

Figure 29f: Community Facilities

Source: EPA Environmental Justice Screening and Mapping Tool; U.S. Census Bureau TIGER/Line Shapefiles; STV Incorporated, 2018.

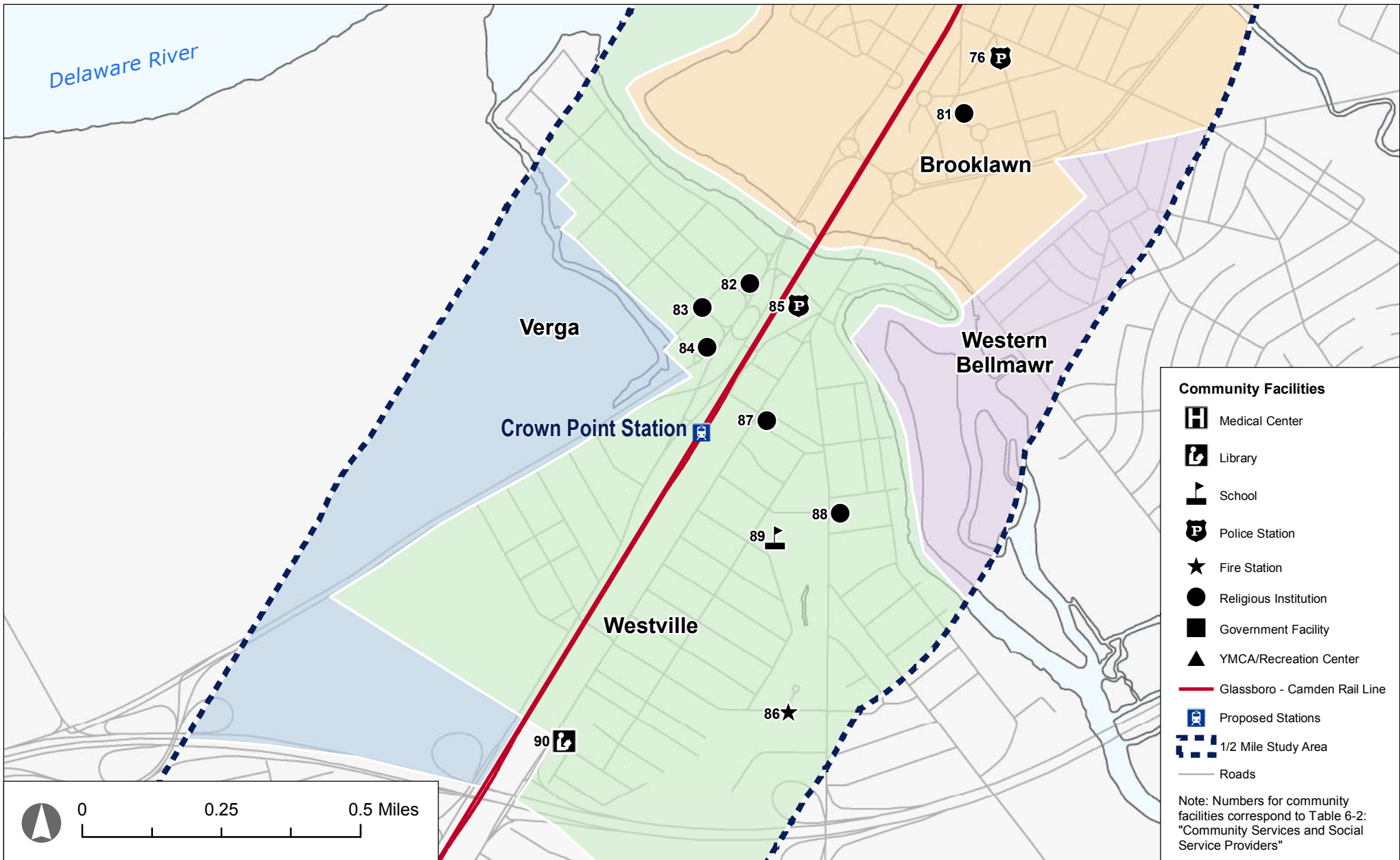


Figure 29g: Community Facilities
Crown Point Station

Source: EPA Environmental Justice Screening and Mapping Tool; U.S. Census Bureau TIGER/Line Shapefiles; STV Incorporated, 2018.



Figure 29h: Community Facilities

Source: EPA Environmental Justice Screening and Mapping Tool; U.S. Census Bureau TIGER/Line Shapefiles; STV Incorporated, 2018.

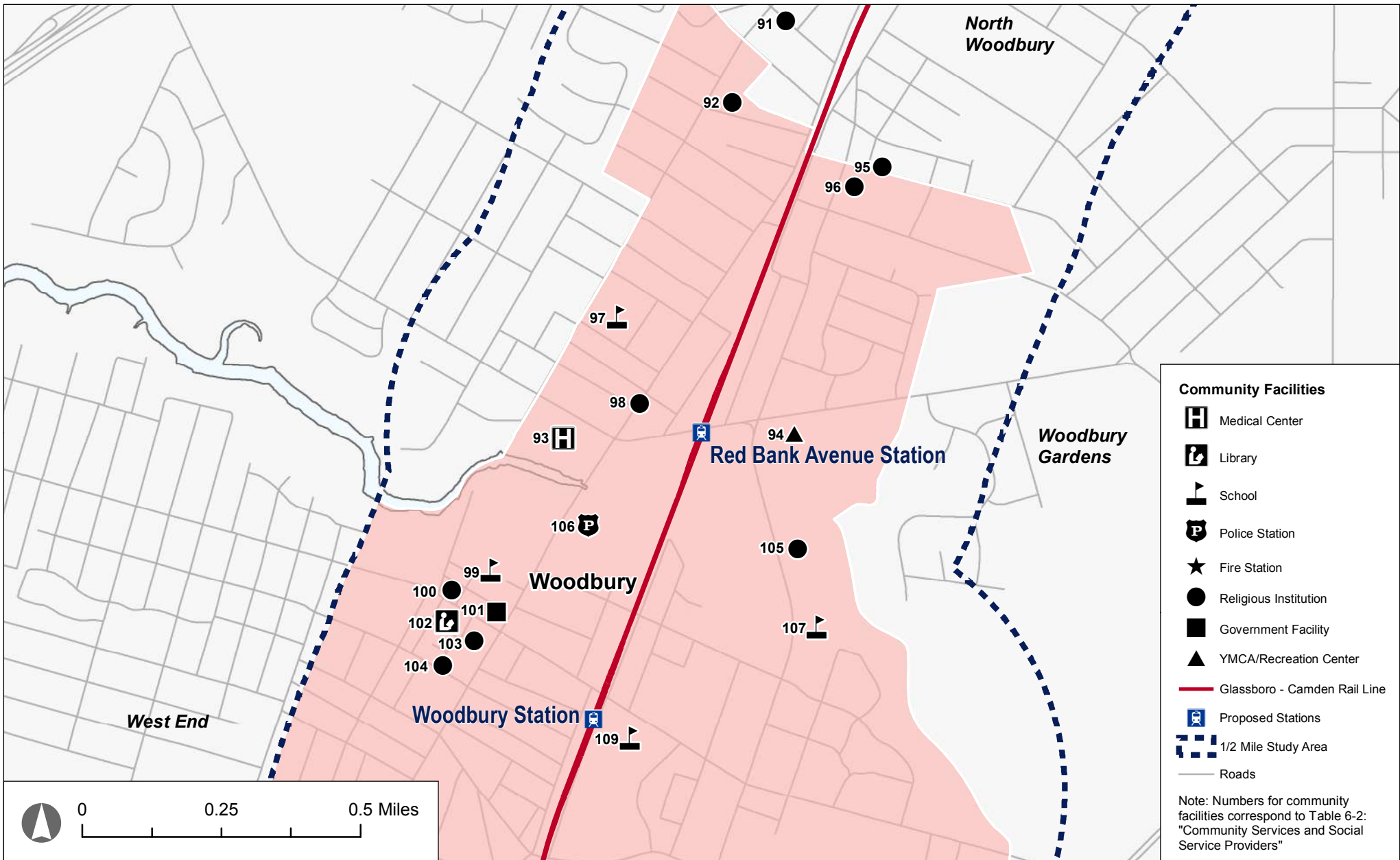


Figure 29i: Community Facilities
Red Bank Avenue Station

Source: EPA Environmental Justice Screening and Mapping Tool; U.S. Census Bureau TIGER/Line Shapefiles; STV Incorporated, 2018.

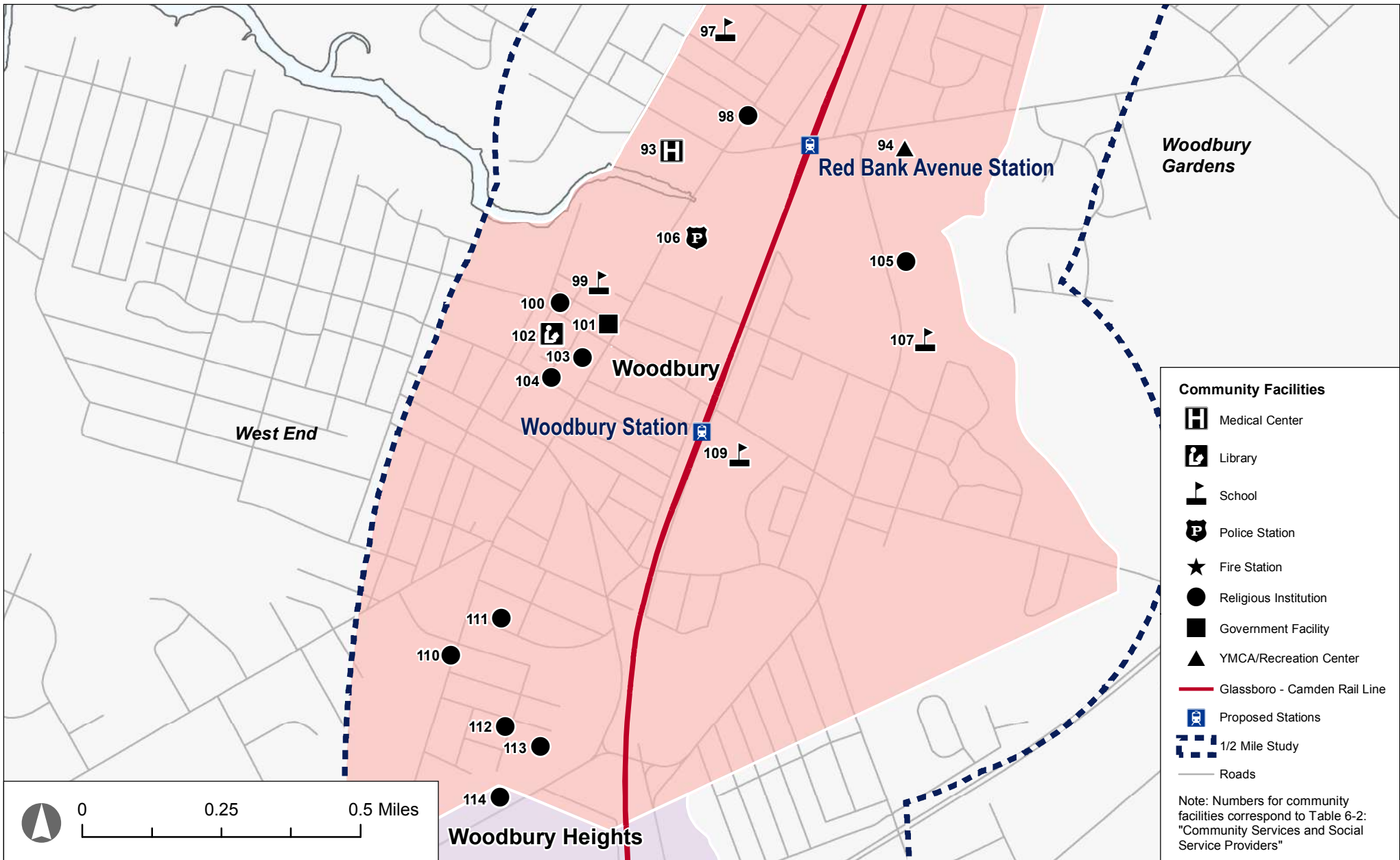


Figure 29j: Community Facilities
Woodbury Station

Source: EPA Environmental Justice Screening and Mapping Tool; U.S. Census Bureau TIGER/Line Shapefiles; STV Incorporated, 2018.



Figure 29k: Community Facilities
Woodbury Heights Station

Source: EPA Environmental Justice Screening and Mapping Tool; U.S. Census Bureau TIGER/Line Shapefiles; STV Incorporated, 2018.

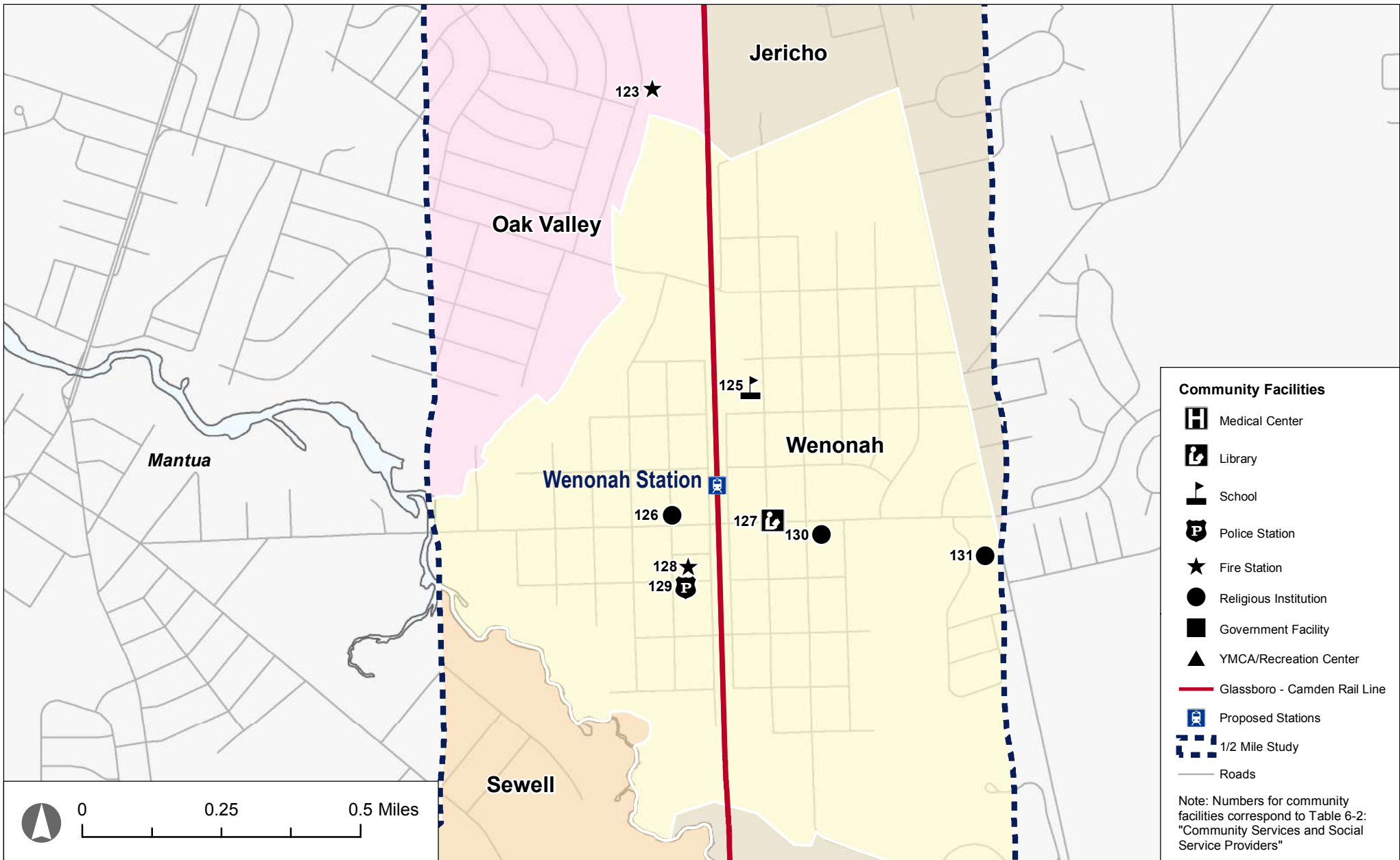


Figure 29I: Community Facilities
Wenonah Station

Source: EPA Environmental Justice Screening and Mapping Tool; U.S. Census Bureau TIGER/Line Shapefiles; STV Incorporated, 2018.

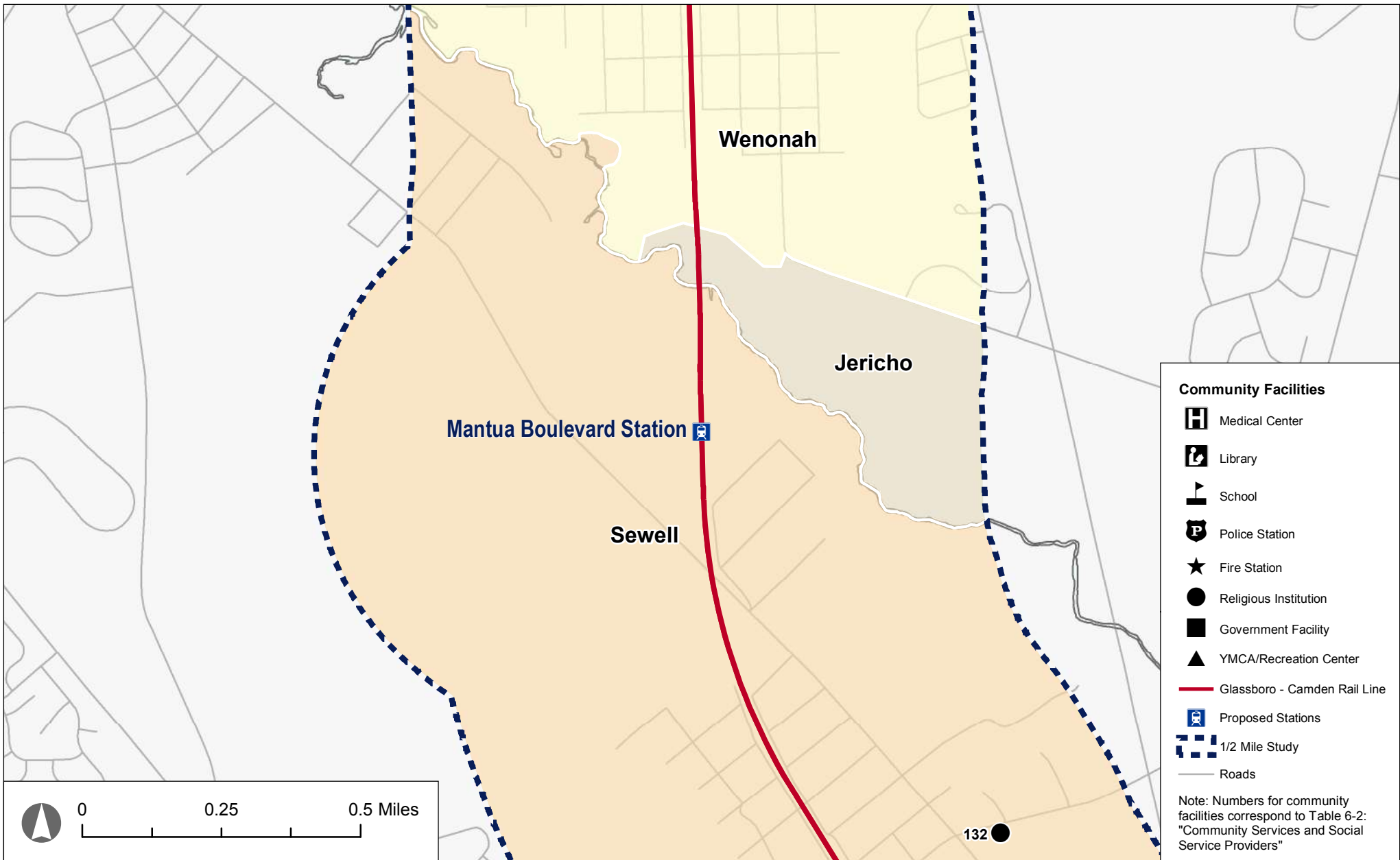


Figure 29m: Community Facilities
Mantua Boulevard Station

Source: EPA Environmental Justice Screening and Mapping Tool; U.S. Census Bureau TIGER/Line Shapefiles; STV Incorporated, 2018.

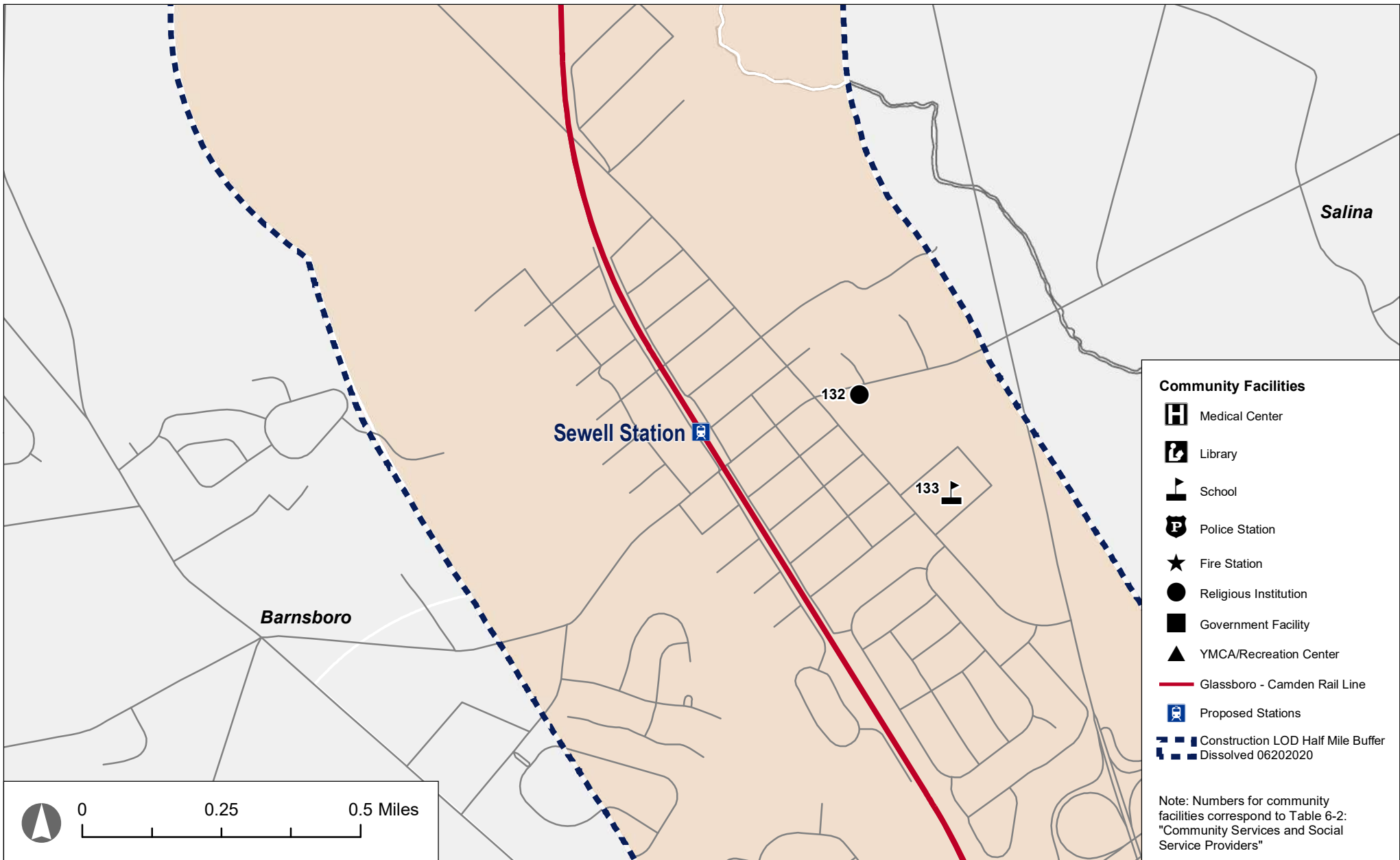


Figure 29n: Community Facilities
Sewell Station

Source: EPA Environmental Justice Screening and Mapping Tool; U.S. Census Bureau TIGER/Line Shapefiles; STV Incorporated, 2018.

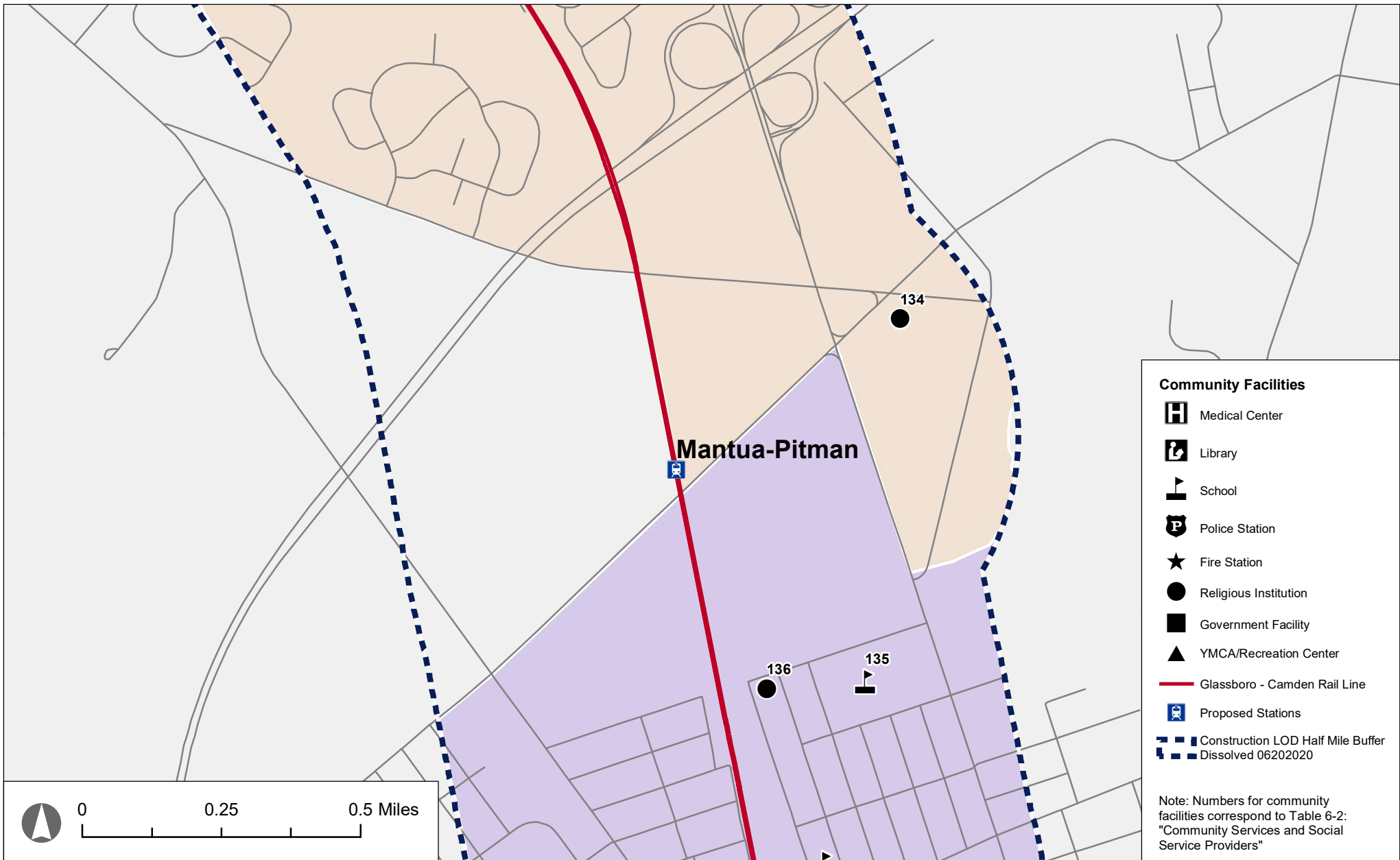


Figure 29o: Community Facilities
Mantua - Pitman Station

Source: EPA Environmental Justice Screening and Mapping Tool; U.S. Census Bureau TIGER/Line Shapefiles; STV Incorporated, 2018.

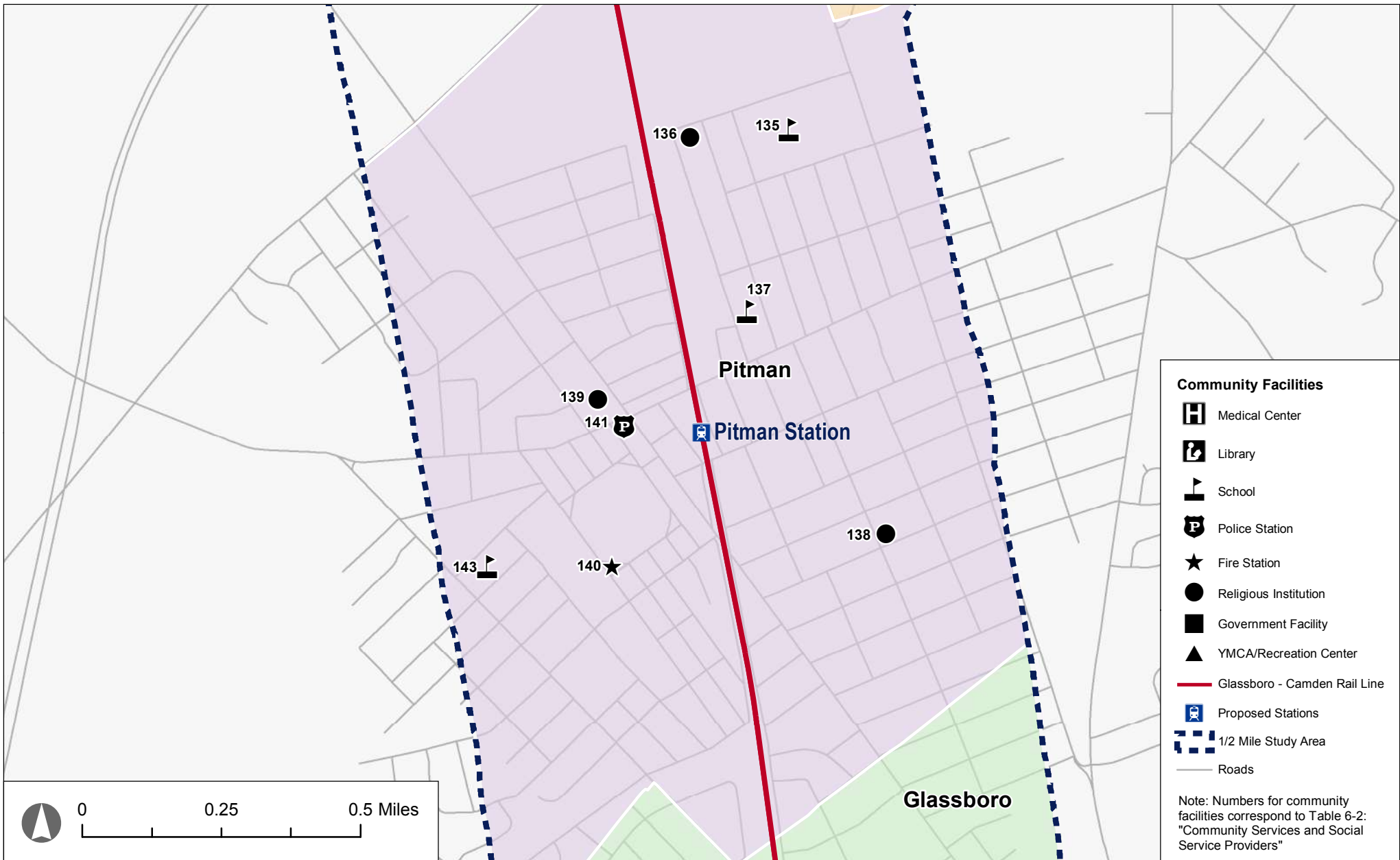
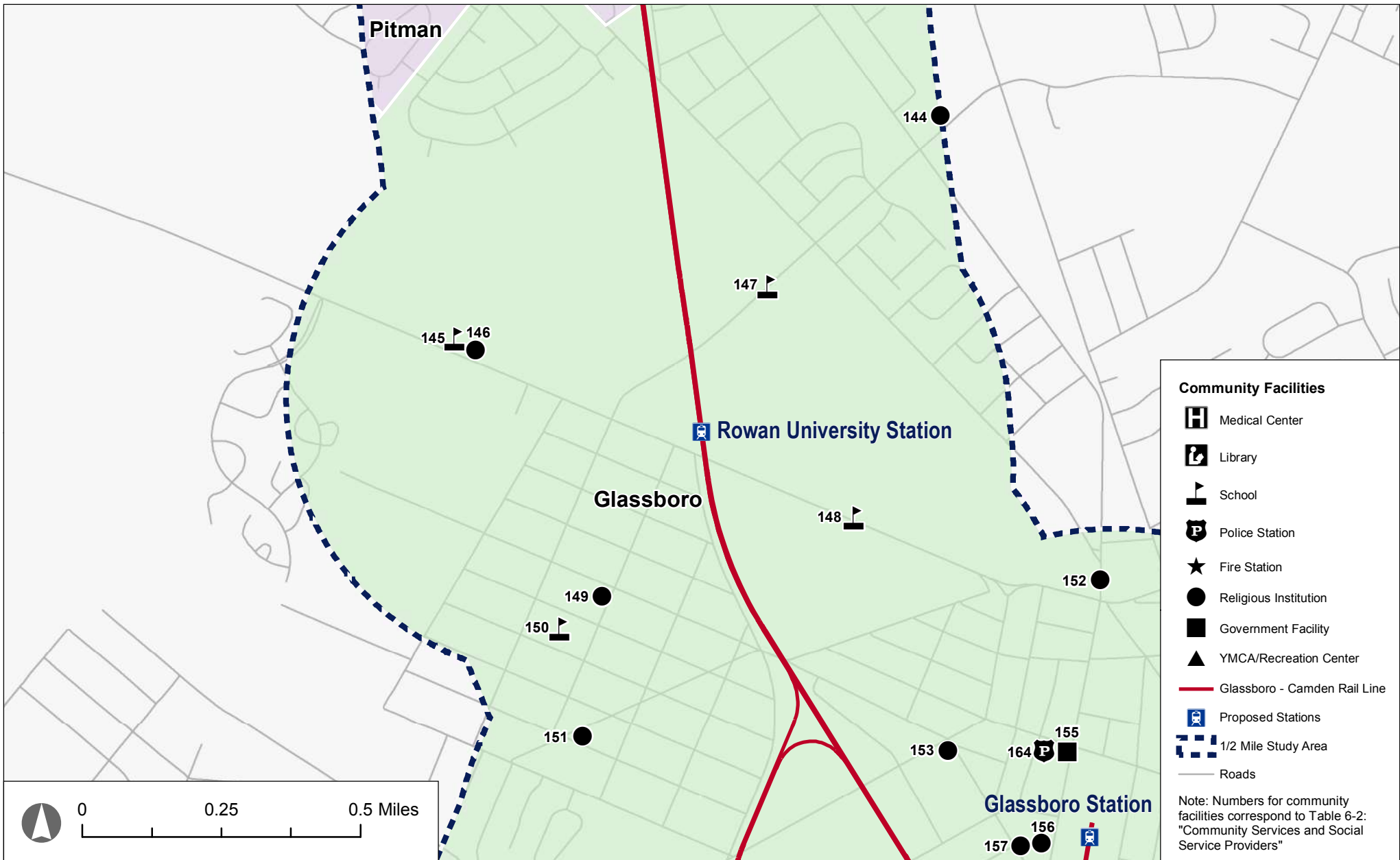


Figure 29p: Community Facilities
Pitman Station

Source: EPA Environmental Justice Screening and Mapping Tool; U.S. Census Bureau TIGER/Line Shapefiles; STV Incorporated, 2018.



Source: EPA Environmental Justice Screening and Mapping Tool; U.S. Census Bureau TIGER/Line Shapefiles; STV Incorporated, 2018.

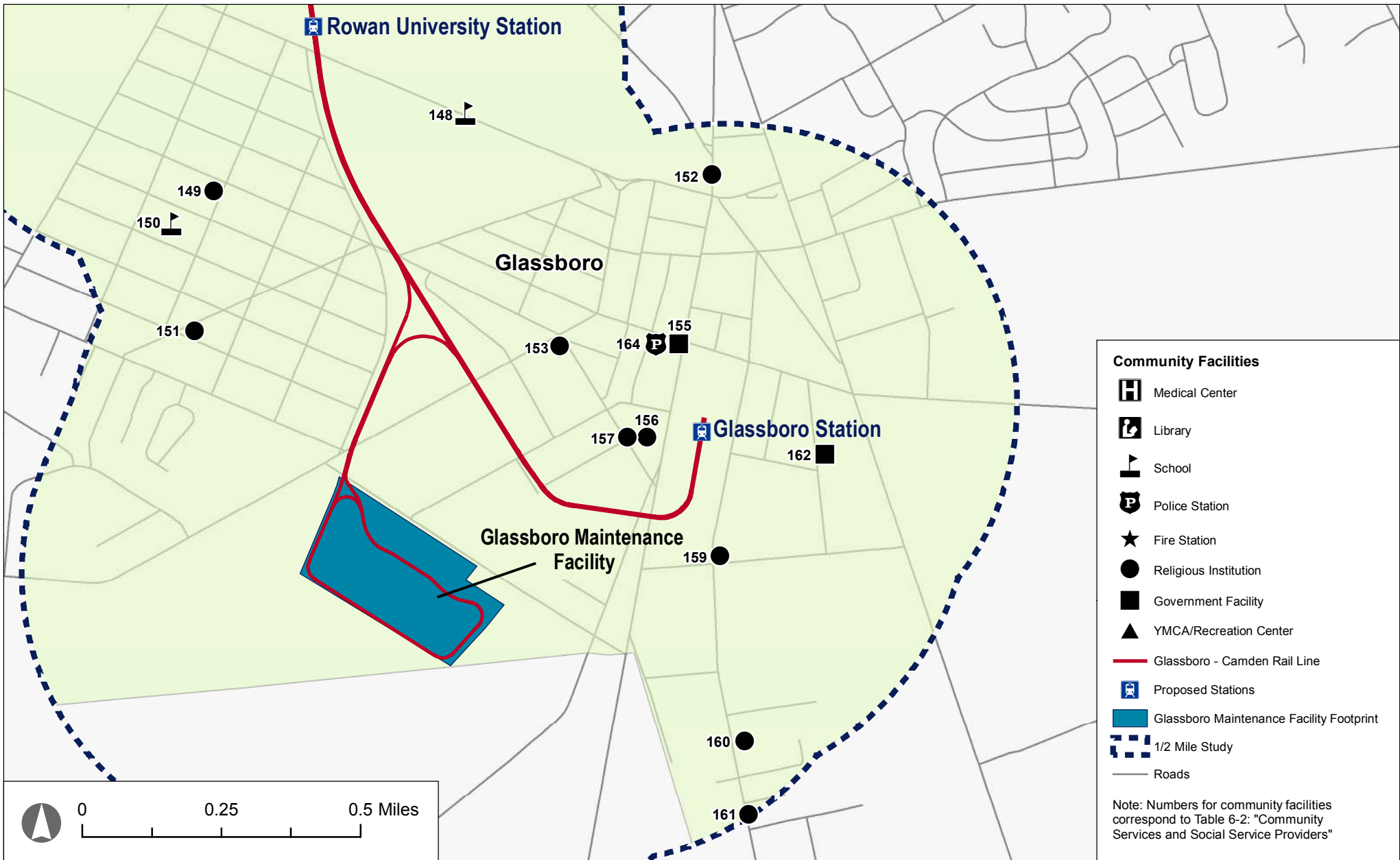


Figure 29r: Community Facilities
Glassboro Station

Source: EPA Environmental Justice Screening and Mapping Tool; U.S. Census Bureau TIGER/Line Shapefiles; STV Incorporated, 2018.

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Do research on these, and others on this list. Do this while dep is reviewing.

Appendix 3A: Environmental Justice

Introduction

Overall, the proposed project would improve accessibility for all communities of concern including low-income, minority, and transit-dependent populations. Any impacts to communities of concern are minimal compared with the proposed project's benefits to the larger environmental justice populations including increased accessibility, a new mode choice, and reduced travel times along the corridor.

Legal and Regulatory Context

Federal Regulatory Environment

Title VI of the Civil Rights Act of 1964 requires that Federal agencies ensure that no person is excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving Federal assistance on the basis of race, color, or national origin.

Federal laws and regulations specifically require the evaluation of the effects of transportation actions on special populations. Executive Order (EO) 12898 requires that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." The overall intent of the Order is to prevent projects and programs from placing disproportionate negative effects on minority and low-income communities and to ensure these communities have ample opportunity to participate in project development.

The federal guidance for evaluating environmental justice issues is found in *Guidance for Federal Agencies on Key Terms in Executive Order 12898*, which was developed by the Interagency Working Group on Environmental Justice, August 1995. In addition, both the U.S. Department of Transportation (DOT) and the U.S. Environmental Protection Agency (EPA) have developed guidelines for addressing environmental justice concerns.

State Regulatory Environment

Formally established under New Jersey Executive Order No. 96 (EO 96) in 2003, the New Jersey Environmental Justice Advisory Council (EJAC) was created with the stated mission to "ensure that the [New Jersey Department of Environmental Protection] develops communication programs, implements and enforces environmental regulations, and policies so that such actions do not unfairly burden any New Jersey Population of people with a disproportionate share of environmental pollution." EJAC was initially created in response to the environmental justice work at the federal level to affirm that the State of New Jersey was also working to uphold the tenets of environmental justice developed at EPA. In doing so, EJAC advises and provides recommendations to the New Jersey Department of Environmental Protection (NJDEP) on matters related to environmental justice.

Introduced in 2018, New Jersey Executive Order No. 23 (EO 23) reaffirmed the advisory role of EJAC, and further required that NJDEP develop guidance for all state agencies and departments with respect to environmental justice. While EO 23 does not establish any explicit regulatory, legislative, or statutory

requirements, or authority related to environmental justice, this guidance and decision-making framework is in the process of being developed. The overarching goals of EJAC guidance remain in accordance with federal initiatives, guidelines, and statutes in providing that state actions, policies, and approvals protect low-income communities and communities of color from disproportionate exposure to environmental hazards.

Environment Prior to the Implementation of the Proposed Project

Study Area

The environmental justice study area is defined as any census tract partially or wholly within ½ mile of the proposed alignment for the GCL. The 2010 U.S. census tract boundaries were used. The GCL study area is shown on Figure 28 (Plates “a” – “c”) in Attachment 3, “Man-Made Resources Tech Report.”

Methodology

Data was collected at the census tract level for the study area and for Camden and Gloucester counties for comparative purposes (including for minority households, transit-dependent populations, and low-income households). Entire counties were selected as the appropriate comparison tool because of the potential regional influence of the proposed project and because it best represents the regional project area.

DOT Order (5610.2) on Environmental Justice provides clear definitions of the four minority groups addressed by Executive Order 12898. These groups are:

- **Black** – a person having origins in any of the black racial groups of Africa;
- **Hispanic** – a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race;
- **Asian American** – a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands; and
- **American Indian and Alaskan Native** – a person having origins in any of the original people of North America and who maintain cultural identification through tribal affiliation or community recognition.

To determine the total number of minority residents in each neighborhood, the number of Black, Hispanic, Asian American, and American Indian or Alaskan Natives were tallied and added together for each Census tract within each neighborhood. Because Hispanic residents may be of any race, people of any ethnic group could categorize themselves as Hispanic or non-Hispanic. In addition, concentrations of transit-dependent populations, such as the elderly, children, and households without a vehicle, were identified. Concentrations of minorities and other special population groups near the project corridor were identified through analysis of the 2014-2018 American Community Survey Five-Year Estimates at both the County and census tract level. The individual tract data were compared to the countywide data to determine if

any of the tracts would qualify as having large concentrations of one or more special populations. These concentrations are referred to as communities of concern.

Communities of concern were identified as those census tracts with either a large concentration of minority residents or median income levels substantially lower than the countywide median income. A tract was categorized as having a community of concern if:

- Minority population within that tract is greater than or equal to 49 percent of total tract population; or,
- Median income for that tract is less than \$53,694 (80 percent of the 2018 Camden County median income) or less than \$68,128 (80 percent of the 2018 Gloucester County median income).

Table 1, “Communities of Concern within the Study Area,” lists the 2010 census tracts, populated with 2014-2018 American Community Survey Five-Year Estimates, that are located within the ½-mile study area and indicates whether high concentrations of minority and/or low-income residents are present. This information is also shown on Figure 1a, “Potential Environmental Justice Communities,” and Figure 1b, “Potential Environmental Justice Communities.” In addition, the median household incomes listed in the following table are based on census tracts.

As shown in Table 1, “Communities of Concern within the Study Area,” 18 of the 26 neighborhoods in the GCL corridor include communities of concern. The majority of environmental justice communities, both low-income and minority, are concentrated in the northern portion of the study area, in and around the city of Camden. However, low-income communities are also dispersed throughout the study area, particularly in the other urban centers such as Woodbury and Glassboro, although these communities tended to be less severely low-income as those communities in the northern portion of the study area near Camden. Minority communities are also found elsewhere in the study area, however, these communities were less concentrated than those identified in Camden County.

Table 1: Communities of Concern within the Study Area

Census Tracts	Associated Neighborhood	Total Population (Census Tract)	Total Minority Population	% Minority Population	Median Household Income	Communities of Concern	
						Minorities	Low-Income
6007	Cooper Point	1,497	1,109	74%	\$27,708	●	●
6008	Pyne Point	5,270	3,997	76%	\$19,520	●	●
6103	Cooper Grant/ Central Water Front	2,151	1,338	62%	\$32,000	●	●

6104	Central Business District/Lanning Square	4,939	3,610	73%	\$29,063	●	●
6002	Gateway	1,933	1,686	87%	\$25,705	●	●
6004	Bergen Square	2,904	2,467	85%	\$19,621	●	●
6014	Parkside	4,623	4,195	91%	\$34,549	●	●
6016	Liberty Park	2,649	2,322	88%	\$23,638	●	●
6015	Whitman Park	4,932	4,154	84%	\$19,011	●	●
6018	Waterfront South	1,206	837	69%	\$29,229	●	●
6017	Centerville	3,146	2,886	92%	\$12,443	●	●
6019	Morgan Village	2,727	2,469	91%	\$23,995	●	●
6020	Fairview	6,478	5,207	80%	\$31,427	●	●
6110	Gloucester City	6,274	1,803	29%	\$53,652		●
6051		2,115	111	5%	\$57,946		
6052		2,857	522	18%	\$65,521		
6053	Brooklawn	2,023	351	17%	\$63,897		
6070	Western Bellmawr	4,480	755	17%	\$42,384		●
5001	Westville	4,185	648	15%	\$53,986		●
5002.01	Verga	2,427	167	7%	\$76,964		
5010.01	Woodbury	2,114	613	29%	\$83,165		
5010.02		4,315	2,550	59%	\$31,064	●	●
5010.03		3,500	1,118	32%	\$67,938		●
5009	Woodbury Heights	2,993	172	6%	\$82,188		
5011.07	Oak Valley	4,394	473	11%	\$78,553		
5011.06	Jericho	3,882	1,657	43%	\$67,092		●
5008	Wenonah	2,225	172	8%	\$122,159		
5007.02	Sewell	5,907	478	8%	\$95,724		
5013.01	Pitman	3,527	345	10%	\$80,375		
5013.02		2,753	99	4%	\$71,125		
5013.03		2,550	207	8%	\$66,500		●
5014.02	Glassboro	3,406	1,056	31%	\$47,227		●
5014.03		3,837	1,110	29%	\$84,534		
5014.04		3,197	838	26%	\$26,250		●
5014.06		4,666	1,461	31%	\$65,257		●

Source: American Community Survey, 2014-2018; US EPA Environmental Justice Mapper, 2019

In addition to communities of concern, special populations of interest for this Draft EIS include transit-dependent populations, such as the elderly, children, zero-car households, and low-income populations.

Table 2, “Transit-Dependent Populations in the GCL Corridor,” includes the first three indicators for transit dependency. Low-income populations are discussed earlier in this section and are shown in Table 1, “Communities of Concern within the Study Area.”

The threshold for the transit-dependent categories is if the percentage of the population of a particular group within a tract is at least 10 percent greater than the percentage of that population in the county. These criteria resulted in the following threshold values for transit dependency:

- The elderly population (age 65 and older) within a tract is greater than or equal to 25.0 percent (Camden County) and 24.9 percent (Gloucester County) of total tract population;
- The youth population (age 0 to 17) within a tract is greater than or equal to 33.0 percent (Camden County) and 32.4 percent (Gloucester County) of total tract population;
- The percentage of zero-car housing units (based on occupied housing units) within a tract is greater than or equal to 21.4 percent (for Camden County) and 15.9 percent (for Gloucester County).

Data was collected at the census tract level, and, where applicable, the weighted average was obtained for the neighborhood as a whole. GCL Corridor Transit-Dependent Neighborhood maps are included in Figure 1c, “Potential Environmental Justice Communities,” Figure 1d, “Potential Environmental Justice Communities,” and Figure 1e, “Potential Environmental Justice Communities.” 13 of the 15 transit-dependent neighborhoods are within the city of Camden, while the remaining two are located in Gloucester City and Woodbury..

Table 2: Transit-Dependent Populations in the GCL Corridor

Census Tract	Associated Neighborhoods	% Elderly	% Youth	% Zero-Car Housing Units	Median Household Income	Large Concentration of Transit-Dependent		
						Elderly	Youth	Zero-Car
Camden County		15%	23.00%	11.40%	\$67,118			
6007	Cooper Point	6.20%	36.90%	29.90%	\$27,708		●	●
6008	Pyne Point	13.10%	27.00%	60.00%	\$19,520			●
6103	Cooper Grant; Central Waterfront	18.70%	11.60%	32.30%	\$32,000			●
6104	Central Business District; Lanning Square	6.70%	20.30%	37.70%	\$29,063			●
6002	Gateway	11.70%	22.90%	39.20%	\$25,705			●
6004	Bergen Square	9.50%	41.30%	39.90%	\$19,621		●	●
6014	Parkside	11.70%	30.10%	30.10%	\$34,549			●

6016	Liberty Park	8.00%	39.80%	40.90%	\$23,638		●	●
6015	Whitman Park	11.50%	26.20%	28.70%	\$19,011			●
6018	Waterfront South	11.70%	20.30%	34.60%	\$29,229			●
6017	Centerville	11.10%	45.00%	58.60%	\$12,443		●	●
6019	Morgan Village	9.80%	28.30%	25.10%	\$23,995			●
6020	Fairview	5.20%	36.00%	32.80%	\$31,427		●	●
6110	Gloucester City	9.00%	29.00%	13.20%	\$53,652			●
6051		15.10%	19.40%	5.60%	\$57,946			
6052		12.30%	26.60%	9.40%	\$65,521			●
6053	Brooklawn	8.70%	20.80%	12.50%	\$63,897			
6070	Western Bellmawr	16.00%	21.10%	11.10%	\$42,384			
Gloucester County		14.90%	22.40%	5.90%	\$85,160			
5001	Westville	12.20%	24.50%	12.40%	\$53,986			
5002.01	Verga	15.50%	17.80%	8.60%	\$76,964			
5010.01	Woodbury	11.50%	24.50%	5.70%	\$83,165			
5010.02		18.70%	22.20%	32.50%	\$31,064			●
5010.03		10.90%	22.10%	15.00%	\$67,938			
5009	Woodbury Heights	16.20%	20.60%	2.90%	\$82,188			
5011.07	Oak Valley	14.60%	19.20%	3.90%	\$78,553			
5011.06	Jericho	18.40%	22.80%	4.30%	\$67,092			
5008	Wenonah	14.80%	24.80%	3.10%	\$122,159			
5007.02	Sewell	13.00%	24.50%	2.70%	\$95,724			
5013.01	Pitman	15.60%	20.90%	4.10%	\$80,375			
5013.02		11.90%	20.80%	12.00%	\$71,125			
5013.03		23.50%	20.40%	10.50%	\$66,500			
5014.02	Glassboro	10.90%	17.40%	10.90%	\$47,227			
5014.03		20.00%	19.40%	4.00%	\$84,534			
5014.04		3.30%	5.40%	10.30%	\$26,250			
5014.06		13.20%	21.50%	4.50%	\$65,257			

Source: 2014-2018 American Community Survey.

No-Action Alternative

The No-Action Alternative would consist of a future scenario with no changes to transportation services or facilities in the GCL Corridor, beyond the projects that are already committed. As a result, project-generated impacts to neighborhoods and community facilities would not occur under the No-Action Alternative. With the No-Action Alternative, neighborhoods and community facilities in the GCL Corridor would not benefit from enhanced access to transit that would be associated with the implementation of the proposed light rail.

Environmental Consequences

After identifying the minority and low-income communities, the potential for environmental benefits and disproportionate or adverse impacts of the GCL on minority and low-income neighborhoods was determined. The impact assessment results from each of the major technical areas were analyzed to determine whether significant impacts would disproportionately occur mostly within communities of concern.

In many cases, details on specific impacts, such as land use changes, noise and vibration effects, and traffic access impacts are presented in other technical reports. In this section, overall impacts to the special populations within the project corridor are assessed. The potential for impacts is expressed quantitatively or with the following qualitative terms:

- **No impact:** This category applies if the GCL is not expected to result in impacts on existing conditions. Positive impacts, such as improved access to neighborhoods and community facilities, may also occur and are represented as no impact. Also included in this category are impacts to individual residential properties that would not result in an impact to the collective neighborhood.
- **Potential impact:** This category applies if the GCL may result in a minimal or moderate impact. Minimal impacts include changes from the existing conditions that typically would not need mitigation; moderate impacts include changes from existing conditions that could be addressed through mitigation.
- **Potentially significant impact:** This category applies if the GCL would likely result in substantial changes that represent an “adverse impact” to the activities relating to a community of concern. In some cases, the impacts might not be fully addressed through the proposed mitigation.

The key criteria for environmental justice analyses is whether or not adverse impacts identified in each of the environmental analysis categories are disproportionate within communities of concern. In other words, would the impacts within a minority or low-income community be appreciably more severe or greater in magnitude than those that would be experienced in non-minority or non-low-income communities.

Summary

Impacts to communities of concern with regards to travel patterns and accessibility, displacement and relocations, community services and facilities, neighborhoods, and noise and vibration are outlined below. These impacts are minimal compared with the proposed project’s benefits to the larger environmental justice populations, including increased accessibility, a new mode choice, and reduced travel times along the corridor. While these do represent impacts on communities of concern, including low-income, minority, and transit-dependent populations, they do not represent a disproportionate impact in these communities. Therefore, it can be determined that no potential for disproportionately high environmental justice impacts would result from the proposed GCL. For more information, see Table 3,

“Potential Impacts to Communities of Concern and Transit-Dependent Populations in the GCL Corridor,” and Table 4, “List of Potential Impacts Corridor-Wide Impacts.”

The identified adverse impacts are capable of being mitigated and are expected to be reduced significantly with appropriate measures. These measures are outlined in Section 4, “Avoidance Measures and Mitigation.”

Table 3: Potential Impacts to Communities of Concern and Transit-Dependent Populations in the GCL Corridor

Census Tracts	Associated Neighborhood	Associated Municipality	Communities of Concern		Large Concentration of Transit-Dependent			Significant Impacts	Less Than Significant Impacts *
			Minorities	Low-Income	Elderly	Youth	Zero-Car		
6007	Cooper Point	City of Camden	●	●		●	●	20401, 20402, 20403, 30701	
6008	Pyne Point		●	●			●		
6103	Cooper Grant/ Central Water Front		●	●			●		
6104	Central Business District/Lanning Square		●	●			●		
6002	Gateway		●	●			●		
6004	Bergen Square		●	●		●	●		
6014	Parkside		●	●			●		
6016	Liberty Park		●	●		●	●		
6015	Whitman Park		●	●			●		
6018	Waterfront South		●	●			●		
6017	Centerville		●	●		●	●		
6019	Morgan Village		●	●			●		
6020	Fairview		●	●		●	●		

6110	Gloucester City	City of Gloucester		●			●	20404, 30703	20414, 30702
6051									
6052							●		
6053	Brooklawn	Borough of Brooklawn							
6070	Western Bellmawr	Borough of Bellmawr		●					
5001	Westville	Borough of Westville		●				20406	
5002.01	Verga	West Deptford Township							
5010.01	Woodbury	City of Woodbury						20408	30704, 30705
5010.02			●	●			●		
5010.03				●					
5009	Woodbury Heights	Borough of Woodbury Heights						30808, 31005	20107, 30706, 30707
5011.07	Oak Valley	Deptford Township							30710
5011.06	Jericho			●					
5008	Wenonah	Borough of Wenonah						30804	
5007.02	Sewell	Mantua Township							
5013.01	Pitman	Borough of Pitman						30806	
5013.02									
5013.03				●					
5014.02	Glassboro			●					

5014.03	Borough of Glassboro						20409,	20108, 30712, 30713, 30903
5014.04			●				20410, 20412,	
5014.06			●				20413, 31005	
<p>* In addition to the significant impacts listed above (all fully mitigated), additional mitigation/avoidance measures will be considered for certain less than significant impacts. Please refer to Section 4, "Avoidance Measures and Mitigation."</p> <p>Note: Natural Resources impacts to be determined in consultation with NJDEP, please refer to Section 3.2, "Natural Resources." Hazardous Materials impacts to be determined in consultation with NJDEP, please refer to Section 3.3.3, "Hazardous Materials." Cultural Resources impacts to be determined in consultation with New Jersey SHPO, please refer to Section 3.4.2, "Cultural Resources"; see also Section 3.4.9.6 for potential visual effects that may be associated with the Glassboro Vehicle Maintenance Facility, pending consultation with New Jersey SHPO.</p>								

Source: GCL Project Team, 2020; American Community Survey, 2014-2018.

Table 4: List of Potential Corridor-Wide Impacts

ID	Impact	Significant Adverse Impact
10101	Acid Producing Soils	No impact currently determined
10201	Surface Waters	No
10220	Flood Hazard Areas	No impact currently determined
10301	Plant Communities - Forest	No impact currently determined
10302	Plant Communities - Agriculture	No impact currently determined
10303	Plant Communities - Old Field	No impact currently determined
10305	Threatened and Endangered Species - Federally-Listed Species - Northern Long Eared Bat	No impact currently determined
10306	Threatened and Endangered Species - Federally-Listed Species - Atlantic Sturgeon and Shortnose Sturgeon	No impact currently determined
10308	Threatened and Endangered Species - State-Listed Species - Bald Eagle	No impact currently determined
10309	Threatened and Endangered Species - State-Listed Species - Barred Owl and Red Shouldered Hawk	No impact currently determined
30601	No Impacts to local law enforcement services	No
30602	No impacts related to station platforms and park-and-ride facilities	No

30603	No impacts related to rail safety	No
30604	No impacts related to vehicular, bicycle, and pedestrian safety	No
30605	No impacts related to operational provisions for safety and security	No
30606	No impacts related to training and education provisions for safety and security	No
31001	Severe noise impacts at 3 monitoring sites (177 dwellings)	Yes
31002	Moderate Noise impacts at 11 monitoring sites (577 dwellings)	Yes

Source: GCL Project Team, 2020.

Travel Patterns and Accessibility

With respect to transit service, the GCL would provide a significant level of benefits for environmental justice populations, particularly the transit-dependent. The GCL would utilize an exclusive guideway that would provide increased reliability, increased service frequencies, and significant travel time savings over the No-Action Alternative. There would be an increase in transit accessibility as well as mobility to origins and destinations throughout the entire NJT system. Improved access to employment centers along the GCL light rail service and within the project corridor would result.

However, negative impacts to local streets near the GCL include reduction of lanes widths, slight relocation of roadways, and full closures of one-way streets affecting local circulation patterns; street circulation patterns would be most-heavily affected in Gloucester City. At-grade crossings could potentially have significant impacts on the roadway network adjacent to the GCL. In addition, public and private parking spaces may be lost. In total, approximately 233 public parking spaces are anticipated to be lost. In total, approximately 132 private parking spaces are anticipated to be lost.

The GCL would also have at-grade crossings at 39 public roadways and one private driveway location. These roadway modifications would change travel patterns for both drivers and pedestrians; however, they would provide a safer environment. A screening process was applied to analyze the 39 GCL at-grade crossings to identify locations with the highest potential impact on vehicular traffic. Sixteen locations were identified as having high potential impacts. Eight of these intersections are located in communities of concern:

- Olive St, Westville
- Cooper St, Woodbury
- East Barber Ave, Woodbury
- Carpenter St, Pitman/Glassboro
- Bowe Blvd, Glassboro
- Mullica Hill Road, Glassboro

- Ellis St, Glassboro
- South Main Street, Glassboro

In addition, the GCL Project Team analyzed transportation conditions at the key intersections and roadways adjacent to or within proximity of proposed station areas. These are locations that are typically impacted by the initiation of light rail service, as the roadways and bicycle and pedestrian facilities are most directly impacted by passenger flows to and from stations. In other instances, the anticipated GCL operations would result in delays related to grade crossing protections such as gates and flashers. Intersections that exhibit high levels of delay and congestion in future-year projections are analyzed to determine the most likely cause of the congestion. In some locations, a queue of left-turning vehicles would exceed the length of the storage turning lane, or the current number of lanes would not provide the roadway capacity required to accommodate projected future roadway volumes.

It was found that roadway and intersection delays with the GCL are generally lower compared to the No-Action condition at locations where no new trips would be generated by GCL stations and parking facilities; they are generally higher compared to the No-Action condition at locations where new drive access trips would be anticipated as a direct result of the proposed GCL parking facilities. However, several locations experienced negative traffic growth in the future with the GCL but also generate traffic due to parking facility activity. Of the 41 intersections analyzed, the majority would experience improvements or no change in future level of service (LOS) with the introduction of the GCL. Those located in communities of concern experiencing an increase in LOS include:

- Broadway Blvd (CR 551) at Delsea Dr (NJ 47) (Westville): F to B
- E. Red Bank Ave at N. Broad St (NJ 45) (Woodbury): D to C

Those intersections experiencing a decrease in LOS and located in communities of concern include:

- E. Red Bank Ave at N. Evergreen Ave (CR 650) (Woodbury): C to E
- Cooper St (CR 534) at S. Evergreen Ave (CR 553) (Woodbury): B to E
- E. Barber Ave at S. Evergreen Ave (CR 553) (Woodbury): E to F
- High St E. at S. Main St (CR 553) (Glassboro): C to D
- E. Barber Ave at Railroad Ave (Woodbury): A to B

Those with projected decreases to LOS E or F and are thus considered significant and adverse. These four intersections would also experience a decreased LOS under the No-Action Alternative. However, these adverse impacts are not disproportionate within communities of concern.

Pedestrian and bicycle accessibility would improve under the GCL. These benefits would be realized throughout the corridor, including in communities of concern.

Displacements and Relocations

Overall, impacts resulting from acquisitions and displacements would not be adverse or disproportionate among minority and low-income communities in the future with the proposed GCL. Of the 46 full property

acquisitions expected with the GCL corridor, 41 are located within communities of concern. Of these, 10 are commercial, 1 is community service, 7 are manufacturing, 1 is parking, 17 are residential, 4 are vacant land, and 1 is wooded land. These acquisitions will impact 10 businesses, displace approximately 84 to 120 employees, and impact 15 residences. These full acquisitions are potentially significant, and therefore adverse, but not disproportionate within communities of concern.

The GCL would require partial acquisition or de minimis acquisition of approximately 170 parcels. Of these, 27 partial acquisitions and 123 de minimis acquisitions would occur in communities of concern. There is no evidence that the impact would be disproportionate.

Community Services and Facilities

As stated in Section 3.5.2.3, “Community Services and Social Service Providers” in Attachment 3, “Man-Made Resources Tech Report,” in the future with the proposed GCL, one community facility (Bethlehem United Church of Christ) located within a community of concern (Glassboro) would experience impacts relating to direct acquisition of ten parking spaces which may impact activities and ADA ramp usage at the back of the church. The church itself would not be displaced and no physical alteration to the building would occur. This impact would not be considered adverse or disproportionate.

Neighborhoods

The GCL would not adversely or disproportionately affect neighborhoods with high concentrations of minority or low-income residents within the proposed project corridor. While some impacts would occur to specific properties, none of these impacts would collectively affect a neighborhood. The improved access to transit and increased mobility to other destinations in the region would result in a positive impact to these communities of concern and transit-dependent populations.

Noise and Vibration

Of 27 representative locations used as receptor sites, moderate noise impacts are likely to occur at 13 representative locations within communities of concern as a result of the proposed GCL activities and severe noise impacts are likely to occur at two representative locations within communities of concern. The severe impacts are anticipated at Zane Street in Glassboro and at Rowan University’s Girard House. The severe noise impact at these locations would be considered adverse; however, no disproportionate impacts are anticipated.

In addition, moderate noise impacts at residential properties adjacent to the proposed vehicle maintenance and storage facilities are expected to occur at each of the two proposed yards located in the communities of Woodbury Heights and Glassboro, with Glassboro considered a community of concern. Further refinement of the maintenance facility activities at the two proposed storage yards would occur during a future project phase at which more details related to the location, types, and duration of various maintenance activities would be developed. These changes may alter noise exposure levels.

Mitigation for these impacts from noise exposure would be determined during final design and it is likely that the impacts can be successfully mitigated. Upon estimating future project noise exposure levels with mitigation measures, the GCL team found that severe noise impacts at receptor sites would be eliminated, but moderate noise impacts would remain at four receptor sites within communities of concern, in Gloucester City and Glassboro. The remaining moderate noise impacts would all be caused by noise generated from horn soundings.

Vibration levels during daily service operations at all receptor sites were found to be below the FTA Impact Threshold.

Avoidance Measures and Mitigation

No-Action Alternative

Project-generated impacts to environmental justice populations would not occur under the No-Action Alternative. Mitigation is not required for the No-Action Alternative.

The Proposed GCL

Mitigation that would allow for avoidance or reduction of impacts to less than significant levels is proposed for all impacts to communities of concern (see Mitigation sections in Attachment 3 – Man-Made Resources Technical Report, Attachment 5 – Traffic Analysis Technical Report, and Attachment 11 – Noise and Vibration Technical Report).

Although mitigation would not eliminate all adverse impacts, impacts would not be concentrated in potential communities of concern, but instead present throughout the entire corridor. Therefore, no community of concern would suffer a burden of being disproportionately affected either directly by a singular significant impact, nor as a result of combinations of impacts that, considered individually, may be less than significant.

Further, these impacts are minimal compared with the proposed project's benefits to the larger environmental justice populations—including increased accessibility, a new mode choice, and reduced travel times—and do not constitute a disproportionate impact on these communities.