

ATTACHMENT 3 Man-Made Resources Technical Report

Glassboro-Camden Line EIS November 2020

Prepared by:



Prepared for:







Project information contained in this document, including estimated limits of disturbance that could result with construction or operation of the proposed GCL, is based on conceptual design parameters that represent a reasonably conservative basis for conducting environmental analyses. As the proposed GCL is advanced through preliminary engineering and construction, efforts will continue to be made to further refine the design and minimize the project footprint. These refinements may result in the potential to avoid and further reduce the adverse effects outlined in this document and as described within this Environmental Impact Statement.



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Appendices

Appendix 3-A: Environmental Justice

1 LAND USE, PUBLIC POLICY AND ZONING

1.1 Introduction

This attachment includes an evaluation of existing land use, zoning, and long-term planning efforts, as well as potential direct effects of the proposed Glassboro - Camden Line ("the proposed GCL" or "the proposed project") on land use patterns along the corridor and within ½ mile of proposed stations and vehicle maintenance facility (VMF) sites. Where necessary, mitigation measures for potential land use impacts are identified.

The proposed GCL would operate primarily within the ROW of an existing Conrail line, which would minimize necessary property acquisitions and land use displacements. While station and maintenance facility areas may experience displacements or require rezoning of a property, the effect would be positive given that the project would likely increase access to public transportation, expand opportunities for redevelopment, and link transportation with adjacent land uses.

1.2 Principal Conclusions

An analysis of land uses and local zoning ordinances was conducted for the project, resulting in the determination that the project would have no significant adverse impacts on land uses and local zoning ordinances. Potential adverse impacts to existing land uses or zoning have been assessed at several station areas, however no significant impacts to surrounding land uses or current zoning districts are found evident. The proposed GCL would operate primarily within the ROW of an existing Conrail line, which would minimize necessary property acquisitions or displacements. It is expected that where necessary, design elements of station areas or vehicle maintenance facilities would conform with the surrounding existing context. While station and maintenance facility areas may experience displacements or require rezoning, the effect is expected to be positive for these areas with increased access to public transportation, and expanded opportunities for redevelopment and for linking transportation with adjacent land uses.

1.3 Affected Environment

The proposed GCL is a proposed 18 mile expansion of transit service in Southern New Jersey that would traverse eleven communities between Camden City and Glassboro Borough. These communities, listed from north to south, include the following within Camden County - Camden City, Gloucester City, and Brooklawn Borough - and the following communities within Gloucester County - Westville Borough, Woodbury City, Woodbury Heights Borough, Deptford Township, Wenonah Borough, Mantua Township, Pitman Borough, and Glassboro Borough. The proposed GCL would restore passenger rail service primarily within an existing Conrail freight right-of-way (ROW) using light rail vehicles similar to the NJ TRANSIT River LINE. The light rail would operate on new dedicated tracks with peak service operating every 15 minutes. There would be two dedicated tracks in Camden and one dedicated track between Camden and Woodbury with a passing siding in Westville and Woodbury. South of Woodbury, the GCL would operate

on one new dedicated GCL track and share one track with Conrail. On this shared track, GCL trains would operate during the day and evening hours, with Conrail trains operating in the late evening and overnight.

The proposed project would provide 14 new transit stations in addition to an existing station at the Walter Rand Transportation Center (WRTC) and two vehicle maintenance facilities.

The proposed GCL would link activity centers, including downtown Camden, Rutgers—Camden, Cooper Hospital, and Rowan University; employment destinations, including Inspira Health Network, Holt Logistics, and South Jersey Port Corporation properties; established residential areas; and areas identified by New Jersey Department of Community Affairs (NJDCA) as being in need of redevelopment or rehabilitation throughout the eleven study area municipalities. Existing land uses within ½ mile of the proposed alignment, proposed vehicle maintenance facilities, and station areas have been evaluated to identify local context and baseline conditions for the corridor. The analysis of existing land uses was developed using 2015 land use classification data from the Delaware Valley Regional Planning Commission (DVRPC) and 2016 Google Earth imagery.

1.3.1 Existing Land Use – GCL Corridor

The GCL corridor is situated within the counties of Camden and Gloucester in New Jersey. The study area for this land use analysis extends ½ mile from the centerline of the proposed alignment and the proposed stations/vehicle maintenance facilities. The GCL alignment would be located within or adjacent to the existing Conrail railroad ROW, which previously supported passenger rail service. Within a ½ mile of the proposed GCL alignment, there are several established residential neighborhoods and commercial corridors (Figure 1, "Existing Land Use – GCL Corridor").

In aggregate, the land area within ½ mile of the proposed GCL alignment is 19 square miles in size. Primary land uses along the proposed alignment in the Camden County portion of the corridor are dense residential and commercial development, which is generally consistent with development patterns found throughout the northern portion of the county. Land uses in Gloucester County tend toward more single-family residential areas, with wooded lands predominating in the west and south of the corridor. The land use patterns in the Gloucester County portion of the corridor are generally more developed along the proposed alignment than the rest of the county. Other land uses in corridor study area include commercial and recreational uses and vacant land.

Traveling south along the alignment from Camden to Glassboro, the corridor changes dramatically from denser urban environments in Camden County and northern Gloucester County to suburban land uses in central and southern Gloucester County. Within the City of Camden, the proposed alignment is located along the eastern edge of dense residential neighborhoods comprised of rowhomes. Further south in Camden, the alignment parallels Interstate 676 adjacent to heavy industrial uses north and south of the more residential Waterfront South neighborhood. Continuing south through Gloucester City, Brooklawn Borough, Westville Borough, Deptford Township, and Woodbury, the alignment travels through built-out, dense urban residential neighborhoods, which transition from smaller lot rowhomes to larger lot single-family homes. As the alignment continues south through Wenonah Borough, the density of

development continues to decrease. Upon entering Mantua Township, the context surrounding the alignment shifts to traditional suburban land use patterns, characterized by larger lot single-family homes and a significant amount of open space. South of Mantua Township, in Pitman Borough, the alignment shifts back toward a built-out, dense residential community similar to northern Gloucester County. Entering Glassboro Borough, the proposed alignment is adjacent to Rowan University and continues south into a mix of, light industrial and lower density residential before terminating near a primary commercial corridor within the borough.

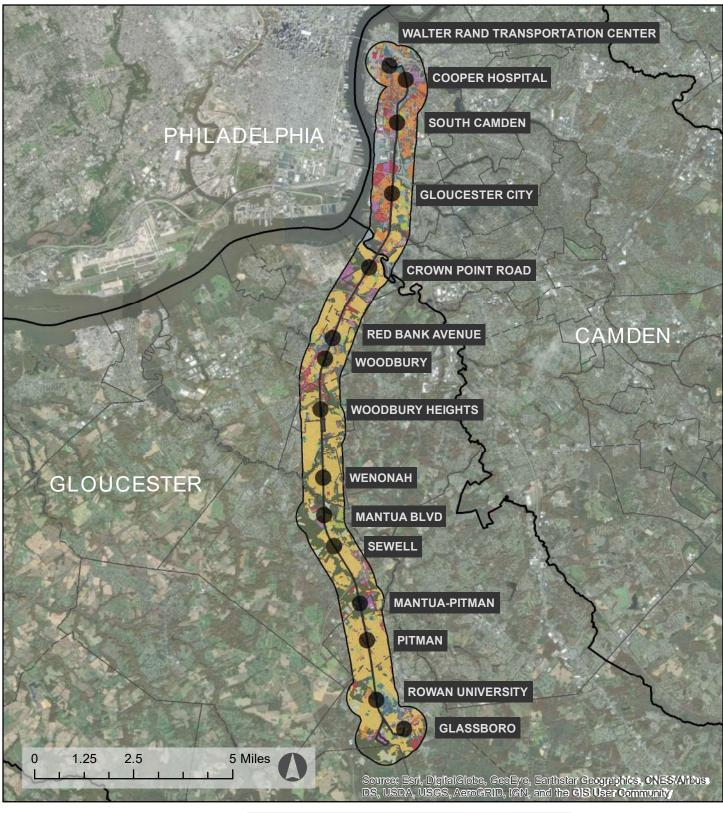
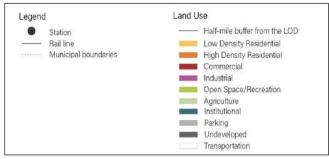


Figure 1: Existing Land Use - GCL Corridor





1.3.2 Existing Land Use and Zoning – Proposed Station Areas

This section provides a review of existing land uses surrounding each of the 14 proposed stations and the existing WRTC for the GCL. Refer to Section 3.4.2, "Community Services and Service Providers" for a detailed inventory and description of community facilities within the project corridor. For information regarding parks and open space, see Attachment 9, "Parklands". Other information regarding specific property impacts can be found in Attachment 12, "Acquisitions and Displacements".

1.3.2.1 Walter Rand Transportation Center (WRTC), Camden

Land Use – WRTC is the only existing station along the GCL. Located between Dr. Martin Luther King Boulevard and Federal Street in downtown Camden, the WRTC serves as the transfer hub for the Port Authority Transit Corporation (PATCO), NJ TRANSIT Bus and River LINE services. Existing land use classifications within ½ mile of the existing WRTC Station are presented on Figure 2, "Existing Land Use – WRTC." More than half of the ½ mile area surrounding the station is classified by the New Jersey Department of Community Affairs as an Urban Enterprise Zone or an area designated in need of redevelopment (63.9 percent) or rehabilitation (2.3 percent). The ½ mile station area contains 5.4 percent undeveloped land. The land use composition within a ½ mile of the WRTC is broken down by percentage in Table 1, "Existing Walter Rand Transportation Center (WRTC) Area (Land Use Composition)."

Table 1: Existing Walter Rand Transportation Center (WRTC) Area (Land Use Composition)

Walter Rand Transportation Center (WRTC)	
Land Use Categories	Land Use Composition (%)
Parking	25.8%
Residential: High Density	21.4%
Institutional	16.9%
Transportation	16.7%
Commercial	7.9%
Undeveloped	5.4%
Open Space	3.8%
Industrial	1.7%
Agriculture	0.3%

Note: Totals due not add to 100 percent due to rounding

Source: Delaware Valley Regional Planning Commission, 2015 Digital Land Use Survey

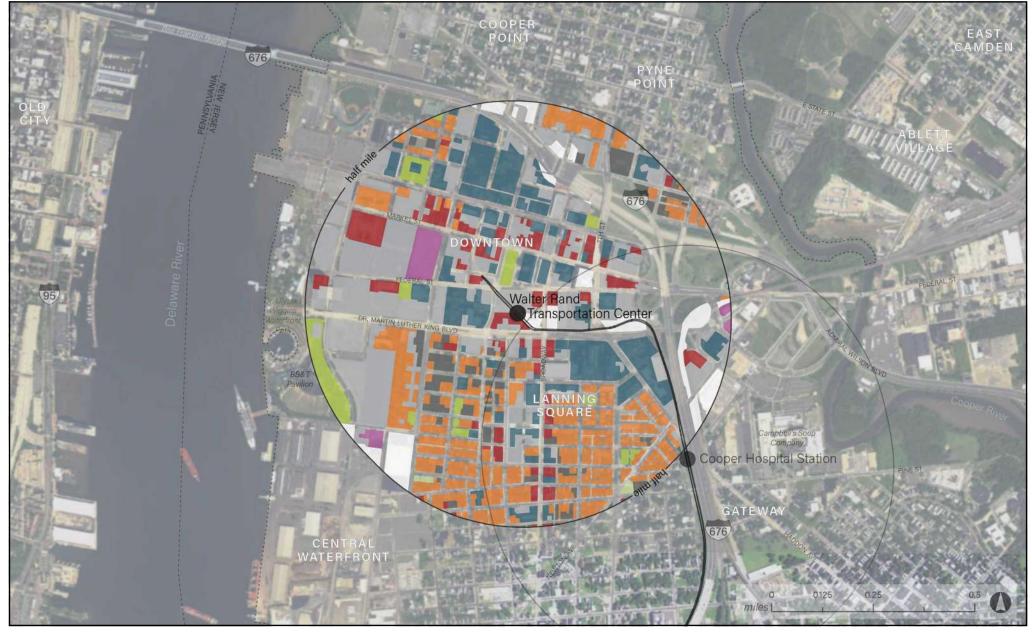
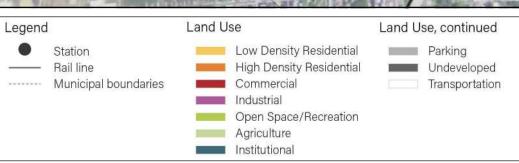


Figure 2: Existing Land Use - WRTC





The station area contains a mix of residential, commercial, and institutional uses. Transportation and commercial parking account for a significant amount of the land coverage. Few manufacturing/industrial and recreational uses exist in the area. The WRTC Station is located near two major activity centers, both classified as institutional uses: the Cooper University Hospital and Rutgers University-Camden. Residential land uses are located primarily to the south and major employment centers are located north of the station. Several parkland areas are located within ½ mile of the station area, including Triangle Park, Roosevelt Plaza, Cooper Plaza, as well as additional smaller neighborhood parks. The Walt Whitman House Museum, Camden City Hall, various Camden County Government offices, and the Camden County Jail are adjacent to the station. Several institutions are located to the north of the WRTC: the 40-acre Rutgers University-Camden Campus, which includes the School of Law and the Nursing and Science Building; United States Post Office; Leap Academy University Charter School; and County Court House. Camden County College is located to the east of the WRTC. The Rowan University-Camden Campus, Environment Community Opportunity (ECO) Charter School, Catholic Partnership Schools' administrative offices, and U.S. Department of Housing and Urban Development office are located northeast of WRTC. KIPP Cooper Norcross Academy is located south of the WRTC.

Multi-family residential and Mickle Towers, a senior public housing facility, are located southwest of WRTC. Large tracts of surface parking lots and parking structures owned by the Parking Authority of the City of Camden are located west of WRTC.

Several churches and the Camden Community Health Center are located throughout the residential neighborhood west of the station. Most commercial uses are located south of the station along Broadway and north of the station along Market Street. These commercial corridors include restaurants, specialty retail, personal services, banks, and professional offices.

Zoning – The ½ mile area surrounding the WRTC has been divided into several zones designated by the City of Camden's zoning ordinance: Medium and High Density Residential, Medical and Support Services, University and Support Services, Office Light Industrial Uses, and Center City Commercial Uses. Medium-Density Residential (R-2) and High-Density Residential (R-3) allow for single-family and multi-family residential units or institutional uses including parks, schools, or municipal facilities. The Medical and Support Zone (MS) permits numerous uses, including single-family and multi-family residential, medical and dental facilities, commercial, restaurant and retail uses, as well as institutional uses. The Office Light Industrial Zone (OLI) permits warehousing and low-density office uses, as well as commercial /restaurant facilities, and also permits railroad passenger stations, facilities, and uses. The Center City Zone (CC) permits residential, commercial, retail, restaurant, institutional, and railroad-associated uses. The University and Support Zone (US) permits similar uses to the CC Zone but provides specific permitted uses for college and university uses. Vacant properties are scattered throughout the ½ mile area, and throughout the zoning districts.

Walter Rand Transportation Center (WRTC), Camden – Growth

The project team reviewed development potential within the vicinity of the proposed station using DVRPC projections (forecast year 2045) and Transit Oriented Development (TOD) estimates developed through a review of existing vacant or underutilized properties. A 2017 DRPA report outlines a plan for

improvements to WRTC intended to facilitate TOD, improving transit service and passenger convenience. The plan includes a new and redesigned bus terminal, multi-story development featuring street-level retail, and attractive sidewalk amenities to transform the pedestrian experience. For the City of Camden, DVRPC municipal-wide projections indicate 10.1 percent growth in employment and 2.7 percent growth in population. While redevelopment of properties is anticipated near WRTC, no specific properties were highlighted for TOD.

1.3.2.2 Cooper Hospital Station, Camden

Land Use – The proposed Cooper Hospital Station would be located adjacent to Interstate 676, near major Camden County employers Cooper University Hospital and Campbell Soup Company Headquarters. The station is also located less than ½ mile from Subaru of America's new corporate headquarters in Camden's Gateway District. The ½ mile station area contains 17.4 percent undeveloped land. Existing land use classifications within ½ mile of the proposed Cooper Hospital Station are shown on Figure 3, "Existing Land Use – Cooper Hospital Station." As shown on Figure 3, "Underutilized Land – Cooper Hospital Station," a significant portion of land to the north and west of the proposed station is classified by the New Jersey Department of Community Affairs as an Urban Enterprise Zone, an area in need of redevelopment (28.3 percent) or in need of rehabilitation (1.3 percent). The land use composition within a ½ mile of the proposed station is broken down by percentage in Table 2, "Proposed Cooper Hospital Station Area (Land Use Composition)."

Table 2: Proposed Cooper Hospital Station Area (Land Use Composition)

Cooper Hospital Station Area	
Land Use Categories	Land Use Composition (%)
Residential: High Density	26.1%
Undeveloped	17.4%
Transportation	15.3%
Parking	11.0%
Institutional	10.2%
Commercial	8.2%
Industrial	7.5%
Wooded	1.7%
Water	1.7%
Open Space	0.5%
Agriculture	0.2%

Note: Totals due not add to 100 percent due to rounding

Source: Delaware Valley Regional Planning Commission, 2015 Digital Land Use Survey

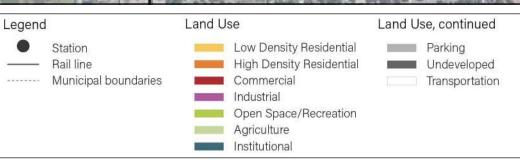
The ½ mile area surrounding the proposed station encompasses primarily single-family and multi-family residential, manufacturing, commercial, parking, and vacant land. Several institutional uses are also located in this area. KIPP Whittier Middle School is located to the south of the proposed station. Triangle Park is located adjacent to the corridor north of the proposed station. The Camden County Salvation Army facility is located southeast of the proposed station. Camden City Government and County Government offices are located to the north. Several churches and the Camden County Health Department are found throughout the residential neighborhood west of the station. Most commercial uses are located west of the station along Broadway, which is characterized by a mix of restaurants, specialty retail, and personal

services. Commercial uses are also located south of the station along Mt. Ephraim Avenue, such as automotive services and a few neighborhood restaurants. KIPP Cooper Norcross Academy is located to the west of this station as well.



Figure 3: Existing Land Use -Cooper Hospital Station





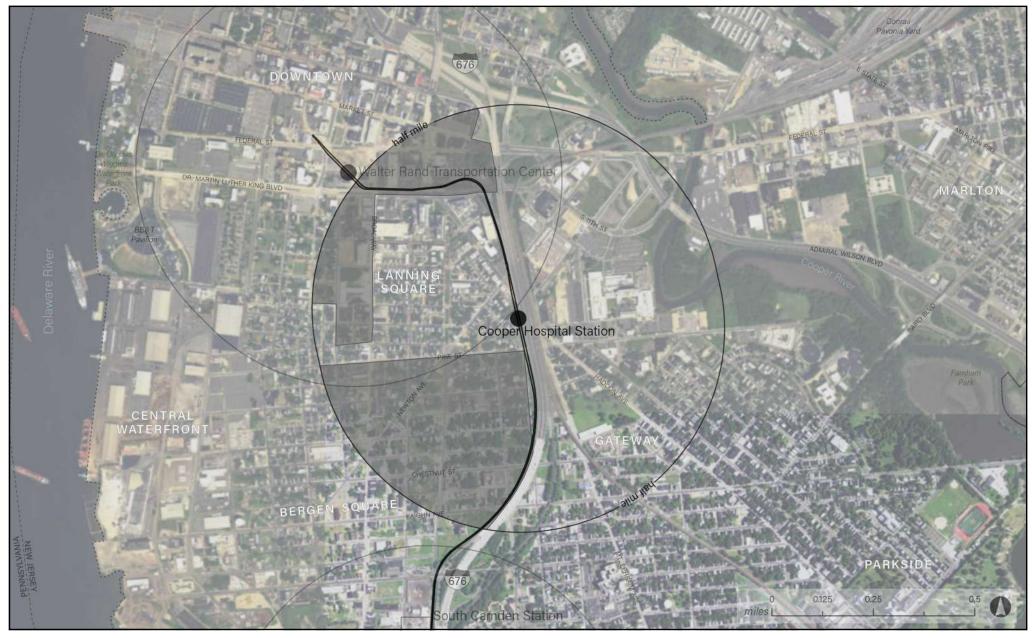
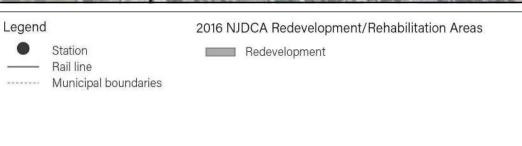


Figure 4: Underutilized Land -Cooper Hospital Station





Zoning – Within ½ mile of the proposed Cooper Hospital Station, most parcels are zoned Medium or High Density Residential, Center City Commercial, Conservation Overlay, Medical and Support, or Office Light Industrial, as designated by the City of Camden's zoning ordinance. Medium-Density Residential (R-2) and High-Density Residential (R-3) allow for single-family and multi-family residential units or institutional uses including parks, schools, or municipal facilities. The Medical and Support Zone (MS) permits numerous uses, including single-family and multi-family residential, medical and dental facilities, commercial, restaurant and retail uses, as well as institutional uses. The Office Light Industrial Zone (OLI) permits warehousing and low-density office uses, as well as commercial /restaurant facilities, and also permits railroad passenger stations, facilities, and uses. The Center City Zone (CC) permits residential, commercial, retail, restaurant, institutional, and railroad-associated uses. The Commercial Zone (C-1) permits nearly identical uses as the CC Zone, at lower densities, but does not explicitly permit railroad associated uses. The Conservation Overlay Zone (CV-2) permits recreational uses and associated commercial uses.

There are several vacant properties surrounding the proposed station, most of which are designated Commercial, Office Light Industrial, or Residential.

<u>Cooper Hospital Station, Camden – Growth</u>

The project team reviewed development potential within the vicinity of the proposed station using DVRPC projections (forecast year 2045) and TOD estimates developed through a review of existing vacant or underutilized properties. For the City of Camden, DVRPC municipal-wide projections indicate 10.1 percent growth in employment and 2.7 percent growth in population. While redevelopment of properties is anticipated near the proposed Cooper Hospital Station, no specific properties were highlighted for TOD.

1.3.2.3 South Camden Station, Camden

Land Use – The proposed South Camden Station would be located between Ferry Avenue and Carl Miller Boulevard in the City of Camden. Most of the land within the ½ mile station area is classified as an Urban Enterprise Zone. Existing land use classifications within ½ mile of the proposed South Camden Station are shown on Figure 5, "Existing Land Use – South Camden Station." As Figure 6, "Underutilized Land – South Camden Station," indicates, the New Jersey Department of Community Affairs has designated 25.8 percent of the land within the ½ mile station area as being in need of redevelopment. In addition, 14.1 percent of the land is classified as undeveloped. The land use composition within ½ mile of the proposed station is broken down by percentage in Table 3, "Proposed South Camden Station Area (Land Use Composition)."

Table 3: Proposed South Camden Station Area (Land Use Composition)

South Camden Station Area Land Use Categories	Land Use Composition (%)
Residential: High Density	29.3%
Transportation	20.2%
Undeveloped	14.1%
Industrial	9.8%
Parking	6.9%
Open Space	6.7%
Institutional	4.4%
Commercial	4.3%
Wooded	4.2%
Residential: Low Density	0.2%

Note: Totals do not add to 100 percent due to rounding

Source: Delaware Valley Regional Planning Commission, 2015 Digital Land Use Survey

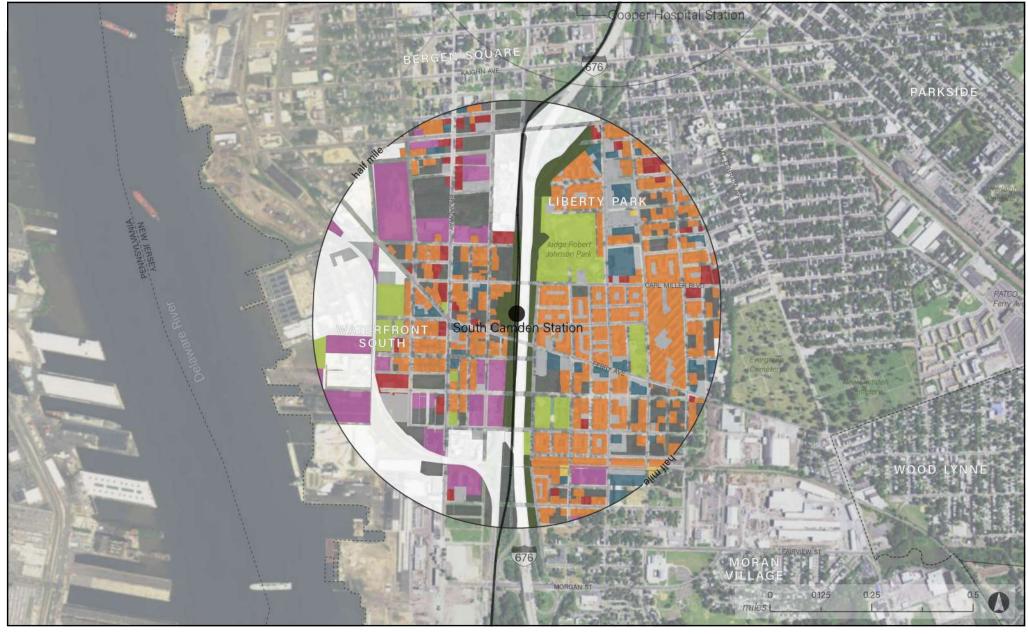


Figure 5: Existing Land Use - South Camden Station



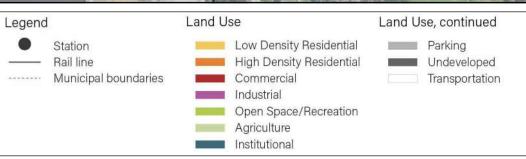




Figure 6: Under Utilized Land - South Camden Station





A mix of land uses are located throughout the ½ mile station area. West of the proposed station, in the Waterfront South neighborhood, land use is predominantly comprised of single-family residential and manufacturing areas associated with the Delaware River waterfront. Community resources in the neighborhood include five recreational parks, the Isabel Miller Community Center, the Camden Shipyard and Maritime Museum, South Camden Theatre Company, Camden Rescue Mission, and other non-profit community organizations. The Waterfront South neighborhood also includes the County sewage treatment facility, scrap metal recycling facilities, two Environmental Protection Agency (EPA) Superfund sites, and 26 known contaminated sites identified by the New Jersey Department of Environmental Protection (as of 2011).

To the east of the station, a wooded buffer extends to Interstate 676. Also, to the east of the station is the Centerville neighborhood, which is predominantly multi-family residential. The Branch Village public housing complex is located in Centreville. Other uses located east of the station area include: recreational uses such as the Judge Robert Johnson Park, Staley Park, and Elijah Perry Park; and institutional land uses are located including the Isabel Miller Community Center, Sumner Elementary School, Sacred Heart Elementary School, and Ferry Avenue Branch Library.

Zoning – The ½ mile area surrounding the proposed South Camden Station has been divided into several zones designated by the City of Camden's zoning ordinance: Residential, Commercial, Port-Related Industry, and General Industry. The Residential district permits single-family detached dwellings, semi-detached dwellings, duplex dwellings, and townhomes. The Commercial district allows for residential uses like what is designated in the residential districts, but also allows for banks, business services, convenience stores, offices, and retail stores. The General Industrial Zone permits manufacturing, wholesale, offices, and restaurants, while the Port-Related Industry zone permits uses more specific to waterfront industry, including manufacturing, transit sheds, marinas, docks, wharfs, and piers.

There are several vacant parcels distributed throughout the ½ mile station radius. Several large parcels are designated General Industry and many smaller parcels to the east and west of the proposed station are designated Residential.

South Camden Station, Camden - Growth

The project team reviewed development potential within the vicinity of the proposed station using DVRPC projections (forecast year 2045) and TOD estimates developed through a review of existing vacant or underutilized properties. For the City of Camden, DVRPC municipal-wide projections indicate 10.1 percent growth in employment and 2.7 percent growth in population. While redevelopment of properties is anticipated near the proposed South Camden Station, no specific properties were highlighted for TOD.

1.3.2.4 Gloucester City Station, Gloucester City

Land Use – The proposed Gloucester City Station would be located between Cumberland and Market Streets, adjacent to South Filmore Street in Gloucester City. Existing land use classifications within ½ mile

of the proposed Gloucester City Station are presented on Figure 7, "Existing Land Use – Gloucester City Station." As Figure 8, "Underutilized Land – Gloucester City Station," indicates, approximately 7.0 percent of the land area has been identified as being in need of redevelopment by the New Jersey Department of Community Affairs. In addition, 7.9 percent of the land is classified as undeveloped. The land use composition within ½ mile of the proposed station is broken down by percentage of in Table 4, "Proposed Gloucester City Station Area (Land Use Composition)."

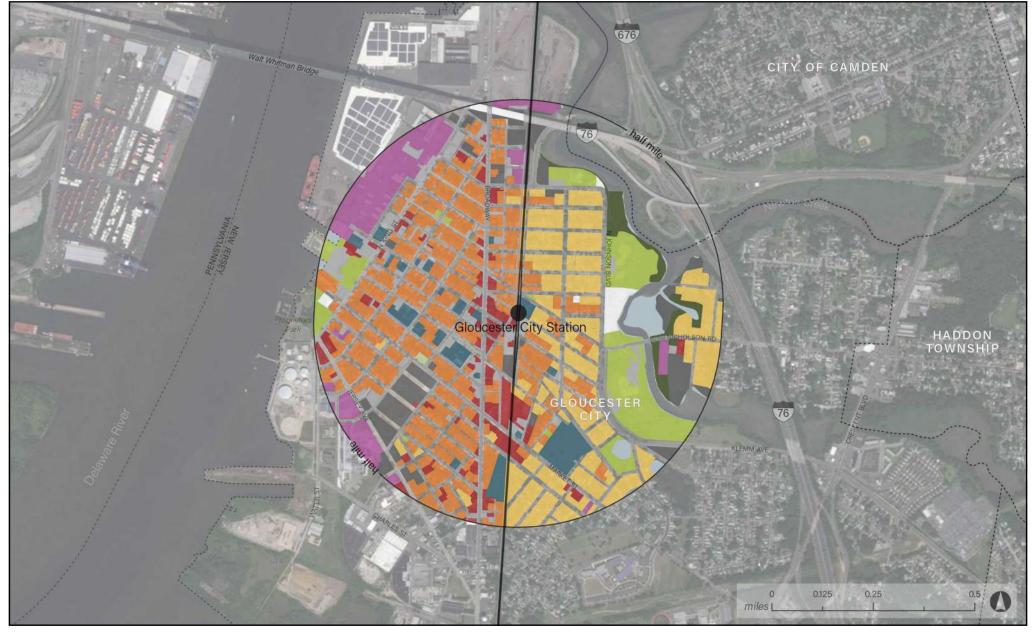


Figure 7: Existing Land Use - Gloucester City Station



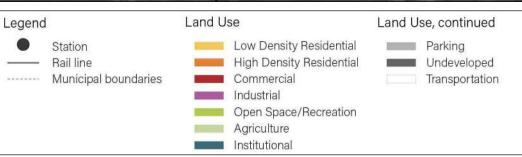




Figure 8: Underutilized Land - Gloucester City Station



Legend 2016 NJDCA Redevelopment/Rehabilitation Areas

Station Redevelopment

Hail line Municipal boundaries

Table 4: Proposed Gloucester City Station Area (Land Use Composition)

Gloucester City Station Area Land Use Categories	Land Use Composition (%)
Residential: High Density	28.5%
Residential: Low Density	18.7%
Open Space	8.1%
Undeveloped	7.9%
Industrial	6.9%
Commercial	6.4%
Transportation	6.1%
Water	5.9%
Parking	4.6%
Institutional	4.1%
Wooded	2.8%
Agriculture	0.1%

Note: Totals do not add to 100 percent due to rounding

Source: Delaware Valley Regional Planning Commission, 2015 Digital Land Use Survey

The Gloucester City Municipal Office and Public Library are both located north of the site. Higher-density residential is the primary land use and accounts for a quarter of the land coverage for the ½ mile area surrounding the proposed station. The recently constructed Gloucester City Middle School is located just west of the proposed station. Commercial uses are located west of the station along Broadway (CR 551), and include professional offices, restaurants, specialty retail, and automotive services. Cold Pack Storage, a major fruit distribution center, as well as several large industrial facilities, such as GAF Building Materials and John Jeffries, which are located southwest of the proposed station. At the western edge of the ½ mile station area, Blueknight Energy Partners is located on a tract of manufacturing/industrial land.

In addition to the newly constructed middle school, institutional uses are distributed throughout the ½ mile station area. These include the Gloucester City Municipal Office, Gloucester City Public Library, Gloucester City Municipal Court, County Government Office, Water Plant, Gloucester City Historical Society, post office, banks, churches, cemeteries, St. Mary's Grade School, the Cool Springs Elementary School, and Gloucester Catholic High School. Four small neighborhood parks are in the ½ mile station area: Paul Street Playground, Washington Street Play Lot, Martin Lake, and Johnson Park are located east of the proposed station, and Middlesex Neighborhood Park, Proprietors Park, and the Gloucester City Marina are located to the west.

Zoning – Within ½ mile of the proposed station location, the land is divided into several zoning districts designated by Gloucester City's zoning ordinance. Most of the land is designated Residential Medium, Residential Low, Retail and Commercial Services, and Park/Greenway. The Residential Low Zone (R-L) permits single-family detached homes, while the Residential Medium Zone (R-M) permits single-family semi-detached and townhouse homes. The Retail and Commercial Services Zone (RCS) permits commercial, office, and professional service uses. The Park/Greenway Zone (P/GW) permits recreational and conservation uses, and the intent is for these lands to remain vacant with the exception of necessary ancillary uses.

Gloucester City Station – Growth

The project team reviewed development potential within the vicinity of the proposed station using DVRPC municipal-wide projections (forecast year 2045) and TOD estimates developed through a review of existing vacant or underutilized properties. For Gloucester City, DVRPC projections indicate 34.7 percent growth in employment and a 0.1 percent decline in population. Further, TOD estimates completed as part of this effort indicated several TOD-eligible properties located near the proposed Gloucester City Station.

1.3.2.5 Crown Point Road Station, Westville Borough

Land Use – The proposed Crown Point Road Station would be in Westville Borough, adjacent to NJ Route 45. Existing land use classifications within ½ mile of the proposed Crown Point Road Station are presented on Figure 9, "Existing Land Use – Crown Point Road Station." As shown on Figure 10, "Underutilized Land – Crown Point Road Station," undeveloped land comprises 10.7 percent of the proposed station area. The percentage of land use composition is identified in Table 5, "Proposed Crown Point Road Station Area (Land Use Composition)."

Table 5: Proposed Crown Point Road Station Area (Land Use Composition)

Crown Point Road Station Area Land Use Categories	Land Use Composition (%)
Residential: Low Density	38.8%
Wooded	12.0%
Undeveloped	10.7%
Water	10.0%
Transportation	6.9%
Open Space	5.8%
Commercial	4.4%
Industrial	3.5%
Parking	3.0%
Institutional	2.5%
Residential: High Density	2.3%

Note: Totals do not add to 100 percent due to rounding

Source: Delaware Valley Regional Planning Commission, 2015 Digital Land Use Survey

Most of the ½ mile area surrounding the proposed station area is single-family residential, water, or wooded. The proposed station is adjacent to several multi-family residential properties. The Parkview Elementary School is located two blocks from the proposed station location. A post office, bank, and Kelsch Associates (a social services organization) are located adjacent to the proposed station location. Other institutional uses include the Westville Borough Police Department, located to the north, and to the south of the proposed station is the headquarters of Services to Overcome Drug Abuse Among Teenagers, Inc. (SODAT) of New Jersey, which is a non-profit drug/alcohol outpatient agency. The Thomas West Park, Park Avenue Baseball Field, and Westville Borough Park are located within ½ mile of the station area. Five churches are located within the proposed station area. Neighborhood recreational land uses are located throughout the station area, including the Iron Workers Union recreational area, located directly west from the proposed station, and the Westville Boat Launch, located on Big Timber Creek.



Figure 9: Existing Land Use -Crown Point Rd Station



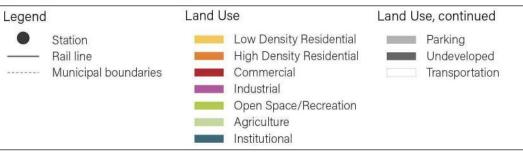




Figure 10: Underutilized Land - Crown Point Rd Station



Legend

Station
Rail line
Municipal boundaries

2016 NJDCA Redevelopment/Rehabilitation Areas
Redevelopment

Commercial uses include various retail establishments, a convenience store, restaurants, and bars. The New Jersey Department of Community Affairs has designated 2.5 percent of the land within the ½ mile station area of the proposed station as being in need of redevelopment, with the largest identified area located to the west of the station. Two smaller outlying parcels located to the northeast and southwest of the station are also identified as being in need of redevelopment.

Zoning – The ½ mile radius around the proposed Crown Point Road Station lies within Westville Borough. Parcels within this zone are designated Residential, Business, and Parks and Conservation. The Residential district permits primarily single-family detached dwellings and accommodates secondary uses such as places of worship and professional offices. The Business District permits commercial uses, as well as single apartments located on the second, or higher, story of a building whose primary use is commercial. Lastly, the Parks and Conservation district permits the uses of public owned parks and conservation or public recreation open spaces.

Crown Point Road Station, Westville Borough - Growth

The project team reviewed development potential within the vicinity of the proposed station using DVRPC projections (forecast year 2045) and TOD estimates developed through a review of existing vacant or underutilized properties. For Gloucester City, DVRPC municipal-wide projections indicate 16.0 percent growth in employment and 14.0 percent growth in population. Further, TOD estimates completed as part of this effort indicated several TOD-eligible properties located near the proposed Crown Point Road Station.

1.3.2.6 Red Bank Avenue Station, Woodbury

Land Use – The proposed Red Bank Avenue Station would be in Woodbury, on Red Bank Avenue between Green Street and Washington Avenue. Existing land use classifications within ½ mile of the proposed Red Bank Avenue Station are presented on Figure 11, "Existing Land Use – Red Bank Avenue Station. The percentage of land use composition is identified in Table 6, "Proposed Red Bank Avenue Station Area (Land Use Composition)."

As illustrated on Figure 12, "Underutilized Land – Red Bank Avenue Station," a small portion of land (2.9 percent) west of the station is identified by the New Jersey Department of Community Affairs as being in need of redevelopment. Less than 1 percent of the proposed station area is undeveloped.

Table 6: Proposed Red Bank Avenue Station Area (Land Use Composition)

Red Bank Avenue Station Area Land Use Categories	Land Use Composition (%)
	. ,
Residential: Low Density	44.7%
Institutional	9.7%
Parking	8.9%
Open Space	8.1%
Commercial	7.2%
Water	7.0%
Wooded	6.4%
Residential: High Density	4.3%
Transportation	3.1%
Undeveloped	0.5%
Agriculture	0.1%

Source: Delaware Valley Regional Planning Commission, 2015 Digital Land Use Survey



Figure 11: Existing Land Use - Red Bank Ave Station





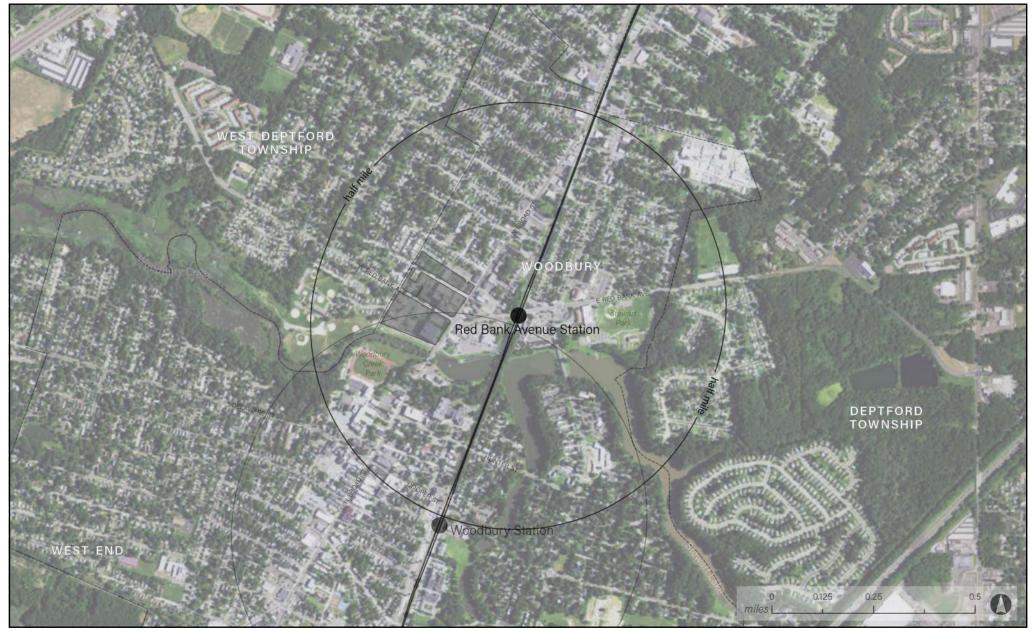


Figure 12: Underutilized Land - Red Bank Ave Station





Nearly half of the ½ mile area surrounding the proposed station is single-family residential, with some multi-family residential uses located to the east of the proposed station. Potential transit-supportive development areas are located to the adjacent east and west of the proposed station site. The Military and Veterans Affairs Department, Woodbury Lake Park, and Stewart Lake Park are located in close proximity of the proposed station. The station would be within close proximity to commercial, institutional, and both single- and multi-family residential land uses. Several health care facilities are located within the ½ mile area, including the Inspira Medical Center located west of the proposed station. This facility provides a full range of medical services, including physical therapy, home care nursing services, medical laboratories, physician offices, and social services. A new facility in Harrison Township—Inspira Medical Center Mullica Hill—has replaced the Woodbury facility. However, the Woodbury facility remains a satellite emergency facility and provides outpatient services.

A number of other institutional uses also exist in the area. The Evergreen Avenue Elementary School, as well as Durand Academy and Community Services, a private special needs school, are located southeast of the proposed station. A post office and Woodbury Junior–Senior High School are located to the southwest and Walnut Street Elementary School is located west of the proposed station. Several churches and banks are also located within the ½ mile area. County government offices and services are located to the immediate south of Broad Street Lake, including Gloucester County Courthouse, Gloucester County Superior Court, Gloucester County Sheriff Department, and the Gloucester County Historical Museum and Library.

Other land use types within the station area include professional offices and commercial uses including eating establishments, automotive repair and service, specialty retail, and convenience markets. Most of these land uses are situated between NJ Route 45 and the proposed GCL alignment.

Zoning – The proposed Red Bank Avenue Station is subject to the City of Woodbury's zoning code, which designates parcels within a ½ mile radius of the station as Commercial, Planned Apartment, Medical Hospital, Residential, and Professional Office Overlay. Residential Districts (R-35 and R-15) permit single-family detached dwellings at different maximum lot sizes (3,500 and 1,500 square feet, respectively). The Planned Apartment District (PA) permits low-density apartment complexes, as well as ancillary support uses. Professional Office Districts (PO-1 and PO-2) permit low density commercial office or professional service uses. The Commercial District (C-1) permits office, retail, commercial, or professional services, as well as mixed use buildings where residential apartments are permitted on upper floors. The Medical-Hospital District (MH) permits medical, dental, or hospital facilities, as well as support uses related to these facilities. The MH district also permits single-family detached residential uses as permitted in the R-35 District.

Red Bank Avenue Station, Woodbury- Growth

The project team reviewed development potential within the vicinity of the proposed station using DVRPC projections (forecast year 2045) and TOD estimates developed through a review of existing vacant or underutilized properties. For Woodbury, DVRPC municipal-wide projections indicate 0.8 percent growth in employment and 4.4 percent growth in population. Further, TOD estimates completed as part of this effort indicated several TOD-eligible properties located near the proposed Red Bank Avenue Station.

1.3.2.7 Woodbury Station, Woodbury

Land Use – The proposed Woodbury Station would be in the City of Woodbury on Green Avenue, south of Cooper Street. It would be adjacent to St. Patrick Church and the Holy Angels Catholic Elementary School and surrounded by a mix of land uses. Existing land use classifications within ½ mile of the proposed station are presented on Figure 13, "Existing Land Use – Woodbury Station." The percentage of land use composition is identified in Table 7, "Proposed Woodbury Station Area (Land Use Composition)." In the proposed station area, 5.8 percent of the land area is identified by the New Jersey Department of Community Affairs as being in need of redevelopment, as shown on Figure 14, "Underutilized Land – Woodbury Station." This includes an area just west of the proposed station in addition to two more outlying areas to the north and southeast of the station. Undeveloped land comprises 4.4 percent of the proposed station area. The proposed Woodbury Station aligns with the Woodbury Master Plan, which emphasizes transit-supportive development and specifically recommends capitalizing on underutilized, undeveloped sites to support TOD.

Table 7: Proposed Woodbury Station Area (Land Use Composition)

Woodbury Station Area Land Use Categories	Land Use Composition (%)
Residential: Low—Density	37.4%
Parking	11.0%
Commercial	10.4%
Institutional	9.6%
Wooded	6.8%
Water	6.0%
Transportation	5.0%
Residential: High Density	4.4%
Undeveloped	4.4%
Open Space	4.3%

Note: Totals do not add to 100 percent due to rounding

Source: Delaware Valley Regional Planning Commission, 2015 Digital Land Use Survey

Relatively dense, single-family residential neighborhoods and commercial uses along NJ Route 45 are the predominant uses within the $\frac{1}{2}$ mile station area. These commercial uses include automotive retail and services, pharmacies, personal services, restaurants, and specialty retail. The Gloucester County Times are located along the southern section of NJ Route 45 within the $\frac{1}{2}$ mile station area.

A post office, Woodbury Junior-Senior High School, and county government offices are located northwest of the proposed station and to the immediate south of Broad Street Lake. Government services include the Gloucester County Courthouse, Gloucester County Superior Court, Gloucester County Sherriff Department, and the Gloucester County Historical Museum and Library. The Evergreen Avenue Elementary School and Durand Academy and Community Services are located northeast of the proposed station. Several churches and other institutional uses are located throughout the station area. Recreational uses include: Rotary Park, which is located south of the proposed station; Hendricksen Park, which is located to the eastern extent of the ½ mile area; Woodbury Lake Park; and Wing/Dickerson Park.

Zoning – The proposed Woodbury Station area is divided into several zoning districts designated by the City of Woodbury's zoning code. Most of the proposed station area is zoned Residential for single-family dwellings. Other zoning districts in the proposed station area articulate a lower-density development model, and include Commercial, Professional Office Overlay, and Planned Apartment Districts. Residential Districts (R-35 and R-15) permit single-family detached dwellings at different maximum lot sizes (3,500 and 1,500 square feet, respectively). The Planned Apartment District (PA) permits low-density apartment complexes, as well as ancillary support uses. Professional Office Districts (PO-1 and PO-2) permit low density commercial office or professional service uses. The C-1 Commercial District permits office, retail, commercial, or professional services, as well as mixed use buildings where residential apartments are permitted on upper floors. The C-2 Commercial District permits similar uses as the C-1 District but does not permit mixed-use or residential uses, aside from accessory apartment uses associated with storage or office uses.



Figure 13: Existing Land Use - Woodbury Station

GLASSBORO-CAMDEN LINE



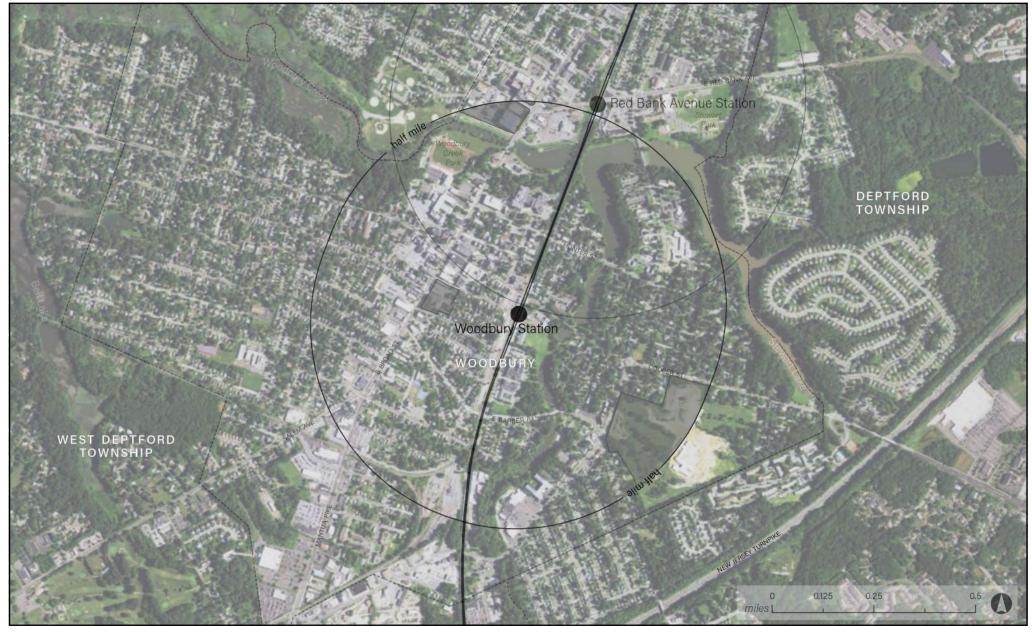
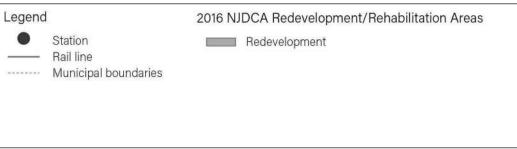


Figure 14: Underutilized Land - Woodbury Station

GLASSBORO-CAMDEN LINE



Woodbury Station, Woodbury- Growth

The project team reviewed development potential within the vicinity of the proposed station using DVRPC projections (forecast year 2045) and TOD estimates developed through a review of existing vacant or underutilized properties. For Woodbury, DVRPC municipal-wide projections indicate 0.8 percent growth in employment and 4.4 percent growth in population. Further, TOD estimates completed as part of this effort indicated several TOD-eligible properties located near the proposed Woodbury Station.

1.3.2.8 Woodbury Heights Station, Woodbury Heights Borough and Deptford Township

Land Use – The ½ mile surrounding the proposed Woodbury Heights Station straddles two municipalities: Woodbury Heights Borough to the north and east, and Deptford Township to the south and west. The proposed Woodbury Heights Station would be located along West Jersey Avenue, at the intersection with Elm Avenue. Existing land use classifications within ½ mile of the proposed Woodbury Heights Station are presented on Figure 15, "Existing Land Use – Woodbury Heights Station." The ½ mile proposed station area does not have any land that has been identified as in need of redevelopment by the New Jersey Department of Community Affairs. However, undeveloped land comprises 4.0 percent of the proposed station area. The percentage of land use composition is identified in Table 8, "Proposed Woodbury Heights Station Area (Land Use Composition)."

Table 8: Proposed Woodbury Heights Station Area (Land Use Composition)

Woodbury Heights Station Area Land Use Categories	Land Use Composition (%)
Residential: Low Density	55.2%
Wooded	25.2%
Open Space	4.0%
Undeveloped	4.0%
Commercial	3.3%
Institutional	3.1%
Transportation	2.5%
Parking	2.1%
Residential: High Density	0.4%
Water	0.1%

Note: Totals do not add to 100 percent due to rounding

Source: Delaware Valley Regional Planning Commission, 2015 Digital Land Use Survey

The station would be surrounded primarily by single-family residential neighborhoods, with wooded areas to the east. The ½ mile area surrounding the proposed station is predominantly residential with other land uses including commercial, institutional, recreational, and manufacturing. St. Margaret's Church and Regional School is to the west of the proposed station, and Woodbury Heights Elementary School is directly adjacent to the east of the proposed station. Woodbury Heights Fire Department is situated at the northern limit of the ½ mile station area. Veterans Park is located directly to the northwest of the proposed station, while two additional parks (Woodbrook Park and Oak Valley Little League Complex) are located south of the proposed station.



Figure 15: Existing Land Use - Woodbury Heights Station





Zoning – Within ½ mile of the proposed station, within Woodbury Heights Borough, parcels are designated Residential and Age-Restricted Residential. The Residential District designates single-family detached dwellings as the principal permitted use, whereas the Residential Age-Restricted District permits multifamily age-restricted residential uses, in which each development is subject to a minimum percentage of affordable housing units.

Within Deptford Township, the parcels within ½ mile radius of the proposed station are designated Institutional, Multi-Family Residential, or High Density Residential.

The Institutional District permits public and quasi-public land uses, which may include government buildings, community centers, libraries, and/or parks. Multi-Family Residential Zones allow for multi-family dwellings and provide the borough with the ability to meet the requirements under the Mount Laurel doctrine, which dictates that municipalities, through their zoning code, must provide opportunities for affordable housing. The High Density Residential District permits single- and two-family detached and semi-detached dwellings located in planned unit developments

Woodbury Heights Station – Growth

The project team reviewed development potential within the vicinity of the proposed station using DVRPC projections (forecast year 2045) and TOD estimates developed through a review of existing vacant or underutilized properties. For Woodbury Heights Borough, DVRPC municipal-wide projections indicate 1.9 percent growth in employment and 7.6 percent growth in population. While redevelopment of properties is anticipated near the proposed Woodbury Heights Station, no specific properties were highlighted for TOD.

1.3.2.9 Wenonah Station, Wenonah Borough

Land Use – The proposed Wenonah Station would be located along North East and North West Avenues, between Mantua Avenue and Poplar Street. Existing land use classifications within ½ mile of the proposed Wenonah Station are presented on Figure 16, "Existing Land Use – Wenonah Station." The ½ mile proposed station area does not have any land that has been identified as being in need of redevelopment by the New Jersey Department of Community Affairs. However, undeveloped land comprises 1.1 percent of the proposed station area. The percentage of land use composition is identified in Table 9, "Proposed Wenonah Station Area (Land Use Composition)."

Table 9: Proposed Wenonah Station Area (Land Use Composition)

Wenonah Station Area Land Use Categories	Land Use Composition (%)
Residential: Low Density	65.3%
Wooded	25.3%
Open Space	2.4%
Institutional	2.1%
Commercial	1.7%
Water	1.6%
Undeveloped	1.1%
Parking	0.3%
Transportation	0.1%

Note: Totals do not add to 100 percent due to rounding

Source: Delaware Valley Regional Planning Commission, 2015 Digital Land Use Survey

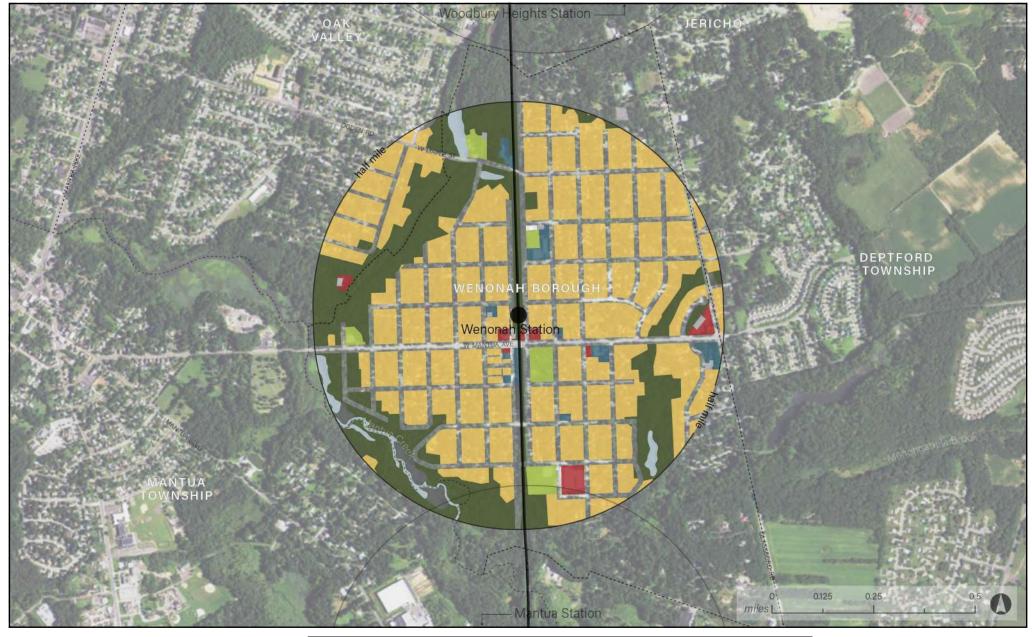
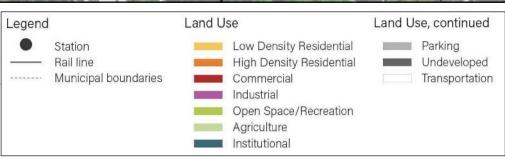


Figure 16: Existing Land Use - Wenonah Station





Within ½ mile radius of the proposed station area, surrounding land uses are predominately (approximately 90 percent) single-family residential or wooded areas. The station would be adjacent to the existing Wenonah Community Center. The proposed station is surrounded by a grid street network of residential land uses, as well as the Wenonah Elementary School, Wenonah Public Library, a post office, and commercial uses that are situated along the intersection of Wenonah and West Avenues. Wenonah Park is located at the intersection of Mantua and East Avenues and two other recreational parks are located at the western (Lisle Field) and southern (Langston Field) extents of the ½ mile station area. Wenonah Lake, a public lake owned by the Borough of Wenonah, is located north of the proposed station. A small number of commercial and community supportive land uses are located at the farthest reaches of the ½ mile area.

Zoning – Most of the land within ½ mile of the proposed Wenonah Station lies within Wenonah Borough; small portions are in Deptford and Mantua Townships. Within Wenonah, land is zoned for Residential, Low Density Residential, Professional Office, Institutional, Commercial, Parks and Conservation, and Senior Citizen Overlay. The Residential District permits single-family detached dwellings, as well as secondary uses of public open spaces and "community residences" which provide accommodations for disabled persons. The Low Density Residential District permits single-family detached dwellings built at densities no higher than one unit per acre, where public sewer is unavailable. Portions of the station area in Deptford and Mantua Townships are zoned for Medium Density Residential Districts.

The Professional Office District permits all uses allowed in the Residential District and office uses that are adjacent to or near existing governmental and commercial uses, excluding uses that include store fronts, store windows, and other elements of retail commercial uses. The Commercial District permits traditional retail commercial uses, including personal services, retail sales, and limited office uses. The Institutional District accommodates a variety of public service uses, including Municipal Buildings, utility and pumping stations, water storage tanks and treatment facilities, public educational facilities, firehouses, and religious places of worship. The Parks and Conservation District dedicates area to publicly-owned space to be preserved in perpetuity. The Senior Citizen Overlay preserves area for age-restricted housing, allowing for both detached and attached single-family dwellings.

Wenonah Station – Growth

The project team reviewed development potential within the vicinity of the proposed station using DVRPC projections (forecast year 2045) and TOD estimates developed through a review of existing vacant or underutilized properties. For Wenonah Borough, DVRPC municipal-wide projections indicate 14.6 percent growth in employment and 14.8 percent growth in population. While redevelopment of properties may occur near the proposed Wenonah Station, no specific properties were highlighted for TOD.

1.3.2.10 Mantua Boulevard Station, Mantua Township

Land Use – The proposed Mantua Boulevard Station would be on Mantua Boulevard (CR 676). Existing land use classifications within ½ mile of the proposed Mantua Boulevard Station are presented on Figure 17, "Existing Land Use – Mantua Boulevard Station." The ½ mile proposed station area does not have any

land that has been identified as being in need of redevelopment by the New Jersey Department of Community Affairs. However, undeveloped land comprises 5.8 percent of the proposed station area. The percentage of land use composition is identified in Table 10, "Proposed Mantua Boulevard Station Area (Land Use Composition)."

Table 10: Proposed Mantua Boulevard Station Area (Land Use Composition)

Mantua Boulevard Station Area Land Use Categories	Land Use Composition (%)
Wooded	45.8%
Residential: Low Density	16.9%
Agriculture	12.2%
Open Space	11.0%
Undeveloped	5.8%
Industrial	4.3%
Commercial	1.8%
Parking	1.4%
Water	0.7%

Note: Totals do not add to 100 percent due to rounding

Source: Delaware Valley Regional Planning Commission, 2015 Digital Land Use Survey

The proposed station is surrounded by agricultural and wooded land, as well as commercial and residential areas. Adjacent to the proposed station is the headquarters of KEE Action Sports, a distributor of paintball products. Other commercial uses directly adjacent to the site include Proof Productions and DVFlora, a global distribution site for fresh cut flowers. A single-family residential neighborhood is located to the immediate southeast of the proposed station and additional single-family residential land uses are also located to the northeast and northwest. Delaware Valley Wholesale Florist, a major employer in Gloucester County, is also located within the ½ mile area. Manufacturing land uses are located southwest and northeast of the ½ mile station area.

A substantial amount of undeveloped wooded land is also in the station area. Maple Ridge Golf Course, which is located at the eastern extent of the ½ mile proposed station area, was closed in 2006 and initially slated for the construction of 100+ homes. Due to changing economic conditions, the golf course has been converted to the Tall Pines State Preserve, Gloucester County's first state park, which includes numerous passive recreational amenities. Wescott Field is located at the southern extent of the ½ mile station area.

Zoning – The areas south and west of the proposed Mantua Boulevard Station within the ½ mile station area are subject to Mantua Township's Zoning ordinance. Most of the proposed station area is Light Industrial or Low, Medium, or High Density Residential. There are also several large parcels of vacant property in residential districts surrounding the proposed station.

The areas to the north and east of the proposed station fall within Deptford Township. This area is comprised of Low Density Residential and Age-Restricted Institutional Districts. The intent of the Low Density Residential District is to allow development for single-family detached dwellings. The Age Restricted District accommodates a combination of medical and residential uses, intended to aid the elderly.



Figure 17: Existing Land Use - Mantua Blvd Station

GLASSBORO-CAMDEN LINE



Mantua Boulevard Station, Mantua Township - Growth

The project team reviewed development potential within the vicinity of the proposed station using DVRPC projections (forecast year 2045) and TOD estimates developed through a review of existing vacant or underutilized properties. For Mantua Township, DVRPC municipal-wide projections indicate 57.4 percent growth in employment and 44.3 percent growth in population. While redevelopment of properties is anticipated near the proposed Mantua Boulevard Station, no specific properties were highlighted for TOD.

1.3.2.11 Sewell Station, Mantua Township

Land Use – The proposed Sewell Station would be on Center Street between East and West Atlantic Avenues. Existing land use classifications within ½ mile of the proposed Sewell Station are depicted on Figure 18, "Existing Land Use – Sewell Station." The ½ mile proposed station area does not have any land that has been identified as being in need of redevelopment by the New Jersey Department of Community Affairs. However, undeveloped land represents 2.9 percent of the land cover within ½ mile of the proposed station. The percentage of land use composition is identified in Table 11, "Proposed Sewell Station Area (Land Use Composition)."

Table 11: Proposed Sewell Station Area (Land Use Composition)

Sewell Station Area Land Use Categories	Land Use Composition (%)
Residential: Low Density	49.8%
Wooded	32.9%
Agriculture	6.9%
Open Space	3.7%
Undeveloped	2.9%
Commercial	1.3%
Institutional	1.3%
Parking	0.8%
Residential: High Density	0.2%
Water	0.2%

Source: Delaware Valley Regional Planning Commission, 2015 Digital Land Use Survey

The area around the proposed station is a predominantly higher-density, single-family residential area. In addition to the residential land uses, which account for roughly one-half of the land area, wooded and agricultural land combined account for approximately 40 percent of the land area. A small percentage of the station area, generally along Center Street, contains commercial, institutional, or recreational uses.

A post office, church, and the Sewell Elementary School are located east of the proposed station. Commercial uses are primarily retail and located to the immediate south and southwest of the proposed station. Two municipal parks are located northwest (Wescott Field) and southeast (Sewell Park and Mantua Community Center) of the proposed station. Tall Pines State Preserve is located approximately ½ mile north of the proposed station location.



Figure 18: Existing Land Use - Sewell Station



