It ranges in width from 2-6 lanes within the study area. An AADT of 18,093 was recorded in 2001 on the segment between US 130 and I-295.

NJ 47 connects the northern portions of the study area to Vineland and southeastern shore points. NJ 42 is just to the north of the study area and provides access to the east.

Transit Services

NJ Transit

There are seven New Jersey Transit bus lines that serve the riverfront communities in Gloucester County. Woodbury is the transit hub of the area where all the bus routes converge with the exception of the Route 408 which goes from Philadelphia through Westville, where it connects with the other bus routes, then travels along NJ 47 in a southeasterly route to Milville. *Figure 6*, represents the fixed transit services in the Gloucester County riverfront communities.

The Route 401 bus services areas between Philadelphia and Salem inclusive of Woodbury. NJ Transit operates 2 buses in the AM peak terminating at Salem. Both are on headways of over 60 minutes. In the PM peak, there are 3 buses running from

Woodbury to Salem on varying headways of at least 30 minutes. Coming to Woodbury in the AM peak, there are 3 buses with headways all under an hour and one under 30 minutes. Coming to Woodbury from Salem in the PM peak, there are two buses with over 1 hour headways.

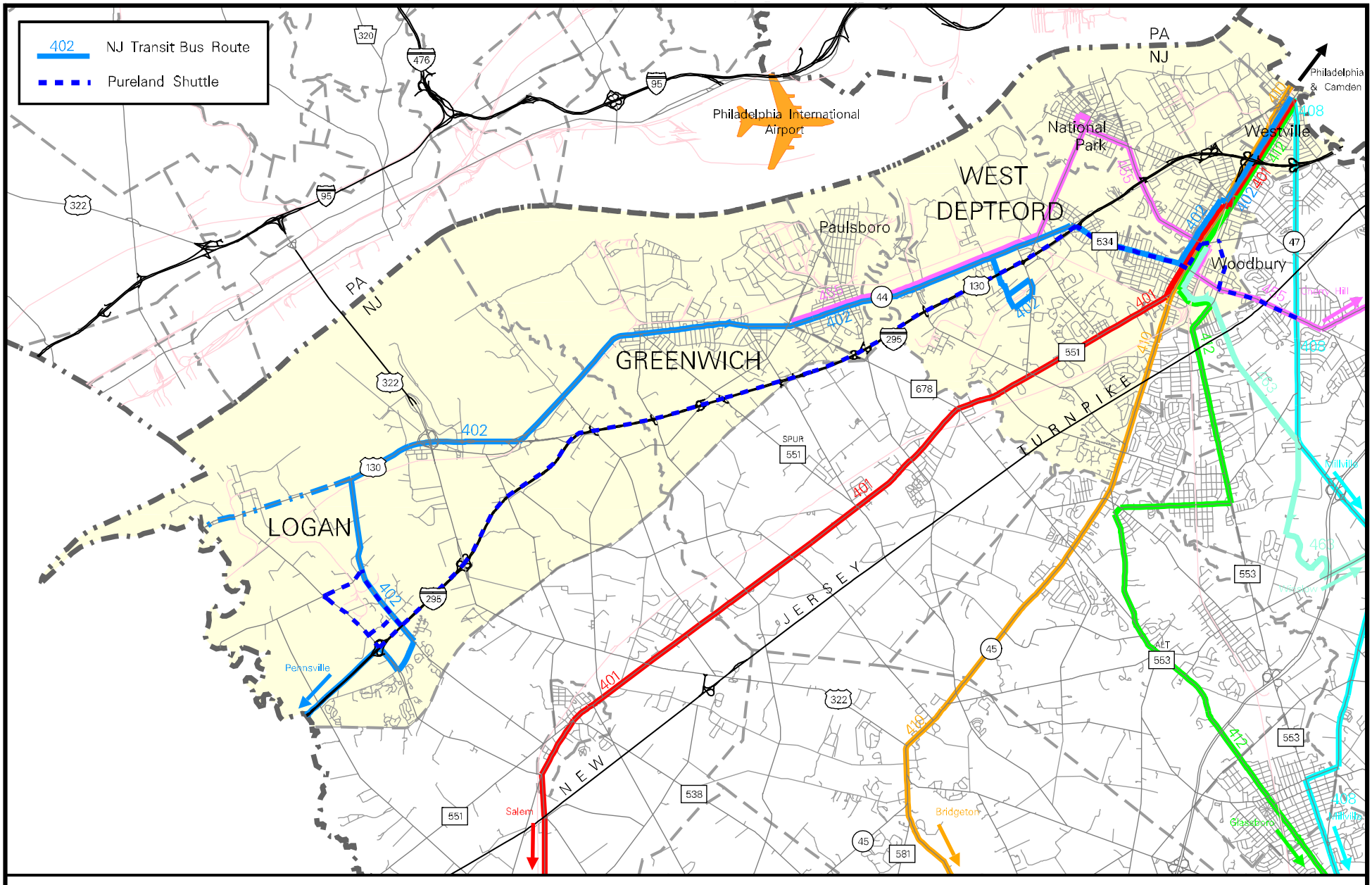
The Route 402 runs from Philadelphia to Pennsville along I-295, US 130 and NJ 44 in the study area. Pureland, Northeast and the MidAtlantic business parks are served by the Route 402 bus. The bus makes a loop at MidAtlantic Park in West Deptford Township. To serve the Pureland Northeast Business Park, the bus turns off of US 130 in Logan Township and traverses the business park on High Hill Road. In the AM peak period from Woodbury to Pennsville, NJ Transit operates two Route 402 buses. Both run on headways of greater than 60 minutes. In the PM peak, there are four buses which terminate in Pennsville. All four service the majority of the service area including the Pureland and MidAtlantic business parks. Headway varies among the four trips from 30 to 40 minutes. One trip was added to the schedule in June, 2002. This trip leaves Philadelphia at 2:39PM and arrives in Pennsville at 4:46PM. There are 4 buses that run towards Woodbury in the morning peak that operate at varying headways. Two start at Pennsville and two start at Beckett. In the PM peak period there are 2 buses that run about 3 hours apart.

The Route 410 bus services areas between Philadelphia and Bridegton inclusive of Woodbury. From Woodbury to Bridgeton there is only one bus during the AM peak period and three buses in the PM peak. From Bridgeton to Woodbury, NJ Transit operates two buses in the morning and one bus in the evening.

The Route 412 bus serves areas between Philadelphia and Elsmere inclusive of Glassboro and Woodbury. Four buses run to Elsmere in the AM peak at varying headways. NJ Transit also operates four buses in the evening peak at headways that vary from under 30 minutes to over 1 hour. Running towards Woodbury, there are 4 buses in the AM peak period with three on headways of under 30 minutes. Three buses operate to Woodbury in the PM peak period, all with headways above 30 minutes. Route 412 serves the northeastern edge of the study area along CR 553 and alternate CR 553.

The Route 455 bus connects Paulsboro with the Cherry Hill Mall through Woodbury. Traveling to Paulsboro there is only one bus in each of the morning and evening peak periods. Service is slightly more frequent in the opposite direction. There are 2 buses going to the Cherry Hill Mall in the morning peak and 4 buses in the PM peak period.

The Route 463 bus connects Woodbury to Avandale Park/Ride to the southeast. NJ Transit operates three buses on 60 minute headway during each peak period in each direction with the exception of the evening peak going to Woodbury. There are only two buses during this period.



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Transit Routes

Figure: 6

Shuttle Service

The Gloucester County Board of Freeholders runs a number of shuttle services throughout the county for its residents. One such shuttle service which directly affects the study area is the Pureland shuttle which ran from Woodbury to Pureland Industrial Park in Logan. In December of 2001 Gloucester County lost its funding for this shuttle service and it was taken over by the Camden County Improvement Authority through a Memorandum of Understanding with Gloucester County. This shuttle travels from Camden to Pureland Industrial Complex and should make stops in Westville and Woodbury. The service on the shuttle corresponds with the major shifts at the Pureland Industrial Complex, and provides in-bound and out-bound service to correspond with shift times. There are three 8-hour and two 12-hour shifts per day. The shuttle runs seven days per week. Shuttle runs have had a maximum of 18 passengers and a minimum of 2. The overnight shifts usually have low ridership. The majority of the passengers are participants in ìwelfare to workî program but there are a few who were employed at the facility before, who are taking advantage of the service.

Though this service was terminated because of a lack of funding, it is worthy of mention here in this study. Church buses were a source of transporting workers to the business parks in the study area. These buses, generally idle during the work week, are utilized as shuttle buses providing a service which is now lacking in the affected communities. Paulsboro Division of Workforce Development contracted with the Second Baptist Church Community Development Center to shuttle low income individuals to Pureland Industrial Park and UPS Center in Camden between July and October, 2001. Funding for rental of the church's shuttle buses came out of the Adult Workforce Investment Act's Dislocated Workers funds. This weekday only service was offered to job applicants seeking to respond to vacancies advertised at these two sites; workers in need of temporary transport while trying to arrange a permanent means of getting to work and workers needing transportation from these sites at off-peak hours. Clients were directed to the program via Paulsboro Welfare Coordinator, the Police Department and the Division of Workforce Development. The shuttle service was a flexible program allowing clients to call in to schedule drop-off and pick-up times and locations. Approximately, 10-15 individuals used the service each weekday with trip frequency dependent on the needs of the clients that day.

Traffic Volumes

There is a lowering of traffic volumes in the older communities of Paulsboro, National Park and Westville. *Figure 7*, shows traffic volumes recorded by DVRPC in the years 1998 to 2002. Complete traffic counts for select locations in the study area can be seen in Apendix A. Traffic volumes are higher in the northern section of the study area than in the southern areas. Traffic volumes have grown progressively in the Pureland Industrial Park/ Beckett residential area of Logan. Beckett Road and Center Square

Road carries most of the traffic in this area. Volumes on US 130 drop off moving south. NJ 45 (Broad Street) and Cooper Street carries the highest traffic volumes through the City of Woodbury.

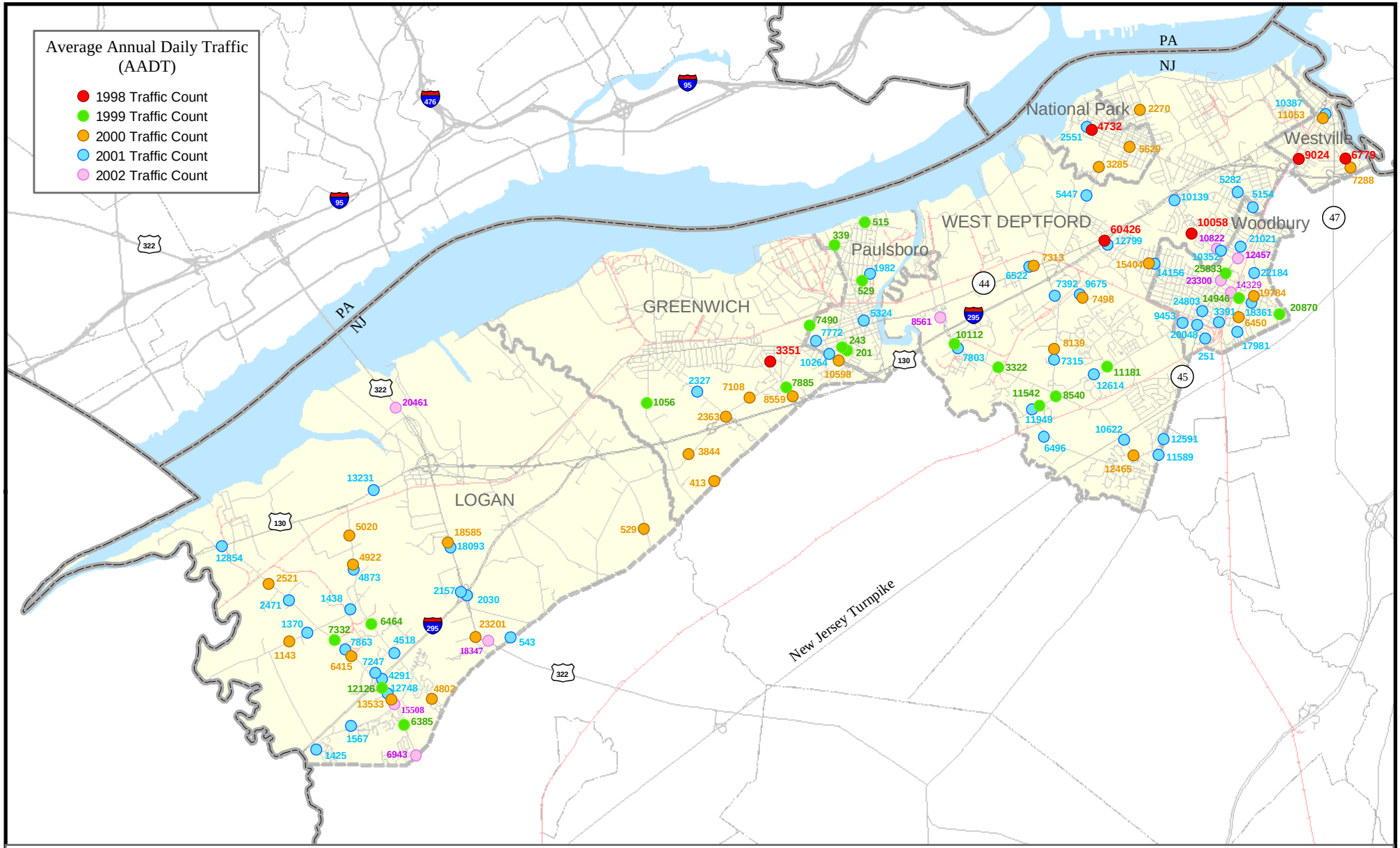
Redevelopment

As mentioned earlier in this report, a number of the riverfront communities are older communities in economic decline. These communities which were dependent on the chemical and petroleum industries suffered an economic blow when most of these entities either scaled back or ceased operations due to stricter environmental regulations. Many of these communities are now considering redevelopment of abandoned sites.

Vacant Buildings in Mall on NJ 44 in Paulsboro

The Borough of Paulsboro is one such community in decline. It has a 190-acre riverfront brownfield site, suitable for redevelopment. The site consists of a 130-acre former oil and chemical bulk storage facility that BP Oil Company purchased in 1969 from Arco Chemical and a 60-acre parcel owned by Essex Chemical (a wholly owned subsidiary of The Dow Chemical Company). This site is located on the northeastern section of Paulsboro and is bordered on 2 sides by water and on 2 sides by residential development. The site of the redevelopment project in Paulsboro is shown on *Figure 8*.

The BP site is undergoing a multi-phased remedial investigation and action, expected to continue for the next ten to twenty years.



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Traffic Volumes

Figure: 7

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Paulsboro
Redevelopment Site

Figure: 8

In accordance with its corporate policy of sustainable development, BP initiated an extensive study of the site in March 2000. The first phase of the study examined the development potential of the site, the regional context and generally the feasibility of redevelopment. The second phase refined the concepts outlined in the first phase to determine the highest and best use for the site and a framework for implementation. With the dual goal of maximizing the siteís immediate market potential and ensuring long-term economic sustainability for the area, the study indicated that the highest and best use is a combination port terminal along with industrial/commercial.

The Phase II study (*Phase II Highest and Best Use Strategy for Implementation* by URS in association with Triad Associates in 2001) recommends that the site consist of waterfront port development; industrial, commercial and retail development, a solar plant and open space provisions.

This project has a number of benefits for Paulsboro. In addition to hundreds of temporary construction jobs, the completion of this development will result in the creation of at least 500 permanent jobs. The completion of this Riverfront Redevelopment will increase the boroughís ratables to strengthen its economic base. In addition to the current private investment in this project by BP, public investment for on-site infrastructure improvements and access will be leveraged by additional private investment. The location of the borough and an analysis of Delaware River traffic indicate the suitability of the site to be partially developed as a port facility; Paulsboro is among the four South Jersey municipalities under consideration for the Port Inland Distribution Network.

SECTION II
TRANSIT

Needs and Deficiencies

Recent land use development in large portions of the study area does not lend itself to traditional mass transportation services. This is one reason the number of commuters served by existing transit services in the study area is limited. The scheduling and routing of NJ Transit bus service in the study area are made to meet levels of passenger demand and primarily serves higher density ìtraditionalî peak direction travel, which in this case is away from the study area, towards Camden and Philadelphia during the morning peak and in the reverse direction for the afternoon peak period. Buses which serve the reverse commuters run infrequently even in the peak periods and offer virtually no service during midday times. The routes 401, 402, 410, and 412 which operate on the same route between Woodbury and Philadelphia are deliberately staggered to create the combined service headway on this portion of the route resulting in none of the buses arriving at Woodbury at the same time, making transfer difficult. Headways tend to be very sporadic. As service exists now, it is set up as a radial service into Philadelphia and significantly reduces the chances of effectively transferring within the system in order to travel within New Jersey and the study area. *Figures 9A and 9B* show the transit frequency of the bus routes which service the study area.

Forest Park and Commodore 295 Industrial Park do not have bus service. The 402 bus runs north of Forest Park along NJ 44. The 401 bus services County Route (CR) 551 over half a mile south of the Commodore complex. Both of these routes are too far from the employment centers to encourage potential riders to use them for commuter trips.

At the Pureland Industrial Park, though the 402 bus serves this major employment center, the service is infrequent and not compatible to the operating hours of most of the businesses in the complex. This is of particular concern for commuters living north of the Park. During the afternoon peak there is only one bus traveling toward Woodbury and this leaves Beckett at 4:06PM. The next one leaves at 7:01PM.

The existing shuttle service is geared to ìwelfare to workî recipients and virtually excludes other potential workers. The service is tailored for Pureland Industrial Park which excludes the other job sites in the study area. Additionally, the shuttle as run currently by the Camden County Improvement Authority has only two pick-up points in Gloucester County, Westville and Woodbury then expresses to Pureland Industrial Park. This eliminates transit dependent residents of Paulsboro, National Park and other communities in the region from seeking employment in these business parks. As noted earlier in the report these are communities with high unemployment rates.

Recommended Transit Service Improvements

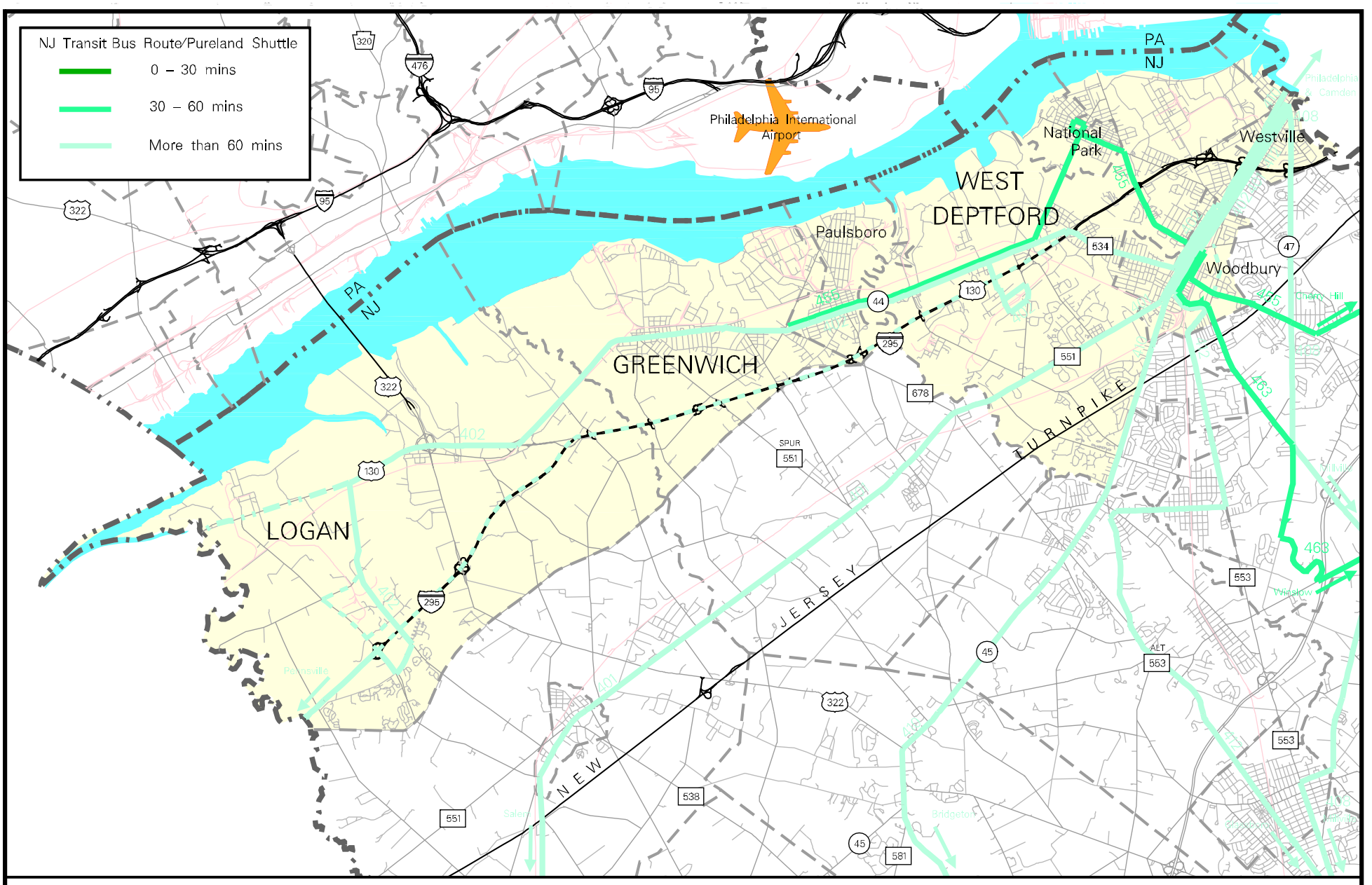
This section suggest several improvements to the existing transit service in the study area to address the identified needs and deficiencies. Financial considerations of any recommendations made in this section are beyond the scope of this study and should be investigated during an in-depth technical analysis by the appropriate transit agency.

Increasing the frequency of bus service in the region should be investigated. An increase in frequency would make the service more attractive allowing for increased ridership. Ideally, service should be provided continuously throughout the day, beginning before the morning peak period and continuing after the evening peak period. Service that only operates during the peak periods is only useful to commuters with regular daytime schedules and does not serve workers outside that window. On the 455 bus route reverse commuters (from Cherry Hill to Paulsboro) are at a disadvantage with the current schedule. This service is designed to give transit dependent residents of Paulsboro the opportunity to travel to jobs in Woodbury, Deptford, Cherry Hill and Philadelphia. There are increasing employment opportunities in the Riverfront communities. The schedule for reverse commuters should be given the same consideration especially when there is potential to increase ridership with efficient service. Regular bus service throughout the day and increased frequencies during peak periods will allow for more flexible use of the service. This will make bus service more attractive to users of single occupant vehicles.

In addition to increasing frequencies, the bus service should operate on headways in consistent increments in order to make arrivals and departures more predictable for users. Even on lightly traveled routes with long headways, it is better to have a schedule that is in one hour increments rather than an inconsistent schedule that can often be a deterrent to transit usage.

Coordinating connections and transfers between bus routes could improve service. NJ Transit needs to examine the potential of combining the trunk of routes 401, 402, 410 and 412 into one bus route running from Woodbury to Philadelphia. The 401, 402, 410 and 412 routes would then run from Woodbury to Salem, Pennsville, Bridgeton and Glassboro respectively. The shorter routes have the potential to increase frequency with existing equipment. Increased frequency on the sections of these existing routes which have low demand, with well timed connections will make the routes more attractive.

Employment centers are increasingly located in suburban developments; therefore, provision of transfer points outside the central city is becoming more important in order to reduce travel times. In the study area, this solution would require coordination of schedules especially in the Woodbury area where most of the bus lines converge.



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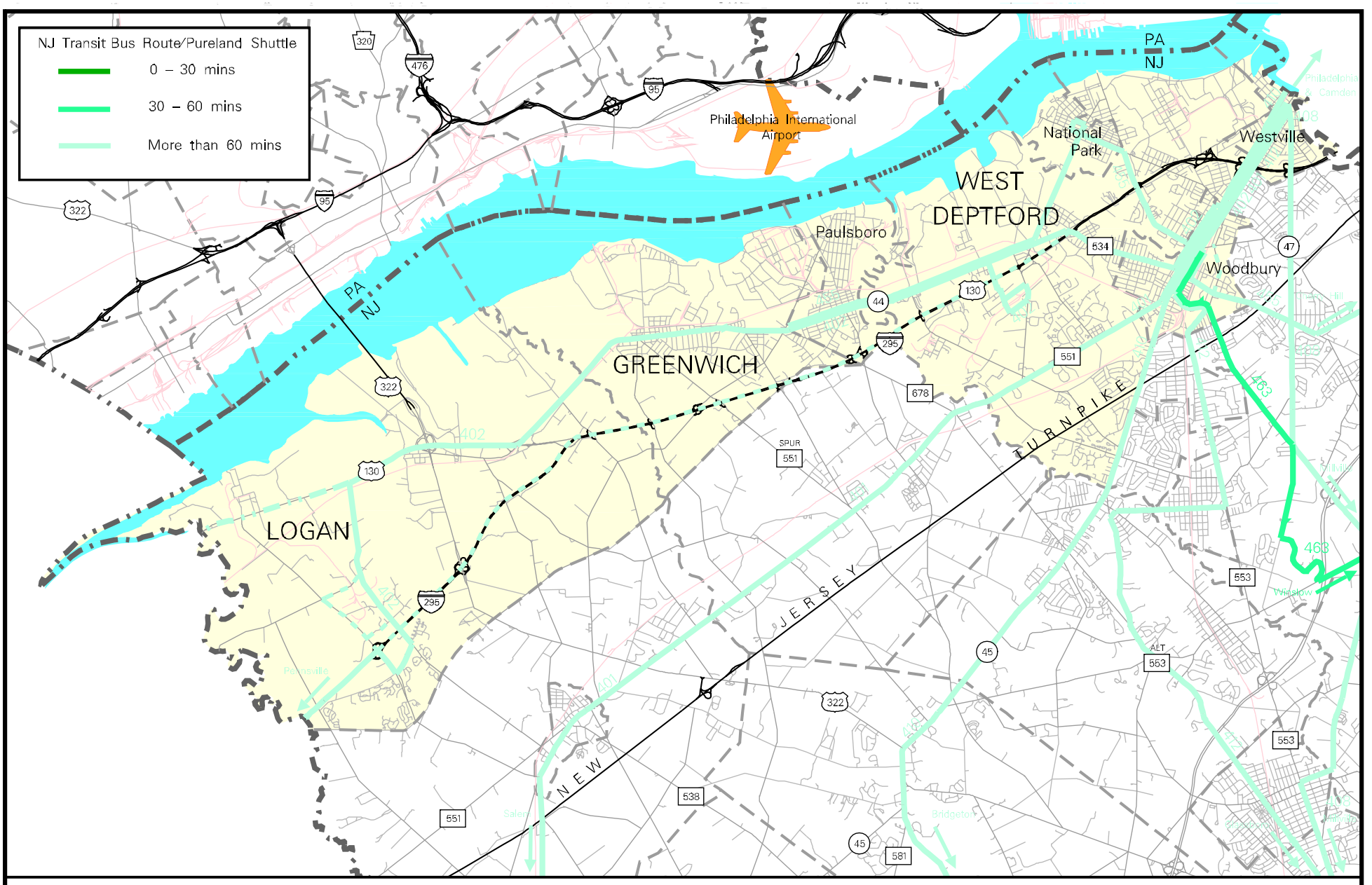
Transit Frequency (A.M. Peak)

Figure: 9a



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Transit Frequency (P.M. Peak)

Figure: 9b

A timed transfer system would allow highly traveled bus lines to arrive at a transfer point at the same time on regular headways. More lightly traveled lines would arrive at headways that are multiples of the shortest headway. This would allow for passengers to transfer between all bus routes at regular intervals and between highly traveled routes at shorter, regular intervals.

For example, a timed-transfer system would allow commuters living on the 412 bus line, to transfer to the 402 line in Woodbury to travel to one of the business complexes. A transit terminal would be necessary in order to implement such a system. This type of system would coordinate all the bus lines coming through Woodbury and allow users to transfer very easily and increase their travel options. Increased frequency and regular headways could also increase the convenience of the bus system. This would make schedules easier to read and remember.

A major transit improvement would be to improve access to the job centers in the study area. Although some job centers do have direct bus service, many employment areas are outside of walking distance from a NJ Transit bus stop. For those employment centers without direct service, some minor re-routing of buses could result in new access to these sites. Specifically, the Forest Park Corporate Center and the Commodore 295 Industrial Park are two of the larger job centers that do not currently have bus service within walking distance. NJ Transit should examine the feasibility of re-routing buses to include these centers within its service area.

The current Memorandum of Understanding between Gloucester County and Camden County Improvement Authority (CCIA) needs to be revisited in an effort to provide transportation services to potential customers in Gloucester County which are not being served under the present agreement.

The service currently provided by the Camden County Improvement Authority (CCIA) needs to provide service to more communities in Gloucester County. They need to make stops in National Park and Paulsboro. The Paulsboro Division of Workforce initiative which contracted with Second Baptist Church Community Development Center to shuttle low income individuals to Pureland Industrial Park and UPS Center in Camden had to terminate that service because of lack of funding. This represents a need in Paulsboro. The buses now run by CCIA have a 25 passenger capacity, currently they have a maximum of 18 passengers and only on the day shift. The other shifts are running far below capacity.

For larger employment complexes, additional shuttle buses should be considered. Shuttle buses should be coordinated with NJ Transit buses so that employees do not lose time waiting or walking long distances.

To maximize the buses potential there needs to be an aggressive marketing campaign.

The Cross County Connection Transportation Management Association (CCCTMA) is equipped to assist in marketing this shuttle service and providing the necessary outreach to potential riders and employers. The CCCTMA is able to fund the marketing through their extra-territorial funding or through funds from NJ Transit made available to the TMA specifically to market shuttle services.

The county and the TMA should reach out to employers and management of the industrial parks to support privately-sponsored or jointly-sponsored transportation solutions. In addition to improving NJ Transit service, employer shuttles should be considered especially in larger employment centers and industrial parks. These shuttles should coincide with the NJ Transit schedules and serve to circulate employees as they arrive on NJ Transit buses. This would reduce walking distances and travel time from bus stops. The distance from the Center Square Road/Heron Drive intersection to the northernmost reaches of the Pureland Industrial Park is approximately 1.8 miles. To the south of this intersection, the industrial park extends approximately 0.9 miles. These distances are far beyond the quarter mile maximum distance that is considered reasonable for the typical person to walk to transit.

Two types of shuttles should be considered: internal circulators at corporate campuses and industrial parks; and shuttles between Woodbury and the corporate campuses and industrial parks. Internal circulators would serve job centers by picking up passengers from NJ Transit stops at the employment centers and distributing them throughout the corporate complexes. These circulators would have to schedule their pickups to coincide with NJ Transit bus schedules in order to be effective. Employment centers such as Pureland Industrial Park could benefit from such service. While Pureland already has bus service, a shuttle from the bus stops would increase area coverage within the park.

Shuttles from Woodbury could operate during peak periods at short, regular headways in order to service the job centers. This could further promote a new Woodbury transfer center and park and ride facility. Forest Park Corporate Center and Kings Point Commerce Center could greatly benefit from a circulator to and from Woodbury. These employment centers are close to Woodbury and close to each other. They could potentially share the cost of the shuttle among the employers located at each employment center. If it is not feasible to re-route existing NJ Transit bus service, places without direct bus service such as the Commodore 295 Industrial Park and the Forest Park Corporate Center would benefit greatly from a Woodbury shuttle. Shuttle service would connect these job centers to all of the bus lines that converge at Woodbury and make it possible to access more jobs via public transit.

Financing of shuttle service can be provided through a variety of sources. State and local contributions should play a large role. The Cross County Connections TMA which serves the region through extra-territorial activities, as stated in their work program can

provide recommendations for shuttle companies capable of providing this service. The TMA can provide the expertise in coordinating NJ Transit, shuttle operators and employers to bring about this service. State and county funds may constitute a portion of the funding. However, private funding should also be considered especially if a shuttle serves multiple employers. Due to the large number of firms operating within these industrial parks, the cost per employer for this shared shuttle service would be more affordable if a shared employer shuttle was implemented than if they had to meet the entire cost alone. Transportation in some cases needs to be tailored to specific needs of the businesses; needs which the financially strapped state agency, NJ Transit may not be able to satisfy under its current budget.

SECTION III
WOODBURY BUS TRANSFER CENTER ANALYSIS

City of Woodbury is the nexus of six bus routes that serves the study area. As shown in *Figure 6*, the City of Woodbury operates as a collection and distribution center for these bus routes. From Woodbury the routes travel in a radial pattern servicing the southern portion of New Jersey. There is a need for a transit center that would facilitate bus passenger transfer from one route to the next thereby making greater parts of the region more accessible. This could also operate as a terminal for some bus routes resulting in shorter bus-trips and potentially shorter headways. In addition, this would provide customers with a comfortable and protected waiting area where ticketing and transit information could be made available.

This section of the report identifies locations in Woodbury that could be most appropriate as a transfer center for most buses serving the area. A sketch planning analysis is developed for the different conceptual alternatives. These were evaluated and recommendations were made.

Four sites were evaluated to determine their suitability to provide bus transfer facility functions. These sites are presented below, with physical as well as operational issues identified. Additionally, detailed maps of each site are provided. *Figure 10* shows the location of all four sites in relation to the major trip generators in the area.

Alternatives Analysis

Red Bank Avenue Site

This site is located on Red Bank Avenue to the east of the intersection with North Broad Street (NJ 45). This site consists primarily of a relatively underutilized parking lot adjacent to the CVS Pharmacy. *Figure 11* shows the proposed site and surrounding area as well as a detailed map of the intersection of Red Bank Avenue and North Broad Street.

- *Size of the site:* This lot (Block 122 Lot 7) is approximately 3.21 acres in area.
- *Pedestrian traffic flow (access to the site):* Pedestrians can access the site from both North Broad Street and Red Bank Avenue, the major thoroughfares in the area. The distance to North Broad Street is approximately 207 feet. There are sidewalks with ramps on both sides of North Broad Street extending to the County Offices.
- *Pedestrian/vehicle conflicts:* The intersection of Red Bank Avenue and North Broad Street has pedestrian actuated crosswalks at all four legs. A 2002 ATR count on Red Bank Avenue in the vicinity of the site recorded an AADT of 12,457.

- *Vehicular Access:* Access to the site is possible from Red Bank Avenue as well as North Broad Street. The intersection of Red Bank Avenue and North Broad Street is signalized. The direct access road to the CVS site from North Broad Street is 23 feet in width. Its intersection with North Broad Street is not signalized. Left turns into and out of the site by buses could pose a safety problem due to the close proximity to the busy intersection of Red Bank Avenue and North Broad Street.
- *Bus routes:* The area is served by several bus routes. NJ Transit buses 401 to Salem, 402 to Pennsville, 410 to Bridgeton, 412 to Glassboro, 455 to Deptford Mall/Cherry Hill, and 463 to Avandale Park and Ride provide service for passengers destined for other parts of the county. Buses 401, 402, 410 and 412 have outbound destinations in Camden and Philadelphia. There are inbound and outbound bus stops within one block of the site.
- *Number of Existing Parking Spaces:* The site has 200 parking spaces. Occupancy rate varies throughout the day.
- *On-Street Loading:* Because of the heavy peak volumes on Red Bank Avenue and North Broad Street, as well as the proximity of the site to the intersection, on-street loading is not practical at this location.
- *Proximity to major employers:* This site is located one block from the Underwood Memorial Hospital, a major employer in the municipality. The county court facilities and jail annex are within a quarter mile distance of this site. The County offices and Woodbury Municipal Building are to the south of this site.
- *Long Term Potential:* Being adjacent to an active freight line makes this site eligible for consideration as a station stop should passenger service be started on this rail line. The location would then be appropriate for consideration in applying the Transit Village concept.
- *Funding Options:* Local government funding through a parking authority; Federal payment/grants through an earmark; and public/private partnership.

Recommended Improvements.

- Improve the access road from North Broad Street to the site by expanding the turning radius.
- The North Broad Street access road could be used for either entry or exit only to the site by buses given existing width. The Red Bank Avenue driveway can be used as both access and egress by buses.
- Passenger amenities such as a ticket office and sheltered waiting area should be incorporated in the development of the site. This will create a focal point for drop-off and pick-up, fostering more efficient transfers.

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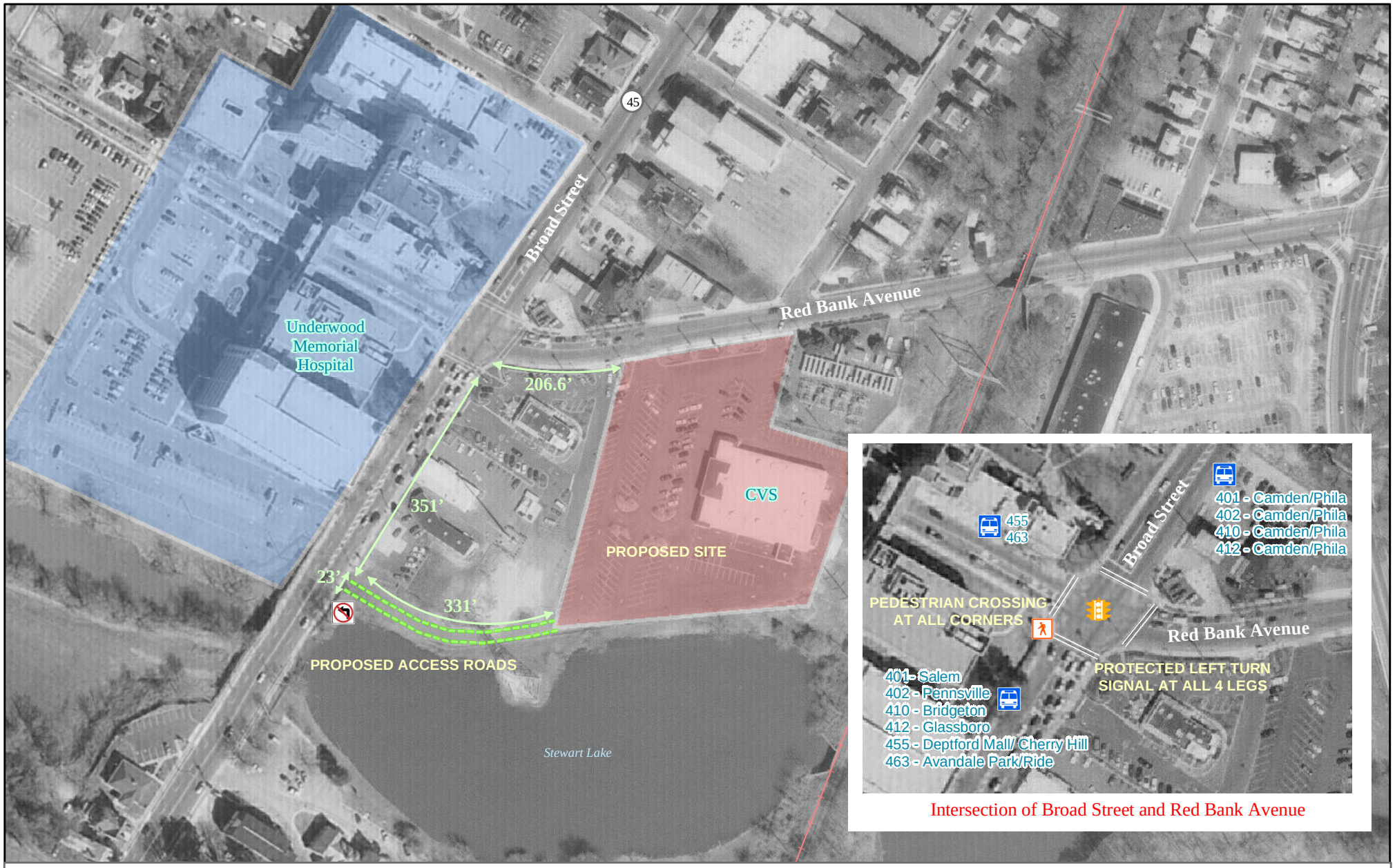
Proposed Bus Transfer Centers

Figure: 10



Intersection of Broad Street and Red Bank Avenue

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Red Bank Avenue Site

Figure: 11

Hunter Street Site

This site is located near the center of the Woodbury business district on the northeast corner of the intersection of North Broad and Hunter Streets. The property is County owned, and currently has two structures that would have to be demolished to accommodate a parking structure. The County identified this site as one currently under consideration for a parking garage. *Figure 12* shows the proposed site and the surrounding area.

- *Size of the Site :* The area under consideration is Block 121, Lots 1,2,3,8 and 9. This area encompasses a total of approximately 45,420 square feet or 1.0427 acre.
- *Pedestrian Traffic Flow (access to the site):* The site can be accessed from North Broad Street and Hunter Street. Currently, there are no pedestrian crosswalks at this location. Sidewalks are present along North Broad Street and Hunter Street and are in good condition. ADA compatible curb ramps are also present that allow street and sidewalk access for persons using wheelchairs. The main pedestrian flow is to the employment sites (County Offices, County Courts and Underwood Memorial Hospital) located along North Broad Street and Hunter Street.
- *Pedestrian/vehicle Conflicts:* The volume of vehicular traffic along Hunter Street is minimal, thereby making the street pedestrian friendly. North Broad Street experiences heavy vehicular traffic volumes, (23,300 AADT was recorded in 2002 between Cooper Street and Hunter Street) thereby making pedestrian access to the site difficult. There is currently an unsignalized pedestrian crosswalk at North Broad Street. On-street parking is permitted on the northbound side of North Broad Street to the south of Hunter Street.
- *Vehicular Access:* There are no existing direct vehicular entrance points from North Broad Street to the site but there is an exit only driveway from the site to this roadway. Currently, the site has to be accessed from Hunter Street.
- *Bus Routes:* NJ Transit buses 401,402,410,412,455, and 463 currently stop on Broad Street in front of the site. This is the busiest transit corridor in the county with these bus routes providing access to destinations such as Philadelphia, Pennsville, Salem, Bridgeton, Elsmere, Cherry Hill and Avondale.
- *Number of Existing Parking Spaces:* While there are a few surface parking spaces, these would be demolished to accommodate a parking structure.
- *On-Street Loading:* On-street loading of passengers would be most appropriate along North Broad Street, as this is the main conduit for several bus routes. This would be effective if there is a bus pull-out in

place, removing the buses from the general traffic stream, as is the case on the southbound side of North Broad Street.

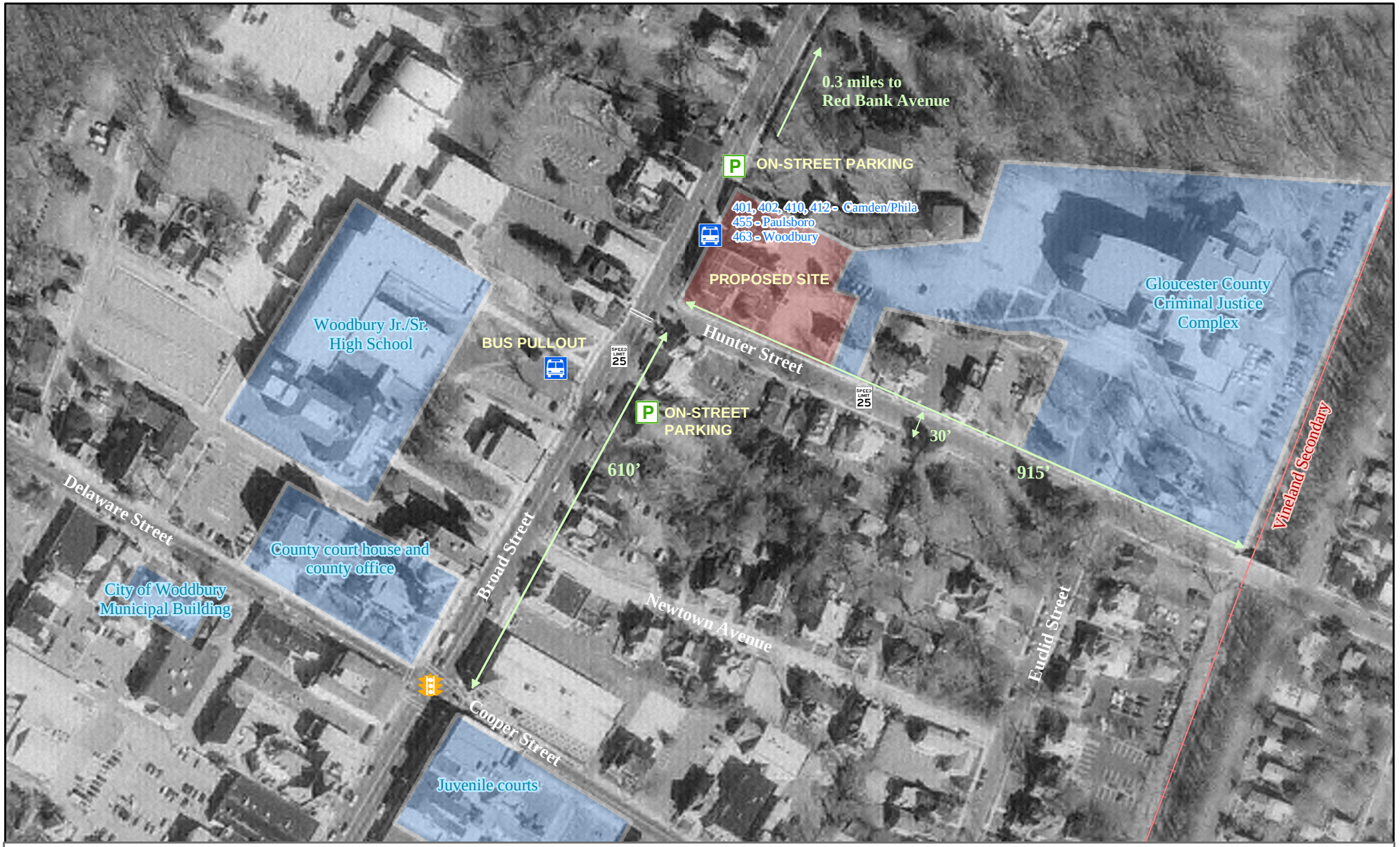
- *Proximity to Major Employers:* This location is at the nexus of the major employers in the City of Woodbury. The County administrative offices, County courts and Woodbury Municipal Building are no more than 495 feet away, well within walking distance to the site. There are several major private employers nearby. The Underwood Memorial Hospital, a major employer in the area, is approximately 0.3 miles to the north of the site. In addition, there are several legal and medical establishments within close proximity.
- *Long Term Potential:* Because of its location within a primary transit corridor of the County, the long term viability of this site is good. Furthermore, with Broad Street being the major commercial district within Woodbury, the demand for off-street parking is expected to be high. The Vineland Secondary is a short distance from this site down Hunter Street. This site, therefore has the added advantage of possible connection to potential future passenger rail.
- *Funding Options:* Local government funding through a parking authority; Federal payment/grants through an earmark; and public/private partnership are a few of the funding options available.

Recommended Improvements.

- Traffic signal at North Broad and Hunter with pedestrian actuated phase.
- Due to high level of traffic on North Broad Street during peak periods primary access to the site should be from Hunter Street.
- The parking garage should incorporate facilities for a transit center. Passenger amenities such as a ticket office and sheltered waiting area should be provided. This will create a focal point for drop-off and pick-up and more efficient transfers.

The Neilsen Plaza Commuter Parking Garage in East Brunswick

The commuter parking garage incorporates at street level bus drop-off and pick-up at the right curb straight ahead. To the right there is a waiting area with ticket booths, seats, vending machines and elevators which take patrons to the upper levels of the parking deck.



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Hunter Street Site

Figure: 12

Railroad Avenue Site

This site is located parallel to Railroad Avenue near the intersection with Cooper Street adjacent to *Carolinaís At The Station CafÈ Grille*, (site of the former railroad station house). It is adjacent to the Vineland Secondary, a single track Class I freight railroad, which in the past also provided commuter service. This right-of-way has also been considered in the late 1990s for light rail service from Camden to Glassboro. *Figure 13* shows the proposed location and the surrounding area as well as a detailed drawing of the immediate area around the site.

- *Size of the site*: The site encompasses the current parking area along Railroad Avenue from Cooper Street to Barber Avenue. The area along Railroad Avenue is currently being used for parking by the City of Woodbury. This lot, Lot 1, is 2.06 acres in area. Lot 3, on the opposite side of the tracks, is 1.5 acres in area, and is also owned by the City of Woodbury and is also used for parking.
- *Pedestrian traffic flow (access to the site)*: There is currently heavy pedestrian traffic across Cooper Street in the vicinity of the site. This is at its peak in the AM and PM when students travel to and from St Patrickís School which is located off Green Street. Also located off Green Street across from the site is Woodbury Mews, a future adult community and assisted living facility. There are sidewalks along all the access roads to the site.
- *Pedestrian/vehicle conflicts*: While there is a pedestrian crosswalk at Green Street and Cooper Street, there are no signalized pedestrian crossings at this location. A school crossing guard is present during peak periods to facilitate the crossing of Cooper Street. A 2002 AADT of 14,329 was recorded on Cooper Street between Green Street and Broad Street
- *Vehicular Access:* Access to the site is possible from Cooper Street at Railroad Avenue and Green Street, all two-lane roadways. Both intersections are unsignalized. Access to the site is particularly difficult during peak periods due to excessive volumes on Cooper Street.
- *Bus routes:* This site is currently served by the number 455 and 412 bus routes.
- *Number of existing parking spaces:* There are parking spaces on both sides of the railroad track at this location. The area along Railroad Avenue is currently being used for municipal parking. It had a total of 173 spaces and experiences varying levels of occupancy on the average weekday. On the opposite side of the tracks, adjacent to Green Street, there are 65 parking spaces. Most of these spaces are currently being used by construction staff of the assisted living facility on Green Street.
- *On-Street Loading:* On-street loading is feasible at this location either along Railroad Avenue or at Green Street.

- *Proximity to major employers:* This location is central to the major employers in the area. The County administrative offices, Municipal Building and County courts are within walking distance of the site (approximately 1,300 feet or 0.25 miles). The Underwood Memorial Hospital, a major employer in the area, is approximately 3,052 feet or 0.58 miles from the site.
- *Long term potential:* This site would become more attractive as an intermodal center if passenger service is restored at a future date on the Vineland Secondary. Existing land uses would make this location an ideal candidate to be developed as a Transit Village.
- *Funding Options*: Local government funding through a parking authority; Federal payment/grants through an earmark; and public/private partnership.

Recommended Improvements

- A traffic signal is needed at the intersection of Railroad Avenue and Cooper Street to permit better access to and from the site.
- While this location is central and is accessible by foot to some of the county facilities, there are other major employers such as the Underwood Memorial Hospital that is beyond the standard quarter mile radius acceptable for walking to or from a transit facility. A timed transfer to a bus which services these facilities or a local shuttle to the major trip generators would therefore be necessary.
- Passenger amenities such as a ticket office and sheltered waiting area should be incorporated in the development of the site. This will create a focal point for drop-off and pick-up, fostering more efficient transfers.

Bus Station in New Brunswick, NJ
Station includes waiting area with ticket office. A sheltered outside waiting area with seats are also available. Park & Ride lot can be seen in the center of the photograph

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Railroad Avenue Site

Figure: 13

South Barber Avenue Site

This site is situated off South Barber Avenue between Railroad Avenue and South Evergreen Avenue. This is at the junction of three active freight lines, the Vineland Secondary, Salem Running Track and Penns Grove Secondary. The portion of this lot to be considered is currently vacant. *Figure 14* is a detailed map of the proposed site and the surrounding area.

- *Size of the Site:* This area is large enough to accommodate a bus transfer facility. The exact acreage would be determined by the number of bus parking spaces that would be needed. This would be a bus pull-out that would be parallel to South Barber Avenue.
- *Pedestrian traffic flow (access to the site):* The adjacent land use includes a rail yard and vacant land. While there are single family residences close by, there are no compatible retail or commercial uses in the immediate vicinity. As a result, pedestrian traffic in this area is minimal.
- *Pedestrian/vehicle conflicts:* There are no pedestrian crosswalks in the vicinity of the site on Railroad Avenue. There are no sidewalks on South Barber Avenue between Railroad Avenue and South Evergreen Avenue. South Evergreen Avenue does not have sidewalks in the vicinity of South Barber Avenue except for the area directly under the rail overpass. On the other roadways leading to the site, sidewalks exist but the majority are in poor condition. A 2001 AADT recorded on South Barber Avenue between Railroad Avenue and South Evergreen Avenue was 3,391.
- *Vehicular Access:* The proposed site would be accessible from Glassboro Road, South Evergreen Avenue, South Barber Avenue and Railroad Avenue. The distance from the traffic circle at South Evergreen Avenue and Glassboro Road to the site is approximately 0.3 miles.
- *Bus Routes:* NJ Transit 412 and 463 buses provides service within 1,584 feet (0.3 miles) of the site.
- *Number of existing parking spaces:* None
- *On-Street Loading:* Because of the narrow right-of way of South Barber Avenue, on-street loading of passengers would not be desirable at this location without construction of bus pull-out.
- *Proximity to major employers:* Because of the isolated location of this site, the major employers in the municipality are located beyond reasonable walking distance.
- *Long Term Potential:* If passenger service is activated on the adjacent rail line in the future, this site could develop as an intermodal station for bus and rail transfers.
- *Funding Options:* Local government funding through a parking authority; Federal payment/grants through an earmark; and public/private partnership.

Recommended Improvements

- Operate a shuttle from this site to major destinations in and around Broad Street.
- Passenger amenities such as a ticket office and sheltered waiting area should be incorporated in the development of the site. This will create a focal point for drop-off and pick-up, fostering more efficient transfers.
- Undertake off-site improvements such as:
  - Modifying or eliminating the traffic circle at CR 553 and South Evergreen Avenue to improve the safety of bus traffic entering and leaving South Barber Avenue.
  - Improving the intersection of South Barber Avenue and South Evergreen Avenue to accommodate better turning radius and traffic circulation and improve sight distance of motorists on all three approaches.
  - Realigning South Barber Avenue between Railroad Avenue and South Evergreen Avenue as shown on *Figure 13* to improve sight distance and safety.

Exit 8A Park & Ride Lot
South Brunswick, NJ
Waiting Area, sheltered pick-up and drop-off area

Indoor Waiting Area
ticket office, vending machines, seats and bathrooms are some of the available amenities

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South Barber Avenue Site

Figure: 14

Alternatives Summary

The following is an alternative matrix that rates the four alternatives developed based on a common set of criteria. The alternative that meets or exceeds all of the stated analysis criteria is the Hunter Avenue Site.

Table 4
Bus Transfer Center Alternative Matrix

	Alternative			
Analysis Criteria	**Hunter Ave Site**	**Railroad Ave Site**	**Red Bank Ave Site**	**S. Barber Ave Site**
Adequate Size of Site	Medium High	High	High	High
Adequate Pedestrian Traffic Flow	High	High	Medium	Poor
Minimum Pedestrian/ Vehicle Conflicts	Medium	Poor	High	Medium
Vehicle Access	High	Poor	Medium High	Medium High
Proximity to Current Bus Routes	High	Medium	High	Poor
Existing Parking Spaces	Medium	High	Medium High	Poor
Possibility for On-Street loading	High	Medium High	Poor	High
Proximity to Major Employers	High	Medium High	Medium	Poor
Long Term Intermodal Potential	Medium	High	Medium	High

The Hunter Avenue site is currently owned by the County; it is in a central location and accessible to the major trip destinations; the County has expressed an interest in constructing a parking garage at this site; it is in the busiest bus corridor in the County, presenting greater opportunities for transfers; pedestrian access to and from the site is

good and this location is suitable for a parking garage and related uses such as office and or commercial use.

Next Steps

There are certain key steps that should be taken once a decision is made to commit to the construction of a parking garage and transit center on a preferred site. These are: a) Identify and establish the entity to take the lead on the project, b) Prepare a detailed feasibility study, c) Identify and quantify financing options, d) Obtain necessary planning approvals, e) Preliminary/final engineering and design, and f) Construction.

Lead Agency
The lead agency should be either the county or municipality ñ major stakeholders in the development of the site. An individual or committee should be appointed by this body to deal with the day-to-day management of the project.

Feasibility Study
It is recommended that the site and its environs be analyzed in greater detail to determine parking supply and demand in the area as well as transportation infrastructure requirements and costs. Many of these issues go beyond the scope of this study and should be addressed by a more detailed technical study. As part of an overall feasibility analysis, it is essential that a market study is conducted to determine the needs and demands within the area for a potential mixed use development. A transit center with a parking garage would induce steady pedestrian and vehicular traffic making the site conducive to other uses such as retail and office space. Depending on commuter demands as well as current market conditions, it should be determined what uses in addition to the parking and transportation uses would be suitable for the site.

An analysis of existing parking, office and retail as well as rental rates would be necessary as a part of a market study. In a detailed evaluation of the site traffic access and circulation; land-use compatibility and costs should be considered.

Planning Approvals
The use, height and bulk of any proposed structure is constrained by current zoning. The site is currently zoned R-15 with a Professional Office and Historic Preservation District overlay. Because the site is within the Woodbury Historic Preservation District, a determination should be sought from both the Historic Preservation Commission as well as the Woodbury Planning Board as to the appropriateness of the proposed development.

Preliminary/Final Engineering and Design
Detailed plans outlining the scope and dimensions of the structure to be built should be completed. The design should take into account the historic nature of this section of the

community and efforts should be taken to make the structure fit aesthetically.

Construction
Construction of the facility should commence once the necessary funding and permits are in place.

Funding Options

This section identifies some of the funding sources and their criteria which may be investigated in the development of a parking garage and bus transfer facility. These could be pursued separately or in different combination as a part of an overall financing package.

New Jersey Transit
New Jersey Transit through their capital funding program is a potential source of funding for this project. A portion of capital funds from state transportation trust fund money is dedicated to bus facilities and park and ride.

Revenue from Mixed-Use Development
The economic or financial feasibility of constructing a self supporting parking garage at the North Broad Street and Hunter Street site can be enhanced by having a mixed use development at the site. By combining parking with the development of commercial and office space, the economic viability of the project could be enhanced. Debt service and operating and maintenance cost can be offset with revenues generated through user fees and rent payments for any office/retail space that might be developed at the site.

Revenue from Local Parking Authority
Local government funding is an alternative mechanism which can be done through a parking authority. This authority would build the facility, receive a share of the revenues from meters, parking fines and facility operations which would enable it to operate as a self-supporting entity. In the case of a revenue shortfall, the general taxing power upon real property by the local government would be used for supplemental funding.
This type of funding was used in East Brunswick with the Nielson Parking Garage at Exit 9 of the New Jersey Turnpike.

Direct Federal Earmark Grant
Funding can be sought by way of a Federal payment/grants through a direct earmark as a demonstration intermodal project to generate economic development.

Federal Grants Programs
– *Congestion Management and Air Quality program (CMAQ)* - This program is a

strategic federal initiative, funded through the DVRPC Transportation Improvement Program (TIP). Funding is provided to projects that meet specific guidelines for air quality improvement. These projects are selected for their ability to help the region reduce emissions from highway sources and meet National Clean Air Act standards. CMAQ is a reimbursement program which will cover up to eighty percent of project costs. A project's sponsor is required to cover at least the remaining twenty percent.

– *Transportation and Community Development Initiative* (TCDI)- This is a DVRPC funded program that provides grants to municipalities to support the implementation of the policies of the DVRPC regional plan through local revitalization efforts. The project must improve the market for development and must serve to enhance the operations of the transportation network.

  The TCDI program is intended to assist in reversing the trends of disinvestment and decline in many of the regionís core cities and first generation suburbs.

– *Transportation Enhancement (TE) Program* - The Transportation Enhancements Program is designed to fund transportation related projects that are over and above what is considered routine construction and maintenance. Projects must fall into one or more of the twelve eligible categories established in the Transportation Equity Act for the 21st Century. Within these categories, projects must have a relationship to the surface transportation system. Funds are available for design, acquisition, utility relocation, or construction of projects. The TE project selection process occurs at the state level. Projects are evaluated based on how well they meet the following criteria: transportation related, construction readiness, local commitment, supplemental funds, user impact, regional or community benefits, element of a larger plan, timing/urgency, economic benefit, value as a cultural resource, and community support.

– *Economic Development Assistance Programs - Availability of Funds Under the Public Works and Economic Development Act of 1965 as amended* - The Economic Development Administration (EDA) processes requests for funding for projects that will create wealth and minimize poverty by promoting a favorable business environment to attract private capital investment and high skill, high wage jobs through world-class capacity building, infrastructure, business assistance, research grants and strategic initiatives.

  Funding priorities for pre-application proposals are based on the following:

  I. Proposals that enhance regional competitiveness and support long-term development of the regional economy

  II. Proposals to help communities plan and implement economic adjustment strategies in response to sudden and severe economic

dislocations (e.g., major lay-offs and/or plant closures, trade impacts, defense restructuring, or disasters).
III. Proposals that support technology-led economic development;
IV. Proposals that advance community and faith-based social entrepreneurship in redevelopment strategies for areas of chronic economic distress.

Public/Private Partnerships

Public/private partnership that would generate tax revenues from a parcel that is currently tax exempt. Because the site is currently owned and used by the county, it is tax exempt and does not generate revenue for Gloucester County or Woodbury City. Following are examples of different types of public/private partnerships that could benefit the City and County.

- Gloucester County, as the owner of the site, would enter into an agreement with a private developer to lease the land for a certain period of time (normally 99 years). The private company would operate the possible garage and mixed use development and pay rent to the County. The rent along with tax revenue (corporate taxes, sales taxes, etc.) would generate a new stream of funds for the county as well as new taxes for Woodbury City.
- Woodbury City could encourage development of the site through another type of public/private partnership involving tax increment financing (TIF). In this example, Gloucester County would sell the site to a private developer. Woodbury City would then enter into a public/private partnership with the developer to create a favorable financing package. Woodbury City would designate the site as a TIF zone and issue revenue bonds as part of a financing package for development of the site. Revenue generated from the sale of the bonds would be used directly by the developer for the redevelopment of the site into a garage and mixed used development. The bonds would be backed by the expected increase in property value after redevelopment. Woodbury City would assess the value of the land at the time of purchase and determine the tax rate. Another assessment at the completion of redevelopment would set a new tax rate. The difference in the two tax rates would be used to repay the bonds over pre-determined period of time. The developer would, in effect, be using taxes to repay the initial redevelopment principal. This has proven to be an effective tool to attract the private sector to redevelopment projects.

SECTION IV
HIGHWAY

This section of the report identifies and evaluates localized problem areas in the corridorís highway network. Highway improvements are recommended to address identified problem areas.

I-295 INTERCHANGE 10

This is a full service interchange located where I-295 intersects with Center Square Road (CR 620) in Logan Township. *Figure 15* shows the location of the interchange in relation to the surrounding area.

Traffic using this interchange is primarily leaving from or destined for the Pureland Industrial Park, the industrial sites on the waterfront and residential development in the surrounding area. While I-295 provides north/south access, Center Square Road provides east/west access. All movements are possible to and from I-295 from Center Square Road at unsignalized intersections. The approaches to the I-295 interchange on Center Square Road have two lanes in each direction. This narrows to one lane in each direction on the bridge over I-295. The intersections of Center Square Road and Heron Drive, which is west of the interchange and Center Square Road and Beckett Road, to the east of the interchange are signalized. *Figure 16* shows the details of the movements between Center Square Road and I-295 as well as the movements for the intersection of Center Square Road and Heron Drive

Existing Traffic Counts

Center Square Road between Heron Drive and Sharptown Road - Total vehicle 24-hour bi-directional Automated Traffic Recorder (ATR) counts were taken at locations along Center Square Road in 2001. The segment of Center Square Road between Heron Drive and Sharptown Road recorded an AADT of 7,863 in 2001. This compares with 6,414 vehicles in 2000. In 2001, the AM peak period (6:00AM - 9:00AM weekday) accounted for 18% of all traffic, while the PM peak period (4:00PM - 7:00PM weekday) accounted for 26%.

ATR vehicle classification counts on Center Square Road between Heron Drive and Sharptown Road shows daily truck volumes accounting for 32% of traffic at this location. The highest volume of trucks occurs in the AM peak period, at which time trucks accounts for 35% of all traffic.

Center Square Road between I-295 and Beckett Road - Based on DVRPCís 24-hour bi-directional Automated Traffic Recorder (ATR) counts in 2001, the segment of Center Square Road between I-295 and Beckett Road experienced an AADT of 12,610. This

compares with 12,126 vehicles in 1999. The AM peak period accounts for 23% of all traffic in 2001, while the PM peak period accounts for 28%.

High Hill Road (CR 662) from Heron Drive to I-295 **-** Total vehicle 24-hour bi-directional Automated Traffic Recorder (ATR) counts were taken along High Hill Road in 2001. The segment of High Hill Road between Heron Drive and I-295 experienced an AADT of 4,518. The AM peak period accounts for 22% of all traffic. While the PM peak period accounts for 33%.

Interchange 10 Peak Turning Movements - As can be seen from *Figure 16*, the primary AM peak movement at the intersection of Heron Drive and Center Square Road, is the westbound thru movement on Center Square Road. In the PM peak, the primary movement is the eastbound thru movement on Center Square Road.

From the southbound entrance and exit ramps to/from I-295, the predominant AM peak traffic flow is from I-295 south to westbound Center Square Road. In the PM peak, the primary flow is from I-295 south to eastbound Center Square Road.

Of the northbound entrance and exit ramps to I-295, the predominant peak AM traffic flow is from westbound Center Square Road to I-295. In the PM, the primary movement is from eastbound Center Square Road to I-295.

Background Growth

Center Square Road between Heron Drive and Sharptown Road saw a 23% increase in AADT over a 1 year period from 2000 to 2001. This increase and expected future development points to a trend towards increasing traffic volumes in the study area. Currently the Pureland Industrial Complex is approximately 12 million square feet of industrial and commercial space and ultimate build-out is 25 million square feet. Due to the expected and potential growth of the complex and surrounding areas traffic volumes will increase. This could exacerbate congestion and delay at several intersections and roadway segments.

Existing residential development in the vicinity of Beckett Road contribute to the traffic volumes on Center Square Road. The Weatherby Development located to the east of Township Line Road in Woolwich Township is expected at build-out to have 4500 units. These will incorporate condominiums, apartments, town homes and single family units. At present only ten percent is completed and there is already a noticeable impact on traffic volumes on Center Square Road.

I-295/ US 130 Riverfront Transporation Corridor Study

N

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Feet

DELAWARE VALLEY
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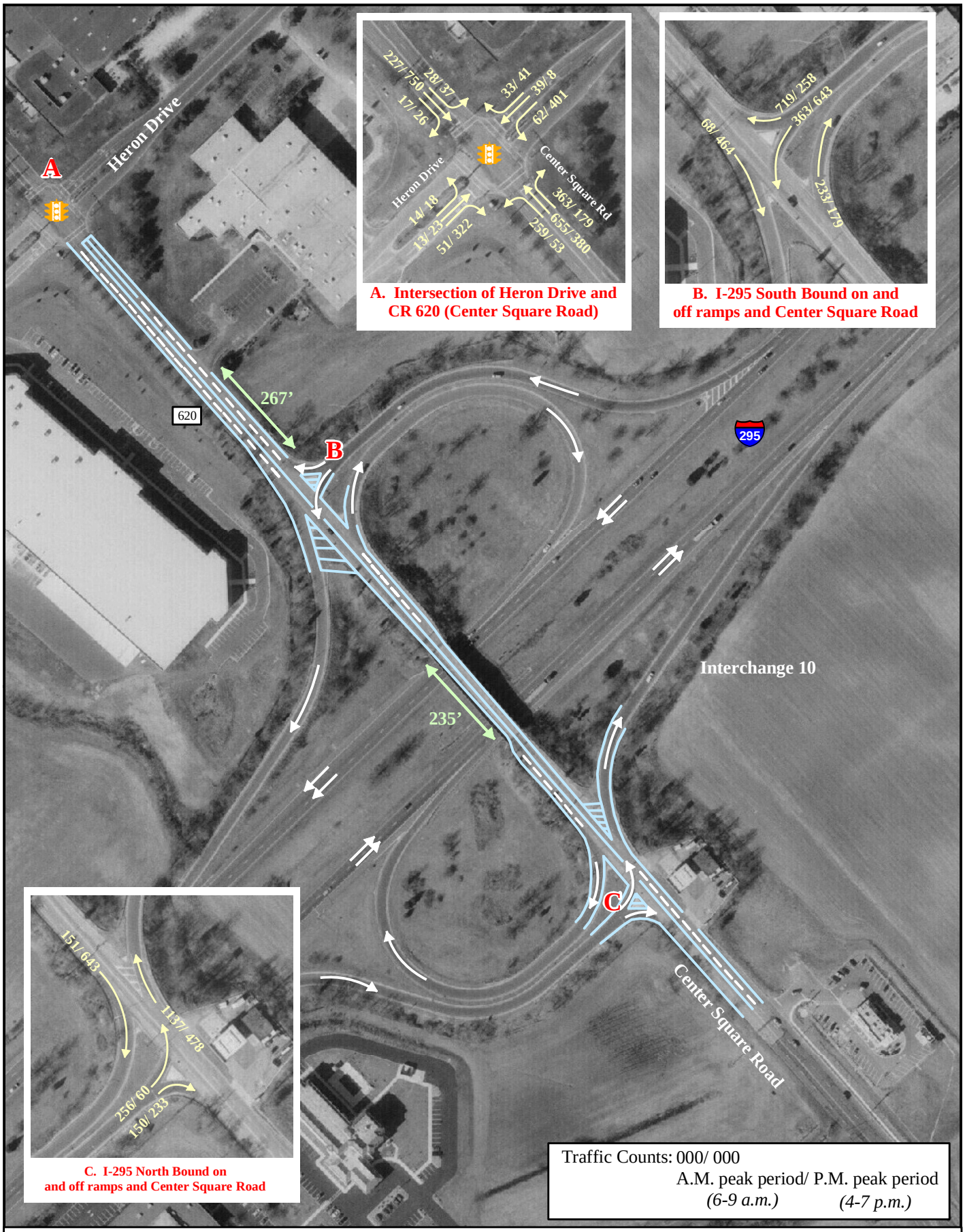
JULY 2002

Interchange 10
(Vicinity)

Figure: 15



A. Intersection of Heron Drive and CR 620 (Center Square Road)

B. I-295 South Bound on and off ramps and Center Square Road

C. I-295 North Bound on and off ramps and Center Square Road

I-295/ US 130 Riverfront Transporation Corridor Study

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Feet

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Interchange 10
(Traffic Movement)

Figure: 16

Land currently being developed on Center Square Road

Needs and Deficiencies

Sight distance is limited at the interchange due to the crown of the bridge obscuring motorists view of on-coming traffic. Through traffic on Center Square Road are at a potential risk in colliding with traffic exiting southbound I-295 at Center Square Road because both sets of motorists view is obscured. The grade from the crown of the bridge exacerbates the situation. Traffic entering the Mitsubishi property through the Center Square Road driveway, which is in close proximity to the I-295 southbound exit ramp compounds the problem at the intersection. Similarly, traffic exiting northbound I-295 at Center Square Road has an obscured view of eastbound traffic.

Westbound traffic on Center Square Road, wishing to enter the Mitsubishi driveway is forced to weave into traffic exiting from southbound I-295.

Due to the lack of warning signs and/or adequate pavement markings, the lane drop on Center Square Road in both directions by the exit ramps to I-295 causes motorists in the right lane to make abrupt lane changes in order to stay on Center Square Road. Truck traffic is backed-up at the Heron Drive entrance to Pureland Industrial Complex

during peak periods due to the length of the red signal timing at the intersection of Heron Drive and Center Square Road.

Traffic exiting southbound I-295 at Center Square Road backs up on to the mainline of I-295 during the PM peak because ramp traffic are unable to clear the intersection quickly. During the PM peak it is difficult to make the left turn from the ramp onto Center Square Road. This has a residual effect because traffic making both the right and left turning movement is caught in the congestion.

Center Square Road between Beckett Road and Heron Drive experiences congestion in the AM and PM peak periods. There are 2 lanes in each direction on Center Square Road from west of Heron Drive to east of Beckett Road, except the I-295 bridge where it is one lane in each direction. With the lane drop on the bridge and the resulting decrease in capacity on Center Square Road there is congestion during peak periods.

The railroad crossing at Center Square Road between US 130 and Birch Creek Road causes delay whenever a freight train crosses the highway. Delays often occur during peak periods and can last several minutes at a time.

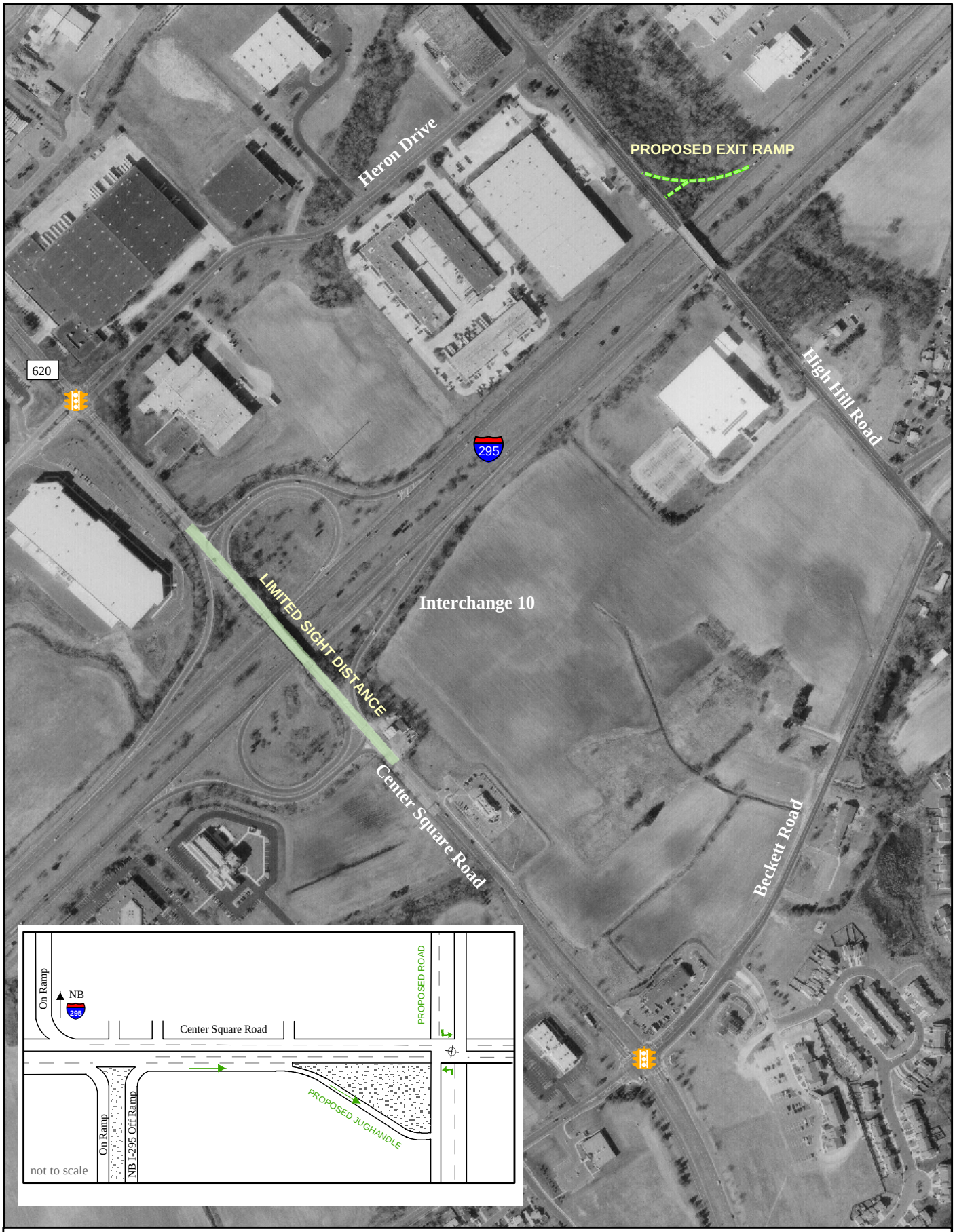
Suggested Improvements

This location needs a more in-depth study which is beyond the scope of this study. The study should look at traffic signal warrants at the exit ramps or the potential of making this interchange a full cloverleaf interchange, eliminating left turns from the I-295 exit ramps.

Eliminate left turns

- *Alternative* 1 - To alleviate traffic congestion of the exit ramps from I-295 to Center Square Road, left turns could be eliminated. This would allow for easier traffic flow at peak periods. Traffic from southbound I-295 wishing to access eastbound Center Square Road would have to do so via Heron Drive, High Hill Road and Beckett Road. Likewise, from northbound I-295 to access westbound Center Square Road the reverse would be true. Though this alternative is safer than existing conditions, it is a circuitous route. It also will place added pressure on Beckett Road/Center Square Road intersection.

- *Alternate* 2 - To accommodate westbound Center Square Road traffic from northbound I-295, a jughandle (represented on *Figure 17*) could be utilized. All traffic from the exit ramp will make a right turn on Center Square Road, traffic wanting to access westbound Center Square Road would enter the jughandle to make the left turn. This would relieve the back-up on to I-295 mainline during peak periods.



I-295/ US 130 Riverfront Transporation Corridor Study

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Interchange 10
(Conceptual Roadway
Improvements)

Figure: 17

In conjunction, to address the back up of traffic at the southbound I-295 exit ramp investigate the potential to construct a new southbound exit ramp at High Hill Road. This is shown on *Figure 17.*

Ramp Widening
Alternatively, the exit ramps could be widened to two lanes. This would allow right-turning traffic an easier flow instead of being stuck behind left-turning traffic. This would ease some of the back-up on to I-295 during peak periods.

Sight-distance and Weaving
A more in-depth study of the sight distance problems at the interchange is needed to determine the appropriate solution.

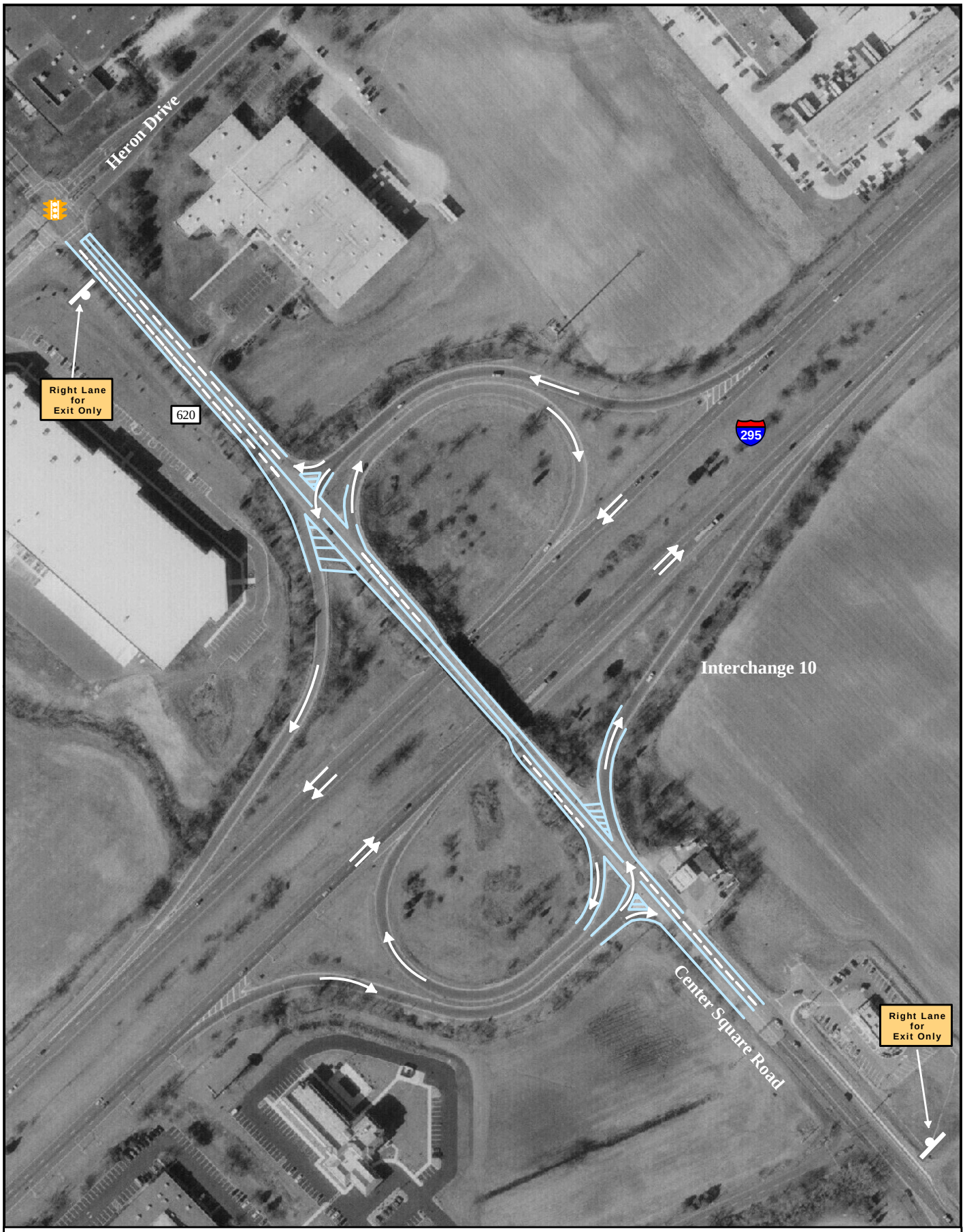
To eliminate the weaving problems caused by the Mitsubishi driveway, investigate the potential to move the entrance to that property to Heron Drive. This would stop motorists entering the Mitsubishi property from making that sharp weave into traffic exiting southbound I-295.

Warning signs needs be placed on Center Square Road ìRight Lane for Exit Onlyî and ìright turnî pavement arrows to warn motorist of the lane drop at the entrance ramps to I-295. These should be placed in both directions as shown on *Figure 18.*

Traffic Signal Timing
A capacity analysis should be done for the Heron Drive/Center Square Road intersection to determine optimum timing for the traffic signal to minimize delays from Heron Drive during peak periods without degrading conditions on Center Square Road.

Trains crossing Center Square Road should be scheduled for off peak hours to prevent back-up of vehicular traffic. Alternatively, when they cross roadways as heavily traveled as Center Square Road they should not be allowed to stop across the roadway.

Replace existing faded warning sign (Right Lane for Exit Only) on westbound Center Square Road approaching I-295 interchange



I-295/ US 130 Riverfront Transporation Corridor Study

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Feet

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JULY 2002

Interchange 10
(Conceptual Sign
Improvements)

Figure: 18

CENTER SQUARE ROAD

Center Square Road (CR 620) is one of the major east-west roadway in Logan Township. It has direct access to the Pureland Industrial Complex and I-295, the major north-south highway in this area. Center Square Road will be playing an even larger role in the mobility of this southwestern section of Logan when the 4500 residential units planned at Weatherby is completed and occupied in nearby Woolwich. This is expected to greatly increase traffic volumes on this road from a 2001 AADT of 12,610.

Needs and Deficiencies

Center Square Road in the vicinity of Township Line Road curves at an angle. It is difficult for motorists to see on-coming traffic at all approaches of the intersection of Center Square Road and Township Line Road. Motorists on Township Line Road are forced in some instances to enter the intersection to determine if it is safe to proceed, this action of itself is unsafe.

Suggested Improvements

Realign Center Square Road as shown in *Figure 19*, this will eliminate the sharp curve and improve the intersection with Township Line Road. There is adequate right-of-way available to realign the roadway.

While the AADT on this roadway segment was 6,385 in 1999, it had increased to 6,943 in 2002. This is expected to increase even further once there is full build-out of homes in the Weatherby development in Woolwich Township. Therefore the four lane section of Center Square Road should be extended east beyond Township Line Road and Weatherby development. Developers should be encouraged to contribute to the roadway improvements.

The county is now in the process of advancing this project.

Traffic Counts: 000/ 000

A.M. peak period/ P.M. peak period

(6-9 a.m.) *(4-7 p.m.)*

I-295/ US 130 Riverfront Transporation Corridor Study

N

0 200 400 600

Feet

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Conceptual Center Square Road Realignment

Figure: 19

SECTION V
PAULSBORO REDEVELOPMENT

This section of the report looks at the transportation problem Paulsboro will experience in developing and marketing their joint redevelopment effort with BP Oil Company of their brownfield site. This is a public/private venture from its initiation. The project has strong support from all levels of government in New Jersey. Gloucester County Department of Economic Development and New Jersey Economic Development Authority are intimately involved in the project. BP is in the forefront and less involved is Dow Chemical who owns 60 acres of the 190 acre site.

The Phase II study (*Phase II Highest and Best Use/Strategy for Implementation*, by URS in association with Triad Associates in 2001) recommends that the site consist of waterfront port development; industrial, commercial and retail development, a solar plant and open space provisions. *Figure 20* shows the Preferred Alternative Plan for this site. Port development will be limited to the waterfront and will include a 900 foot wharf structure to accommodate a mid-sea ocean-going vessel. Upland storage would be 30 to 40 acres that could be used for manufacturing/processing, open paved storage, auto import processing/storage, transit sheds/warehouses and import/export cargoes. The commercial/industrial development will be at the south end of the project site adjacent to existing industrial uses.

Need and Deficiency

BPís proposed redevelopment in Paulsboro according to the study is expected to generate excess traffic through the community and most specifically, truck traffic, given the nature of the proposed redevelopment. Paulsboro, which is mainly residential, has most of its industrial facilities on the southern side of the borough in a cluster adjacent to Greenwich Township, the current truck route favors these sites to the south of the borough with direct access to I-295 via CR 653. *Figure 21* shows the current truck route. Direct access to the redevelopment site is limited. For truck traffic to access this site, which is on the northern end of the borough from I-295, it will have to take a circuitous route utilizing the current truck route and residential streets. This site will compete with other industrial sites located closer to I-295 interchanges.

Recommended Improvements

The site is already served by existing railroad lines that according to the plans will continue to service the development. The Phase I study (*Site Redevelopment, Phase 1,* by URS in 2000) evaluated 4 scenarios for access to the site from I-295. To maintain a separation of industrial and neighborhood traffic, construction of a bridge across Mantua Creek is proposed for the redevelopment project. This bridge will give this site direct access to I-295 by way of CR 656. The exit from I-295 at CR 656 was recently up-graded and should be able to carry the expected increase in traffic. The consultants also conducted an analysis to determine the technical engineering feasibility and preliminary

estimate for road network and bridge spanning Mantua Creek. The developed conceptual roadway cross-sections and profiles adhere to NJDOT and American Association of State Highway Transportation Officials (AASHTO) requirements. Additional design considerations include the U.S. Coast Guard requirements and the potential impacts to the BP site. The proposed bridge cross section, preferred by NJDOT, consists of two 15-foot wide lanes and a 6-foot wide sidewalk, using a maximum profile gradient of 5%. All standards are based on minimum design standards and a design speed of 30 mph. For the project to succeed the bridge is essential.

BP intends to continue its site remediation program in Paulsboro for the next 15-20 years. The construction of the solar plant which has begun, will be the largest thin-film solar plant in the Eastern United States to power the environmental remediation equipment and has a great educational potential about renewable energy. BPís involvement in this redevelopment process is indicative of the existence of a strong public-private partnership.

The borough was awarded a Transportation Community Development Initiative (TCDI) grant of $80,000 by DVRPC which will go towards a pre-scoping study for the bridge.

Source: *Phase II Highest and Best Use/Strategy for Implementation*, by URS in association with Triad Associates in 2001.

I-295/ US 130 Riverfront Transporation Corridor Study

N

not to scale

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JULY 2002

Consultant Preferred Alternative
Paulsboro Redevelopment

Figure: 20

I-295/ US 130 Riverfront Transporation Corridor Study

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Miles

DELAWARE VALLEY
REGIONAL PLANNING COMMISSION
JULY 2002

Paulsboro
Truck Route

Figure: 21

SECTION VI
CONCLUSION

The face of Gloucester County riverfront communities have changed. A region which was previously dominated by small traditional industrial-based, mixed-use communities and agriculture is now changing to suburban residential development and large park-like industrial complexes. With large quantities of vacant land and farmers willing to sell property, the rate of residential and commercial/industrial development in Logan and West Deptford and other surrounding municipalities has the potential to be inordinate.

Unfortunately, mass transit has not kept pace with development. In an area, previously under-served, development in the region like most of the state has taken place without mass transit consideration. The form that residential and commercial/industrial development has taken in the region does not provide the densities conducive to traditional mass transit. Therefore, mass transit providers need to investigate non-traditional strategies to satisfy the transit needs of the countyís residents.

The study has made several recommendations to address areas of need identified. Any one of these recommendations on its own will not adequately alleviate the deficiency experienced by the region but a combination of the recommendations made will provide the necessary service.

The provision of a bus transfer center in Woodbury will go a long way to distributing efficient transit service to southern New Jersey. It has the potential for timed-transfers, and decreasing bus headways if some routes can terminate in Woodbury.

Paulsboroís redevelopment project is the first of its kind in the northeastern United States. The success of this joint project with BP Oil Company could be the push-start the boroughís economy needs.

APPENDIX A

Logan Township

Traffic Counts

1. CR 662 High Hill Road from CR 601 to Birch Creek Road (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	59	
2:00 AM	24	
3:00 AM	38	
4:00 AM	72	
5:00 AM	74	
6:00 AM	240	
7:00 AM	382	
8:00 AM	428	
9:00 AM	360	
10:00 AM	214	
11:00 AM	204	
12:00 PM	188	
1:00 PM	222	
2:00 PM	200	
3:00 PM	287	
4:00 PM	434	
5:00 PM	458	
6:00 PM	458	
7:00 PM	254	
8:00 PM	180	
9:00 PM	120	
10:00 PM	92	
11:00 PM	79	
12:00 AM	76	
Daily Total	**5,143**	
AADT	**4,873**	
Seasonal Factor	0.958	
AM Peak Period (6-9 AM)	1,410	27.4%
PM Peak Period (4-7 PM)	1,604	31.2%

Logan Township

Traffic Counts

2. CR 620 Center Square Road from US 130 to CR 601 (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	80	
2:00 AM	84	
3:00 AM	54	
4:00 AM	39	
5:00 AM	42	
6:00 AM	104	
7:00 AM	126	
8:00 AM	134	
9:00 AM	124	
10:00 AM	97	
11:00 AM	118	
12:00 PM	114	
1:00 PM	102	
2:00 PM	109	
3:00 PM	156	
4:00 PM	188	
5:00 PM	182	
6:00 PM	133	
7:00 PM	120	
8:00 PM	112	
9:00 PM	94	
10:00 PM	132	
11:00 PM	117	
12:00 AM	112	
Daily Total	**2,673**	
AADT	**2,471**	
Seasonal Factor	0.966	
AM Peak Period (6-9 AM)	488	18.3%
PM Peak Period (4-7 PM)	623	23.3%

Logan Township

Traffic Counts

3. CR 601 Pedricktown Center Square Road from CR 602 to CR 620 (Both Directions)

11/27/2001

Hour Ending	Traffic Counts	
1:00 AM	27	
2:00 AM	8	
3:00 AM	11	
4:00 AM	10	
5:00 AM	16	
6:00 AM	41	
7:00 AM	72	
8:00 AM	136	
9:00 AM	91	
10:00 AM	44	
11:00 AM	66	
12:00 PM	86	
1:00 PM	86	
2:00 PM	70	
3:00 PM	86	
4:00 PM	140	
5:00 PM	134	
6:00 PM	84	
7:00 PM	73	
8:00 PM	56	
9:00 PM	25	
10:00 PM	27	
11:00 PM	36	
12:00 AM	21	
Daily Total	**1,446**	
AADT	**1,370**	
Seasonal Factor	0.957	
AM Peak Period (6-9 AM)	340	23.5%
PM Peak Period (4-7 PM)	431	29.8%

Logan Township

Traffic Counts

4. CR 620 Center Square Road from Heron Drive to Sharptown Road (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	160	
2:00 AM	163	
3:00 AM	143	
4:00 AM	116	
5:00 AM	138	
6:00 AM	179	
7:00 AM	305	
8:00 AM	483	
9:00 AM	568	
10:00 AM	567	
11:00 AM	367	
12:00 PM	423	
1:00 PM	462	
2:00 PM	546	
3:00 PM	420	
4:00 PM	452	
5:00 PM	760	
6:00 PM	568	
7:00 PM	448	
8:00 PM	315	
9:00 PM	298	
10:00 PM	264	
11:00 PM	217	
12:00 AM	143	
Daily Total	**8,505**	
AADT	**7,863**	
Seasonal Factor	0.966	
AM Peak Period (6-9 AM)	1,535	18.0%
PM Peak Period (4-7 PM)	2,228	26.2%

Logan Township

Traffic Counts

5. CR 662 High Hill Road from Heron Drive to I-295 (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	57	
2:00 AM	34	
3:00 AM	28	
4:00 AM	44	
5:00 AM	59	
6:00 AM	123	
7:00 AM	268	
8:00 AM	388	
9:00 AM	282	
10:00 AM	154	
11:00 AM	184	
12:00 PM	200	
1:00 PM	362	
2:00 PM	250	
3:00 PM	238	
4:00 PM	428	
5:00 PM	456	
6:00 PM	478	
7:00 PM	208	
8:00 PM	151	
9:00 PM	112	
10:00 PM	86	
11:00 PM	82	
12:00 AM	97	
Daily Total	**4,769**	
AADT	**4,518**	
Seasonal Factor	0.958	
AM Peak Period (6-9 AM)	1,061	22.2%
PM Peak Period (4-7 PM)	1,570	32.9%

Logan Township

Traffic Counts

6. CR 620 Center Square Road from Beckett Road to I-295 (Both Directions)

4/2/02-4/3/02

Hour Ending	Traffic Counts	
1:00 AM	206	
2:00 AM	121	
3:00 AM	104	
4:00 AM	132	
5:00 AM	207	
6:00 AM	471	
7:00 AM	1,012	
8:00 AM	1,417	
9:00 AM	1,088	
10:00 AM	710	
11:00 AM	641	
12:00 PM	902	
1:00 PM	1,046	
2:00 PM	855	
3:00 PM	844	
4:00 PM	1,135	
5:00 PM	1,099	
6:00 PM	1,265	
7:00 PM	1,035	
8:00 PM	782	
9:00 PM	577	
10:00 PM	455	
11:00 PM	426	
12:00 AM	297	
Daily Total	**16,827**	
AADT	**15,508**	
Seasonal Factor	0.963	
AM Peak Period (6-9 AM)	3,988	23.7%
PM Peak Period (4-7 PM)	4,534	26.9%

Logan Township

Traffic Counts

7. US 322 from US 130 to I-295 (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	166	
2:00 AM	131	
3:00 AM	107	
4:00 AM	137	
5:00 AM	278	
6:00 AM	705	
7:00 AM	1,633	
8:00 AM	1,724	
9:00 AM	1,483	
10:00 AM	1,147	
11:00 AM	1,003	
12:00 PM	952	
1:00 PM	944	
2:00 PM	1,015	
3:00 PM	1,122	
4:00 PM	1,336	
5:00 PM	1,575	
6:00 PM	1,667	
7:00 PM	1,044	
8:00 PM	714	
9:00 PM	555	
10:00 PM	376	
11:00 PM	350	
12:00 AM	215	
Daily Total	**20,379**	
AADT	**18,093**	
Seasonal Factor	0.964	
AM Peak Period (6-9 AM)	5,545	27.2%
PM Peak Period (4-7 PM)	5,622	27.6%

Logan Township

Traffic Counts

8. US 322 Bridgeport Mullica Rd. from Coontown Road to CR 669 (Both Directions)

7/8/2002

Hour Ending	Traffic Counts	
1:00 AM	232	
2:00 AM	140	
3:00 AM	154	
4:00 AM	208	
5:00 AM	313	
6:00 AM	617	
7:00 AM	1,184	
8:00 AM	1,599	
9:00 AM	1,409	
10:00 AM	1,358	
11:00 AM	1,243	
12:00 PM	1,261	
1:00 PM	1,221	
2:00 PM	1,252	
3:00 PM	1,322	
4:00 PM	1,505	
5:00 PM	1,631	
6:00 PM	1,494	
7:00 PM	1,115	
8:00 PM	816	
9:00 PM	651	
10:00 PM	527	
11:00 PM	379	
12:00 AM	283	
Daily Total	**21,914**	
AADT	**18,347**	
Seasonal Factor	0.911	
AM Peak Period (6-9 AM)	4,809	21.9%
PM Peak Period (4-7 PM)	5,745	26.2%

Greenwich Township

Traffic Counts

9. CR 673 Democrat Road from NJ 44 to CR 653 (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	16	
2:00 AM	11	
3:00 AM	3	
4:00 AM	6	
5:00 AM	8	
6:00 AM	39	
7:00 AM	74	
8:00 AM	186	
9:00 AM	160	
10:00 AM	132	
11:00 AM	125	
12:00 PM	144	
1:00 PM	162	
2:00 PM	144	
3:00 PM	155	
4:00 PM	180	
5:00 PM	193	
6:00 PM	198	
7:00 PM	158	
8:00 PM	147	
9:00 PM	76	
10:00 PM	88	
11:00 PM	46	
12:00 AM	30	
Daily Total	**2,481**	
AADT	**2,327**	
Seasonal Factor	0.962	
AM Peak Period (6-9 AM)	459	18.5%
PM Peak Period (4-7 PM)	729	29.4%

Greenwich Township

Traffic Counts

10. Berkeley Road from CR 653 to I-295 (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	73	
2:00 AM	74	
3:00 AM	41	
4:00 AM	83	
5:00 AM	127	
6:00 AM	405	
7:00 AM	634	
8:00 AM	722	
9:00 AM	651	
10:00 AM	524	
11:00 AM	561	
12:00 PM	674	
1:00 PM	700	
2:00 PM	595	
3:00 PM	739	
4:00 PM	795	
5:00 PM	818	
6:00 PM	858	
7:00 PM	541	
8:00 PM	381	
9:00 PM	345	
10:00 PM	277	
11:00 PM	197	
12:00 AM	128	
Daily Total	**10,943**	
AADT	**10,264**	
Seasonal Factor	0.962	
AM Peak Period (6-9 AM)	2,412	22.0%
PM Peak Period (4-7 PM)	3,012	27.5%

Paulsboro Borough

Traffic Counts

11. Broad Street from Berkeley Road to Cedar Avenue (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	76	
2:00 AM	34	
3:00 AM	38	
4:00 AM	39	
5:00 AM	69	
6:00 AM	182	
7:00 AM	327	
8:00 AM	392	
9:00 AM	508	
10:00 AM	520	
11:00 AM	580	
12:00 PM	570	
1:00 PM	638	
2:00 PM	577	
3:00 PM	642	
4:00 PM	666	
5:00 PM	637	
6:00 PM	618	
7:00 PM	474	
8:00 PM	412	
9:00 PM	296	
10:00 PM	214	
11:00 PM	182	
12:00 AM	142	
Daily Total	**8,833**	
AADT	**7,772**	
Seasonal Factor	0.937	
AM Peak Period (6-9 AM)	1,409	16.0%
PM Peak Period (4-7 PM)	2,395	27.1%

Paulsboro Borough

Traffic Counts

12. Mantua Avenue from 5th Street to 6th Street (Both Directions)

11/27/2001

Hour Ending	Traffic Counts	
1:00 AM	40	
2:00 AM	10	
3:00 AM	14	
4:00 AM	11	
5:00 AM	13	
6:00 AM	38	
7:00 AM	76	
8:00 AM	168	
9:00 AM	132	
10:00 AM	99	
11:00 AM	105	
12:00 PM	86	
1:00 PM	125	
2:00 PM	112	
3:00 PM	152	
4:00 PM	178	
5:00 PM	200	
6:00 PM	180	
7:00 PM	158	
8:00 PM	125	
9:00 PM	97	
10:00 PM	68	
11:00 PM	40	
12:00 AM	26	
Daily Total	**2,253**	
AADT	**1,982**	
Seasonal Factor	0.937	
AM Peak Period (6-9 AM)	414	18.4%
PM Peak Period (4-7 PM)	716	31.8%

Paulsboro Borough

Traffic Counts

13. North Delaware Street from Buck Street to Broad Street (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	56	
2:00 AM	28	
3:00 AM	14	
4:00 AM	20	
5:00 AM	26	
6:00 AM	68	
7:00 AM	182	
8:00 AM	274	
9:00 AM	370	
10:00 AM	324	
11:00 AM	374	
12:00 PM	370	
1:00 PM	414	
2:00 PM	373	
3:00 PM	414	
4:00 PM	504	
5:00 PM	528	
6:00 PM	434	
7:00 PM	372	
8:00 PM	301	
9:00 PM	231	
10:00 PM	184	
11:00 PM	112	
12:00 AM	66	
Daily Total	**6,039**	
AADT	**5,324**	
Seasonal Factor	0.933	
AM Peak Period (6-9 AM)	894	14.8%
PM Peak Period (4-7 PM)	1,838	30.4%

West Deptford Township

Traffic Counts

14. CR 656 Paradise Road from US 130 to Nolte Drive (Both Directions)

11/27/2001

Hour Ending	Traffic Counts	
1:00 AM	84	
2:00 AM	44	
3:00 AM	33	
4:00 AM	33	
5:00 AM	61	
6:00 AM	196	
7:00 AM	470	
8:00 AM	619	
9:00 AM	575	
10:00 AM	364	
11:00 AM	409	
12:00 PM	428	
1:00 PM	512	
2:00 PM	496	
3:00 PM	554	
4:00 PM	738	
5:00 PM	704	
6:00 PM	755	
7:00 PM	416	
8:00 PM	264	
9:00 PM	180	
10:00 PM	154	
11:00 PM	141	
12:00 AM	89	
Daily Total	**8,319**	
AADT	**7,803**	
Seasonal Factor	0.962	
AM Peak Period (6-9 AM)	1,860	22.4%
PM Peak Period (4-7 PM)	2,613	31.4%

West Deptford Township

Traffic Counts

15. NJ 44 Crown Point Road from Leonards Lane to Jobstown Road (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	38	
2:00 AM	30	
3:00 AM	31	
4:00 AM	42	
5:00 AM	48	
6:00 AM	106	
7:00 AM	392	
8:00 AM	364	
9:00 AM	424	
10:00 AM	350	
11:00 AM	377	
12:00 PM	444	
1:00 PM	511	
2:00 PM	414	
3:00 PM	436	
4:00 PM	595	
5:00 PM	558	
6:00 PM	480	
7:00 PM	356	
8:00 PM	284	
9:00 PM	252	
10:00 PM	180	
11:00 PM	145	
12:00 AM	96	
Daily Total	**6,953**	
AADT	**6,522**	
Seasonal Factor	0.962	
AM Peak Period (6-9 AM)	1,286	18.5%
PM Peak Period (4-7 PM)	1,989	28.6%

West Deptford Township

Traffic Counts

16. CR 643 Grove Road from CR 656 to Metropolitan Avenue (Both Directions)

11/27/2001

Hour Ending	Traffic Counts	
1:00 AM	48	
2:00 AM	22	
3:00 AM	38	
4:00 AM	48	
5:00 AM	42	
6:00 AM	138	
7:00 AM	429	
8:00 AM	866	
9:00 AM	764	
10:00 AM	376	
11:00 AM	358	
12:00 PM	368	
1:00 PM	478	
2:00 PM	436	
3:00 PM	481	
4:00 PM	645	
5:00 PM	776	
6:00 PM	730	
7:00 PM	418	
8:00 PM	293	
9:00 PM	199	
10:00 PM	166	
11:00 PM	86	
12:00 AM	109	
Daily Total	**8,314**	
AADT	**7,315**	
Seasonal Factor	0.937	
AM Peak Period (6-9 AM)	2,197	26.4%
PM Peak Period (4-7 PM)	2,569	30.9%

West Deptford Township

Traffic Counts

17. CR 551 Kings Highway from CR 643 to CR 648 (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	57	
2:00 AM	21	
3:00 AM	20	
4:00 AM	31	
5:00 AM	47	
6:00 AM	164	
7:00 AM	479	
8:00 AM	867	
9:00 AM	906	
10:00 AM	667	
11:00 AM	719	
12:00 PM	761	
1:00 PM	823	
2:00 PM	744	
3:00 PM	803	
4:00 PM	966	
5:00 PM	1,199	
6:00 PM	1,126	
7:00 PM	733	
8:00 PM	598	
9:00 PM	344	
10:00 PM	328	
11:00 PM	183	
12:00 AM	154	
Daily Total	**12,740**	
AADT	**11,949**	
Seasonal Factor	0.962	
AM Peak Period (6-9 AM)	2,416	19.0%
PM Peak Period (4-7 PM)	4,024	31.6%

West Deptford Township

Traffic Counts

18. CR 660 Jessup Road from I-295 to Ollerton Avenue (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	131	
2:00 AM	68	
3:00 AM	37	
4:00 AM	30	
5:00 AM	26	
6:00 AM	44	
7:00 AM	95	
8:00 AM	316	
9:00 AM	702	
10:00 AM	711	
11:00 AM	493	
12:00 PM	490	
1:00 PM	486	
2:00 PM	601	
3:00 PM	562	
4:00 PM	594	
5:00 PM	716	
6:00 PM	848	
7:00 PM	960	
8:00 PM	743	
9:00 PM	572	
10:00 PM	425	
11:00 PM	293	
12:00 AM	215	
Daily Total	**10,158**	
AADT	**9,675**	
Seasonal Factor	0.964	
AM Peak Period (6-9 AM)	1,157	11.4%
PM Peak Period (4-7 PM)	3,118	30.7%

West Deptford Township

Traffic Counts

19. CR 551 Kings Highway from CR 656 to CR 660 (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	80	
2:00 AM	49	
3:00 AM	32	
4:00 AM	40	
5:00 AM	82	
6:00 AM	191	
7:00 AM	404	
8:00 AM	718	
9:00 AM	871	
10:00 AM	762	
11:00 AM	728	
12:00 PM	792	
1:00 PM	884	
2:00 PM	878	
3:00 PM	838	
4:00 PM	972	
5:00 PM	1,107	
6:00 PM	1,132	
7:00 PM	801	
8:00 PM	692	
9:00 PM	490	
10:00 PM	423	
11:00 PM	284	
12:00 AM	198	
Daily Total	**13,448**	
AADT	**12,614**	
Seasonal Factor	0.962	
AM Peak Period (6-9 AM)	2,184	16.2%
PM Peak Period (4-7 PM)	4,012	29.8%

West Deptford Township

Traffic Counts

20. CR 656 Paradise Road from NJ 45 to NJ Turnpike (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	74	
2:00 AM	35	
3:00 AM	30	
4:00 AM	30	
5:00 AM	45	
6:00 AM	169	
7:00 AM	486	
8:00 AM	817	
9:00 AM	734	
10:00 AM	501	
11:00 AM	554	
12:00 PM	598	
1:00 PM	712	
2:00 PM	672	
3:00 PM	679	
4:00 PM	910	
5:00 PM	984	
6:00 PM	1,040	
7:00 PM	731	
8:00 PM	526	
9:00 PM	394	
10:00 PM	266	
11:00 PM	200	
12:00 AM	138	
Daily Total	**11,325**	
AADT	**10,622**	
Seasonal Factor	0.962	
AM Peak Period (6-9 AM)	2,206	19.5%
PM Peak Period (4-7 PM)	3,665	32.4%

National Park Borough

Traffic Counts

21. CR 642 Hessian Avenue from CR 643 to Military Drive (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	22	
2:00 AM	6	
3:00 AM	5	
4:00 AM	6	
5:00 AM	10	
6:00 AM	42	
7:00 AM	102	
8:00 AM	146	
9:00 AM	176	
10:00 AM	118	
11:00 AM	128	
12:00 PM	160	
1:00 PM	210	
2:00 PM	183	
3:00 PM	199	
4:00 PM	230	
5:00 PM	212	
6:00 PM	194	
7:00 PM	172	
8:00 PM	131	
9:00 PM	101	
10:00 PM	62	
11:00 PM	62	
12:00 AM	43	
Daily Total	**2,720**	
AADT	**2,551**	
Seasonal Factor	0.962	
AM Peak Period (6-9 AM)	466	17.1%
PM Peak Period (4-7 PM)	808	29.7%

West Deptford Township

Traffic Counts

22. Delaware Street from Woodbury City Line to Matthews Avenue (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	89	
2:00 AM	43	
3:00 AM	40	
4:00 AM	54	
5:00 AM	95	
6:00 AM	292	
7:00 AM	742	
8:00 AM	1,178	
9:00 AM	1,094	
10:00 AM	892	
11:00 AM	778	
12:00 PM	842	
1:00 PM	938	
2:00 PM	948	
3:00 PM	1,058	
4:00 PM	1,178	
5:00 PM	1,243	
6:00 PM	1,330	
7:00 PM	953	
8:00 PM	730	
9:00 PM	557	
10:00 PM	454	
11:00 PM	312	
12:00 AM	216	
Daily Total	**16,056**	
AADT	**14,156**	
Seasonal Factor	0.933	
AM Peak Period (6-9 AM)	3,306	20.6%
PM Peak Period (4-7 PM)	4,704	29.3%

West Deptford Township

Traffic Counts

23. Red Bank Avenue from I-295 to Oakland Road (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	166	
2:00 AM	80	
3:00 AM	43	
4:00 AM	32	
5:00 AM	56	
6:00 AM	62	
7:00 AM	143	
8:00 AM	437	
9:00 AM	755	
10:00 AM	691	
11:00 AM	471	
12:00 PM	440	
1:00 PM	561	
2:00 PM	619	
3:00 PM	587	
4:00 PM	727	
5:00 PM	831	
6:00 PM	848	
7:00 PM	849	
8:00 PM	726	
9:00 PM	574	
10:00 PM	502	
11:00 PM	370	
12:00 AM	238	
Daily Total	**10,808**	
AADT	**10,808**	
Seasonal Factor	0.962	
AM Peak Period (6-9 AM)	1,397	12.9%
PM Peak Period (4-7 PM)	3,255	30.1%

West Deptford Township

Traffic Counts

24. Red Bank Avenue from Frances Avenue to Tatum Street (Both Directions)

11/27/2001

Hour Ending	Traffic Counts	
1:00 AM	72	
2:00 AM	37	
3:00 AM	28	
4:00 AM	53	
5:00 AM	62	
6:00 AM	132	
7:00 AM	374	
8:00 AM	622	
9:00 AM	670	
10:00 AM	558	
11:00 AM	518	
12:00 PM	536	
1:00 PM	658	
2:00 PM	582	
3:00 PM	740	
4:00 PM	850	
5:00 PM	888	
6:00 PM	881	
7:00 PM	748	
8:00 PM	632	
9:00 PM	453	
10:00 PM	398	
11:00 PM	233	
12:00 AM	144	
Daily Total	**10,869**	
AADT	**10,352**	
Seasonal Factor	0.964	
AM Peak Period (6-9 AM)	1,798	16.5%
PM Peak Period (4-7 PM)	3,367	31.0%

Woodbury City

Traffic Counts

25. Lafayette Avenue from Stuart Street to Packard Avenue (Both Directions)

11/27/2001

Hour Ending	Traffic Counts	
1:00 AM	6	
2:00 AM	2	
3:00 AM	0	
4:00 AM	2	
5:00 AM	4	
6:00 AM	1	
7:00 AM	5	
8:00 AM	12	
9:00 AM	15	
10:00 AM	9	
11:00 AM	10	
12:00 PM	10	
1:00 PM	19	
2:00 PM	14	
3:00 PM	13	
4:00 PM	26	
5:00 PM	28	
6:00 PM	16	
7:00 PM	20	
8:00 PM	17	
9:00 PM	15	
10:00 PM	8	
11:00 PM	8	
12:00 AM	4	
Daily Total	**264**	
AADT	**251**	
Seasonal Factor	0.962	
AM Peak Period (6-9 AM)	33	12.5%
PM Peak Period (4-7 PM)	90	34.1%

Woodbury City

Traffic Counts

26. South Barber Avenue from Railroad Avenue to South Evergreen Avenue (Both Directions)

11/27/2001

Hour Ending	Traffic Counts	
1:00 AM	20	
2:00 AM	9	
3:00 AM	6	
4:00 AM	7	
5:00 AM	8	
6:00 AM	25	
7:00 AM	116	
8:00 AM	242	
9:00 AM	257	
10:00 AM	170	
11:00 AM	192	
12:00 PM	206	
1:00 PM	225	
2:00 PM	236	
3:00 PM	268	
4:00 PM	265	
5:00 PM	356	
6:00 PM	335	
7:00 PM	221	
8:00 PM	166	
9:00 PM	107	
10:00 PM	97	
11:00 PM	61	
12:00 AM	20	
Daily Total	**3,615**	
AADT	**3,391**	
Seasonal Factor	0.962	
AM Peak Period (6-9 AM)	640	17.7%
PM Peak Period (4-7 PM)	1,177	32.6%

Woodbury City

Traffic Counts

27. Evergreen Avenue from Barber Avenue to Hesters Avenue (Both Directions)

11/6/2001

Hour Ending	Traffic Counts	
1:00 AM	82	
2:00 AM	55	
3:00 AM	23	
4:00 AM	31	
5:00 AM	67	
6:00 AM	245	
7:00 AM	670	
8:00 AM	1,384	
9:00 AM	1,376	
10:00 AM	1,186	
11:00 AM	1,242	
12:00 PM	1,327	
1:00 PM	1,369	
2:00 PM	1,402	
3:00 PM	1,386	
4:00 PM	1,491	
5:00 PM	1,562	
6:00 PM	1,586	
7:00 PM	1,300	
8:00 PM	972	
9:00 PM	661	
10:00 PM	503	
11:00 PM	319	
12:00 AM	198	
Daily Total	**20,437**	
AADT	**17,981**	
Seasonal Factor	0.937	
AM Peak Period (6-9 AM)	3,675	18.0%
PM Peak Period (4-7 PM)	5,939	29.1%

Westville Borough

Traffic Counts

28. Broadway Avenue from NJ 47 to Birch Avenue (Both Directions)

11/27/2001

Hour Ending	Traffic Counts	
1:00 AM	72	
2:00 AM	38	
3:00 AM	22	
4:00 AM	38	
5:00 AM	53	
6:00 AM	128	
7:00 AM	414	
8:00 AM	886	
9:00 AM	478	
10:00 AM	573	
11:00 AM	584	
12:00 PM	612	
1:00 PM	682	
2:00 PM	726	
3:00 PM	699	
4:00 PM	942	
5:00 PM	966	
6:00 PM	878	
7:00 PM	712	
8:00 PM	508	
9:00 PM	434	
10:00 PM	284	
11:00 PM	214	
12:00 AM	131	
Daily Total	**11,074**	
AADT	**10,387**	
Seasonal Factor	0.962	
AM Peak Period (6-9 AM)	1,906	17.2%
PM Peak Period (4-7 PM)	3,498	31.6%

West Deptford Township

Traffic Counts

29. CR 656 Paradise Road from I-295 to NJ 44 (Both Directions)

6/3/2002

Hour Ending	Traffic Counts	
1:00 AM	109	
2:00 AM	98	
3:00 AM	122	
4:00 AM	103	
5:00 AM	128	
6:00 AM	240	
7:00 AM	516	
8:00 AM	604	
9:00 AM	588	
10:00 AM	467	
11:00 AM	479	
12:00 PM	492	
1:00 PM	540	
2:00 PM	506	
3:00 PM	574	
4:00 PM	762	
5:00 PM	685	
6:00 PM	665	
7:00 PM	475	
8:00 PM	356	
9:00 PM	347	
10:00 PM	269	
11:00 PM	221	
12:00 AM	168	
Daily Total	**9,514**	
AADT	**8,561**	
Seasonal Factor	0.921	
AM Peak Period (6-9 AM)	1,948	20.5%
PM Peak Period (4-7 PM)	2,587	27.2%

Woodbury City

Traffic Counts

30. CR 644 Red Bank Avenue from North Broad Street to Green Street (Both Directions)

6/3/2002

Hour Ending	Traffic Counts	
1:00 AM	96	
2:00 AM	48	
3:00 AM	49	
4:00 AM	39	
5:00 AM	51	
6:00 AM	138	
7:00 AM	467	
8:00 AM	746	
9:00 AM	857	
10:00 AM	723	
11:00 AM	725	
12:00 PM	808	
1:00 PM	848	
2:00 PM	874	
3:00 PM	896	
4:00 PM	968	
5:00 PM	1,012	
6:00 PM	1,123	
7:00 PM	984	
8:00 PM	744	
9:00 PM	676	
10:00 PM	498	
11:00 PM	302	
12:00 AM	172	
Daily Total	**13,844**	
AADT	**12,457**	
Seasonal Factor	0.921	
AM Peak Period (6-9 AM)	2,208	15.9%
PM Peak Period (4-7 PM)	4,087	29.5%

Woodbury City

Traffic Counts

31. CR 644 Red Bank Avenue from North Broad Street to Tatum Street (Both Directions)

6/3/2002

Hour Ending	Traffic Counts	
1:00 AM	80	
2:00 AM	63	
3:00 AM	39	
4:00 AM	33	
5:00 AM	52	
6:00 AM	109	
7:00 AM	358	
8:00 AM	592	
9:00 AM	682	
10:00 AM	686	
11:00 AM	573	
12:00 PM	630	
1:00 PM	704	
2:00 PM	726	
3:00 PM	790	
4:00 PM	818	
5:00 PM	868	
6:00 PM	1,000	
7:00 PM	874	
8:00 PM	724	
9:00 PM	716	
10:00 PM	482	
11:00 PM	283	
12:00 AM	145	
Daily Total	**12,027**	
AADT	**10,822**	
Seasonal Factor	0.921	
AM Peak Period (6-9 AM)	1,741	14.5%
PM Peak Period (4-7 PM)	3,560	29.6%

Woodbury City

Traffic Counts

32. NJ 45 North Broad Street from Hunter Street to Cooper Street (Both Directions)

6/3/2002

Hour Ending	Traffic Counts	
1:00 AM	198	
2:00 AM	131	
3:00 AM	108	
4:00 AM	94	
5:00 AM	134	
6:00 AM	428	
7:00 AM	950	
8:00 AM	1,569	
9:00 AM	1,689	
10:00 AM	1,524	
11:00 AM	1,502	
12:00 PM	1,534	
1:00 PM	1,540	
2:00 PM	1,662	
3:00 PM	1,594	
4:00 PM	1,643	
5:00 PM	1,673	
6:00 PM	1,772	
7:00 PM	1,612	
8:00 PM	1,338	
9:00 PM	1,208	
10:00 PM	957	
11:00 PM	646	
12:00 AM	388	
Daily Total	**25,894**	
AADT	**23,300**	
Seasonal Factor	0.921	
AM Peak Period (6-9 AM)	4,636	17.9%
PM Peak Period (4-7 PM)	6,700	25.9%

Woodbury City

Traffic Counts

33. CR 640 Cooper Street from North Broad Street to Green Avenue (Both Directions)

6/3/2002

Hour Ending	Traffic Counts	
1:00 AM	108	
2:00 AM	54	
3:00 AM	44	
4:00 AM	56	
5:00 AM	60	
6:00 AM	273	
7:00 AM	570	
8:00 AM	894	
9:00 AM	1,000	
10:00 AM	883	
11:00 AM	912	
12:00 PM	993	
1:00 PM	1,001	
2:00 PM	1,061	
3:00 PM	1,059	
4:00 PM	1,185	
5:00 PM	1,160	
6:00 PM	1,282	
7:00 PM	999	
8:00 PM	887	
9:00 PM	739	
10:00 PM	602	
11:00 PM	326	
12:00 AM	181	
Daily Total	**16,329**	
AADT	**14,329**	
Seasonal Factor	0.921	
AM Peak Period (6-9 AM)	2,737	16.8%
PM Peak Period (4-7 PM)	4,626	28.3%

Woolwich Township

Traffic Counts

34. CR 620 Center Square Road from CR 551 to Township Line Road (Both Directions)

6/3/2002

Hour Ending	Traffic Counts	
1:00 AM	73	
2:00 AM	53	
3:00 AM	36	
4:00 AM	46	
5:00 AM	58	
6:00 AM	162	
7:00 AM	337	
8:00 AM	586	
9:00 AM	534	
10:00 AM	346	
11:00 AM	304	
12:00 PM	425	
1:00 PM	440	
2:00 PM	430	
3:00 PM	482	
4:00 PM	620	
5:00 PM	573	
6:00 PM	674	
7:00 PM	504	
8:00 PM	400	
9:00 PM	340	
10:00 PM	212	
11:00 PM	144	
12:00 AM	132	
Daily Total	**7,911**	
AADT	**6,943**	
Seasonal Factor	0.920	
AM Peak Period (6-9 AM)	1,619	20.5%
PM Peak Period (4-7 PM)	2,371	30.0%

Logan Township

Traffic Counts

35. US 322 Bridegtport Mullica Hill Road from US 130 to Commodore Barry Bridge (Both Directions)

4/15/2002

Hour Ending	Traffic Counts	
1:00 AM	164	
2:00 AM	104	
3:00 AM	88	
4:00 AM	146	
5:00 AM	266	
6:00 AM	597	
7:00 AM	1,220	
8:00 AM	1,620	
9:00 AM	1,632	
10:00 AM	1,350	
11:00 AM	1,332	
12:00 PM	1,336	
1:00 PM	1,305	
2:00 PM	1,326	
3:00 PM	1,343	
4:00 PM	1,572	
5:00 PM	1,668	
6:00 PM	1,663	
7:00 PM	1,268	
8:00 PM	856	
9:00 PM	775	
10:00 PM	550	
11:00 PM	362	
12:00 AM	222	
Daily Total	**22,765**	
AADT	**20,461**	
Seasonal Factor	0.978	
AM Peak Period (6-9 AM)	5,069	22.3%
PM Peak Period (4-7 PM)	6,171	27.1%

Vehicle Classification Counts

CR 656 from US 130 to Nolte Drive

4/2/2002

Northbound					Southbound					Total Volumes
Time	**Total**	**# Cars**	**# Trucks***	**% Trucks**	**Time**	**Total**	**# Cars**	**# Trucks***	**% Trucks**	**NB & SB**
12:00 AM	33	28	5	15.2%	12:00 AM	29	25	4	13.8%	62
1:00 AM	21	18	3	14.3%	1:00 AM	51	44	7	13.7%	72
2:00 AM	11	7	4	36.4%	2:00 AM	14	13	1	7.1%	25
3:00 AM	11	9	2	18.2%	3:00 AM	16	9	7	43.8%	27
4:00 AM	15	11	4	26.7%	4:00 AM	23	18	5	21.7%	38
5:00 AM	115	99	16	13.9%	5:00 AM	96	65	31	32.3%	211
6:00 AM	217	149	68	31.3%	6:00 AM	227	169	58	25.6%	444
7:00 AM	236	185	51	21.6%	7:00 AM	320	249	71	22.2%	556
8:00 AM	247	191	56	22.7%	8:00 AM	257	184	73	28.4%	504
9:00 AM	168	114	54	32.1%	9:00 AM	151	95	56	37.1%	319
10:00 AM	159	118	41	25.8%	10:00 AM	147	93	54	36.7%	306
11:00 AM	233	166	67	28.8%	11:00 AM	191	125	66	34.6%	424
12:00 PM	223	178	45	20.2%	12:00 PM	234	165	69	29.5%	457
1:00 PM	188	138	50	26.6%	1:00 PM	198	144	54	27.3%	386
2:00 PM	255	205	50	19.6%	2:00 PM	237	164	73	30.8%	492
3:00 PM	382	287	95	24.9%	3:00 PM	375	271	104	27.7%	757
4:00 PM	368	290	78	21.2%	4:00 PM	275	202	73	26.5%	643
5:00 PM	392	347	45	11.5%	5:00 PM	313	249	64	20.4%	705
6:00 PM	228	194	34	14.9%	6:00 PM	178	145	33	18.5%	406
7:00 PM	163	143	20	12.3%	7:00 PM	159	126	33	20.8%	322
8:00 PM	95	81	14	14.7%	8:00 PM	108	90	18	16.7%	203
9:00 PM	79	71	8	10.1%	9:00 PM	84	72	12	14.3%	163
10:00 PM	61	52	9	14.8%	10:00 PM	56	45	11	19.6%	117
11:00 PM	56	50	6	10.7%	11:00 PM	59	49	10	16.9%	115
Daily Total	**3,956**				**Daily Total**	**3,798**				**7,754**

*Trucks include pickup/panel trucks and buses

Vehicle Classification Counts

North Delaware Street from Adams Street to Broad Street

4/2/2002

Northbound					Southbound					Total Volumes
Time	Total	# Cars	# Trucks*	% Trucks	Time	Total	# Cars	# Trucks*	% Trucks	NB & SB
12:00 AM	36	35	1	2.8%	12:00 AM	24	22	2	8.3%	60
1:00 AM	21	18	3	14.3%	1:00 AM	13	10	3	23.1%	34
2:00 AM	9	8	1	11.1%	2:00 AM	8	7	1	12.5%	17
3:00 AM	4	2	2	50.0%	3:00 AM	9	5	4	44.4%	13
4:00 AM	11	7	4	36.4%	4:00 AM	12	8	4	33.3%	23
5:00 AM	28	16	12	42.9%	5:00 AM	46	33	13	28.3%	74
6:00 AM	77	53	24	31.2%	6:00 AM	90	68	22	24.4%	167
7:00 AM	219	184	35	16.0%	7:00 AM	186	138	48	25.8%	405
8:00 AM	175	130	45	25.7%	8:00 AM	154	121	33	21.4%	329
9:00 AM	175	143	32	18.3%	9:00 AM	152	109	43	28.3%	327
10:00 AM	168	128	40	23.8%	10:00 AM	172	142	30	17.4%	340
11:00 AM	189	155	34	18.0%	11:00 AM	265	213	52	19.6%	454
12:00 PM	162	127	35	21.6%	12:00 PM	206	169	37	18.0%	368
1:00 PM	193	155	38	19.7%	1:00 PM	172	136	36	20.9%	365
2:00 PM	228	180	48	21.1%	2:00 PM	223	169	54	24.2%	451
3:00 PM	281	229	52	18.5%	3:00 PM	215	162	53	24.7%	496
4:00 PM	230	188	42	18.3%	4:00 PM	242	193	49	20.2%	472
5:00 PM	206	177	29	14.1%	5:00 PM	252	206	46	18.3%	458
6:00 PM	178	153	25	14.0%	6:00 PM	247	206	41	16.6%	425
7:00 PM	163	145	18	11.0%	7:00 PM	136	113	23	16.9%	299
8:00 PM	137	116	21	15.3%	8:00 PM	101	77	24	23.8%	238
9:00 PM	77	67	10	13.0%	9:00 PM	56	51	5	8.9%	133
10:00 PM	55	49	6	10.9%	10:00 PM	57	53	4	7.0%	112
11:00 PM	36	30	6	16.7%	11:00 PM	18	16	2	11.1%	54
Daily Total	**3,058**				**Daily Total**	**3,056**				**6,114**

*Trucks include pickup/panel trucks and buses

Vehicle Classification Counts

Mantua Avenue from 5th Street to 6th Street

4/2/2002

Northbound					Southbound					Total Volumes
Time	Total	# Cars	# Trucks*	% Trucks	Time	Total	# Cars	# Trucks*	% Trucks	NB & SB
12:00 AM	11	10	1	9.1%	12:00 AM	21	18	3	14.3%	32
1:00 AM	5	3	2	40.0%	1:00 AM	4	4	0	0.0%	9
2:00 AM	4	3	1	25.0%	2:00 AM	3	2	1	33.3%	7
3:00 AM	3	3	0	0.0%	3:00 AM	3	3	0	0.0%	6
4:00 AM	6	3	3	50.0%	4:00 AM	7	3	4	57.1%	13
5:00 AM	10	8	2	20.0%	5:00 AM	31	19	12	38.7%	41
6:00 AM	34	25	9	26.5%	6:00 AM	48	37	11	22.9%	82
7:00 AM	71	61	10	14.1%	7:00 AM	100	80	20	20.0%	171
8:00 AM	39	30	9	23.1%	8:00 AM	88	67	21	23.9%	127
9:00 AM	49	38	11	22.4%	9:00 AM	62	46	16	25.8%	111
10:00 AM	53	40	13	24.5%	10:00 AM	63	38	25	39.7%	116
11:00 AM	56	47	9	16.1%	11:00 AM	54	39	15	27.8%	110
12:00 PM	63	50	13	20.6%	12:00 PM	73	57	16	21.9%	136
1:00 PM	65	55	10	15.4%	1:00 PM	56	42	14	25.0%	121
2:00 PM	71	54	17	23.9%	2:00 PM	85	64	21	24.7%	156
3:00 PM	111	84	27	24.3%	3:00 PM	76	57	19	25.0%	187
4:00 PM	119	98	21	17.6%	4:00 PM	110	88	22	20.0%	229
5:00 PM	132	105	27	20.5%	5:00 PM	95	73	22	23.2%	227
6:00 PM	93	76	17	18.3%	6:00 PM	96	72	24	25.0%	189
7:00 PM	64	55	9	14.1%	7:00 PM	54	46	8	14.8%	118
8:00 PM	63	48	15	23.8%	8:00 PM	40	29	11	27.5%	103
9:00 PM	42	38	4	9.5%	9:00 PM	32	25	7	21.9%	74
10:00 PM	27	23	4	14.8%	10:00 PM	23	17	6	26.1%	50
11:00 PM	20	16	4	20.0%	11:00 PM	9	8	1	11.1%	29
Daily Total	**1,211**				**Daily Total**	**1,233**				**2,444**

*Trucks include pickup/panel trucks and buses

Vehicle Classification Counts

CR 620 from Heron Drive to Sharptown Road

4/2/2002

Westbound					Eastbound					Total Volumes
Time	**Total**	**# Cars**	**# Trucks***	**% Trucks**	**Time**	**Total**	**# Cars**	**# Trucks***	**% Trucks**	**WB & EB**
12:00 AM	47	30	17	36.2%	12:00 AM	175	126	49	28.0%	222
1:00 AM	41	17	24	58.5%	1:00 AM	141	98	43	30.5%	182
2:00 AM	42	23	19	45.2%	2:00 AM	111	74	37	33.3%	153
3:00 AM	39	20	19	48.7%	3:00 AM	43	26	17	39.5%	82
4:00 AM	90	46	44	48.9%	4:00 AM	34	20	14	41.2%	124
5:00 AM	216	125	91	42.1%	5:00 AM	72	42	30	41.7%	288
6:00 AM	352	210	142	40.3%	6:00 AM	159	104	55	34.6%	511
7:00 AM	390	235	155	39.7%	7:00 AM	180	124	56	31.1%	570
8:00 AM	417	287	130	31.2%	8:00 AM	217	159	58	26.7%	634
9:00 AM	292	201	91	31.2%	9:00 AM	148	91	57	38.5%	440
10:00 AM	223	140	83	37.2%	10:00 AM	207	152	55	26.6%	430
11:00 AM	273	161	112	41.0%	11:00 AM	283	216	67	23.7%	556
12:00 PM	315	183	132	41.9%	12:00 PM	188	110	78	41.5%	503
1:00 PM	282	188	94	33.3%	1:00 PM	250	179	71	28.4%	532
2:00 PM	223	116	107	48.0%	2:00 PM	255	205	50	19.6%	478
3:00 PM	319	211	108	33.9%	3:00 PM	365	277	88	24.1%	684
4:00 PM	248	178	70	28.2%	4:00 PM	332	262	70	21.1%	580
5:00 PM	344	235	109	31.7%	5:00 PM	295	244	51	17.3%	639
6:00 PM	197	123	74	37.6%	6:00 PM	193	159	34	17.6%	390
7:00 PM	173	110	63	36.4%	7:00 PM	139	99	40	28.8%	312
8:00 PM	98	65	33	33.7%	8:00 PM	100	80	20	20.0%	198
9:00 PM	114	69	45	39.5%	9:00 PM	102	77	25	24.5%	216
10:00 PM	114	65	49	43.0%	10:00 PM	121	90	31	25.6%	235
11:00 PM	120	74	46	38.3%	11:00 PM	136	100	36	26.5%	256
Daily Total	**4,969**	3112	1,857	37.4%	**Daily Total**	**4,246**	3114	1,132	26.7%	**9,215**

*Trucks include pickup/panel trucks and buses

I-295 Corridor Study Directional Traffic Counts

Intersection of Heron Drive and CR 620 Center Square Road

Time Period	Direction 1			Direction 3		
	Heron Drive Northbound			CR 620 Eastbound		
AM Peak (5/15/02)	**L**	**S**	**R**	**L**	**S**	**R**
7:00-7:15 AM	0	1	3	2	23	2
7:15-7:30 AM	3	1	4	3	19	0
7:30-7:45 AM	0	1	12	5	33	3
7:45-8:00 AM	1	0	9	3	25	1
8:00-8:15 AM	1	0	8	3	34	2
8:15-8:30 AM	3	3	4	5	26	2
8:30-8:45 AM	4	2	8	6	32	4
8:45-9:00 AM	2	5	3	1	35	3
Total	**14**	**13**	**51**	**28**	**227**	**17**
	Heron Drive Northbound			CR 620 Eastbound		
PM Peak (5/14/02)	**L**	**S**	**R**	**L**	**S**	**R**
4:00-4:15 PM	0	3	38	7	88	1
4:15-4:30 PM	3	2	32	4	66	3
4:30-4:45 PM	0	1	31	2	106	8
4:45-5:00 PM	5	3	19	5	86	4
5:00-5:15 PM	4	6	81	5	106	3
5:15-5:30 PM	1	3	39	5	101	2
5:30-5:45 PM	3	4	44	4	97	2
5:45-6:00 PM	2	1	38	5	100	3
Total	**18**	**23**	**322**	**37**	**750**	**26**

Time Period	Direction 2			Direction 4		
	Heron Drive Southbound			CR 620 Westbound		
AM Peak (5/16/02)	**L**	**S**	**R**	**L**	**S**	**R**
7:00-7:15 AM	4	0	6	12	42	20
7:15-7:30 AM	6	5	5	28	77	42
7:30-7:45 AM	7	5	1	32	108	63
7:45-8:00 AM	6	4	7	65	111	68
8:00-8:15 AM	13	8	3	33	90	53
8:15-8:30 AM	8	7	5	30	76	46
8:30-8:45 AM	10	2	3	28	72	31
8:45-9:00 AM	8	8	3	31	79	40
Total	**62**	**39**	**33**	**259**	**655**	**363**
	Heron Drive Southbound			CR 620 Westbound		
PM Peak (5/14/02)	**L**	**S**	**R**	**L**	**S**	**R**
4:00-4:15 PM	36	2	3	7	48	16
4:15-4:30 PM	49	1	5	7	39	20
4:30-4:45 PM	62	2	3	4	36	14
4:45-5:00 PM	44	1	6	5	49	27
5:00-5:15 PM	69	0	9	9	46	25
5:15-5:30 PM	47	0	5	8	62	27
5:30-5:45 PM	48	1	4	6	51	24
5:45-6:00 PM	46	1	6	7	49	26
Total	**401**	**8**	**41**	**53**	**380**	**179**

I-295 Corridor Study Directional Traffic Counts

Intersection of NJ 45 Broad Street and CR 534 Cooper Street

Time Period	Direction 1			Direction 3		
	Broad Street Northbound			Cooper Street Eastbound		
AM Peak (7/2/02)	L	S	R	L	S	R
7:00-7:15 AM	21	67	6	11	183	12
7:15-7:30 AM	24	75	7	11	221	14
7:30-7:45 AM	30	92	11	5	223	11
7:45-8:00 AM	29	78	13	7	213	23
8:00-8:15 AM	33	79	14	12	178	16
8:15-8:30 AM	45	87	10	20	244	32
8:30-8:45 AM	28	80	6	14	201	30
8:45-9:00 AM	23	53	13	15	178	30
Total	**233**	**611**	**80**	**95**	**1641**	**168**
	Broad Street Northbound			Cooper Street Eastbound		
PM Peak (7/2/02)	L	S	R	L	S	R
4:00-4:15 PM	12	191	20	47	60	9
4:15-4:30 PM	6	172	31	46	74	20
4:30-4:45 PM	8	168	21	47	92	16
4:45-5:00 PM	9	177	20	50	100	9
5:00-5:15 PM	8	152	21	45	94	14
5:15-5:30 PM	12	185	19	45	102	12
5:30-5:45 PM	9	178	22	49	98	13
5:45-6:00 PM	8	181	20	46	95	11
Total	**72**	**1404**	**174**	**375**	**715**	**104**

Time Period	Direction 2			Direction 4		
	Broad Street Southbound			Cooper Street Westbound		
AM Peak (7/2/02)	L	S	R	L	S	R
7:00-7:15 AM	20	41	7	11	88	5
7:15-7:30 AM	18	40	6	8	90	11
7:30-7:45 AM	28	48	11	4	83	9
7:45-8:00 AM	31	53	12	5	123	20
8:00-8:15 AM	31	52	8	7	108	13
8:15-8:30 AM	46	78	8	7	107	22
8:30-8:45 AM	50	67	14	11	144	15
8:45-9:00 AM	50	73	13	6	139	20
Total	**274**	**452**	**79**	**59**	**882**	**115**
	Broad Street Southbound			Cooper Street Westbound		
PM Peak (7/2/02)	L	S	R	L	S	R
4:00-4:15 PM	10	171	38	22	92	21
4:15-4:30 PM	8	169	47	31	93	20
4:30-4:45 PM	9	173	40	28	96	15
4:45-5:00 PM	15	177	48	26	127	19
5:00-5:15 PM	11	187	34	21	98	11
5:15-5:30 PM	17	192	36	32	98	16
5:30-5:45 PM	16	185	38	30	95	17
5:45-6:00 PM	14	181	39	28	97	15
Total	**100**	**1435**	**320**	**218**	**796**	**134**

I-295 Corridor Study Directional Traffic Counts

Intersection of Beckett Road and CR 620 Center Square Road

Time Period	Direction 1			Direction 3		
	CR 620 Westbound			Beckett Road Northbound		
AM Peak (6/25/02)	L	S	R	L	S	R
7:00-7:15 AM	1	100	15	24	8	2
7:15-7:30 AM	4	140	23	34	7	5
7:30-7:45 AM	5	117	26	46	10	6
7:45-8:00 AM	2	110	11	39	18	1
8:00-8:15 AM	9	94	11	17	9	4
8:15-8:30 AM	7	77	15	20	17	1
8:30-8:45 AM	5	67	15	16	7	1
8:45-9:00 AM	7	46	8	28	9	4
Total	**40**	**751**	**124**	**224**	**85**	**24**
	CR 620 Westbound			Beckett Road Northbound		
PM Peak (6/25/02)	L	S	R	L	S	R
4:00-4:15 PM	6	53	7	16	13	5
4:15-4:30 PM	6	50	15	12	13	5
4:30-4:45 PM	9	46	12	17	20	7
4:45-5:00 PM	8	43	15	18	11	6
5:00-5:15 PM	10	42	13	16	11	12
5:15-5:30 PM	9	52	8	18	17	13
5:30-5:45 PM	5	51	18	11	22	6
5:45-6:00 PM	11	62	20	18	15	9
Total	**64**	**399**	**108**	**126**	**122**	**63**

Time Period	Direction 2			Direction 4		
	CR 620 Eastbound			Beckett Road Southbound		
AM Peak (6/25/02)	L	S	R	L	S	R
7:00-7:15 AM	29	30	5	10	3	35
7:15-7:30 AM	31	34	1	12	2	37
7:30-7:45 AM	33	24	9	10	8	33
7:45-8:00 AM	39	39	9	13	9	41
8:00-8:15 AM	34	23	5	11	10	23
8:15-8:30 AM	29	42	3	14	8	38
8:30-8:45 AM	18	30	4	12	7	17
8:45-9:00 AM	30	23	10	14	12	22
Total	**243**	**245**	**46**	**96**	**59**	**246**
	CR 620 Eastbound			Beckett Road Southbound		
PM Peak (6/25/02)	L	S	R	L	S	R
4:00-4:15 PM	15	37	9	2	18	14
4:15-4:30 PM	32	69	23	10	21	19
4:30-4:45 PM	30	97	25	4	24	13
4:45-5:00 PM	41	63	31	18	28	15
5:00-5:15 PM	47	120	24	26	35	26
5:15-5:30 PM	54	106	40	15	26	26
5:30-5:45 PM	28	85	23	10	19	23
5:45-6:00 PM	57	89	29	15	33	13
Total	**304**	**666**	**204**	**100**	**204**	**149**

I-295 Corridor Study Directional Traffic Counts

I-295 Interchange 10

Time Period	Direction 1	Direction 2
AM Peak (5/14/02)	**I-295 Northbound Off-Ramp to CR 620 Eastbound**	**I-295 Northbound Off-Ramp to CR 620 Westbound**
7:00-7:15 AM	11	15
7:15-7:30 AM	12	33
7:30-7:45 AM	35	44
7:45-8:00 AM	22	61
8:00-8:15 AM	23	31
8:15-8:30 AM	22	27
8:30-8:45 AM	13	21
8:45-9:00 AM	12	24
Total	**150**	**256**
PM Peak (5/15/02)	**I-295 Northbound Off-Ramp to CR 620 Eastbound**	**I-295 Northbound Off-Ramp to CR 620 Westbound**
4:00-4:15 PM	27	12
4:15-4:30 PM	28	5
4:30-4:45 PM	27	10
4:45-5:00 PM	30	7
5:00-5:15 PM	34	2
5:15-5:30 PM	28	9
5:30-5:45 PM	31	6
5:45-6:00 PM	27	9
Total	**232**	**60**

Time Period	Direction 3	Direction 4
AM Peak (5/15/02)	**CR 620 Eastbound to I-295 Northbound On-Ramp**	**CR 620 Westbound to I-295 Northbound On-Ramp**
7:00-7:15 AM	13	171
7:15-7:30 AM	11	154
7:30-7:45 AM	15	160
7:45-8:00 AM	14	177
8:00-8:15 AM	26	134
8:15-8:30 AM	28	136
8:30-8:45 AM	19	123
8:45-9:00 AM	25	82
Total	**151**	**1137**
PM Peak (5/15/02)	**CR 620 Eastbound to I-295 Northbound On-Ramp**	**CR 620 Westbound to I-295 Northbound On-Ramp**
4:00-4:15 PM	84	47
4:15-4:30 PM	39	59
4:30-4:45 PM	121	50
4:45-5:00 PM	52	62
5:00-5:15 PM	136	61
5:15-5:30 PM	76	76
5:30-5:45 PM	65	60
5:45-6:00 PM	70	63
Total	**643**	**478**

I-295 Corridor Study Directional Traffic Counts

I-295 Interchange 10

Time Period	Direction 5	Direction 6
AM Peak (5/14/02)	**CR 620 Westbound to I-295 Southbound On-Ramp**	**I-295 Southbound Off-Ramp to CR 620 Eastbound**
7:00-7:15 AM	37	47
7:15-7:30 AM	36	44
7:30-7:45 AM	30	44
7:45-8:00 AM	36	52
8:00-8:15 AM	21	54
8:15-8:30 AM	21	44
8:30-8:45 AM	31	41
8:45-9:00 AM	21	37
Total	**233**	**363**
PM Peak (5/15/02)	**CR 620 Westbound to I-295 Southbound On-Ramp**	**I-295 Southbound Off-Ramp to CR 620 Eastbound**
4:00-4:15 PM	37	59
4:15-4:30 PM	32	92
4:30-4:45 PM	24	53
4:45-5:00 PM	14	104
5:00-5:15 PM	20	62
5:15-5:30 PM	18	94
5:30-5:45 PM	20	90
5:45-6:00 PM	14	89
Total	**179**	**643**

Time Period	Direction 7	Direction 8
AM Peak (5/14/02)	**I-295 Southbound Off-Ramp to CR 620 Westbound**	**CR 620 Eastbound to I-295 Southbound On-Ramp**
7:00-7:15 AM	66	9
7:15-7:30 AM	68	3
7:30-7:45 AM	96	4
7:45-8:00 AM	149	12
8:00-8:15 AM	96	10
8:15-8:30 AM	78	10
8:30-8:45 AM	86	12
8:45-9:00 AM	80	8
Total	**719**	**68**
PM Peak (5/16/02)	**I-295 Southbound Off-Ramp to CR 620 Westbound**	**CR 620 Eastbound to I-295 Southbound On-Ramp**
4:00-4:15 PM	25	41
4:15-4:30 PM	23	21
4:30-4:45 PM	43	46
4:45-5:00 PM	26	45
5:00-5:15 PM	59	57
5:15-5:30 PM	33	70
5:30-5:45 PM	21	81
5:45-6:00 PM	28	103
Total	**258**	**464**

I-295/US 130 Riverfront Transportation Corridor Study

Publication No. 02037

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Geographic Area Covered: I-295/US 130 Corridor, Gloucester County - Borough of Westville, Borough of Paulsboro, Borough of National Park, City of Woodbury, Logan Township, West Deptford Township, Greenwich Township

Key Words: transit, corridor planning, needs and deficiencies, headways, recommended improvements, traffic study, growth management, planning areas, residential development, commercial/industrial development, redevelopment, brownfields, alternative modes, traffic congestion, bus transfer center, highway improvement

ABSTRACT

This is a transportation corridor study, which provides an analysis of the I-295/US 130 corridor in Gloucester County. Undertaken at the request of Gloucester County Planning Department, the study identifies and addresses the transportation needs facing the riverfront communities. At the request of the county priority is given to identifying the transit needs and potential service enhancements in the corridor. The study also takes a look at localized problem areas in the highway network and provides recommendations that address these needs.

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