APPENDICIES

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APPENDIX A: EXISTING CONDITIONS SUMMARY

Introduction

Understanding the current state of bicycle and pedestrian mobility is the first step towards building an active transportation plan that improves safety, connectivity and addresses equity. This appendix provides an overview of existing walking and biking infrastructure, policies, barriers, and opportunities within East Providence. By evaluating the accessibility and inclusivity of the city's neighborhoods and streets, this appendix lays the foundation for future recommendations for where to add bicycle lanes, crosswalks, sidewalks, bus stop infrastructure, and intersection treatments.

Key Findings

Stakeholder Feedback

- According to our survey, about two thirds of respondents walk, bike, or use active transportation other than a personal vehicle regularly in East Providence. **More than 90% of respondents want to walk, bike, or roll more often.**
- Stakeholders report that the top barriers to walking and biking are vehicle traffic that feels unsafe and lack of infrastructure such as crosswalks and bike lanes.

Community Profile

- **Vehicle ownership is lower in central East Providence** adjacent to the I-195 corridor, where bicycle and pedestrian improvements might benefit residents more immediately.
- **Fewer workers are driving alone to work** each year between 2019-2023, and a much **larger proportion are working from home**. This suggests the need for improved infrastructure and amenities to support more local trips by foot or by bicycle.

Active Transportation Facilities Today

- The East Bay Bicycle Path and Ten Mile Greenway provide comfortable **bike connections in the north south direction.** They are not connected, limiting continuous bicycle access to Rumford.
- Low stress facilities primarily consist of existing off-street paths. The north-south nature of dedicated facilities **limits travel east-west within the city** and connections to the bicycle path from residential neighborhoods to the east, though Henderson Bridge provides connectivity between the western parts of town and Providence.
- **Pedestrian facilities in the city are largely present on both sides of arterial and state-owned roadways**. Still, sidewalks today have a handful of systemic issues that detract from their usability, such as blockages and obstructions, discontinuous segments, inconsistent design and limited curb cuts and a lack of ADA compliant curb ramp features.
- Wampanoag Trail, Veteran's Memorial Parkway, and segments of Pawtucket Avenue have longer segments without pedestrian crossings, creating significant barriers to destinations like the East Bay Bicycle Path, schools, and parks.

Safety Conditions

- In comparison to other Rhode Island towns, East Providence ranked 4th highest in pedestrian crashes leading to a fatality or serious injury and 5th in both pedestrian and cyclist injury crashes.
- Pedestrian injury **crashes happen at higher rates on multilane, high-volume roads**. Highly disadvantaged areas experience higher injury crash rates than is representative of their population.

Connectivity

- The destinations that are the most difficult to access by walking, biking, or rolling are spread across the city and include several major grocery stores and all three post offices. Destinations on interior local roads, like schools, have a lower access score meaning they are generally accessible in low-stress trips.
- Pedestrian activity is well disbursed throughout the city, with higher levels of activity in the city center, Rumford and Riverside areas. Unsurprisingly, bicycle trip activity is particularly high closest to the bicycle paths where there are dedicated bicycle facilities.

Community Profile

East Providence is a city of over 47,000 people, situated between the City of Providence on the west and the Seekonk area of Massachusetts on the east. It is the fifth largest city in Rhode Island and the population has been relatively steady, lending itself to a strong base of residents to plan around for enhanced active transportation options. The city is positioned adjacent to both the Providence and Seekonk Rivers to the west, and Runnins and Ten Mile Rivers to the east, creating a geography that naturally lends itself to opportunities for walking and biking paths and recreational opportunities. The many rivers, as well as the highways along them, also create connectivity barriers to be addressed.

The demographics of the community also impact the needs and opportunities for walking and biking, such as the goal to plan active transportation infrastructure for all ages and abilities. In East Providence many residents are under 18 (16.9%), 65 or over (20.8%), or have a disability as a person under 65 (10.6%). These populations have a higher risk of more severe crash outcomes and have a higher non-driver rate than the general population.

Transportation and Commute Characteristics

East Providence has a median household income that is slightly below the state average and a poverty rate that is similar to the state average, emphasizing the importance of providing low-cost transportation options such as walking and biking. The lowest income census tracts generally overlap with high population density and non-vehicle households, such as in the Riverside area and the area encompassing the Henderson/Washington Bridges. In these communities, people are likely to benefit from improved active transportation opportunities to encourage mode-shift and associated affordability benefits. Vehicle ownership is also lower in central East Providence adjacent to the I-195 corridor, where bicycle and pedestrian improvements might benefit residents more immediately (Figure 1).

Commute mode share has changed significantly between 2019 and 2023 where the influence of the COVID-19 pandemic is apparent (Table 1. Commute Mode Change 2019-2023). Currently, the mean

East Providence Demographics

- **Language**. About 23% of the population speaks a language other than English at home, 15.5% (68%) speaks another Indo-European language other than Spanish. Census estimates do not provide a more granular interpretation of language minorities, but it is likely that those households are largely speaking Portuguese or Portuguese-based creole.
- **Race and Ethnicity.** The community is predominantly non-Hispanic White (74%), with Hispanic populations of any race making up 9% of the population. The largest racial minority populations are mixed-race individuals (10%), and those who identify as Black alone (5.5%).
- **Income.** The median household income is $79,660 (or around $45k per capita), slightly below the statewide median of $86,372.
- **Poverty.** Around 10.8% of people in East Providence are in poverty, similar to the statewide rate, and less than the national rate of 12.5%.

travel time to work is 23 minutes. **Most workers commute alone by car** (76%), but **working from home** is now the second most common worker experience (11%) (Figure 2).

Figure 1. Households in Poverty, Households without Vehicles, and Population Density in East Providence (Source: Justice 40 V3)

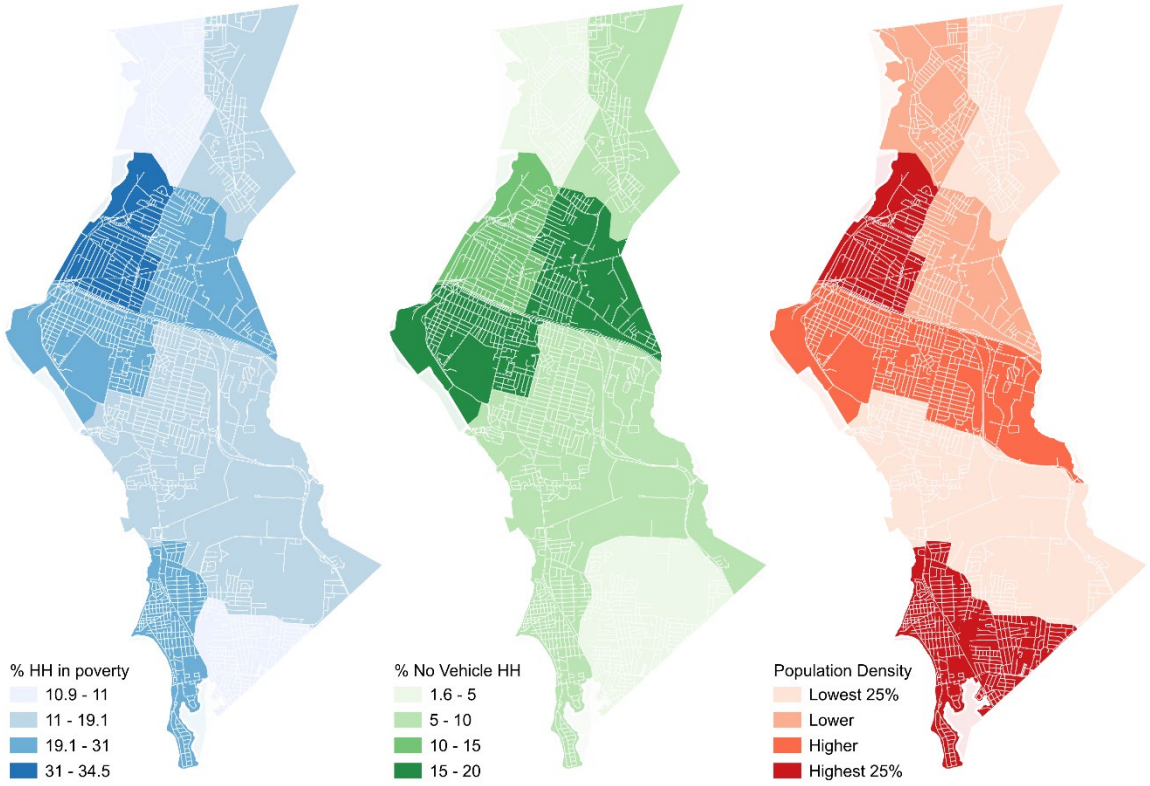
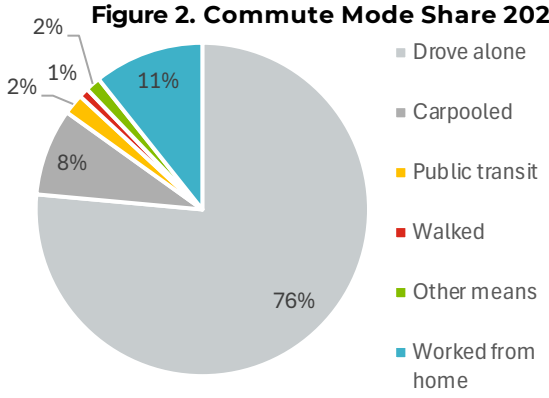


Table 1. Commute Mode Change between 2019-2023 (5yr avg)

Mode	Net Change	% Change
Drove alone	-2,395	-12%
Carpooled	281	16%
Public transit	-203	-30%
Walked	40	22%
Other means	-44	-11%
Worked from home	1,960	353%

Figure 2. Commute Mode Share 2023



Plan and Policy Context

State Context

The East Providence Bike and Pedestrian Master Plan aims to advance state and regional goals related to transportation, safety, and sustainability. In several state plans, East Providence is identified as a high-risk area due to a significant number of crashes involving vulnerable road users and a high opportunity area due to connectivity to the East Bay Bicycle Path (EBBP). Consequently, this plan's goal is to support the objectives outlined in regionally significant plans, such as the following:

- **Rhode Island Vulnerable Road User Safety Assessment (2023)** focuses on reducing fatal and serious injuries among pedestrians and cyclists.
- **Rhode Island Strategic Highway Safety Plan (2023)** aims to achieve Vision Zero goals by reducing traffic-related deaths and serious injuries by 25% by 2027 and eliminating them by 2050 through design interventions, public awareness campaigns, and regulatory changes.
- The **State Transportation Improvement Program (STIP 2022-2031)** provides federal funding for pedestrian improvements on key streets such as Warren Avenue, Pawtucket Avenue, and Newport Avenue.
- The **Rhode Island Bicycle Mobility Plan (2020)** identifies East Providence as a priority area for expanding bike infrastructure and filling gaps in the regional active transportation network by enhancing corridors that improve connectivity between the EBBP and other critical routes.
- **Moving Forward RI 2040 (2020)** outlines a long-term vision for alternative transportation systems across Rhode Island that support economic growth and equity.

Major Projects

Two ongoing projects are transforming multimodal transportation in East Providence today. This plan will look to leverage these regionally significant projects as a backbone to our proposed transportation network improvements.

- **Henderson Bridge Project (2025):** A multi-phase project transforming a freeway into a complete street with 2 miles of separated bike and pedestrian lanes,

Figure 3. Henderson Bridge

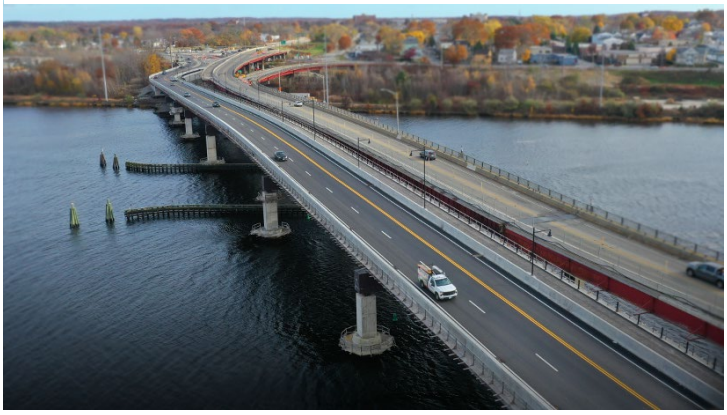
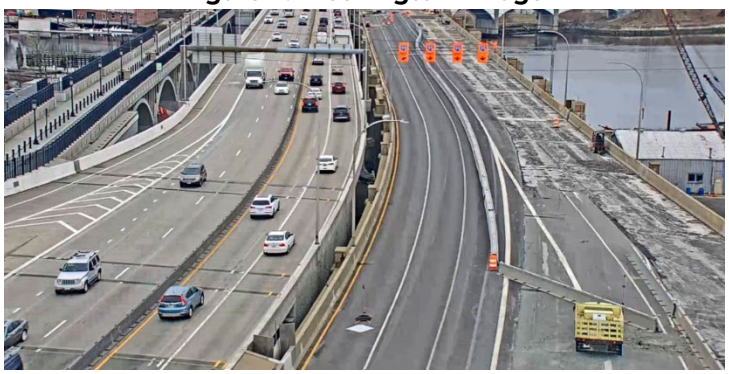


Figure 4. Washington Bridge



improving connectivity to the EBBP and Ten Mile River Greenway.[1]

- **Washington Bridge/I-195 Off-Ramp to Waterfront Drive (2024):** Designed to enhance multimodal access, integrating pedestrian and bicycle-friendly improvements in a key development corridor. This project is in the earlier stages and will take several years to complete the full replacement. [2]

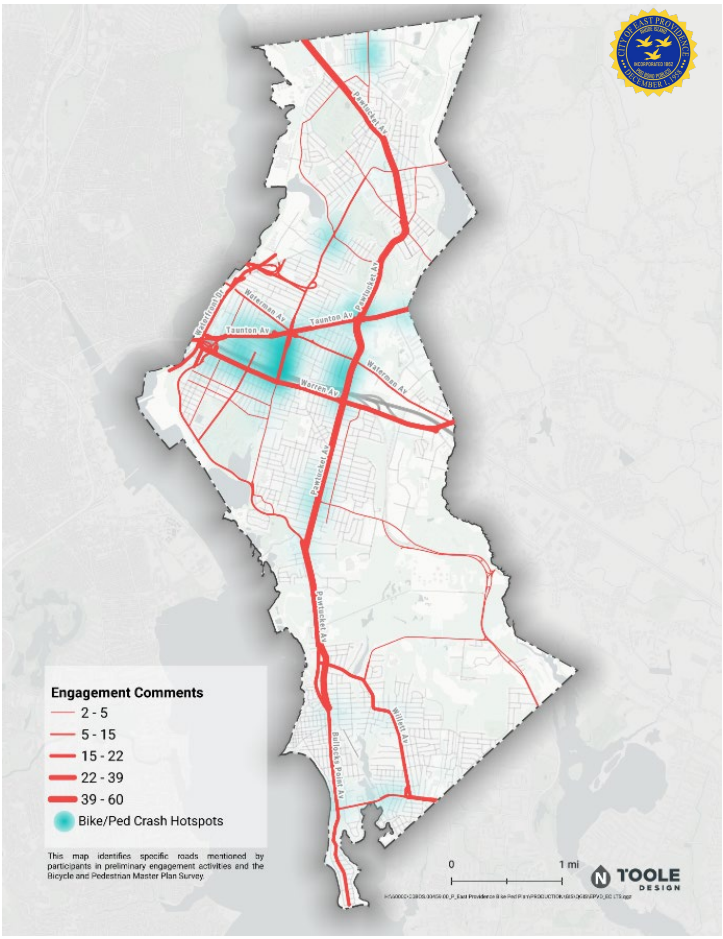
Active Transportation Facilities Today

Stakeholder Feedback

During our first phase of engagement, stakeholders had an opportunity to share about their travel behavior, barriers to walking and biking, and priorities related to active travel. We received over 185 survey comments from people who live, work, or visit East Providence. Key takeaways from the survey reveal active transportation trends in East Providence today:

- **Vehicle access.** Ninety-seven percent of respondents have access to a car. Still, almost two thirds of respondents say they walk, bike or use alternative modes of transportation regularly in East Providence with 92% of respondents hoping to increase the amount they walk, bike, or roll.
- **Trip purpose.** The highest number of respondents say their biking trips are for recreation or social activities, but over one-quarter use a bicycle for commute and errand trips.
- **Barriers.** The top barriers to walking are vehicle traffic that feels unsafe and the condition of sidewalks and crosswalks. The top barriers to biking are vehicle traffic that feels unsafe and lack of bicycle infrastructure.
- **Priorities.** Several streets came up repeatedly as priorities for improvements: Pawtucket Ave, Taunton Ave, Waterman Ave, Warren Ave, and Broadway. Taunton Ave, Warren Ave, and Pawtucket Ave in particular overlap more bicycle and pedestrian crash hot spots (Density of Stakeholder Comments & Bicycle and Pedestrian Crashes).

Figure 5. Density of Stakeholder Comments & Bicycle and Pedestrian Crashes

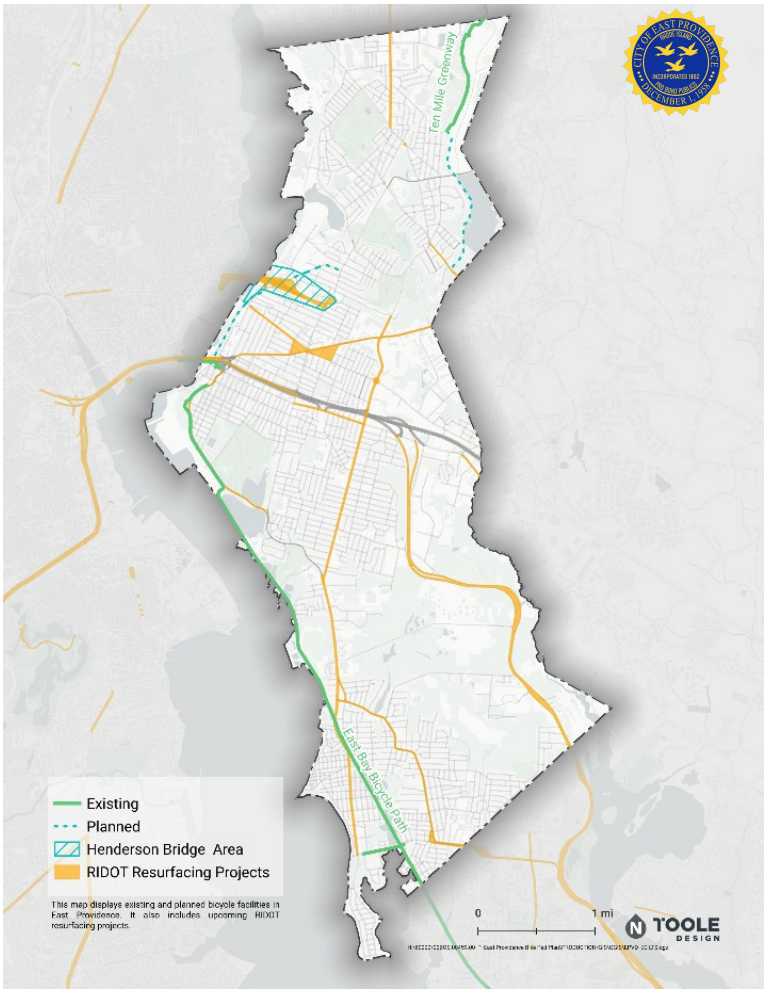


[1] https://www.dot.ri.gov/projects/Henderson/index.php
[2] https://www.dot.ri.gov/projects/WashingtonBridge2024/

Facilities for Biking

- Most bikeway facilities in East Providence today are off-street paths including the EBBP and Ten Mile Greenway which provide comfortable and continuous bike connections in the north south direction.
- Total off-street mileage is 8.24 miles and total on-street mileage is 0.31 miles of standard bike lanes.
  - » East Bay Bicycle Path: 4.93 miles
  - » Ten Mile Greenway: 2.90 miles
  - » Washington Bridge (George Redman Linear Park): 0.41 miles
  - » Crescent View Ave: 0.31 miles painted bike lane
- East Providence has 3.7 miles of planned on- and off-street bike facilities
  - » Henderson Parkway: 2 miles separated bike facility
  - » Ten Mile Greenway Extension: 1.5 miles shared use path
  - » First Ave Bikeway: 0.17 miles

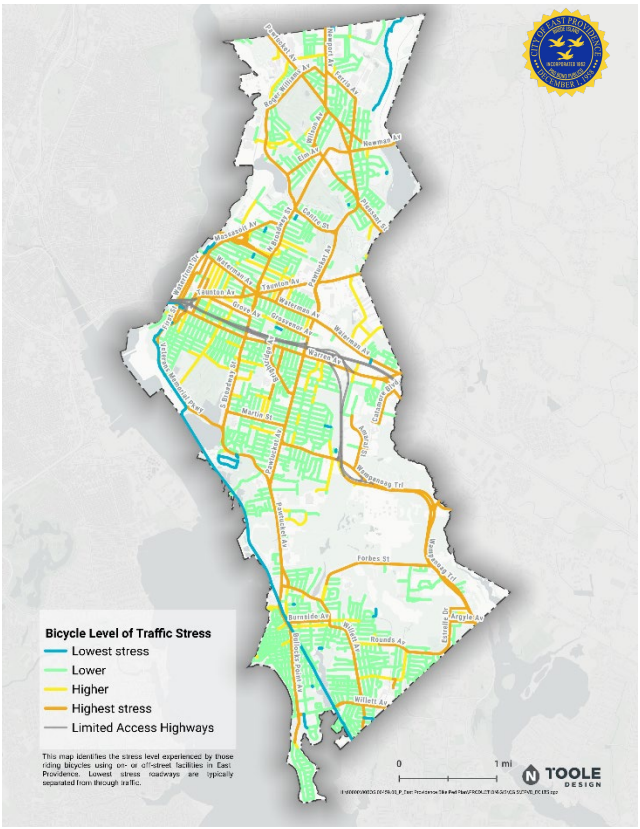
Figure 6. Existing and Planned Bicycle Facilities



Bicycle Level of Traffic Stress

- A "low-stress bikeway" feels safe and comfortable for a diverse range of bicyclists, especially those who prefer not to share the road with cars. The Level of Traffic Stress metric evaluates the comfort and navigability of streets from a bicyclist's perspective, scoring streets from 1 (low stress, high comfort) to 4 (high stress, low comfort). The results of the analysis help identify gaps in not only where infrastructure exists, but gaps in low stress connections.
- Low stress facilities in East Providence consist of existing off-street bike trails and a few local streets with minimal through traffic. East-west travel is limited by a lack of dedicated off-road facilities and a network of high stress roads that act as barriers to continuous travel. Most arterials and state-owned roads are part of the high stress network due to higher speeds and traffic volumes. Around 70% of crashes where people walking or biking were seriously injured or killed took place on or immediately adjacent to the highest stress roads.

Figure 7. Bicycle Level of Traffic Stress Network



Facilities for Walking

- Pedestrian facilities in the city are largely present on both sides of arterial and state-owned roadways. On other roadways pedestrian facilities are relatively discontinuous, particularly in neighborhoods with a primarily residential character, for example much of Rumford. Sidewalks today have a handful of systemic issues that detract from their usability, such as:
- **Obstacles.** Widespread placement of permanent utility poles, signs, trees, or other objects on sidewalks. Cars are often observed parked on sidewalks; some areas where there should be sidewalks have been designed instead for parking.
- **Gaps.** Discontinuous sidewalks, often ending abruptly, even surrounding critical facilities like schools.
- **Accessibility.** A lack of curb cuts and other design elements consistent with ADA standards.
- **Parking lots.** Wide and frequent commercial driveways, unclear division between parking lots and pedestrian paths.

Pedestrian and Access Assessment

- Together with the city, we identified seven high pedestrian activity areas for detailed pedestrian and access assessment. The areas can be described as *Six Corners, Watchemocket Square, Riverside Square, Pawtucket Ave (at Wampanoag Trail, & at Taunton Ave), Newport Ave, and Crescent Park*. We selected the areas with criteria including: 1) existing presence of residential and commercial activities, 2) proximity to destinations of interest to residents, such as the high school, 3) identification during public outreach, 4) areas targeted for pedestrian improvement in the Comprehensive Plan, and 5) the Safe Streets for All vulnerable road user High Injury Network.

In these activity areas, the sidewalk coverage ranges from less than one-third of miles in locations including Newport Ave, Crescent Park, and Pawtucket & Wampanoag to about three-quarters coverage in Six Corners and Pawtucket & Taunton. The areas with better sidewalk coverage generally align with higher transit quality and coverage. Though sidewalk coverage is relatively high in the areas reviewed, this is likely a higher proportion than typical in other parts of the city with fewer amenities.

Figure 8. Sidewalk Gap on River St

Figure 9. Missing Curb Cut Near a Senior Center on Waterman Ave

Table 2. Sidewalk and Transit Coverage in Pedestrian Activity Areas

Location	Character	Road Mileage	Sidewalk Coverage	Arterial/Collector Sidewalk Coverage	Transit Quality
Six Corners	Complex arterial intersection with an underpass	7.53	74%	92%	Higher
Watchemocket Square	Dense mixed-use area near highway ramps	8.98	68%	39%	Higher
Riverside Square	Emerging mixed-use district with a complex intersection & bike path crossings	3.34	53%	100%	Lower
Pawtucket & Wampanoag	Single story commercial units and multifamily housing	3.36	31%	77%	Medium
Pawtucket & Taunton	Sprawl, shopping plazas and thigh high school, on high-capacity arterials	5.79	75%	98%	Medium
Newport Ave	Commercial sprawl area with adjacent lower income and high-density housing	3.69	19%	82%	Lower
Crescent Park	Largely residential areas surrounding the park, some strip malls	3.92	28%	75%	Lower

Pedestrian Level of Crossing Stress

- Many intersections in East Providence would likely benefit from crossing upgrades like ADA-accessible curb ramps, high-visibility crosswalk markings, and sidewalk connectivity. The pedestrian crossing analysis allows Toole Design to determine the intersections where these upgrades would have the biggest potential for improving safety outcomes. The pedestrian crossing analysis evaluates characteristics of each approaching street segment approaching an intersection, including the motor vehicle traffic volume, motor vehicle traffic speed, number of vehicle travel lanes, and the presence of a median. Since vehicle volume and speed data in East

Providence are available on only some streets, assumptions based on street classification and default speed limits will be used to supplement existing data.

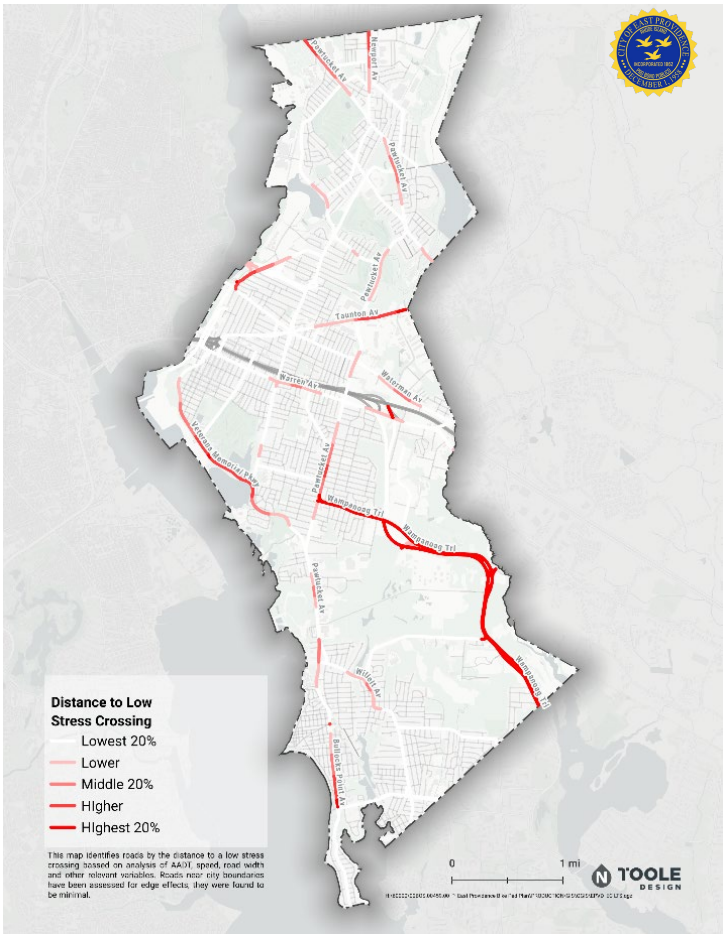
As shown in Figure 10, the following roads have segments that are very far from a low stress crossings. Many of these roads have also been identified in the High Injury Network and in engagement activities with people in East Providence have longer distances to low stress crossings.

- **Wampanoag Trail** stands out as a significant barrier to pedestrian crossings. Wampanoag Trail has no low stress pedestrian crossing points, but it does have housing units, parks, and bus stops on either side, creating demand for safe crossings. The road has a "Freeway" functional classification today. This does not fully align with local uses and access to the street and may be a hurdle to design solutions.
- Veteran's Memorial Parkway has limited low stress crossings between Crown Avenue and Mercer Street, limiting access to the EBBP.
- Segments of Pawtucket Avenue are difficult to cross, particularly near Kent Heights.
    - » There is a pedestrian crossing light at Kent Heights Elementary, but this does not reduce the crossing stress by enough to qualify the crossing as low stress.

Additional roadways with longer distances to low stress crossings include:

- Taunton Avenue
- Warren Avenue
- Bullocks Point Avenue
- Massasoit Avenue
- Newport Avenue
- Waterman Avenue
- Willet Avenue
- Roger Williams Avenue
- Pleasant Avenue
- South Broadway

Figure 10. Distance to Low Stress Crossing

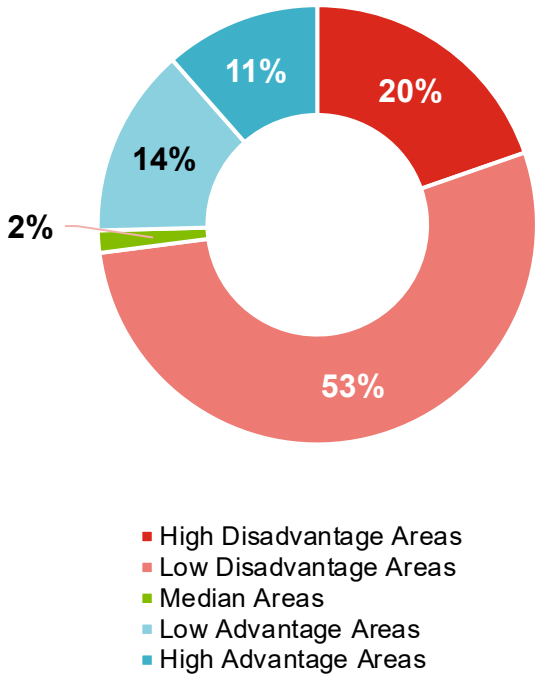


Safety Conditions

Crash Analysis

The Crash Analysis looks at broader crash trends and patterns to summarize safety data in a format that can inform network recommendations in the Final Plan. The analysis is based on five years of crash data (2019-2023) collected by enforcement agencies using the State of Rhode Island Uniform Crash Report form, paired with roadway and demographics data using spatial analysis.

Figure 11. Percent of Crashes in Disadvantaged Areas



During the five-year period from 2019 to 2023, there were a total of **140 crashes involving cyclists and pedestrians** in East Providence (62 crashes and 78 crashes respectively). Of the total crashes, 122 (around 87%) led to cyclist/pedestrian injuries, with 19 crashes leading to fatalities and/or serious injuries. There were 5 crashes resulting in the death of a person walking. The below section is a more detailed breakdown of trends to help identify proposed bicycle and pedestrian improvements in the future.

- **State ranking.** In comparison to the rest of the state, East Providence ranked 5th highest municipality in both pedestrian and bicycle crashes that resulted in injury.
- **Lighting.** A higher proportion of VRU crashes that are serious take place in dark conditions (43%), than all injury crashes (24%).
- **Weather.** Most crashes take place in *Clear* conditions. A higher proportion of serious injury crashes occur during *Rainy* conditions than all injury crashes.
- **Time and Seasonality.** Bicycle injury crashes are most common in the *summer*. Pedestrian injury crashes are most common in the *winter*. Both bicycle and pedestrian injury crashes happen most often between *12-3PM*.
- **Contributing factors.** Crashes involving people walking and biking are most frequently marked as involving an *unrestrained* person, this seems to be referring to the person walking or biking and not a person in a car. *Young drivers* are involved in 16% of serious crashes. *Senior drivers* are involved in 11% serious crashes.
- **Disadvantaged Areas.** Most crashes take place in areas that are described as disadvantaged. Around 9% of East Providence's population lives in *highly disadvantaged areas*, but 20% of injury crashes involving people walking or biking take place here.

Road Type

- Crashes most often take place on local roads that have low or moderate volumes and generally two lanes. There are disproportionately high rates of crashes that take place on multilane roads, roads owned by the state, and roads with high traffic volumes. Often these characteristics represent the same roads, high speed arterials.

Lanes & Volume

- Injury crashes most often take place on two lane roads with a low to moderate traffic volume.
- Pedestrian injury crashes disproportionately take place on high-volume multi-lane roads.

Jurisdiction

- Crashes involving people walking or biking are most common on locally owned roads
- The crash rate per mile is higher for both pedestrian and bicycle crashes on state owned roads.

Safety Near Schools

There are 13 total schools in East Providence. One high school, two junior high schools, 8 public elementary schools and 2 private elementary schools (Figure 15). The number of crashes involving a pedestrian or bicyclist happening within a 5-, 10-, and 15-minute walk from each school were summarized and the schools ranked (Table 3). Crashes close to schools were weighted higher than more distant crashes, so the schools with the highest number of crashes within 15 minutes might not be ranked above a school with fewer, closer crashes. The analysis

Figure 12. Injury Crashes by Road Type

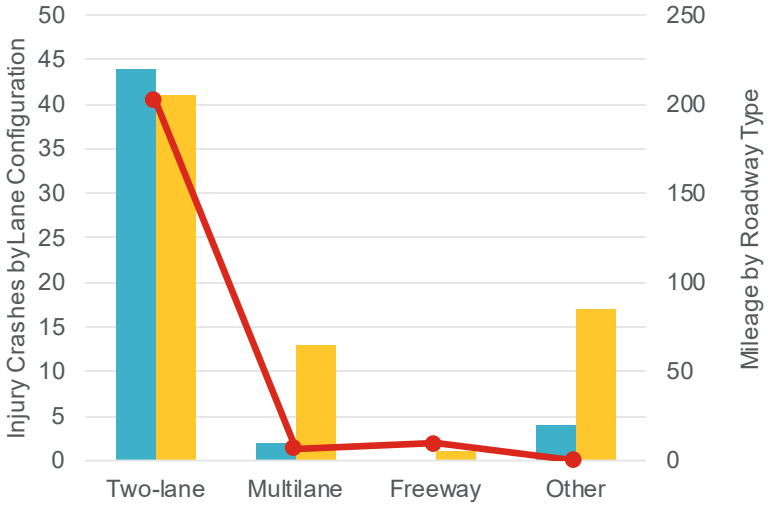


Figure 13. Injury Crashes by Jurisdiction

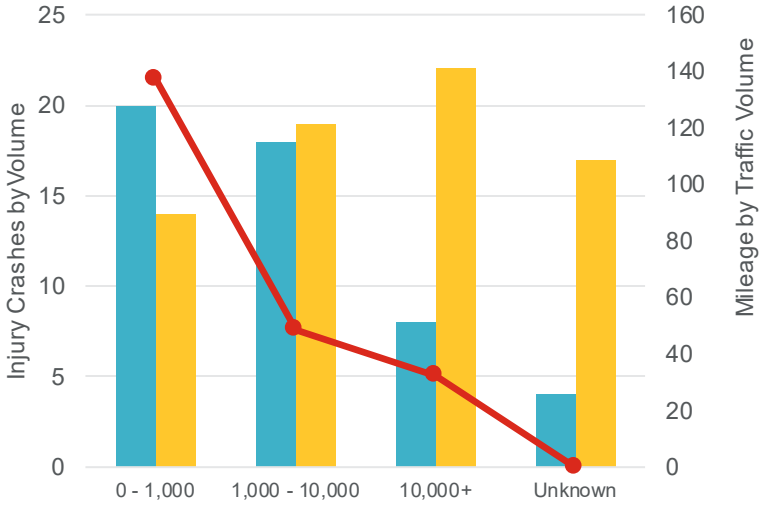
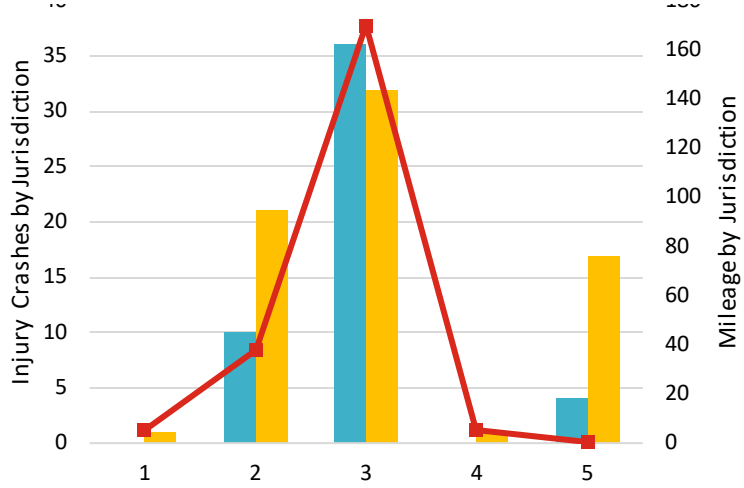


Figure 14. Injury Crashes by Volume



revealed the schools with the highest and lowest density of crashes.

- Ocean State Montessori had the highest number of crashes within a 5- and 10-minute walk, likely due to its location between Broadway, I-195, and Taunton Ave.
- **Emma G Whiteknact Elementary** has the highest total number of crashes within a 15-minute walk.
- Alice M Waddington had the lowest number of crashes within a 15-min walk, more closer crashes.
- The Wolf School, James RD Oldman Elementary, and Riverside Junior High historically have relatively low crashes. All are located on lower speed, interior, residential roads.
- Some schools, such as Hennessey and Silver Spring Elementary, have adjacent fields or playgrounds without comprehensive sidewalk coverage and protected crossings.
- Crashes around schools should be considered when completing the first round of priority sidewalk projects. Sidewalks will be prioritized around schools.

Table 3. School Crash Ranking

Name	Score
Ocean State Montessori	42
Emma G Whiteknact	43
Kent Heights	13
Agnes B Hennessey	23
E Providence High	25
Orlo Avenue	29
Alice M Waddington	5
Silver Spring	12
Edward R Martin	8
Myron J Francis	8
The Wolf School	6
James R D Oldham	3
Riverside	4

High Injury Network

The high injury/risk network is a product of the Rhode Island Public Transit Authority's recent Safe Streets for All project. The network represents locations that are priorities for both reactive and proactive safety improvements. Within the city, the HIN includes a mix of roadways that are low to high volume. Broadway is almost entirely on the HIN in the city and is a higher volume street, requiring a different set of improvements such as a higher protection bike facility and wider sidewalks potentially. The HIN also includes some lower volume neighborhood connections, that would likely require treatments more appropriate for local roads like traffic calming.

Figure 16. Injury Crashes Around Youth Destinations

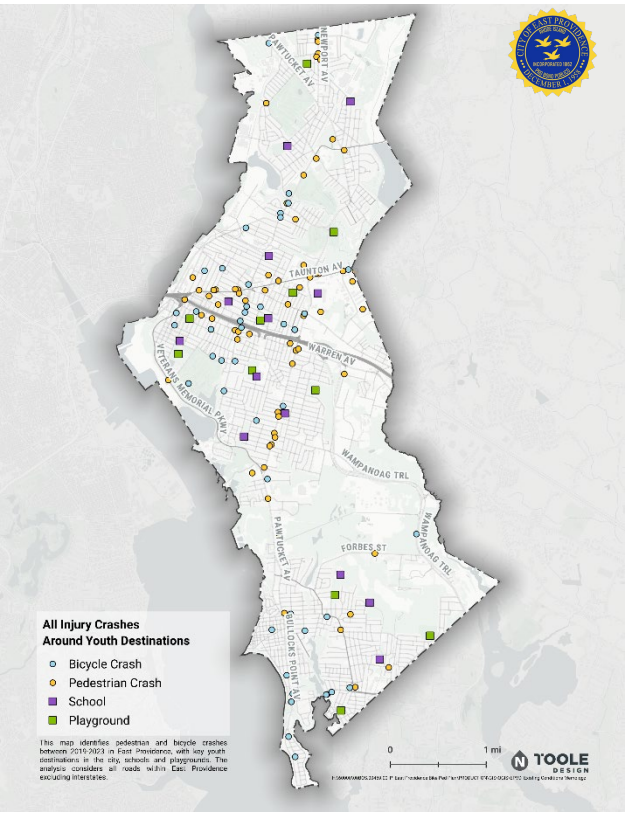
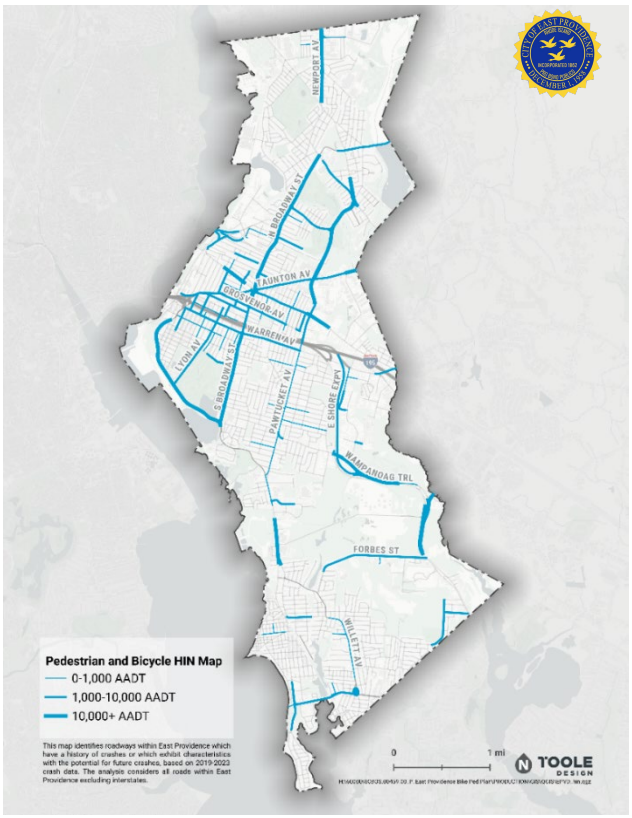


Figure 15. Pedestrian and Bicycle High Injury/Risk



Connectivity

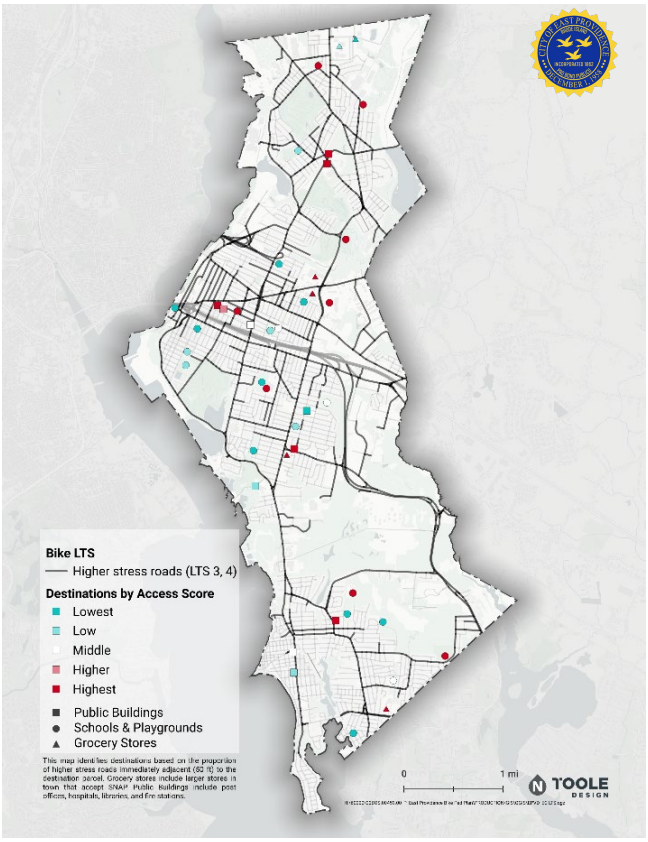
Barriers Analysis

This analysis evaluates connectivity to key destinations and shows whether destinations such as schools, playgrounds, public buildings, and grocery stores can be reached on the low-stress travel network. In other words, the low-stress network is only one aspect of accessibility to destinations. If the low-stress network does not connect to any destinations, it is of limited value for people bicycling.

Destinations in East Providence were scored by the proportion of immediately adjacent roads that are higher stress (scoring a 3 or 4 on the bicycle LTS) referred to as the stress score. The destinations that emerge as the most difficult to access are spread across the city, including several major grocery stores and all three post offices. Destinations on interior local roads, like schools, have a lower access score meaning they are generally accessible in low-stress trips.

- The analysis shows that **Pawtucket Avenue** has several frequented destinations that are difficult to access.
- Martin Middle School, East Providence High, Ocean State Montessori School, and Riverside Middle School all have a high proportion of adjacent roads with high stress levels.
- The **Save A Lot, and both Shaw's** grocery stores are in the highest stress score category.
- All three post offices, and the Rumford Fire Station are in the highest stress score category.

Figure 17. Destinations by Access Score



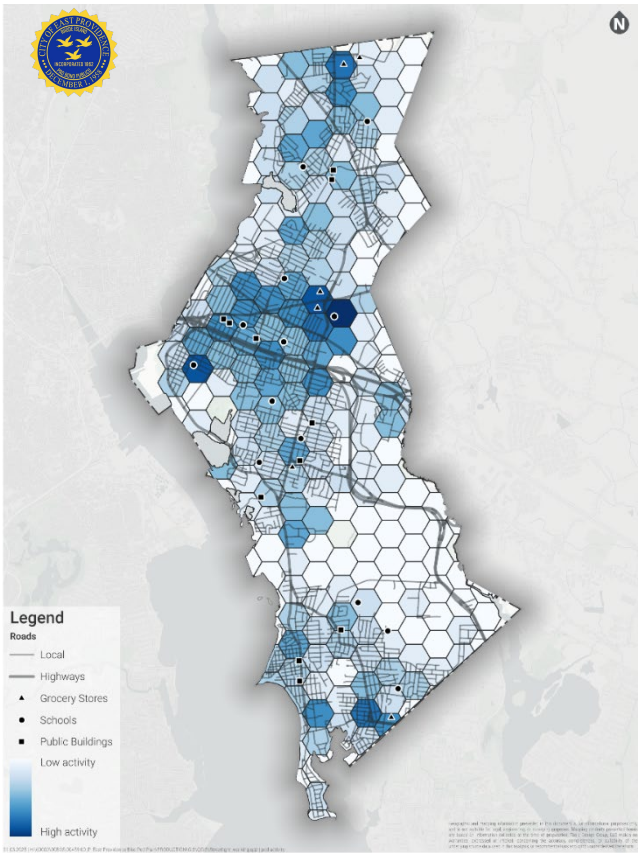
Travel Trends

Bicycle and pedestrian trip data was retrieved from Streetlight, and represents trips taken between April and October 2021. Streetlight data is based on anonymized and aggregated data from devices like smartphones, so data is generally accurate but should be considered as general trends rather than definitive statistics.

Pedestrian Activity

This analysis considers pedestrian trip activity, identifying how many people on average pass through each hexagonal grid cell every day. Generally, **Pedestrian activity is well disbursed throughout the city, with higher levels of activity in the city center, Rumford and Riverside areas.** Additional trends worth noting include:

Figure 18. Pedestrian Trip Activity, 2021



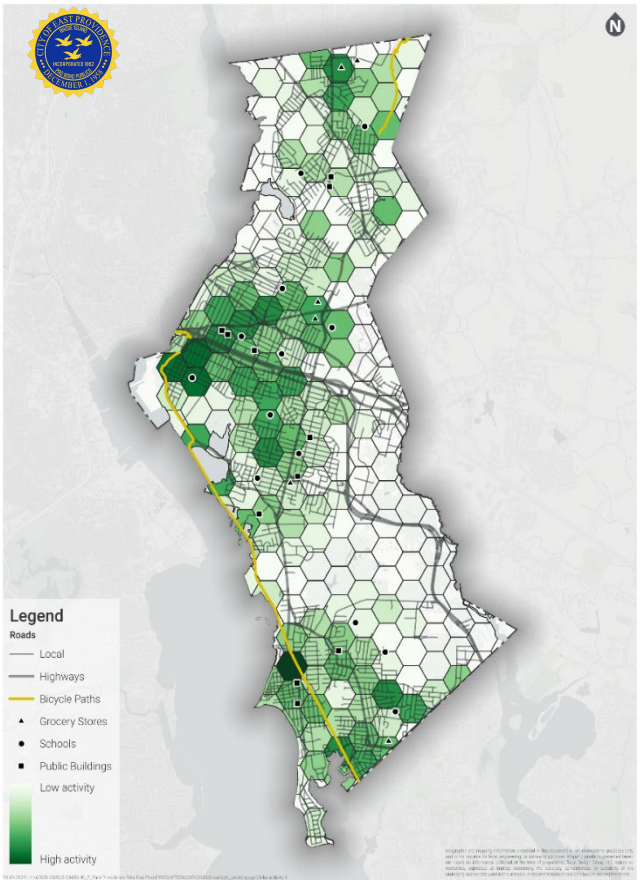
- The area around East Providence High School experiences the highest amount of pedestrian activity.
- The cell in Watchemoket Square containing the Agnes B Hennessey Elementary School experiences the second highest level of pedestrian activity. This is also where Pierce Memorial Stadium and Pierce Memorial Field are co-located and activities such as East Providence Little League Baseball, and 5K and half marathon running events take place annually.
- Pedestrian activity is most concentrated in the city center, on the streets that make up Six Corners.
- The Willet Avenue commercial area where a local pizza restaurant (Town Pizza) and a Dunkin Donuts are located experiences high levels of pedestrian activity.
- The northernmost Newport Avenue commercial area, where a high number of businesses are located experiences high levels of pedestrian activity. This grid cell is also the site of multiple crashes involving people walking or riding bicycles.

Bicycle Activity

This analysis considers bicycle trip activity, identifying how many people on average pass through each hexagonal grid cell every day. Unsurprisingly, **bicycle trip activity is particularly high closest to the bicycle paths where there are dedicated bicycle facilities**. Additional bicycle trends worth noting include:

- Bicycle activity is highest surrounding entrances to the **EBBP**.
- The area containing the **Riverside entrance to the EBBP** has the highest levels of bicyclist activities.
- There are high levels of bicycle activity in the cell containing the **First Avenue gap in the EBBP** and the surrounding roads in Watchemoket Square.
- People riding bicycles might be **avoiding the Pawtucket Avenue corridor**, since the data shows higher activity on interior residential roads.
- Riverside bicycle riders likely use the **EBBP** to travel to central East Providence **over Pawtucket Avenue**.
- There are high levels of activity in the cells containing **residential roads to the north and south of I-195**. Trek Bicycle East Providence is located within this grid of bike activity along Warren Avenue. This bike shop previously was East Providence Cycle and was in business locally as such for 45 years.
- The northernmost **Newport Avenue** commercial area, where a high number of businesses are located, experiences high levels of bicycle activity. This area is the site of multiple crashes involving people walking or riding bicycles.

Figure 19. Bicycle Trip Activity, 2021

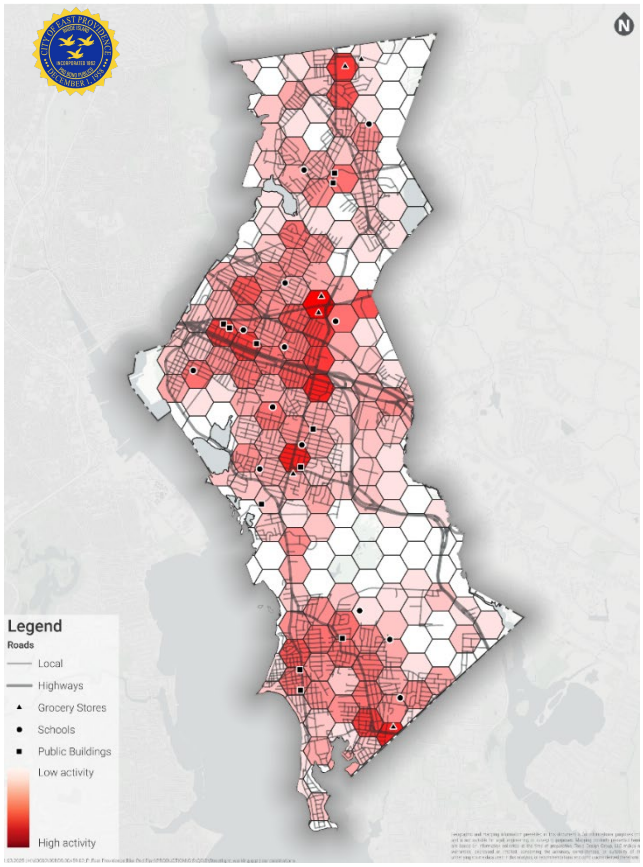


Vehicle Destinations

This analysis shows the volume of vehicle trips that both start and end in City boundaries. The data was retrieved from Streetlight, and represents trips taken between April and May 2024 and September and October 2024. Generally, where the map has darker red colors is where more trips are ending. Trips originating outside of East Providence were not considered in this analysis, because Massachusetts data was not available, and that data accounts for much of the trip activity given the shared state border.

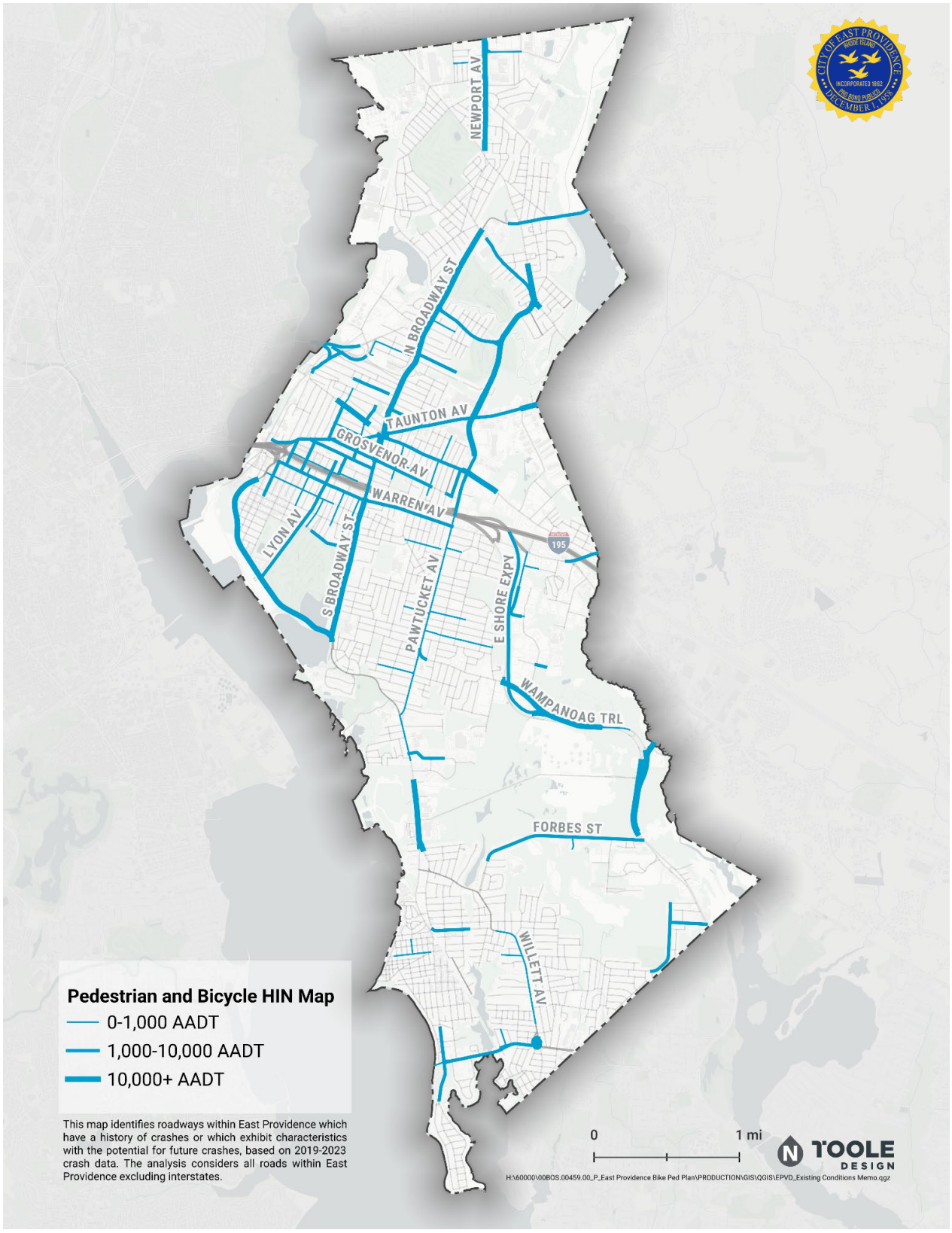
All modes in the travel trends analysis are visualized on a scale reflecting the highest and lowest levels within each mode. Low levels of vehicle activity are much higher than the highest level of bicycle and pedestrian activity due to existing mode share. The vehicle trip analysis finds the following trends:

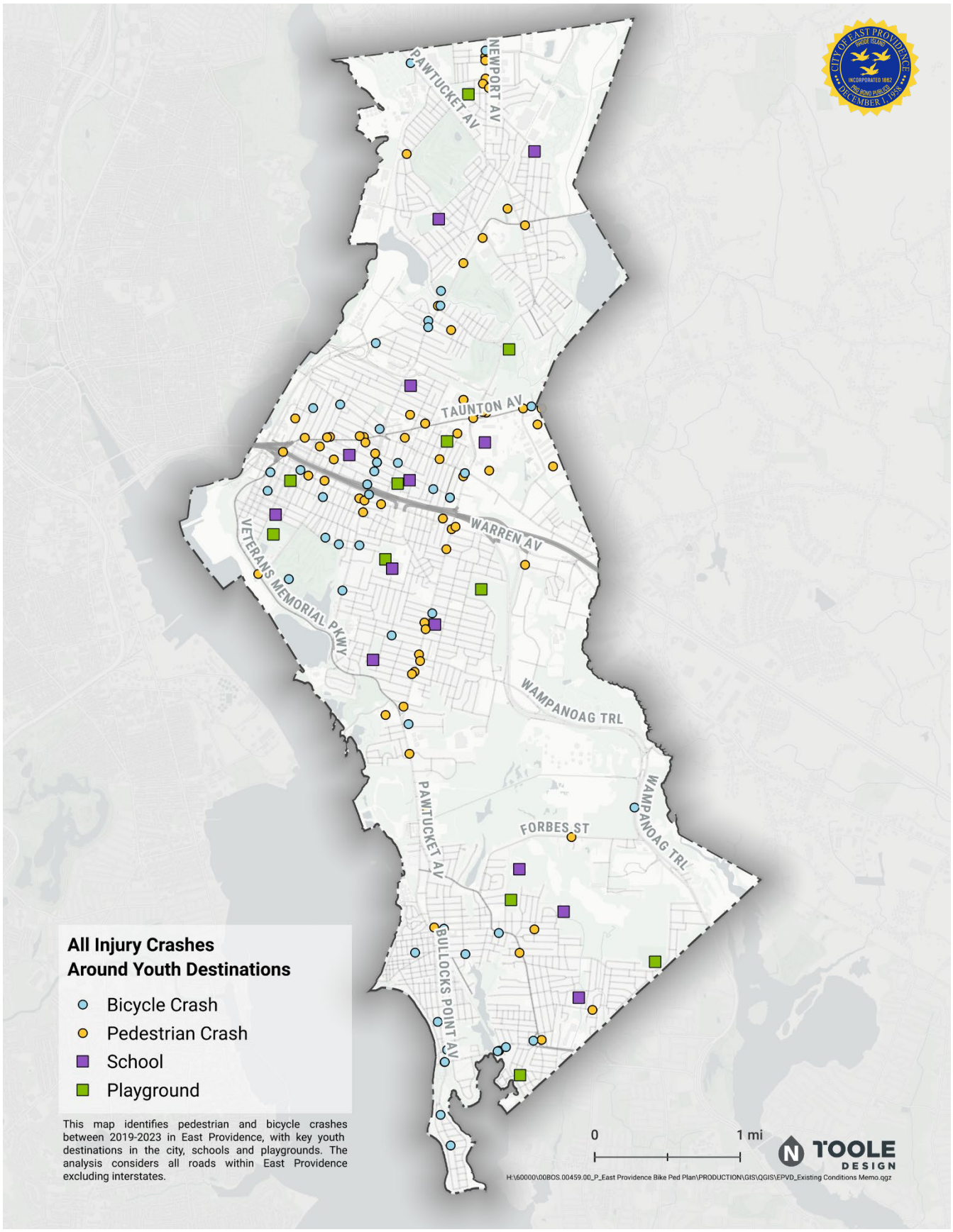
Figure 20. Bicycle Trip Activity, 2021

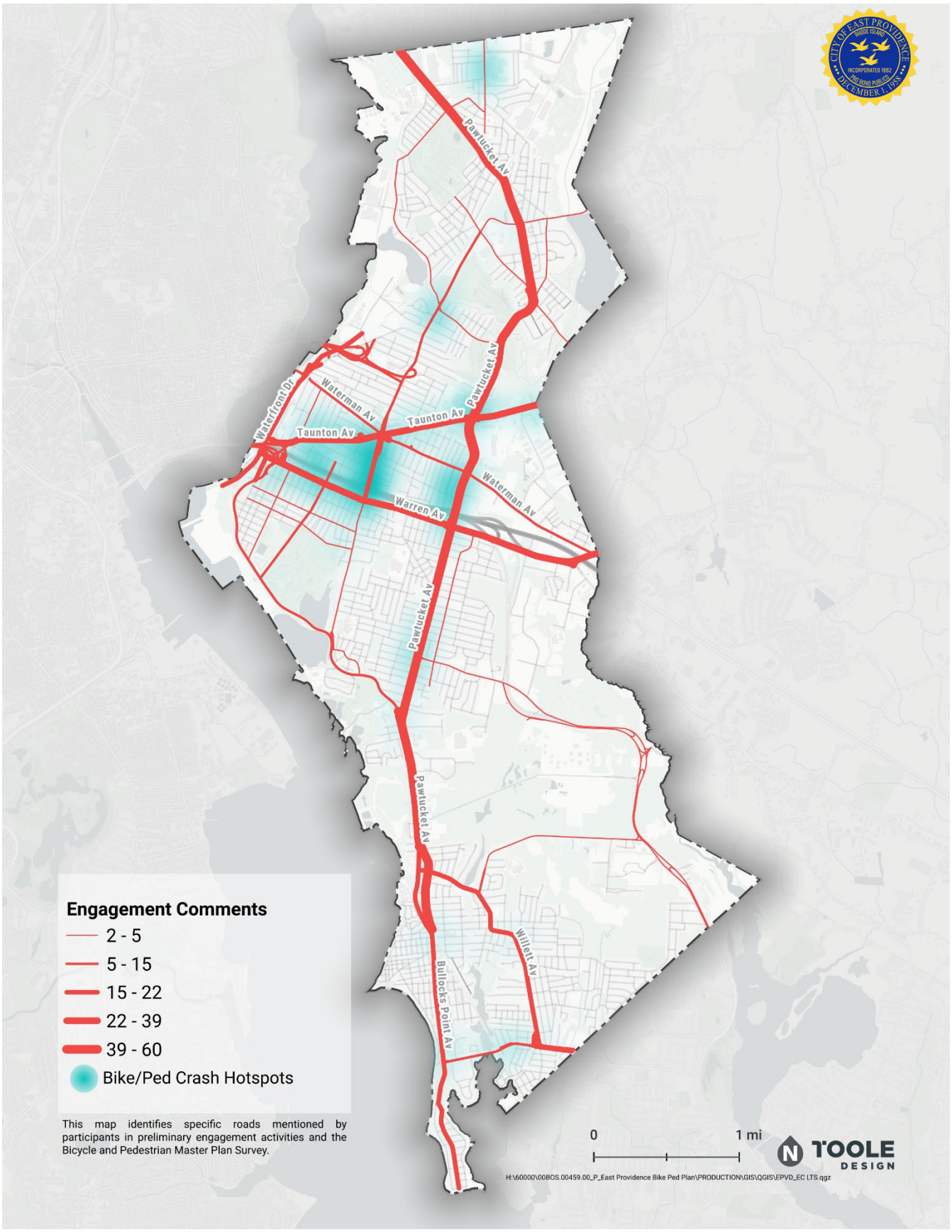


- The area containing the **Stop and Shop** on Taunton Avenue is the most common destination for vehicle trips originating in East Providence.
- **Central East Providence**, along Pawtucket Avenue and Warren Avenue, are common vehicle destinations.
- Vehicle destination cells frequently contain a **grocery store or other commercial activity**, such as the cell containing the Aldi on Newport Avenue, and the cell containing the Shaw's on Willett Avenue.
- **Armington Corner**, near the beginning of Wampanoag Trail, is a common destination for vehicles.
- The northernmost **Newport Avenue** commercial area, where a high number of businesses are located, is a common destination for vehicle trips.

APPENDIX B: HIGH RESOLUTION MAPS




PAWTUCKET AV
NEWPORT AV
TAUNTON AV
WARREN AV
VETERANS MEMORIAL PKWY
WAMPANOAG TRL
PAWTUCKET AV
FORBES ST
WAMPANOAG TRL
BULLOCKS POINT AV
All Injury Crashes
Around Youth Destinations
Bicycle Crash
Pedestrian Crash
School
Playground
This map identifies pedestrian and bicycle crashes between 2019-2023 in East Providence, with key youth destinations in the city, schools and playgrounds. The analysis considers all roads within East Providence excluding interstates.
0
1 mi
TOOLE DESIGN
H:\60000\00BOS.00459.00_P_East Providence Bike Ped Plan\PRODUCTION\GIS\QGIS\EPVD_Existing Conditions Memo.qgz


Pawtucket Av
Waterfront Dr
Waterman Av
Taunton Av
Taunton Av
Pawtucket Av
Waterman Av
Warren Av
Pawtucket Av
Pawtucket Av
Willett Av
Bullocks Point Av
Engagement Comments
2 - 5
5 - 15
15 - 22
22 - 39
39 - 60
Bike/Ped Crash Hotspots
This map identifies specific roads mentioned by participants in preliminary engagement activities and the Bicycle and Pedestrian Master Plan Survey.
0
1 mi
TOOLE DESIGN
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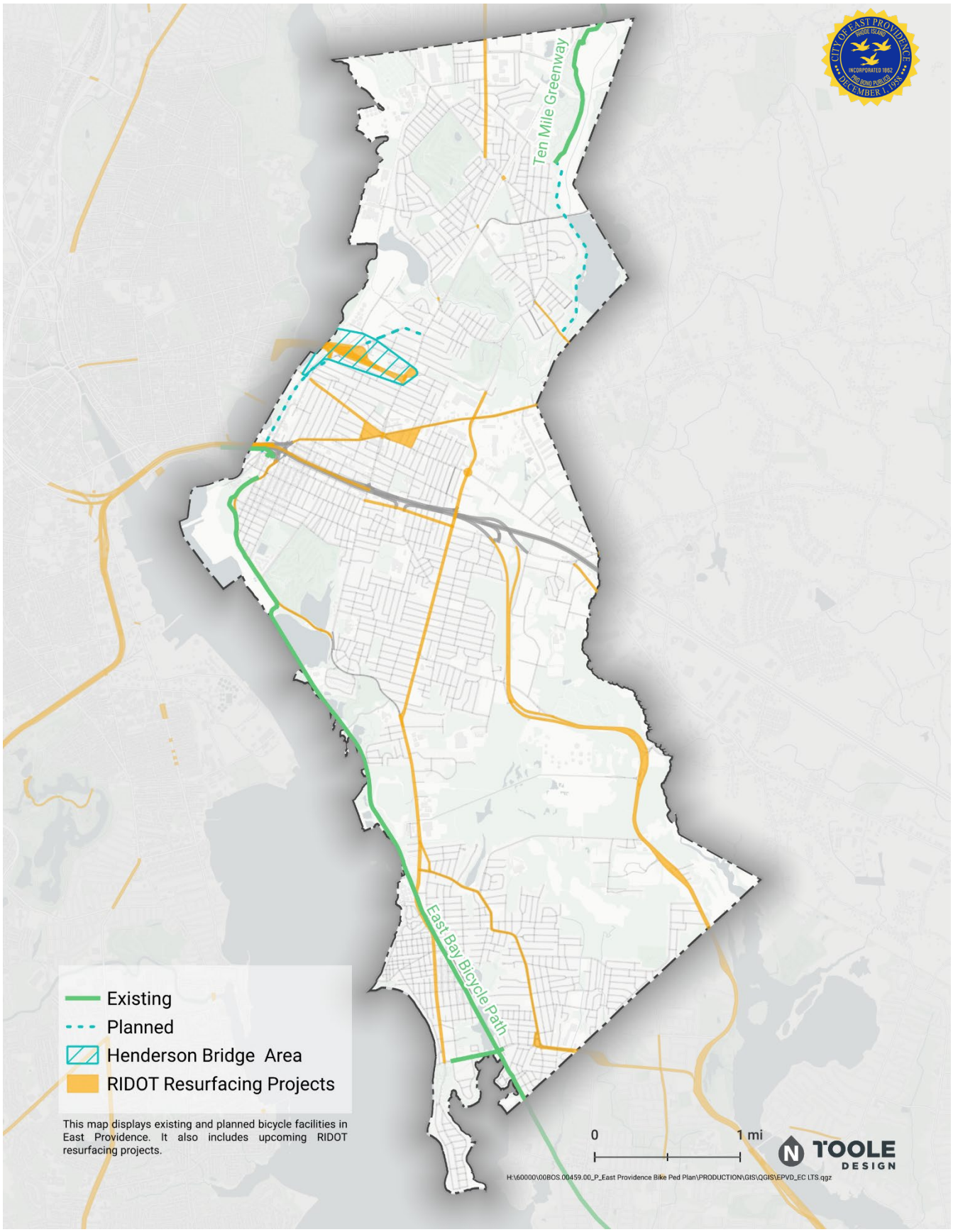
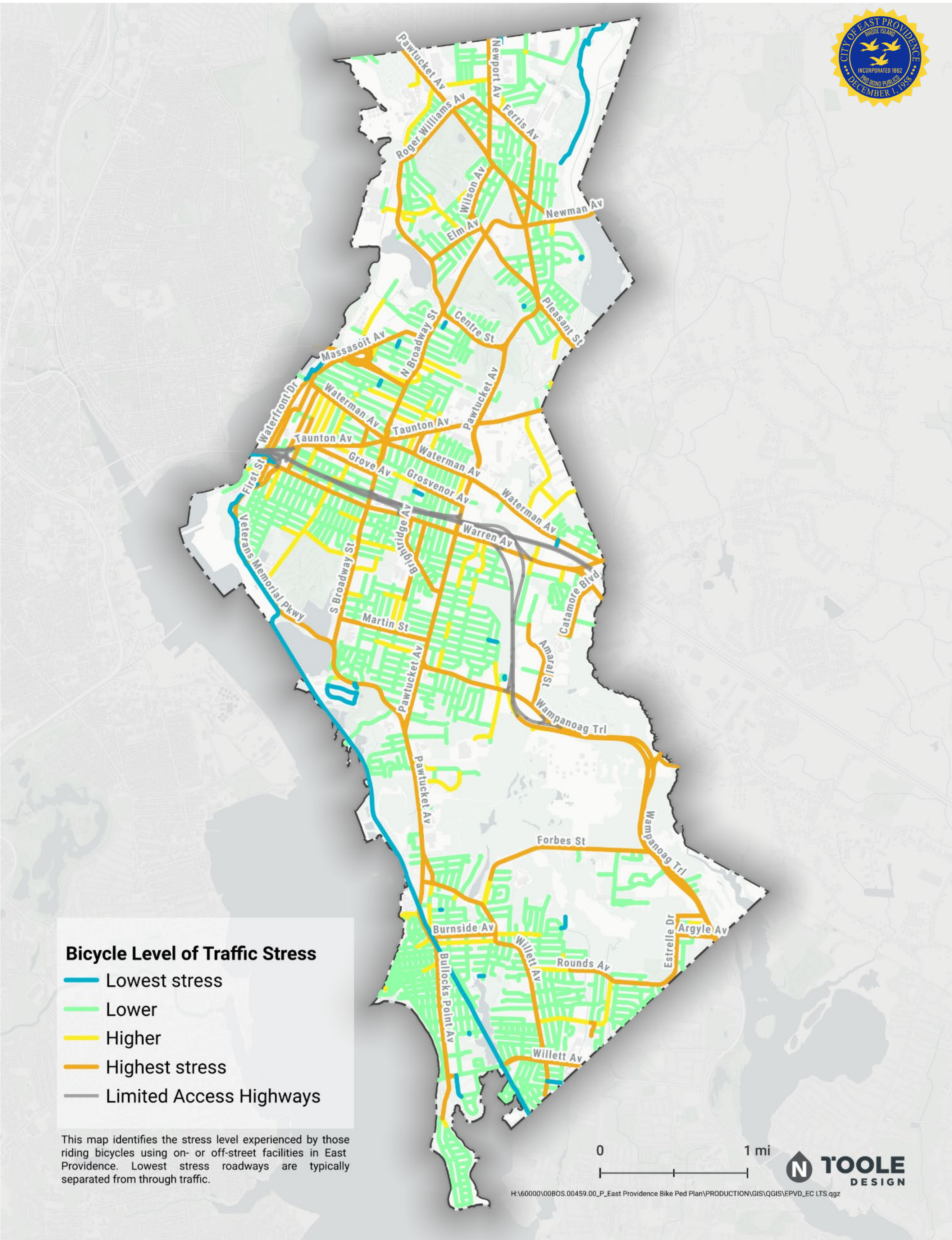
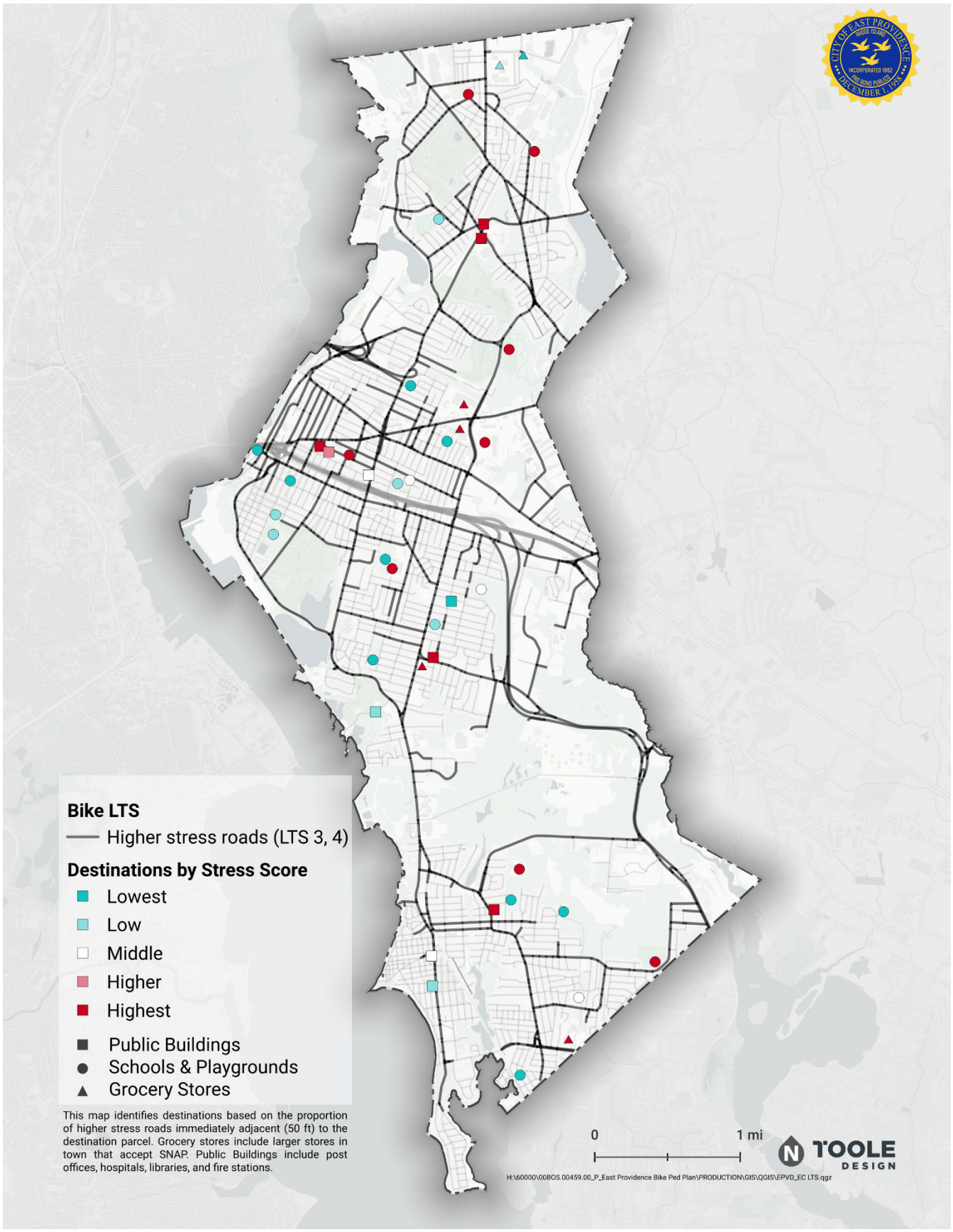
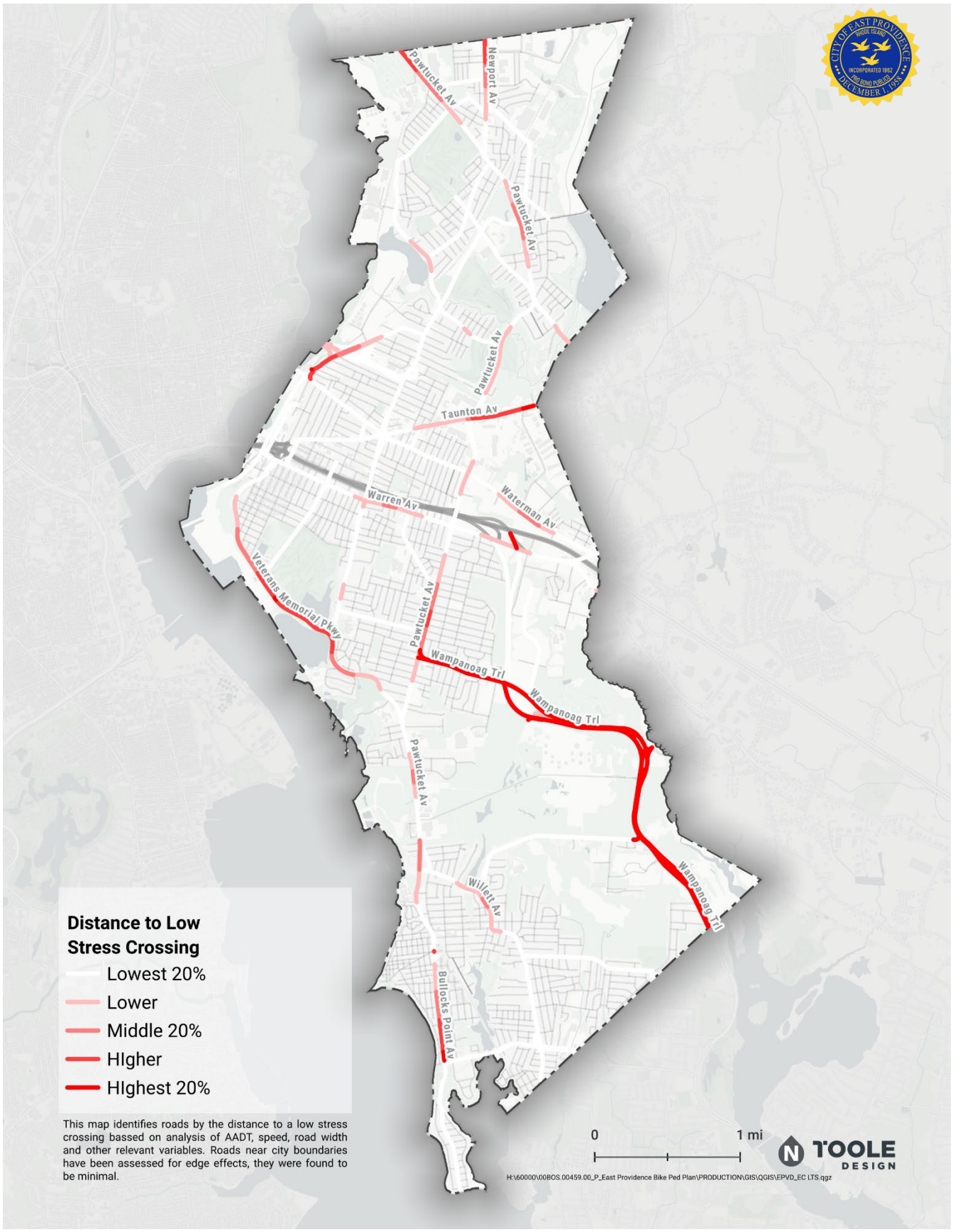

Ten Mile Greenway
East Bay Bicycle Path
Existing
Planned
Henderson Bridge Area
RIDOT Resurfacing Projects
This map displays existing and planned bicycle facilities in East Providence. It also includes upcoming RIDOT resurfacing projects.
0
1 mi
TOOLE DESIGN
H:\60000\00BOS.00459.00_P_East Providence Bike Ped Plan\PRODUCTION\GIS\QGIS\EPVD_EC LTS.qgz



This map identifies the stress level experienced by those riding bicycles using on- or off-street facilities in East Providence. Lowest stress roadways are typically separated from through traffic.


Bike LTS
Higher stress roads (LTS 3, 4)
Destinations by Stress Score
Lowest
Low
Middle
Higher
Highest
Public Buildings
Schools & Playgrounds
Grocery Stores
This map identifies destinations based on the proportion of higher stress roads immediately adjacent (50 ft) to the destination parcel. Grocery stores include larger stores in town that accept SNAP. Public Buildings include post offices, hospitals, libraries, and fire stations.
0
1 mi
TOOLE DESIGN
H:\60000\00BOS.00459.00_P_East Providence Bike Ped Plan\PRODUCTION\GIS\QGIS\EPVD_EC LTS.qgz


Pawtucket Av
Newport Av
Pawtucket Av
Pawtucket Av
Taunton Av
Warren Av
Waterman Av
Veterans Memorial Pkwy
Pawtucket Av
Wampanoag Trl
Wampanoag Trl
Pawtucket Av
Willett Av
Wampanoag Trl
Bullocks Point Av
Distance to Low Stress Crossing
Lowest 20%
Lower
Middle 20%
HIgher
HIghest 20%
This map identifies roads by the distance to a low stress crossing bassed on analysis of AADT, speed, road width and other relevant variables. Roads near city boundaries have been assessed for edge effects, they were found to be minimal.
0
1 mi
TOOLE DESIGN
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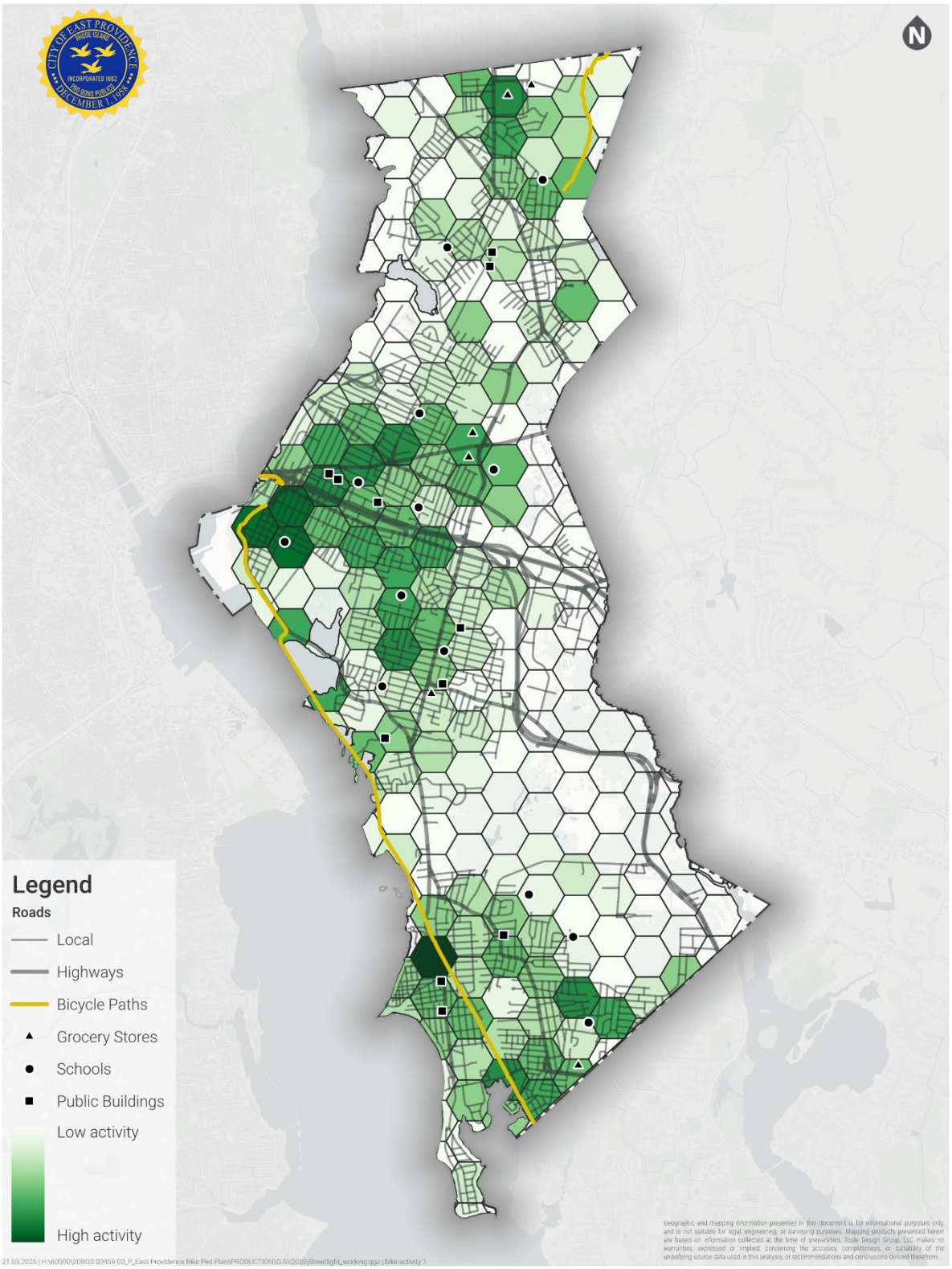
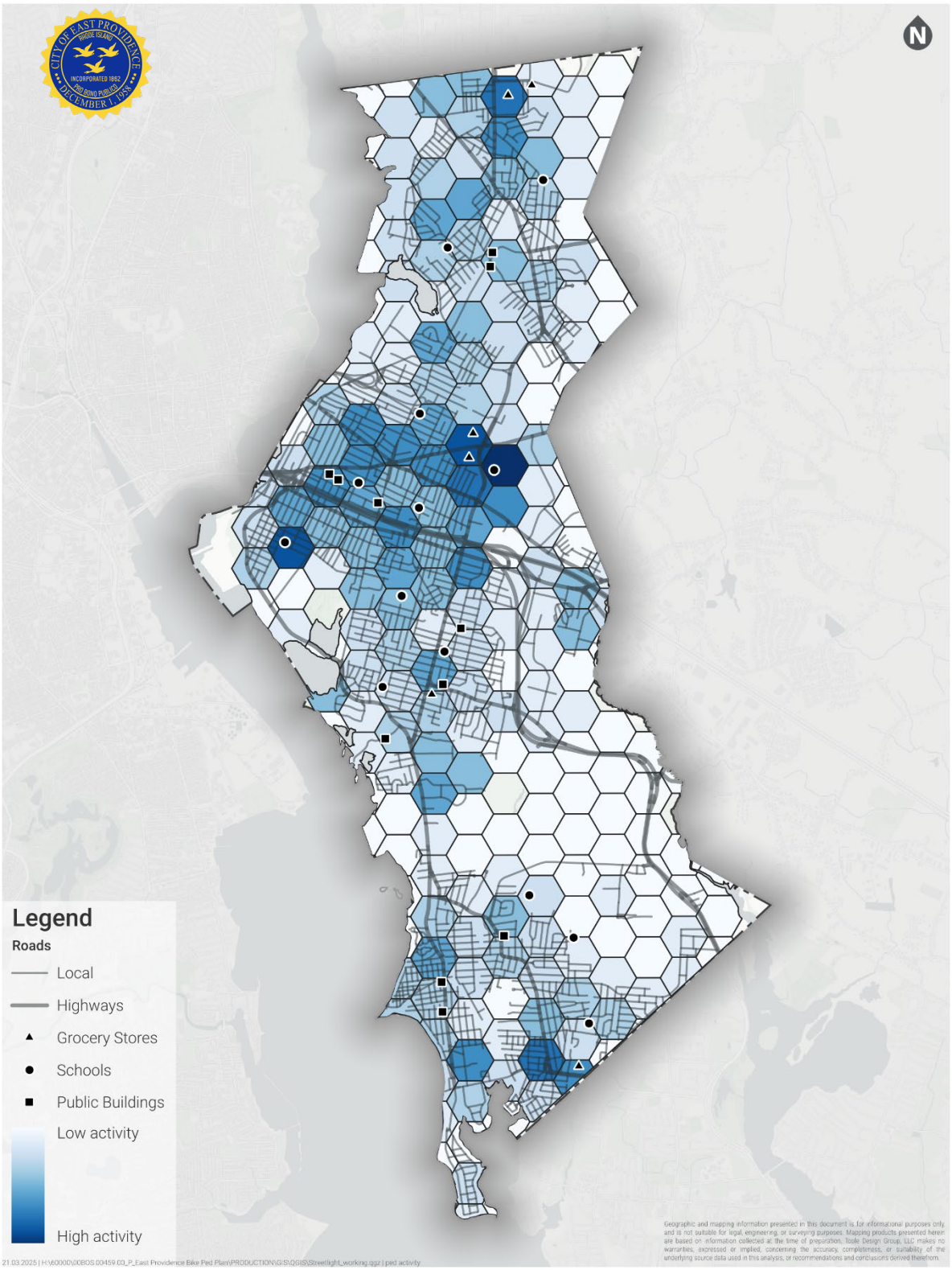
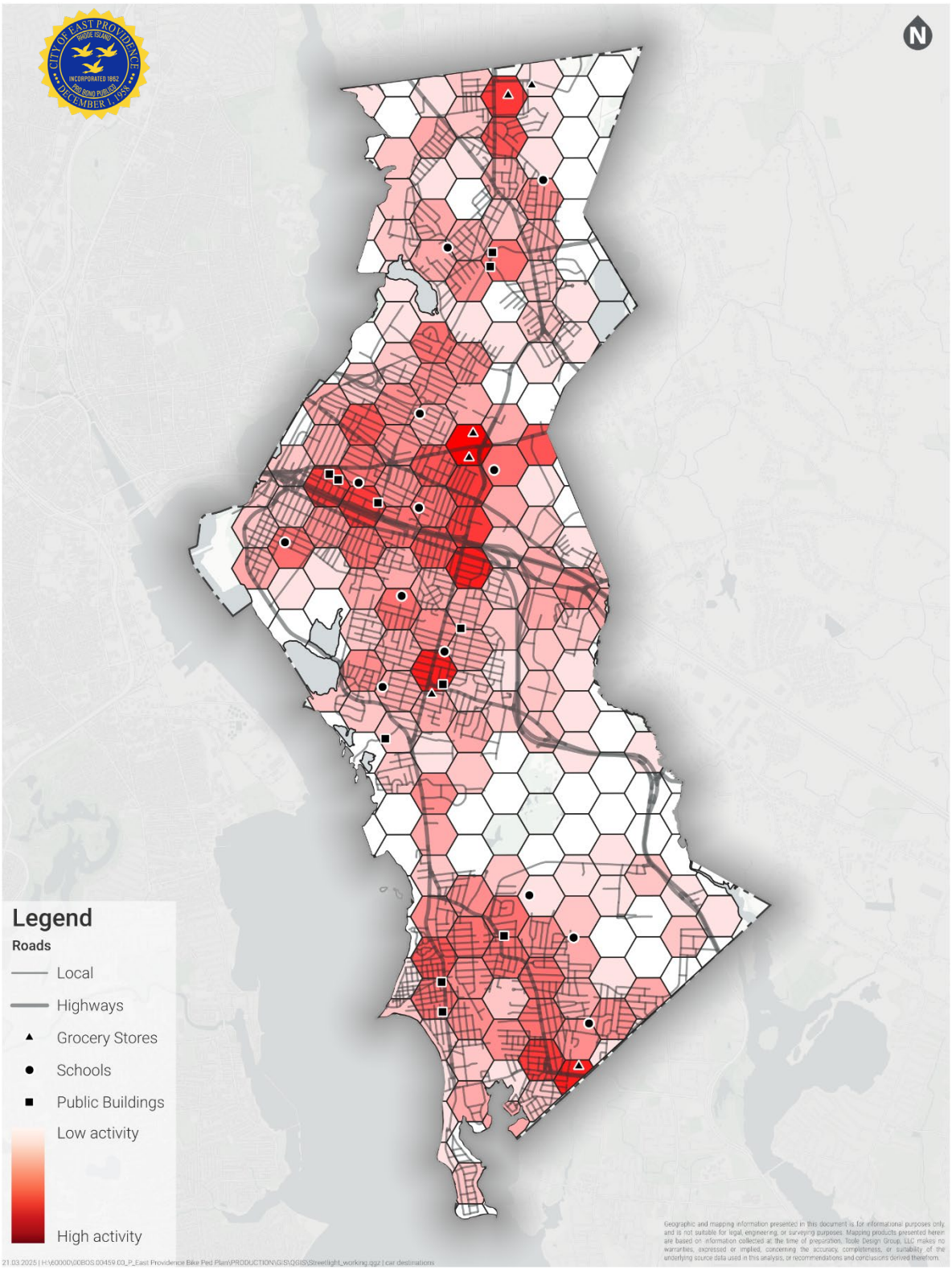
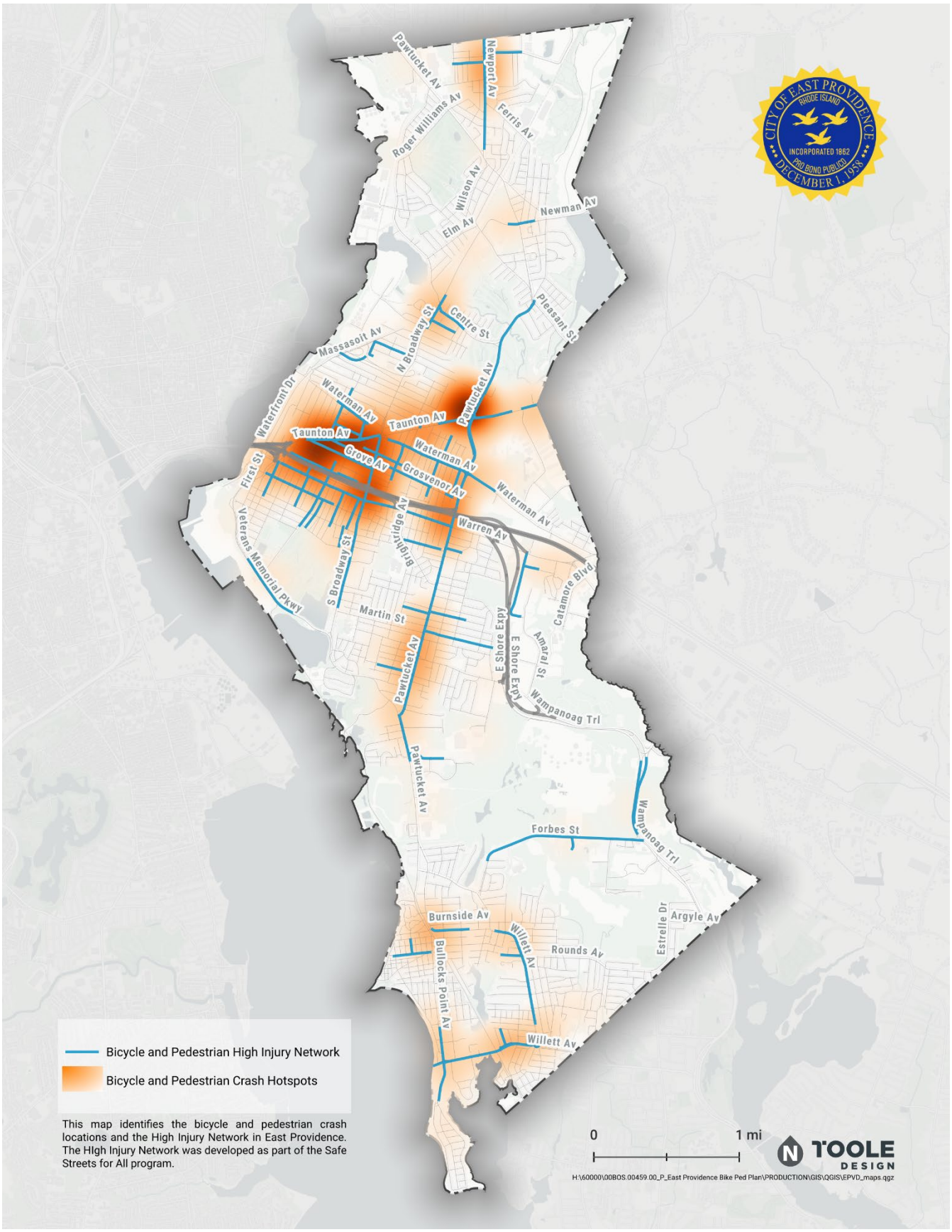

Legend
Roads
Local
Highways
Bicycle Paths
Grocery Stores
Schools
Public Buildings
Low activity
High activity
Geographic and mapping information presented in this document is for informational purposes only, and is not suitable for legal, engineering, or surveying purposes. Mapping products presented herein are based on information collected at the time of preparation. Toole Design Group, LLC makes no warranties, expressed or implied, concerning the accuracy, completeness, or suitability of the underlying source data used in this analysis, or recommendations and conclusions derived therefrom.
21.03.2025 | H:\60000\00BOS.00459.00_P_East Providence Bike Ped Plan\PRODUCTION\GIS\QGIS\Streetlight_working.qgz | bike activity 1


Legend
Roads
Local
Highways
Grocery Stores
Schools
Public Buildings
Low activity
High activity
Geographic and mapping information presented in this document is for informational purposes only, and is not suitable for legal, engineering, or surveying purposes. Mapping products presented herein are based on information collected at the time of preparation. Toole Design Group, LLC makes no warranties, expressed or implied, concerning the accuracy, completeness, or suitability of the underlying source data used in this analysis, or recommendations and conclusions derived therefrom.
21.03.2025 | H:\60000\00BOS.00459.00_P_East Providence Bike Ped Plan\PRODUCTION\GIS\QGIS\Streetlight_working.qgz | ped activity


Legend
Roads
Local
Highways
Grocery Stores
Schools
Public Buildings
Low activity
High activity
Geographic and mapping information presented in this document is for informational purposes only, and is not suitable for legal, engineering, or surveying purposes. Mapping products presented herein are based on information collected at the time of preparation. Toole Design Group, LLC makes no warranties, expressed or implied, concerning the accuracy, completeness, or suitability of the underlying source data used in this analysis, or recommendations and conclusions derived therefrom.
21.03.2025 | H:\60000\00BOS.00459.00_P_East Providence Bike Ped Plan\PRODUCTION\GIS\QGIS\Streetlight_working.qgz | car destinations


Pawtucket Av
Newport Av
Roger Williams Av
Ferris Av
Wilson Av
Elm Av
Newman Av
Pleasant St
Centre St
N Broadway St
Massasoit Av
Waterfront Dr
Waterman Av
Taunton Av
Pawtucket Av
Grove Av
Grosvenor Av
First St
Veterans Memorial Pkwy
S Broadway St
Bridgham Av
Warren Av
Martin St
Catamore Blvd
E Shore Expy
Amaral St
Wampanoag Trl
Forbes St
Burnside Av
Willett Av
Rounds Av
Estrelle Dr
Argyle Av
Bullocks Point Av
CITY OF EAST PROVIDENCE
RHODE ISLAND
INCORPORATED 1862
PRO BONO PUBLICO
DECEMBER 1, 1958
Bicycle and Pedestrian High Injury Network
Bicycle and Pedestrian Crash Hotspots
This map identifies the bicycle and pedestrian crash locations and the High Injury Network in East Providence. The HIgh Injury Network was developed as part of the Safe Streets for All program.
0
1 mi
TOOLE DESIGN
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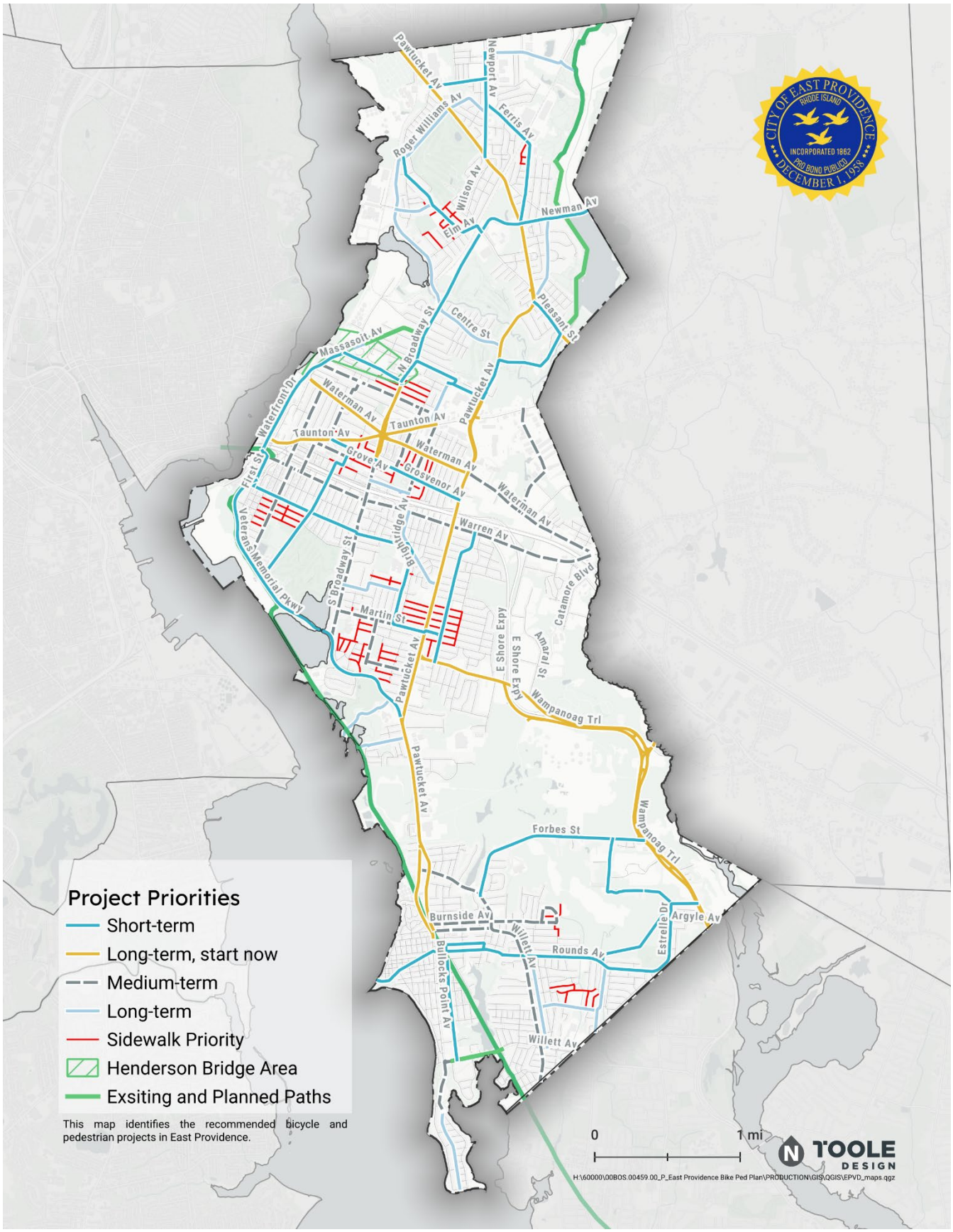
Project Priorities
Short-term
Long-term, start now
Medium-term
Long-term
Sidewalk Priority
Henderson Bridge Area
Exsiting and Planned Paths
This map identifies the recommended bicycle and pedestrian projects in East Providence.
0
1 mi
TOOLE DESIGN
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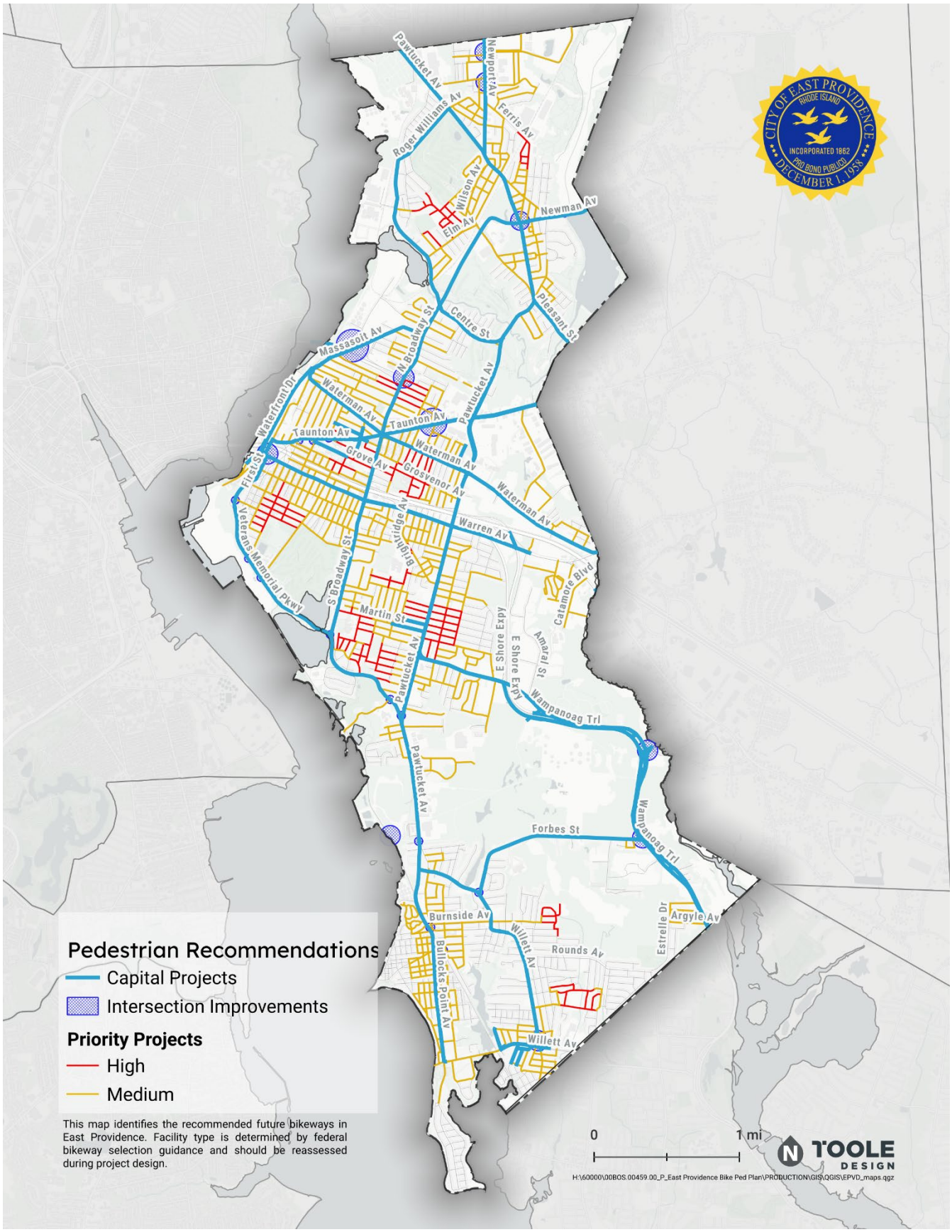
CITY OF EAST PROVIDENCE
RHODE ISLAND
INCORPORATED 1862
PRO BONO PUBLICO
DECEMBER 1, 1958
Pawtucket Av
Newport Av
Ferris Av
Roger Williams Av
Wilson Av
Elm Av
Newman Av
Pleasant St
Centre St
N Broadway St
Massasoit Av
Waterfront Dr
Waterman Av
Taunton Av
Pawtucket Av
First St
Grove Av
Grosvenor Av
Warren Av
Veterans Memorial Pkwy
S Broadway St
Martin St
Highbridge Av
Catamore Blvd
E Shore Expy
Amaral St
Wampanoag Trl
Forbes St
Burnside Av
Willett Av
Rounds Av
Estrelle Dr
Argyle Av
Bullocks Point Av


Pedestrian Recommendations
Capital Projects
Intersection Improvements
Priority Projects
High
Medium
This map identifies the recommended future bikeways in East Providence. Facility type is determined by federal bikeway selection guidance and should be reassessed during project design.
0
1 mi
TOOLE DESIGN
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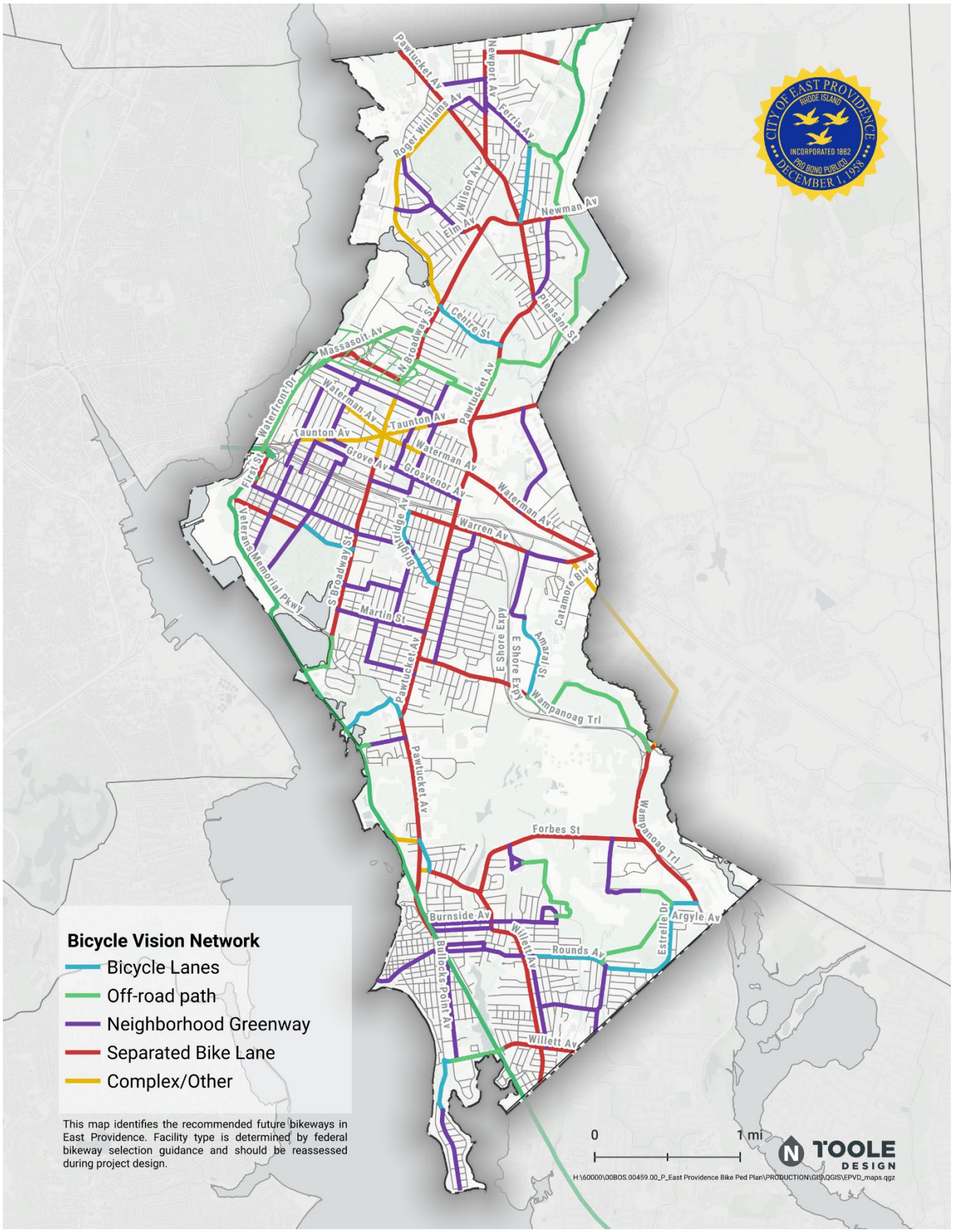
CITY OF EAST PROVIDENCE
RHODE ISLAND
INCORPORATED 1862
PRO BONO PUBLICO
DECEMBER 1, 1958
Pawtucket Av
Newport Av
Ferris Av
Roger Williams Av
Wilson Av
Elm Av
Newman Av
Pleasant St
Centre St
N Broadway St
Massasoit Av
Waterfront Dr
Waterman Av
Taunton Av
Pawtucket Av
First St
Grove Av
Grosvenor Av
Veterans Memorial Pkwy
S Broadway St
Bridge Av
Warren Av
Martin St
Catamore Blvd
E Shore Expy
Amaral St
Wampanoag Trl
Forbes St
Burnside Av
Bullocks Point Av
Willett Av
Rounds Av
Estrelle Dr
Argyle Av


Bicycle Vision Network
Bicycle Lanes
Off-road path
Neighborhood Greenway
Separated Bike Lane
Complex/Other
This map identifies the recommended future bikeways in East Providence. Facility type is determined by federal bikeway selection guidance and should be reassessed during project design.
0
1 mi
TOOLE DESIGN
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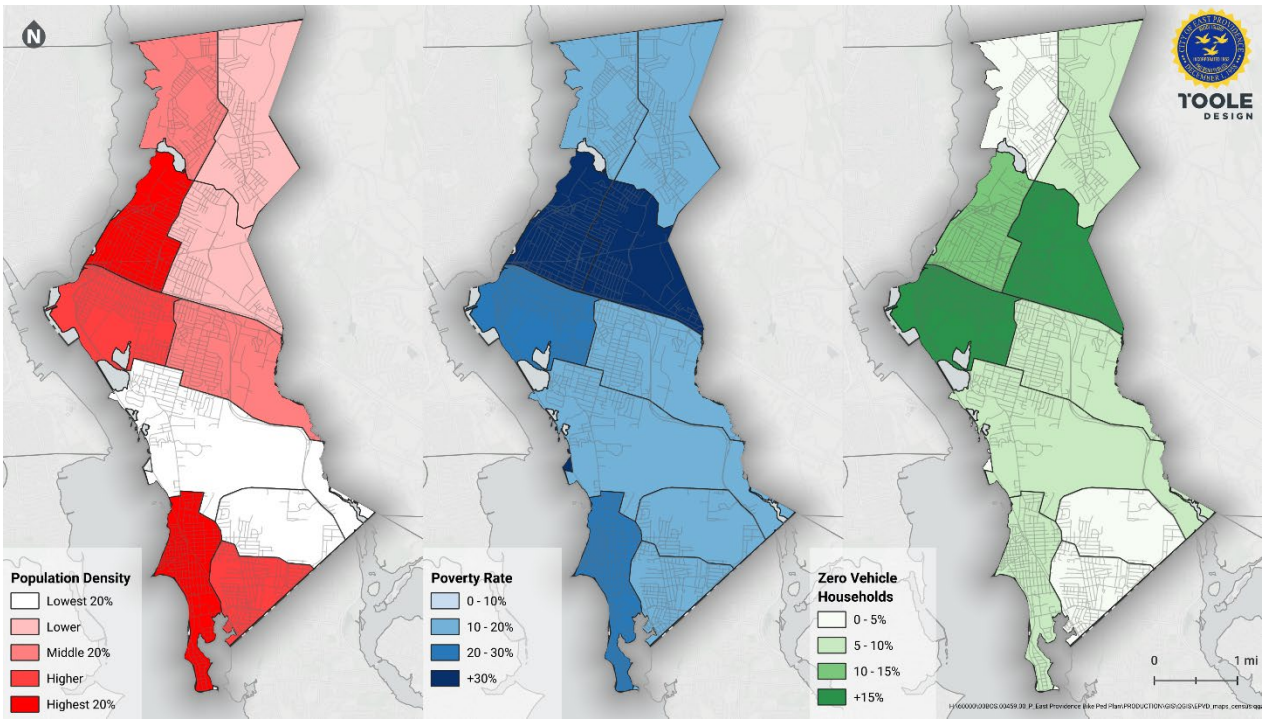
CITY OF EAST PROVIDENCE
RHODE ISLAND
INCORPORATED 1862
PRO BONO PUBLICO
DECEMBER 1, 1958
Pawtucket Av
Newport Av
Ferris Av
Roger Williams Av
Wilson Av
Elm Av
Newman Av
Pleasant St
Centre St
N Broadway St
Massasoit Av
Waterfront Dr
Waterman Av
Taunton Av
Grove Av
Grosvenor Av
First St
Veterans Memorial Pkwy
S Broadway St
Bridge Av
Slater Av
Warren Av
Martin St
E Shore Expy
Catamore Blvd
Amaral St
Wampanoag Trl
Forbes St
Burnside Av
Willett Av
Rounds Av
Estrella Dr
Argyle Av
Bullocks Point Av


Population Density
Lowest 20%
Lower
Middle 20%
Higher
Highest 20%
Poverty Rate
0 - 10%
10 - 20%
20 - 30%
+30%
Zero Vehicle Households
0 - 5%
5 - 10%
10 - 15%
+15%
TOOLE DESIGN
0
1 mi

APPENDIX C: ENGAGEMENT SUMMARY

The City of East Providence developed a Bicycle and Pedestrian Master Plan informed by robust engagement with key stakeholders and members of the public. Public engagement events in this appendix are grouped by audience (Stakeholder Engagement, Public Engagement) and by project milestone (Project Introduction, Existing Condition Review, & Recommendations). The insights gathered informed project goals, recommendations, and future implementation actions.

Engagement by the Numbers

Stakeholder Interviews	Stakeholder Organizations Engaged	Public Informational Meetings	Pop-Up Events	Event Attendees	Survey Responses
4	20	2	3	160	185
Social Media Posts	**Flyers**	**E-blasts**	**Press Release**	**Calendar Announcements**	**Comments Received**
6	2	3	1	3	280

Stakeholder Engagement

Stakeholder Interview Summary

Engagement Event	**Stakeholder Interviews**
Date & Location	December 2024 through February 2025 on Zoom
Purpose	Identify the unique transportation needs of community members, gaps in the active transportation network, and ideas for improving the transportation system to support pedestrians and cyclists. The insights documented here contributed to plan goals, recommendations, and future implementation actions.
Engagement Activity	Stakeholder interviews
Participation	**Interview 1 (12/16/2024):** Erik Skadberg (City Engineer) **Interview 2 (12/17/2024):** John Potvin (City Engineer), Laura Jones (Director of Senior Services), Diane Sullivan (Director of Recreation Department), Ray Lavey (Director of the Waterfront Commission), Mark Cadoret (Police Department, Patrol Division) **Interview 3 (1/29/25):** Cedric Ye (Providence Streets Coalition and Student), Nick Rutter (Rosen in Riverside), Sam Archer (Cycling Advocate), Liza Burkin (Providence Streets Coalition), Clayton Graham (Cycling Advocate) **Interview 4 (2/28/2025):** Bob O'Neil (AARP volunteer), Deborah Perry (RI Senior Program, YWCA, and EBCAP Board Member), Jason Rafferty (Riverside Renaissance Program), Jeanne Boyle (RI Waterfront Enterprises, former East Providence Planning Director), Laura McNamara (Blackstone Valley Tourism), Melissa Martin (RI Waterfront Enterprises), Ray Pouliot (Leadership RI Senior Fellows Program), Seth Grady (RI Waterfront Enterprises), Tina Guenetter (RAMP, US Access Board)

Key Findings
The **East Bay Bike Path** is noted as the most used facility in the city, but stakeholders expressed a desire for **safer connections** from within the city and neighborhoods to the bike path. **Accessing the Bike Path** was identified as a high priority that could be achieved with **safer crossings** and **links to key destinations** such as the high school, supermarkets, and other local businesses.
The design of roads makes it difficult to walk to **popular destinations** like grocery stores, pharmacies, and schools even though the distance is short and the landscape is flat. There are also concerns with many **slip lanes** where sidewalks (especially on Pawtucket Avenue and Warren Avenue) have utility poles in the middle of the pedestrian zone.
Priority locations for improvements included:

- **Pawtucket Avenue:** There are not enough safe **pedestrian crossing points for students and seniors** to access top destinations (i.e., Stop and Shop, Senior Center, Recreation Department, High School) in the vicinity.
- **Taunton Avenue:** Pedestrians cross at unmarked locations because they are more convenient. **Visibility** and **pedestrian signals/crossings** are areas for improvement to avoid crashes and safety issues.
- **Six Corners:** The roads at Six Corners converge and are difficult and confusing to navigate. Stakeholders reported that a **modern rotary** and **wayfinding signs** could help drivers navigate Six Corners better, which could make the road safer for pedestrians and cyclists.
- **Waterman Avenue:** There are safety concerns regarding **visibility** and **parking**—cars park close to intersections, which create unsafe conditions for drivers leaving side streets and pedestrians looking to cross. Additionally, many drivers speed on this street.
- **Wampanoag Trail:** There are many condominiums and other new developments along this road, but the road deters bike and pedestrian usage due to the **lack of dedicated sidewalks**, **crossing locations**, and **inaccessible bus stops**.

Public Engagement

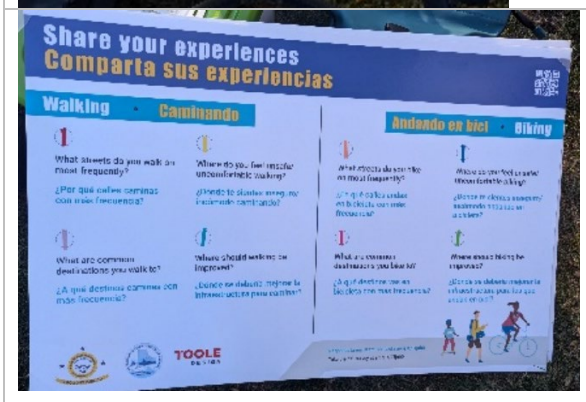
Project Introduction

Engagement Event	**Pop-Up at the Witches Parade**
Date & Location	October 19, 2024 Crescent Park Carousel, 700 Bullocks Point Ave, Riverside, RI 02915
Purpose	Introduce the project to the public and solicit information on walking/biking habits and desired improvements
Engagement Activity	Interactive mapping exercise to identify most frequented walking/biking routes and destinations and areas for improvements
Attendees	~70 attendees

Key Findings ***(Desire for the following)***	**Quotes**
Safer crossings from the city to the **East Bay Bike Path**	• "All for it! Love it! (re: EBBP). Need better access to the Henderson Bridge from Rumford via bike. No safe way from the north bridge connection. Shoulder sucks near Henderson roundabout, cars are bad there. The love the bike path, take it to work every day and bought their house to be closer to the bike path." • "The bike path is unimproved in some places, but present on the map. Would be huge if it could connect to Rumford. Improve the gravel section to a full paved bike path. Could be used year round." • "More designated bike path connections to neighborhood and greenways particularly on Willette Ave and the Thurston St area. Walks to get ice cream with kids, feels safe"
Enhanced **street design** and **safer navigation** on roads	• "Clarity on if walkers or bikers should be on the right or left of path, bikes ride fast, its busy!" • "Hard left turn north of Borealis - someone was hit at crosswalk, people on the bike path turn quickly" • "Need clearly marked lanes for turning, drivers' education with bike/ped information & bike path plowing"
Safer travel for **children to schools** and daycares	• "2nd connection to the bike path needed, Waddington elementary school teacher: students need better sidewalk connections especially near the bus stop" • "Willett Ave needs safe ped crossings, more than just striping! Middle schoolers could walk if safe for

	a middle schooler and parents wouldn't have to drop them off!" • "No connection to daycare on Wampanoag Trail."
Design refinements to the **sidewalk network** to prioritize **connectivity** and **user comfort**	• "Improve sidewalks city wide" • "Space for sidewalks are missing" • "No continuous sidewalks in this neighborhood"

Photos



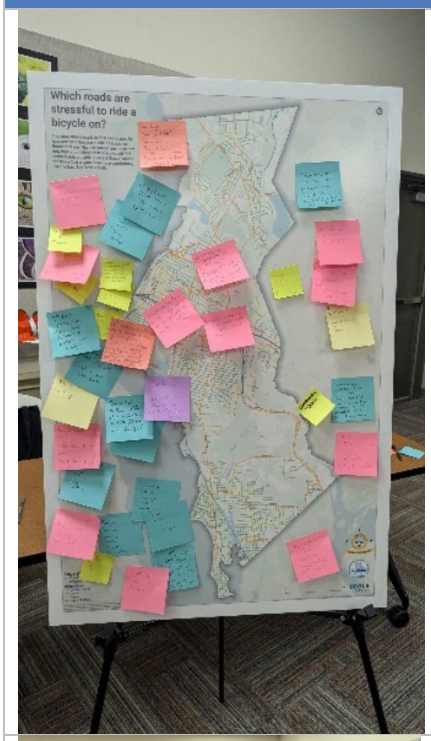
Engagement Event	**Public Open House #1 at Weaver Library**
Date & Location	March 26, 2025 Weaver Library
Purpose	Introduce the project to the public and validate existing conditions findings

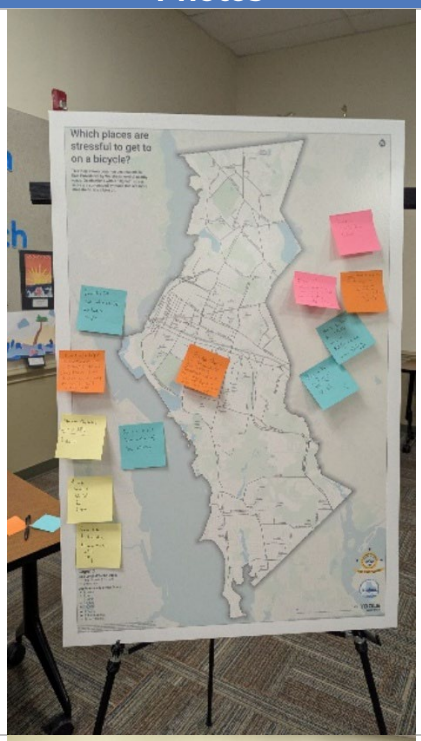
Engagement Activity	• Facilitated multiple interactive mapping exercises to identify:
	  ○ roads on which it is stressful to walk or bike
	  ○ low stress crossing points
	  ○ walking/biking challenges and improvement opportunities
	• Print questionnaire on demographics and desired walking/biking improvements

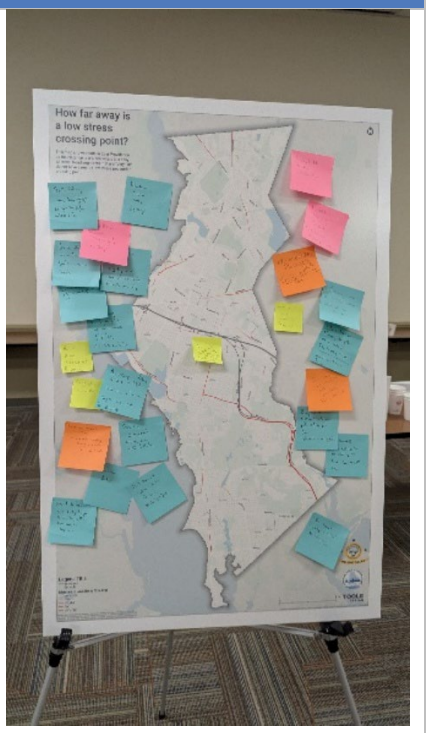
Participation	34 attendees

Key Findings *(Desire for the following)*	**Quotes**
Improving connections to the **East Bay Bike Path** is a top concern (ranked as the most stressful location to get on a bicycle and ride a bicycle on)	• "More bike lanes especially connecting EBBP to pedestrian bridge and to carousel/Rose Larisa Park. City also needs more "yield to cyclists/pedestrians" signage throughout" • "Safe transitions between major bike routes (e.g., Washington Bridge, Waterfront Drive, E. Bay Path, shoulder maintenance)" • "Better connection point (path) from neighborhoods surrounding bike path (i.e. Broadway to Parkway)"
Increasing pedestrian and bicycle safety around **schools** and on **north-south connections** like Pawtucket Avenue (ranked as a popular place that is stressful to get to on a bicycle)	• "Lanes to traverse the city North to South and East to West. From the High School to Weaver Library." • "Connections to schools! Continue EBBP to Pawtucket- new waterfront developments should include bike/ped access." • "North/South lanes on Pawtucket Ave. There are few ways to go home. After dark bike path is too isolated and can't get you everywhere."
Enhancing safety with drivers, as **driver behavior** such as influences road safety to people who walk and bike on **shared roads**	• "Narrower streets would encourage cars to slow down" • "Safety from cars! Drivers on their phones is #1 danger to us, even walking to schools—from other parents!" • "Cars must share the road. I ride a bike year round, I do not operate a car by choice. Not always easy, I'd love a bus (60) to have an EP stop"

Photos


Which roads are stressful to ride a bicycle on?


Which places are stressful to get to on a bicycle?


How far away is a low stress crossing point?

Existing Conditions Review

Engagement Event	**Pop-Up at Borealis Coffee Shop**
Date & Location	June 15, 2025 Borealis Coffee Shop near the East Bay Bike Path
Purpose	Provide an update on the project, validate existing conditions findings and ask feedback on preliminary network recommendations

Engagement Activity	• Facilitated multiple interactive mapping exercises to identify:
	  ○ Potential bicycle infrastructure improvements
	  ○ Potential pedestrian network improvements
	• Online questionnaire to provide general reactions and in-depth thoughts on proposed recommendations to improve walking and biking in East Providence

Participation	~40 attendees

Key Findings	Quotes
Desire for a **continuous sidewalk network** with better connectivity to parks, on Crescent View, and on the Henderson Bridge	• "Close the sidewalk gap on Cresent View" • "Pedestrian access on all sides of the Henderson Bridge" • "Support bike path connection, Washington and Henderson Bridge along waterfront for cyclists"
Inclination for **safer connections** to **frequented destinations** and on First Avenue and Pawtucket Avenue	• "First Ave bike lane needs to come back (5 agrees)" • "Pawtucket Ave separated lane – love it" • "Separated bike lane from high school to Weaver Library down Taunton Ave" • "Waddington elementary school, there is no safe way to walk/bike there" • "[…] the connector rd from end of I95 bridge to EastBay is a dangerous mess."
Agreement with existing conditions findings: demand for **improvements to signage, sidewalks, and facilities**	• "N Broadway needs continuous facilities (Short- and long-term)" • "Please fix cracks, erosion; signage/digital; also please widen path; rules to follow because it's not clear"

Photos


East Providence Draft
Bicycle Vision Network
TOOLE


East Providence Draft
Pedestrian Priorities
TOOLE


KEEP

Engagement Event	**Pop-Up at Concerts in the Park**
Date & Location	July 17, 2025 East Providence Recreation Department's Concerts in the Park Series at Crescent Park
Purpose	Provide an update on the project, validate existing conditions findings and ask feedback on preliminary network recommendations

Engagement Activity	• Facilitated multiple interactive mapping exercises to identify:
	  ○ Potential bicycle infrastructure improvements
	  ○ Potential pedestrian network improvements

Participation	~10 attendees

Key Findings	Quotes
Concerns with **driver behavior** and its effect on pedestrian safety	• "City enforced no parking on sidewalks" • "Multi-modal Pawtucket Ave with Bike path and road diet" • "Better stoppage for bikers and drivers need to slow down at flashing lights"
Improved connections to **top destinations** and **along key routes** (e.g., schools, Henderson Bridge, First Ave, Crescent View Ave)	• "First Ave bike lane needs to come back (11 agrees)" • "Crescent View Ave is unsafe for bicyclists. Many cars are speeding, I actually avoid it when commuting home" • "Henderson Bridge Area: both sides for bike and pedestrian. Too many people running across traffic" • "Getting across Taunton Avenue on a bike is tricky"

Photos


East Providence Draft
Pedestrian Priorities
TOOLE


East Providence Draft
Bicycle Vision Network
TOOLE

Recommendations

Engagement Event	**Public Open House at Weaver Library**
Date & Location	October 16, 2025 Weaver Library
Purpose	Share concept designs for prioritized projects and solicit public feedback
Engagement Activity	• Interactive mapping exercise on three projects (1st Street, Mercer Street, and Juniper Street) to express general reactions
Participation	~10 attendees

Summary
We had positive conversations with residents who were generally pleased with our short-term project recommendations and design features. We received a few comments from people who suggested more ambitious design elements (raised intersections and crosswalks over speed humps). One person was unhappy with the bike infrastructure plan, but generally seemed dismissive of people biking and did not articulate actionable critiques.

Photos

APPENDIX D: PUBLIC SURVEY QUESTIONS AND RESULTS

Summary

- Most respondents walk or bike regularly.
- Most respondents are interested in walking or biking more.
- Almost all respondents have access to a car.
- Approximately 26% of respondents commute by bike.
- Approximately 77% of respondents walk recreationally.
- Separated shared use paths are the preferred facility type, though any physical separation is preferred to none.
- Vehicle traffic is the biggest barrier to both walking and biking.

Themes	Quotes
Theme 1: While most people in East Providence have access to a car, they are **interested in using active modes for daily travel.**	*"Before moving to E.P. I biked and walked almost everywhere (for errands and pleasure). Now as a E. P. resident, I am highly car dependent because of the lack of safe bike lanes and poorly maintained sidewalks [...]"*
Theme 2: People identify **feeling unsafe with vehicle traffic** as the biggest barrier to biking and walking in East Providence. There is a strong desire for connected and protected bike paths throughout the city that would link to the existing bike paths and key destinations, and promote intercity north-south travel.	*"Children walking/biking to Hennessey elementary is always a nerve-wracking situation in the morning with cars speeding by children that have to go in the street to get to school."*
Theme 3: People are very interested in **separated bicycle lanes and paths**, particularly on major roads.	*"I urge the city to collaborate with relevant stakeholders to transform Pawtucket Ave into a bicycle-friendly road. Consider reducing the number of lanes (possibly one or two) to widen the sidewalk, incorporate a curbed bicycle lane, and create a 'linear park' in select areas with increased tree canopy."*
Theme 4: Many people who use the East Bay Bike Path do not venture off the path into other areas of the city. Many people desire more **safe connections to the East Bay Bike Path** and connections to destinations within the city.	*"I live in Kent Heights and commute into Providence for work daily on my bike. Having a safe and dedicated way to connect the EP Neighborhoods to the East Bay Bike Path would encourage more users to get to the amazing resource that is the EBBP without endangering their lives."*

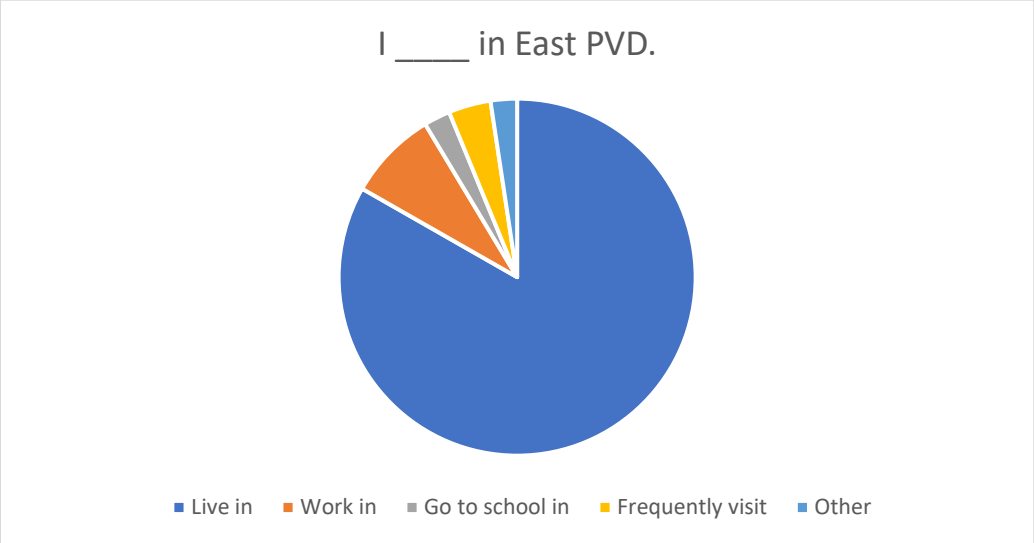
Theme 5: **Sidewalk connectivity and quality is a barrier** to safe travel. Less than 6.5% of respondents felt a 12-year-old child could safely cross a multilane road (such as Pawtucket or Taunton Ave) unattended.	*"The bike path is a great resource, but it would be nice if our city was more walkable/bike friendly outside of the bike path."*

Survey Questions

Open Dates: 10/18/24 – 4/1/25

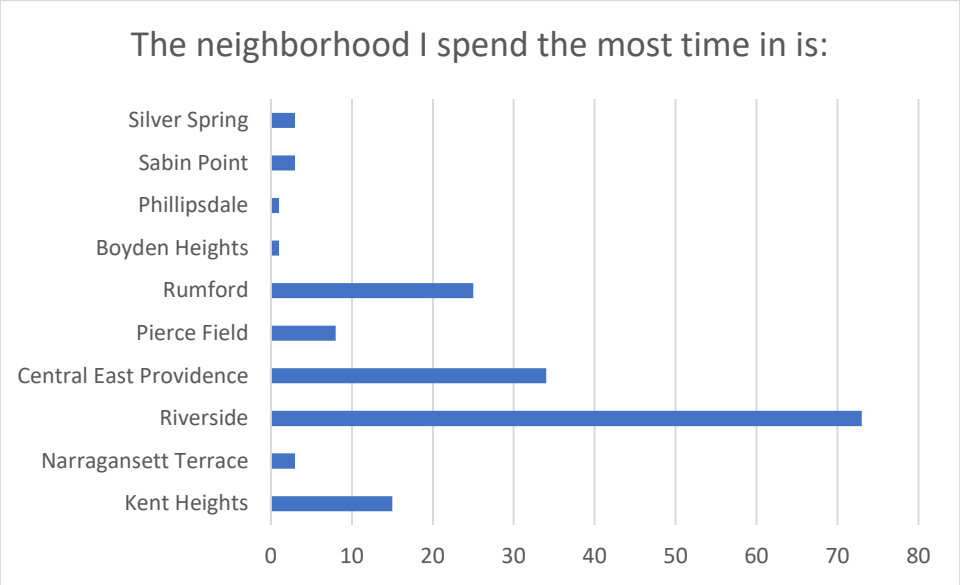
Background

1) I _____ East Providence
   - ☐ Live in
   - ☐ Work in
   - ☐ Go to school in
   - ☐ Frequently visit
   - ☐ Other _____



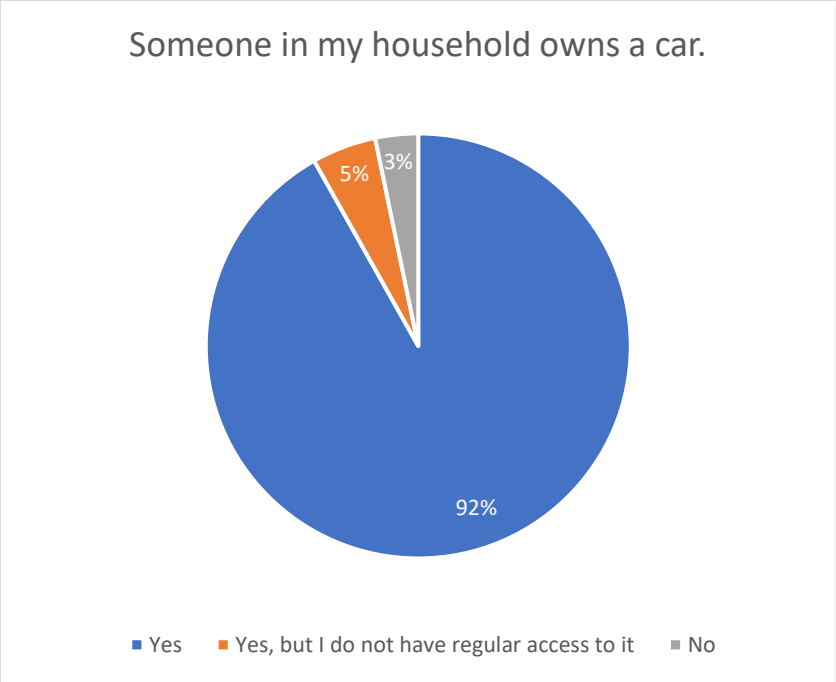
2) The neighborhood I spend the most time in is:
   - ☐ Central East Providence
   - ☐ Pierce Field
   - ☐ Silver Spring
   - ☐ Boyden Heights
   - ☐ Kent Heights

- ☐ Riverside
- ☐ Sabin Point
- ☐ Narragansett Terrace
- ☐ Rumford
- ☐ Phillipsdale
- ☐ Bridgham Farm



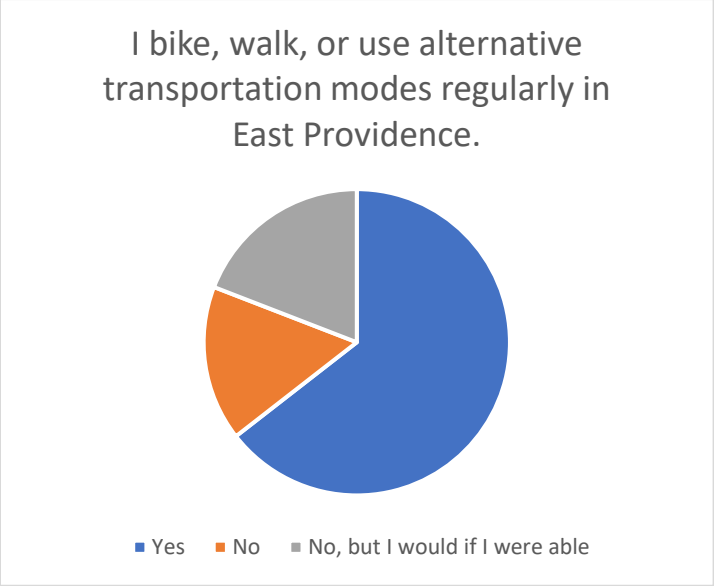
Travel Behavior

3) Someone in my household owns a car.
   - ☐ Yes
   - ☐ Yes, but I do not have regular access to it
   - ☐ No


Someone in my household owns a car.
5%
3%
92%
Yes
Yes, but I do not have regular access to it
No

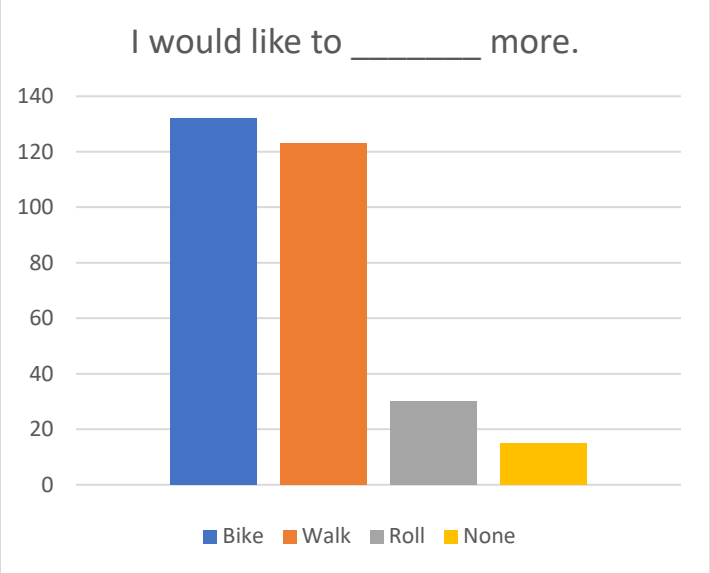
4) I bike, walk, or use alternative transportation modes regularly in East Providence.

- ☐ Yes
- ☐ No
- ☐ No, but I would if I were safely able to meet my needs



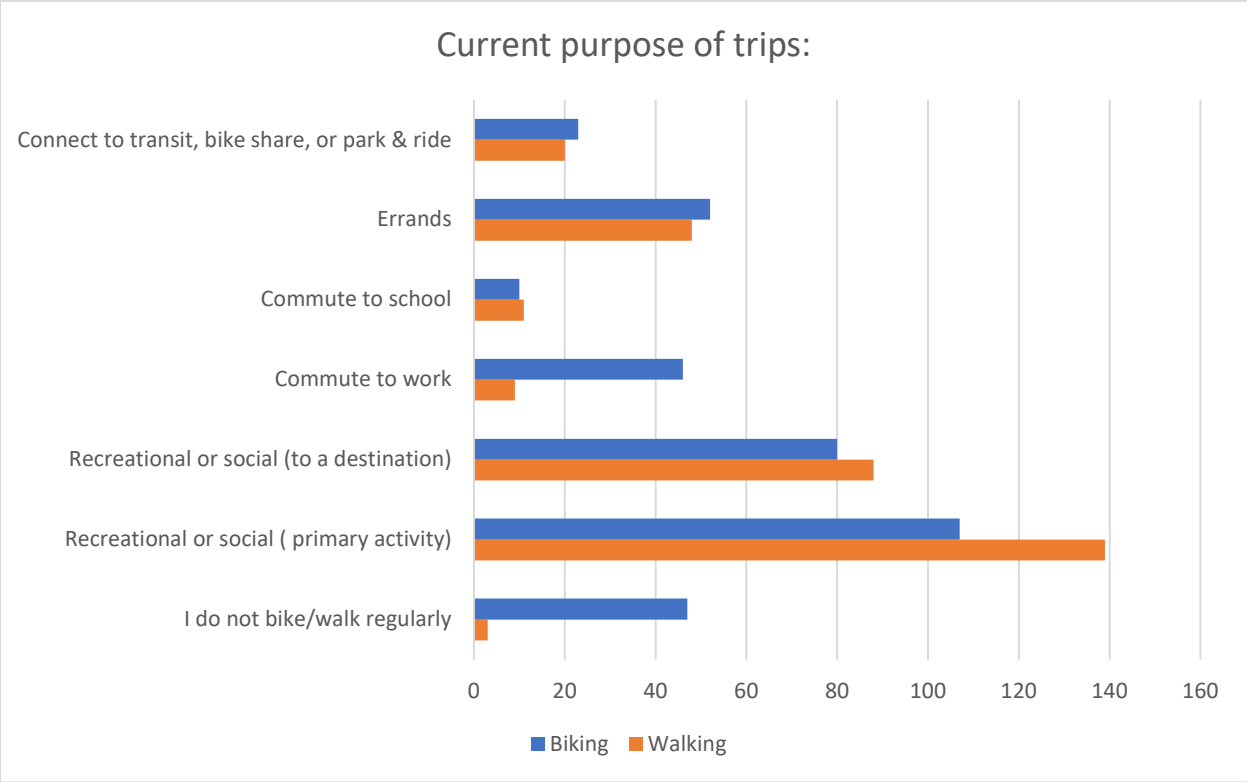
5) I would like to _____ more.

- ☐ Bike
- ☐ Walk
- ☐ Roll (mobility aid, skateboard, e-scooter, another device)
- ☐ Do none of these activities



6) Current purpose of **biking** trips:
   - ☐ I do not bike regularly
   - ☐ Recreational or social (biking is primary activity)
   - ☐ Recreational or social (biking to another activity or destination)
   - ☐ Commute to work
   - ☐ Commute to school
   - ☐ Errands
   - ☐ Connect to transit or park & ride
   - ☐ Other: _____

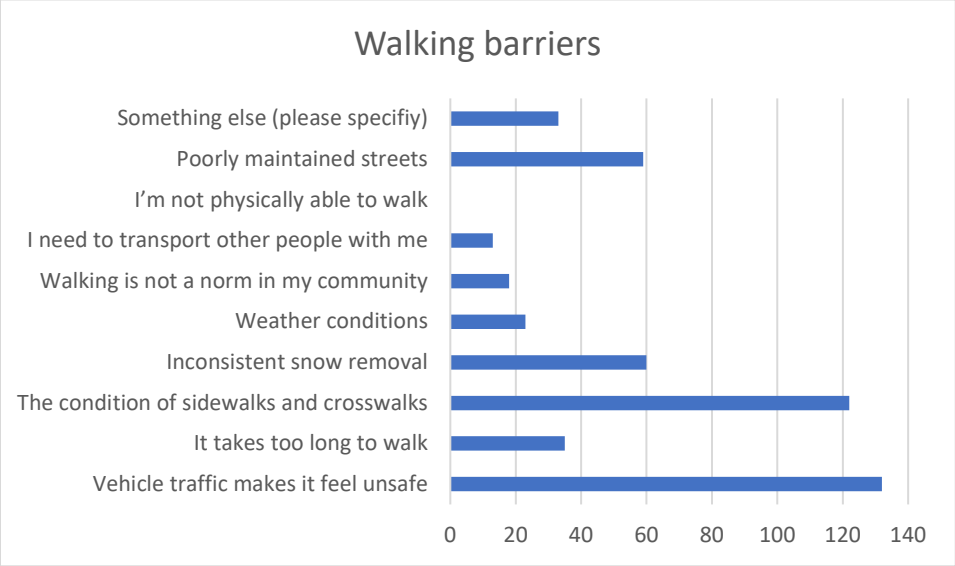
7) Current purpose of **walking** trips
   - ☐ I do not walk regularly
   - ☐ Recreational or social (walking is primary activity)
   - ☐ Recreational or social (walk to another activity or destination)
   - ☐ Commute to work
   - ☐ Commute to school
   - ☐ Purchase goods/services
   - ☐ Connect to transit or park & ride
   - ☐ Other: _____



Preferences, Barriers, and Priorities

8) Which of these are common barriers to **walking** that you experience in the city?

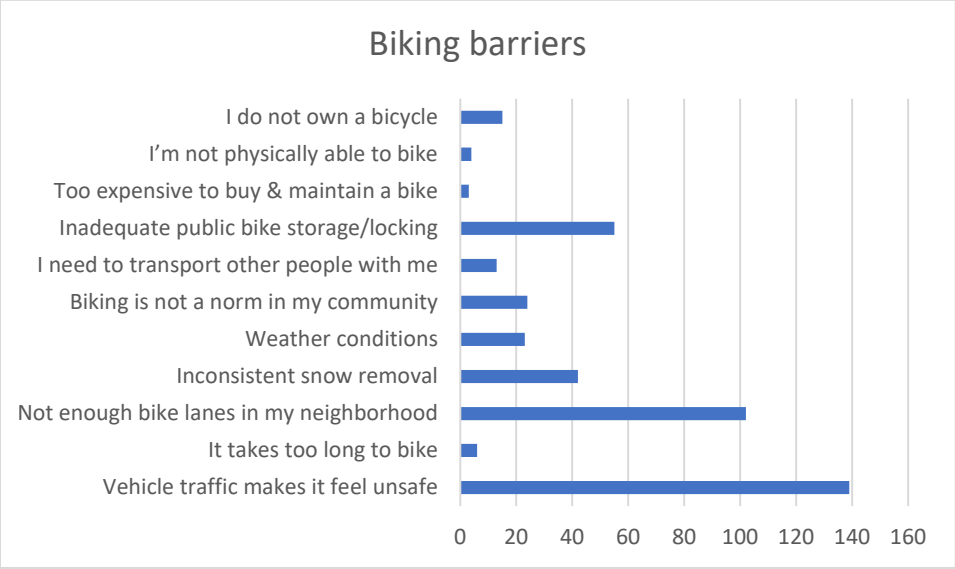
- ☐ Vehicle traffic makes it feel unsafe
- ☐ It takes too long to walk
- ☐ The condition of sidewalks and crosswalks
- ☐ Inconsistent snow removal
- ☐ Weather conditions
- ☐ Walking is not a norm in my community
- ☐ I need to transport other people with me
- ☐ I'm not physically able to walk
- ☐ Poorly maintained streets
- ☐ Something else (please describe below)



9) Which of these are common barriers to **biking** that you experience in the city?

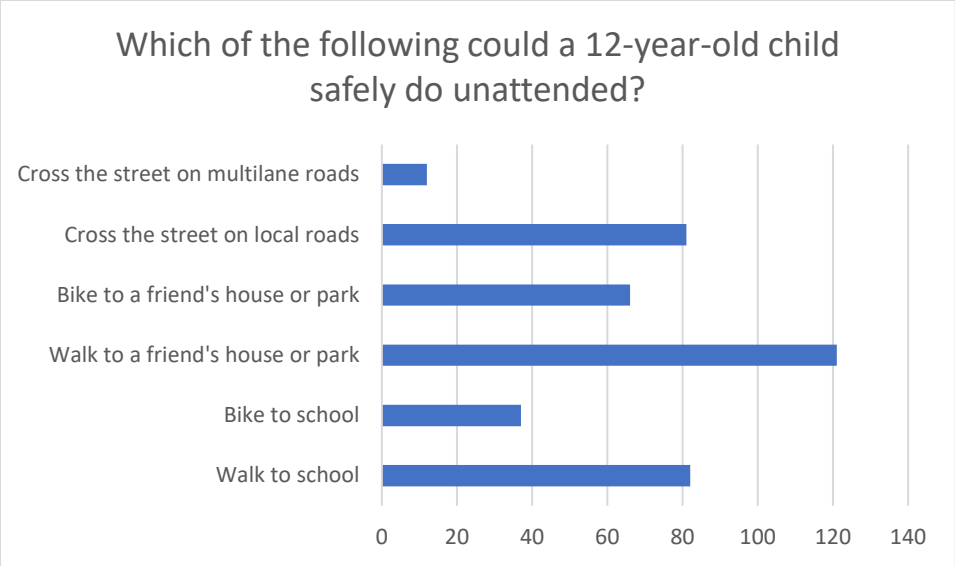
- ☐ Vehicle traffic makes it feel unsafe
- ☐ It takes too long to bike
- ☐ Not enough bike lanes in my neighborhood
- ☐ The safety of intersections
- ☐ Inconsistent snow removal
- ☐ Weather conditions
- ☐ Biking is not a norm in my community
- ☐ I need to transport other people with me
- ☐ Inadequate public bike storage/locking
- ☐ Too expensive to buy & maintain a bike

- ☐ I'm not physically able to bike
- ☐ I do not own a bicycle
- ☐ Something else (please describe below)



10) Which of the following could a 12-year-old child safely do unattended in East Providence?

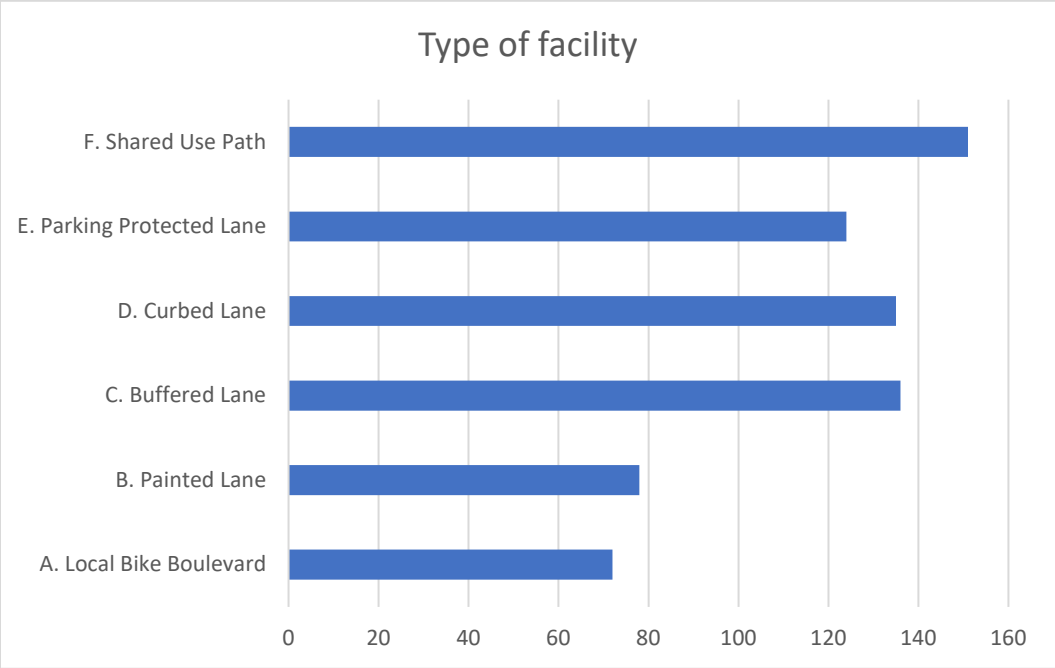
- ☐ Walk to school
- ☐ Bike to school
- ☐ Walk to a friend's house or park
- ☐ Bike to a friend's house or park
- ☐ Cross the street on local roads
- ☐ Cross the street on multilane roads



11) Would you be comfortable riding a bike in any of these places? Select all that apply.

☐ A. Local Bike Boulevard

- ☐ B. Painted Lane
- ☐ C. Buffered Lane
- ☐ D. Curbed Lane
- ☐ E. Parking Protected Lane
- ☐ F. Shared Use Path



12) Which three streets in your community would you prioritize for improvement.
Street: _____
Improvement: _____
Street: _____
Improvement: _____
Street: _____
Improvement: _____

Street	Rank	Street	Rank	Street	Rank
Pawtucket Ave	Highest	Massasoit Ave	Medium	Ferris Ave	Low
Warren Ave	High	Forbes St	Medium	Don Ave	Low
Taunton Ave	High	Dover Ave	Medium	Estrella Dr	Low
North Broadway	High	Crescent View Ave	Medium	Grassy Plains Rd	Low
Waterfront Drive	High	Juniper St	Medium	Wampanoag Trail	Low

Street	Rank	Street	Rank	Street	Rank
Waterman Ave	High	Fort St	Medium	Roger Williams Ave	Low
Bullocks Point Ave	High	Lyons Ave	Low	Burnside Ave	Low
Willett Ave	High	Mayflower St	Low	Greenwood Ave	Low
1st St	High	Moorland Ave	Low	Frederick St	Low
South Broadway	Medium	Walnut St	Low	Pleasant St	Low
Newman Ave	Medium	Potter St	Low	Centre St	Low
Newport Ave	Medium	Mauran Ave	Low		
Veterans Memorial Parkway	Medium	Clyde Ave	Low		

13) Do you have any other locations, comments, or stories about biking or walking in East Providence you would like to share?

Comment Themes

1) Sidewalk condition, continuity, and ADA accessibility

- "Let's take care of the terrible sidewalks throughout the city… crumbling sidewalks and curbing."
- "Broken and uneven sidewalks… senior citizens in wheelchairs… needing to use the road."
- "Sidewalks… crumbling, uneven, raised tree roots… can't walk, use walker/wheelchair…"

2) Maintenance and operations (sweeping, snow/ice, vegetation, debris)

- "Maintain… cut roots… cut back branches… widen where possible."
- "Snow removal from the bike path… needs to be a priority… large commuter population."
- "Deploying town maintenance to clean existing sidewalks… debris, overgrown weeds, trash/glass."

3) Connectivity gaps: getting from neighborhoods to the East Bay Bike Path, bridges, and destinations

- "Better connections are needed between residential neighborhoods and… Shaws/Stop & Shop… the High School."
- "The east bay bike path… lack of connection to other parts of the city is a concern."
- "Connect Rumford to east bay bike path please."

4) High-stress crossings and barrier locations (bridges, roundabouts, ramps, Six Corners, major intersections)

- "Six corners is very hard to cross… slip ways… high vehicle speeds. It really divides the city."
- "The Henderson Bridge roundabout has been an absolute disaster for bike traffic… disenfranchises… non-motorized traffic."
- "Crossing the 195 on ramp is so dangerous… Warren/Pawtucket intersection… close calls even when I have the light."

5) Speeding, aggressive/distracted driving, and lack of enforcement

- "Drivers… do not stop for pedestrians in crosswalks… could stand there forever… not a single car will stop."
- "Cars come off the highway… lunatics… blow right through crosswalks… police presence is non-existent."
- "Too many people driving with cell phones in their face… not paying attention."

6) Facility preferences: protected/separated routes vs opposition to bike lanes

- Pro-protection: "Separated bike lanes on the major corridors… would really make the entire city accessible by bike."
- Pro-separation: "KEEP BIKES AND CARS ON SEPARATE PATHS!"
- Opposition: "No one wants bike lanes… waste of money… fix our crumbling sidewalks." / "Bike lanes… make traffic and congestion worse."
- Note: This is not an even split, there are around 6 (of 180) respondents who are explicitly against bike infrastructure

7) Safer crossings and better signals (crosswalk treatments, beacons, timing, clarity)

- "Middle of the road signage/raised crosswalks/flashing lights… especially around libraries, bus stops, and schools."
- "Walk/don't walk… change too quickly… not enough time to cross."
- "People don't know how the HAWK signal… is supposed to work… almost got run over."

8) Family mobility, Safe Routes to School, and quality-of-life/economic benefits

- "My child couldn't bike to school… bike lanes are nonexistent…"
- "Want to be able to ride bikes as a family to local businesses and school."
- "Safe streets… boost local businesses, reduce car dependence… improve accessibility for seniors and people with disabilities."

Demographics

The following questions are optional. The results will help us understand who this survey has reached and whether we are hearing from a representative sample of the East Providence community. All information you share is anonymous and will not be used to identify you or associated with the feedback you share.

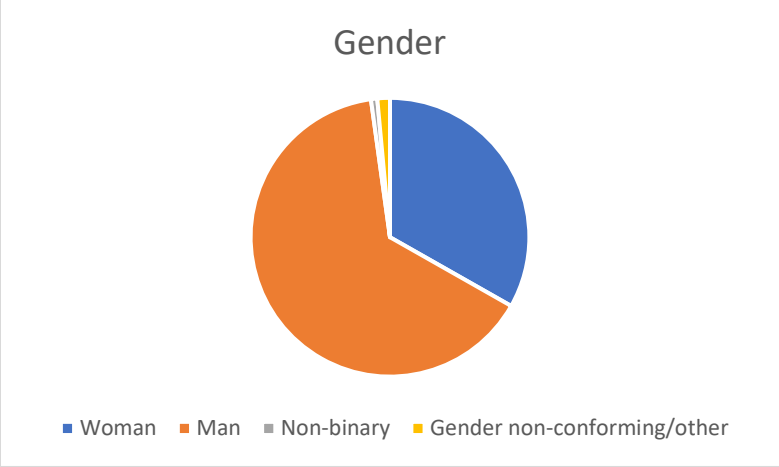
14) Age

_____

Average:	45
Median:	42
Max:	81
Min:	16
<=24:	3
25-34:	46
35-44:	47
45-64:	59
>=65:	22

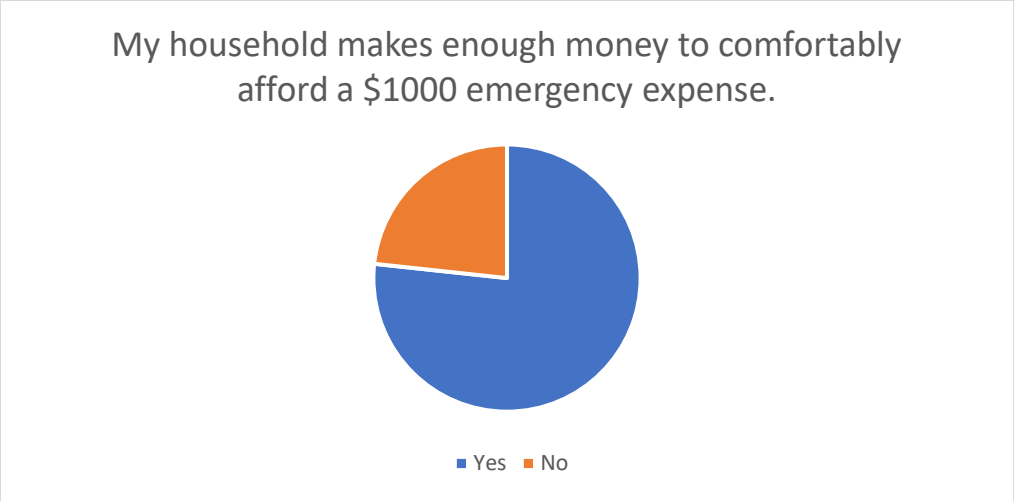
15) Gender

- ☐ Woman
- ☐ Man
- ☐ Non-binary
- ☐ Gender non-conforming/other (you may elaborate if you choose)



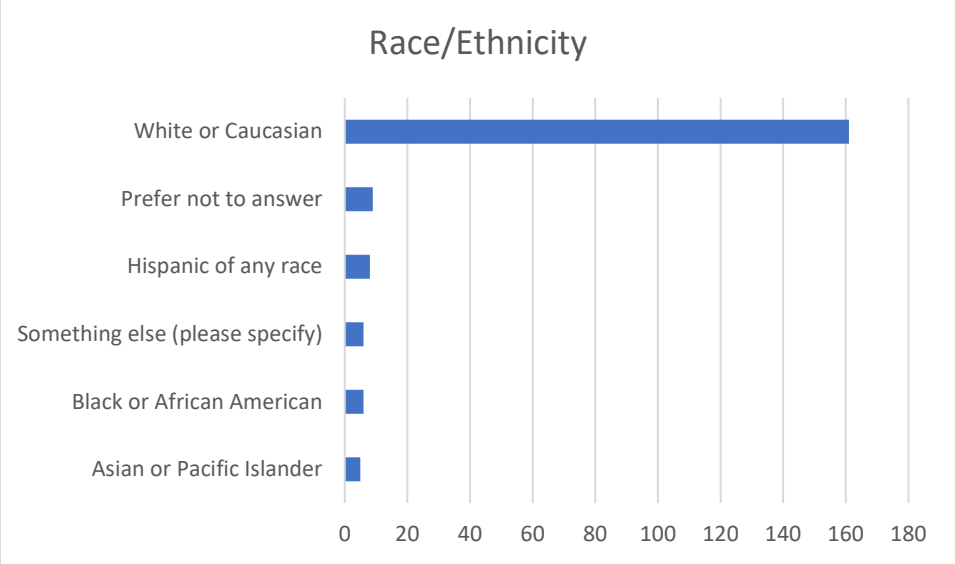
16) My household makes enough money to comfortably afford a $1000 emergency expense.

- ☐ Yes
- ☐ No



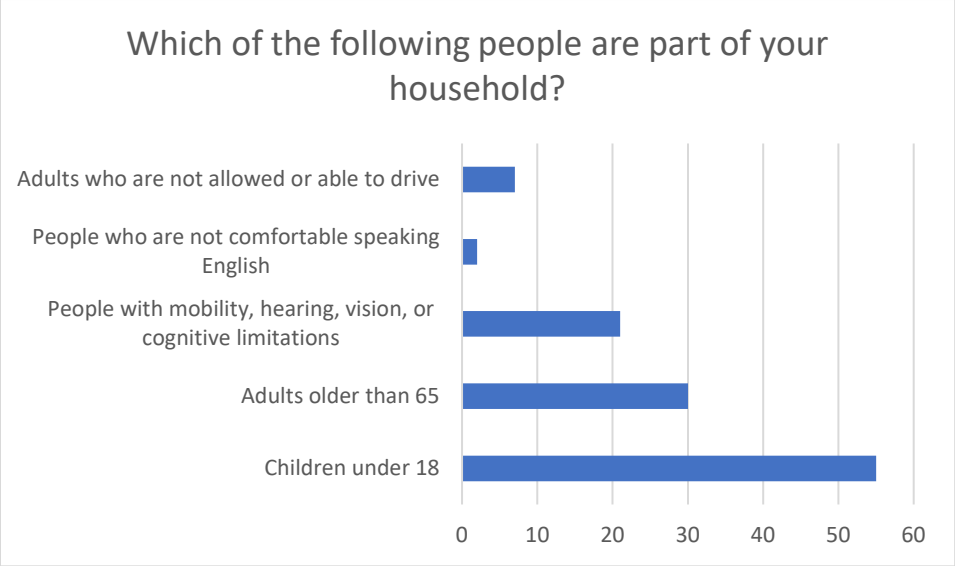
17) Race

- ☐ Asian or Pacific Islander
- ☐ Black or African-American
- ☐ White or Caucasian
- ☐ Hispanic of Any Race
- ☐ Prefer not to answer
- ☐ Other (please specify)



18) Which of the following people are in your household?

- ☐ Children under 18
- ☐ Adults older than 65
- ☐ People with mobility, hearing, vision, or cognitive limitations
- ☐ People who are not comfortable speaking English
- ☐ Adults who are not allowed or able to drive



Additional Analysis

Households with Children

- Vehicle traffic is the top concern, followed by the presence and quality of sidewalks and bike lanes.
- Preference for separated paths compared to the general population, with a slightly greater preference for local bike boulevards and curbed lanes.
- Families with children were less likely to agree that 12-year-old children should be able to walk and bike unattended to various locations.

Households Unable to Afford an Emergency Expense

- These respondents are less likely to be walking and biking compared to the general respondent pool.
- These respondents are more interested in walking than biking when compared to the general respondent pool.
- While overall less interested in biking than walking, 33% bike to work, a higher proportion than the general respondent pool (26%).

APPENDIX E: NETWORK DEVELOPMENT PRINCIPLES

Bicycle Network Development Guiding Principles

The proposed bicycle network was developed with the following guidelines:

- **Mobility**
  - » Provide consistent and continuous facility types across jurisdictional boundaries
  - » Utilize community engagement input to identify key connections and destinations
- **Safety**
  - » Prioritize routes on lower volume, lower speed streets
  - » Provide physical separation on higher volume, higher speed streets
  - » Follow FHWA bikeway selection guidance
  - » Redesign intersections / crossings on higher volume, higher speed streets
- **Connectivity & Access**
  - » Prioritize connections to path access points
  - » Provide enhanced connections to schools, bus stops, grocery stores, parks, and jobs

Pedestrian Network Development Principles

The proposed pedestrian network was developed with the following guidelines:

1. **Mobility**
   - » Institute a maximum crosswalk spacing policy/standard
   - » Prioritize filling sidewalk gaps
   - » Design streets in accordance with Public Right-of-Way Accessibility Guidelines (PROWAG) standards to ensure accessibility
2. **Safety**
   - » Reflect SS4A priorities and opportunities
   - » Identify high priority crossing needs
   - » Redesign intersections / crossings in higher pedestrian activity areas
3. **Connectivity & Access**
   - » Prioritize connections to path access points
   - » Provide enhanced connections to schools, bus stops, grocery stores, parks, and jobs
   - » Increase wayfinding at high volume intersections

APPENDIX F: POLICIES AND PROGRAMS

The City of East Providence recommends adopting and implementing the following policies and programs in support of the Bicycle and Pedestrian Plan. The policy and program recommendations are aligned to the Plan goals to enhance safety, mobility and connectivity and access.

Program: A set of activities to further plan goals, often involving members of the public and city staff.

Policy: A procedural improvement to further plan goals, often internal, involving only city staff.

Table 1: 'Big Ideas' (Longer-term Strategies)

Recommendation	**Type**	**Description**	**Cost** ($-$$$)	**Effort** (1=low 3= high)
Wampanoag Trail Reclassification from 'Freeway' to 'Arterial'	Policy	Reclassify the southern segment of Wampanoag Trail from a freeway to an arterial to reflect surrounding land uses, reduce barriers to walking and biking and improve safety and access to nearby destinations and the Runnins River.	$$$	3
Sidewalk Funding Program	Program	Establish a permanent program to create a consistent annual funding source for repairing, upgrading, and expanding sidewalks across East Providence, using dedicated local revenues such as capital funds, or a portion of traffic violation revenues.	$$$	3

Table 2: Recommended Policies and Programs

Recommendation	Type	Description	Cost ($-$$$)	Effort (1=low 3= high)
		Mobility		
Implement a School- and Path-Focused Bike Count Data Program	Program	Deploy permanent and portable counters at high-use locations including school zones, bike paths, trailheads, and key intersections to monitor bike and pedestrian activity. Focus on corridors with student traffic to measure how many children are biking and walking to school. Use collected data to evaluate the performance of new infrastructure with before and after counts and identify priority locations for safety improvements, crossings, and network expansions.	$$	3
Regular Pedestrian and Bicycle Community Advisory Committee Meetings	Program	Establish a standing community Bicycle and Pedestrian Advisory Committee (BPAC) composed of East Providence residents, community champions, and local stakeholders. The committee would serve as a quarterly advisory body to the City, offering input on biking and walking issues, helping guide policy, and elevating community priorities. To ensure meaningful engagement, the BPAC should be formed with a clear charter, inclusive representation, and transparent processes. It should also maintain strong connections to broader planning efforts, such as the city's Bicycle and Pedestrian Plan, Safe Streets for All initiatives, and Vision Zero goals. Each neighborhood will identify or appoint a local representative to serve as a conduit for transportation-related feedback, ensuring ongoing communication between residents and the BPAC.	$	2

Open Streets (Recurring Street Closures)	Program	Establish a recurring Open Streets program that temporarily closes selected streets to motor vehicle traffic, turning them into safe, car-free spaces for walking, biking, skating, and community gathering. The program would give residents and visitors the chance to enjoy public streets for recreation, wellness, and social connection, especially in areas that lack parks or safe active transportation routes. Target areas might include streets near Warren Ave, segments along the East Bay Bike Path, or community hubs like Riverside Square. Events could be scheduled on weekends, weekday evenings, or during summer months to encourage widespread participation. The program would be led by the City Council and coordinated by Public Works, Planning, and Public Safety.	$$	3
Community Bike Rides	Program	Establish a recurring community bike ride program in East Providence to bring together residents of all ages and skill levels for guided, educational, and social rides. These rides would be designed to help participants gain confidence navigating local streets and trails.	$	1
Establish a Citywide Bike Rack Strategy and Inventory	Program	Develop and implement a standardized bike rack strategy for East Providence, beginning with a comprehensive inventory of existing bicycle parking. Start by conducting a citywide inventory of existing bike racks, documenting their locations, condition, design type, and installation quality. Focus on high-traffic areas including schools, parks, libraries, retail corridors, transit stops, and civic buildings. Establish design standards that specify preferred rack types (such as inverted-U racks), spacing, placement, and materials. Racks should be placed in highly visible, well-lit areas that do not obstruct sidewalks or pathways. Make the inventory public through an online map or open data platform to improve user awareness and support planning.	$$	2

Partner with Businesses to Promote Biking	Policy	Work with local businesses to host sponsored rides, offer discounts for customers who arrive by bike, host bike tune-up events, and provide bike-friendly amenities. Promote these partnerships as part of a "bike-friendly business" campaign to support both biking and local economic development. Bike friendly businesses may be featured on future promotional campaigns for things to do off the East Bay Bike Path.	$	2
Implement streetscape improvements with bike and pedestrian projects	Policy	When implementing streetscape improvements, the City will include bike and pedestrian projects that consider supportive amenities (such as street furniture, landscaping, and other infrastructure) to make walking and biking safer and more inviting.	$$	2
Identify an e-bike and micromobility strategy	Policy	The City will identify an e-bike and micromobility strategy that recognizes this as an emerging area, remaining flexible and responsive to new technologies and community needs as they evolve	$	2
		Safety		
Walk and Bike Safety Education	Program	Partner with schools, community centers, and local bike shops to deliver age-appropriate walk- and bike-safety training for the whole community. For elementary and middle-school students, integrate hands-on cycling skills and safety lessons into PE classes or offer them as after-school programs. Complement youth training with creative public education for all ages, including community classes, neighborhood events, eye-catching signage, and multilingual communications. Offer specialized courses for adults who may be new to active transportation, and provide basic bike-mechanic workshops so school staff and community leaders can keep bikes in safe working order. Together, these coordinated efforts create a culture of safety and support more people walking and biking comfortably.	$$	2
Walk & Roll to School Day	Program	A designated event, either held in concert with the national day or independently, to encourage students to walk, bike, or roll to school. The event offers students an opportunity to become familiar with the City's bike facilities, while also promoting biking in a safe and encouraging	$	2

		environment by incorporating practical bike safety skills such as bike rodeos.		
Organize Bike Buses for School Commutes		Partner with a local organization to organize bike buses and group rides to school led by adults on safe, pre-planned routes. Recruit parent volunteers and promote the program through schools. Bike buses support safer school travel, reduce car congestion, and increase biking among students.	$	1
Create a traffic calming program	Internal program	Create a comprehensive traffic-calming program to receive, prioritize, and coordinate responses to community-identified and data-demonstrated needs for safer, slower streets. Community feedback will be gathered primarily through phone calls and direct outreach. Additional input may come from proactive staff engagement, public meetings, and referrals from neighborhood partners. To ensure the program is actionable and equitable, the City should allocate a dedicated annual traffic-calming fund within the Capital Improvement Program (CIP). This funding will support quick-build materials, data collection, and ongoing evaluation.	$$$	3
Expand participation in the Rhode to Bicycle Safety (R2BS) Program	Program	Continue and expand the implementation of the Rhode to Bicycle Safety (R2BS) program in all East Providence elementary schools, with a focus on 4th and 5th grade students. The Gordon School has already demonstrated leadership in this space, regularly participating in hands-on bike safety activities and hosting events such as Ride to School Day. Connect the program with citywide active transportation events like Bike to School Day, Walk and Roll to School Day, and seasonal Open Streets events. Reinforce learning through take-home materials for families and coordination with local bike shops for additional community support.	$$	2

Expand and Institutionalize Multimodal Safety Education for Adults and Older Adults	Program	Continue and broaden transportation safety programming in East Providence by launching a dedicated adult and older adult initiative. This expanded program will deliver multimodal safety education in partnership with community centers, senior centers, libraries, faith-based institutions, and local branches of AAA and AARP, focusing on practical skills, comfort riding a bike in traffic, and understanding current bicycle infrastructure and laws (for both riders and drivers). This program will also offer other modal options for seniors, helping safely access and use senior-specific transit offerings such as The Ride and discounted transit fares, and refreshers on safe driving behaviors.	$$	2
Implement RI Safe Cross Media Campaign materials	Program	Use statewide campaign materials to run a localized pedestrian and bike safety campaign. Feature East Providence hotspots like crosswalks near schools or high-speed roads, in social media, bus ads, and local news. Collaborate with the school department and public health teams to tie messaging into seasonal safety pushes (e.g., back-to-school or daylight savings). Set up pop-up outreach tables during peak commuting hours or at community events to distribute educational materials, free safety gear (e.g., lights, reflectors, helmets), and information on local traffic laws. Include representatives from local police, public works, and transportation departments to answer questions and promote safe road behaviors	$$	2

Participate in RIDOT Law Enforcement Training	Program	Enroll East Providence Police Department (EPPD) staff in pedestrian/bike enforcement training. Include this training in onboarding for school resource officers and traffic enforcement staff. Focus on education-first enforcement and equitable outreach. Coordinate with law enforcement to increase enforcement of speed limits, bike lane violations, and yielding at crossings near the Bike Path. Prioritize education-based enforcement.	$	1
Support snow clearing by property owners	Program	Advance strategies to increase property owner compliance with sidewalk snow clearing requirements. Explore the possibility of creating a low-tech, text-based tool that allows residents to receive snowplow schedule updates and timely shoveling reminders via SMS. In partnership with organizations like Local Initiatives Support Corporation (LISC Rhode Island), create a winter youth employment or volunteer program that offers stipends or service credits to young people who shovel sidewalks and driveways for older adults and residents with mobility challenges. This program can be operated through schools, youth centers, or city recreation departments.	$	1
Include bike paths and transit stops in the city's broader winter maintenance strategy	Policy	Develop a formal snow removal and year-round maintenance strategy/ policy for East Providence's bike paths, including the East Bay Bike Path and any future shared-use trails. Identify key trail access points near schools, transit stops, and commercial districts as high-priority zones for snow removal. Integrate bike path maintenance into city snow operations planning and budgets to avoid treating trails as an afterthought. To supplement city efforts, engage community groups—such as the Boy Scouts, youth organizations, and neighborhood associations—in seasonal stewardship projects. These groups can assist with light trail maintenance, signage cleanup, and volunteer-supported snow	$$	2

		shoveling at trail entrances or access points.		
		Connectivity & Access		
Expand Bike Rentals Along the EBBP	Program	Partner with companies to bike rental shops or shared stations (with helmets) at key intersections and along the bike path to support access for residents and visitors. This will expand the path's reach, promote intercity biking, and reduce car trips.	$$$	3
Create an ADA Transition Plan	Strategy	Create an ADA Transition Plan to bring all sidewalks, curb ramps, and crosswalks up to compliance with the Americans with Disabilities Act (ADA) and aligned with the statewide plan. This policy can serve as a guide for coordinating efforts to improve street infrastructure for people who walk and use mobility devices in East Providence. Prioritize locations according to input from the community and based on their connection to schools, parks, medical facilities, business districts, and places with high concentrations of older adults. Adopt metrics to measure success.	$$$	2

Establish cohesive multilingual wayfinding signage	Program	Develop and implement a cohesive, multilingual citywide wayfinding signage strategy to improve navigation for people walking, biking, and driving across East Providence. The city's evolving bicycle and pedestrian infrastructure would benefit from a clear signage system that enhances both functionality and identity. The strategy should prioritize the placement of pedestrian-oriented signage—such as totem signs, kiosk maps, and walking-distance indicators—in high-activity areas such as Watchemoket Square, Riverside Square, the waterfront redevelopment zone, and around transit stops. Signage should guide people to parks, schools, trails, business districts, and civic spaces, supporting both transportation and economic development goals. A concurrent signage audit should identify and remove outdated, redundant, or visually cluttered signage to improve aesthetics and reduce confusion. All new signage should follow a standardized visual language (colors, fonts, icons) that reinforces East Providence's brand and enhances the legibility of the streetscape.	$$$	3
Standardize traffic signal phasing	Policy	Standardize traffic control and pedestrian signal phasing to prioritize safe pedestrian movements through intersections. Consistent and reliable pedestrian signals will improve the safety of people crossing the street and the rate at which people driving yield to people crossing on foot or on bike. Standardize use of automatic recall, which eliminates the need for a pedestrian to push a button to call the WALK signal. Introduce use of Leading Pedestrian Intervals (LPIs) as a standard treatment at appropriate intersections. Consider Right Turn on Red restrictions at intersections across East Providence and at all locations where LPIs are used.	$$	2
Create a bicycle and pedestrian facility GIS database	Policy	Create a bicycle and pedestrian GIS database that is regularly maintained. The data should include existing sidewalks, crosswalks, paths, signals, and future conditions.	$	1

APPENDIX G: IMPLEMENTATION PLAN

The Implementation Plan for the Bike and Pedestrian Plan outlines how recommended projects, policies, and programs can be advanced over time. The Implementation Plan includes the following:

- Prioritization Framework
- Bicycle and Pedestrian Project List
- Funding Strategies
- Lifecycle Cost Opinions
- Concept Designs

Prioritization Framework

The prioritization framework is intended to provide the City of East Providence with flexibility in project selection and implementation while advancing projects that best align with the plans core goals that reflect input received through public engagement. Establishing clear priorities will help the City to:

- Identify projects that best advance plan goals
- Align projects with grant and funding criteria to improve competitiveness for future investment
- Guide implementation as funding, staff capacity, and coordination opportunities with other roadway projects become available

Through the prioritization process, each project receives a score for individual plan goals which are then weighted based on their relative importance to the City of East Providence to produce a total score. Reporting scores by goal allows each objective to stand on its own; for example, a project with a high safety score may warrant advancement even if it scores lower in connectivity or equity. Projects are scored through a geospatial analysis and every proposed bicycle project and proposed pedestrian capital project is scored.

This approach also allows projects to be matched with appropriate funding sources. Projects with high safety scores may be well suited for Highway Safety Improvement Program (HSIP) funding, while projects with strong equity scores may align with programs such as the Transportation Alternatives Program (TAP). Table 3 presents the prioritization framework and scoring criteria used to evaluate projects.

Data sources:

- **Crashes:** Vulnerable road user crashes (including bicycle, pedestrians, and other non-vehicle road users; RIDOT 2019-2023.
- **Schools:** Schools; RIGIS 2023
- **Destinations:** Parks, playgrounds, public buildings (libraries, post offices, town hall, fire stations); Open Street Map 2023
- **Transit:** RIPTA bus stops; RIGIS 2023
- **Pedestrian Activity:** Streetlight RI DOA license accessed 2024
- **Bike Facilities:** Bike Paths; RIDOT 2023 (edited)

Ongoing Pedestrian Projects

East Providence has an incomplete sidewalk network, atypical for a city of its size and regional importance. While pedestrian capital projects were ranked in the prioritization process, the city has significant work that should be made towards the completion of a complete and accessible sidewalk network.

As there is no data reflecting local sidewalk presence, our sidewalk recommendations are based on community priorities. **Sidewalks and protected crossings within 0.25 miles of a school followed by within 0.25 miles of a transit stop should be sequenced in the short-term and as the first priority.**

Table 3: Project Prioritization Scoring

Category	**Description**	**Weight**	**Scoring**
Safety	Crashes (VRU)	20	0= No crash on segment 5= 1 crash on segment 20= 2 or more crashes on segment
	Schools	20	Relative Scoring: 20 = School directly on corridor 10 = School within 0.25 mile 0 = No facility within .25 mi of corridor
Connectivity/Access	Destinations	15	15 = at least one park and one public building 5 = only park or public building 0 = no destinations nearby
	Pedestrian activity	15	15 = Segment is in the top 5% of activity areas 0 = All others are zero
Mobility	Transit	15	Relative Scoring: 15 = Roads within 500 feet of bus stop 0 = All other roads
	Bike paths access	15	Relative Scoring: 15 = Street is within 500 feet of an access point 0 = all other roads

Bicycle and Pedestrian Project List

Below is the full project list in suggested order of implementation. The city has been provided with a more detailed ranking dataset that characterizes projects by their relative importance to plan goals (safety, mobility, connectivity/access). The "Long term, start now" projects are projects that are important to the project goals, but are more technically complicated than is typical. They will likely require additional study or coordination between agencies that make planning now advantageous, even if they are not likely to be completed in the short-term.

Timeframes:
Short: 0-5 years
Medium: 5-10
Long: +10

The prioritization score strongly influences the recommended implementation ranking, but it is not the sole determining factor. The considerations below affect whether projects are assigned to the short-, medium-, or long-term timeframes. However, projects with the highest scores were not reassigned to later timeframes from their preliminary categories.

Factors used to determine project rank:

- Score
- Connectivity
- Level of effort
- Jurisdiction
- Public engagement

Table 4: Bicycle and Pedestrian Project List

Rank	Streets	Bike Rank	Ped Rank	Facility	Timeline
1	First St, Warren Av	1	16	Separated On Road	Short
2	Forbes St	2	10	Separated On Road	Short
3	Veterans Memorial Pkwy	0	6	Crossing Improvements	Short
4	Juniper St	5	0	Neighborhood Greenway	Short
5	Lyon Av, N Carpenter St, Orchard St	10	0	Neighborhood Greenway	Short

Rank	Streets	Bike Rank	Ped Rank	Facility	Timeline
6	Ferrer Av, Smith St, Allen Av	59	0	Neighborhood Greenway	Short
7	Ferris Av	35	0	Advisory Bike Lane	Short
8	Newman Av	15	28	Separated On Road	Short
9	Estrelle Dr, Grassy Plain Rd, Reardon Av, Rounds Av	10	0	Advisory Bike Lane	Short
10	North Broadway	28	6	Separated On Road	Short
11	Grosvenor Av	19	16	Neighborhood Greenway	Short
12	Dover Av	46	0	Neighborhood Greenway	Short
13	Off road path (behind Grassy Plains Park)	0	0	Off Road Path	Short
14	Off road path (Riverside Middle School to James RD Oldham School)	0	0	Off Road Path	Short
15	Crescent View	15	30	Separated On Road	Short
16	Fort St	5	X	Bike Lane	Medium
17	Allen Av, Bullocks Point Av, Shore Rd	10	10	Neighborhood Greenway	Medium
18	Mercer St	15	X	Separated On Road	Medium

Rank	Streets	Bike Rank	Ped Rank	Facility	Timeline
19	Massasoit Av, Waterfront Dr	15	35	Separated On Road	Medium
20	Metropolitan Park Dr, Willett Av	19	30	Reconfiguration, Separated On Road	Medium
21	Martin St	19	16	Neighborhood Greenway	Medium
22	Broadway St, S Broadway St	19	16	Separated On Road	Medium
23	Carlton Av, Irving Av, N Hull St	19	X	Neighborhood Greenway	Medium
24	Central Av, Cooper St, James St	19	X	Neighborhood Greenway	Medium
25	Warren Av, Waterman Av	28	6	Neighborhood Greenway, Separated On Road	Medium
26	Waterman Av	28	6	Separated On Road	Medium
27	Fifth St	28	X	Neighborhood Greenway	Medium
28	Potter St, Walnut St	28	X	Neighborhood Greenway	Medium
29	Grove Av	28	22	Neighborhood Greenway	Medium
30	Purchase St	28	X	Neighborhood Greenway	Medium
31	Hospital Rd, Hospital Road Private Wy	35	X	Neighborhood Greenway	Medium
32	Commercial Wy	35	X	Neighborhood Greenway	Medium

Rank	Streets	Bike Rank	Ped Rank	Facility	Timeline
33	Bliss St	35	X	Neighborhood Greenway	Medium
34	Sutton Av	35	X	Neighborhood Greenway	Medium
35	Newport Av	35	10	Separated On Road	Medium
36	Providence Av	42	X	Neighborhood Greenway	Medium
37	Burnside Av, Griffith Dr	42	X	Neighborhood Greenway	Medium
38	Dodge St, Silver Spring Av	42	X	Neighborhood Greenway	Medium
39	N County St	42	X	Neighborhood Greenway	Medium
40	Boyden Blvd, Off road connection	46	6	Neighborhood Greenway, Off Road Path	Medium
41	Narragansett Park Dr	59	10	Off Road Path, Separated On Road	Medium
42	Off road path (White Squadron to East Bay Bike Path)	X	X	Off Road Path	Medium
43	Off road path (Kettle Point to East Bay Bike Path)	X	X	Off Road Path	Medium
44	Off road path (The Wolf School to Ten Mile Greenway)	X	X	Off Road Path	Medium

Rank	Streets	Bike Rank	Ped Rank	Facility	Timeline
45	Water St	X	10	Pedestrian Only	Medium
46	John St	X	16	Pedestrian Only	Medium
47	Mary Av	X	22	Pedestrian Only	Medium
48	Vineyard Av	X	22	Pedestrian Only	Medium
49	Whelden Av	X	22	Pedestrian Only	Medium
50	Bourne Av, Elm Av, Frederick St, Greenwood Av, Ruth Av	19	X	Neighborhood Greenway Separated On Road	Long
51	Legion Wy	46	X	Neighborhood Greenway	Long
52	Squantum Rd	46	X	Bike Lane	Long
53	Apollo Rd, Brookhaven Dr, Lee Rd	46	X	Neighborhood Greenway	Long
54	Brown St	46	X	Neighborhood Greenway	Long
55	Brightridge Av	46	X	Bike Lane	Long
56	Goldsmith Av, None	46	X	Neighborhood Greenway, Off Road Path	Long
57	Henderson Expy	46	36	Separated On Road	Long
58	Centre St	46	30	Bike Lane	Long
59	Ferris Av	46	X	Neighborhood Greenway	Long

Rank	Streets	Bike Rank	Ped Rank	Facility	Timeline
60	Roger Williams Av	46	30	Sidewalks	Long
61	Beverly Rd	59	X	Neighborhood Greenway	Long
62	Becker Av	59	X	Neighborhood Greenway	Long
63	Bourne Av	59	X	Neighborhood Greenway	Long
64	Agnes St, Off road connection	64	X	Neighborhood Greenway, Off Road Path	Long
65	New Rd	64	X	Neighborhood Greenway	Long
66	Roger Williams Av	64	30	Neighborhood Greenway	Long
67	Pleasant St	64	30	Neighborhood Greenway	Long
68	Massasoit Av	64	35	Separated On Road	Long
69	Bullocks Point Av	70	10	Neighborhood Greenway	Long
70	Off road Path (behind the cemetery)	X	X	Separated On Road	Long
71	Valley St	X	16	Pedestrian Only	Long
72	Boston St	X	22	Pedestrian Only	Long
73	Payette St	X	22	Pedestrian Only	Long

Rank	Streets	Bike Rank	Ped Rank	Facility	Timeline
A	Pawtucket Av	2	1	Road Diet, Separated On Road	Long term, start now
B	Six Corners (Broadway St, N Broadway St, Taunton Av, Waterman Av)	10	6	Further study	Long term, start now
C	Wampanoag Trl	5	28	Reclassificatio n	Long term, start now
D	Mayor's Ten Mile Connection	46	1	Off Road Path	Long term, start now
E	Riverside (Bullocks Point Av, Pawtucket Av, Veterans Memorial Pkwy)	5	10	Bike Lane, Pedestrian Improvement	Long term, start now

APPENDIX H: FUNDING AND COST OPINIONS

Potential Funding Sources by Project

Short-Term Projects

Rank	Location / Corridor	Project Type	Potential Funding Sources
1	First St, Warren Ave	Separated On-Road	HSIP, TAP, STBG, SS4A
2	Forbes St	Separated On-Road	HSIP, TAP, STBG, SS4A
3	Veterans Memorial Pkwy	Crossing Improvements	HSIP, SS4A, TAP, CMAQ
4	Juniper St	Neighborhood Greenway	TAP, STBG, SS4A (low-cost safety countermeasures)
5	Lyon / N Carpenter / Orchard	Neighborhood Greenway	TAP, STBG, SS4A
6	Ferrer / Smith / Allen	Neighborhood Greenway	TAP, STBG
7	Ferris Ave	Advisory Bike Lane	TAP, STBG, HSIP (if crash history exists)
8	Newman Ave	Separated On-Road	HSIP, TAP, STBG, SS4A
9	Estrelle / Grassy Plain / Reardon / Rounds	Advisory Bike Lane	TAP, STBG
10	North Broadway	Separated On-Road	HSIP, TAP, STBG, SS4A
11	Grosvenor Ave	Neighborhood Greenway	TAP, STBG
12	Dover Ave	Neighborhood Greenway	TAP, STBG
13	Grassy Plains Park	Off-Road Path	TAP, RTP, STBG
14	Riverside MS to James R. Oldham	Off-Road Path	TAP, RTP, SS4A (school safety context)
15	Crescent View	Separated On-Road	HSIP, TAP, STBG

Long-Term, Start-Now Projects (A–E)

Rank	Location / Corridor	Project Type	Potential Funding Sources
A	Pawtucket Ave	Road Diet / Separated On-Road	HSIP, SS4A, STBG, INFRA (if corridor-scale)
B	Six Corners	Further Study	SS4A (planning), PLAN (SPR/PL funds), RTA (planning & design)
C	Wampanoag Trail	Reclassification	STBG, INFRA, PROTECT (if resilience elements included), SS4A
D	Mayor's Ten Mile Connection	Off-Road Path	TAP, RTP, STBG, BUILD (regional connectivity)
E	Riverside Corridor	Bike Lane + Ped Improvements	HSIP, TAP, STBG, SS4A

Federal Funding Sources

Sourced from the FHWA Pedestrian and Bicycle Funding Opportunities list updated 10/25: https://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/funding_opportunities.pdf

- **Active Transportation Infrastructure Investment Program (ATIIP):** Competitive federal grant program to plan, design, and construct connected active transportation networks and corridors. https://www.transportation.gov/rural/grant-toolkit/active-transportation-infrastructure-investment-program-atiip
- **Bridge Investment Program (BRI):** Federal funding for repairing, replacing, or rehabilitating highway bridges, including bicycle and pedestrian access. https://www.fhwa.dot.gov/bridge/bip/
- **Carbon Reduction Program (CRP):** Funds transportation projects that reduce greenhouse gas emissions, including bicycle and pedestrian improvements. https://www.fhwa.dot.gov/infrastructure/carbon-reduction.cfm
- **Congestion Mitigation and Air Quality Improvement Program (CMAQ):** Supports transportation projects that reduce congestion and improve air quality, including bike and pedestrian facilities. https://www.fhwa.dot.gov/environment/air_quality/cmaq/
- **Highway Safety Improvement Program (HSIP):** Funds infrastructure and non-infrastructure projects proven to reduce traffic fatalities and serious injuries. https://highways.dot.gov/safety/hsip
- **Railway-Highway Crossings Program (RHCP):** Funds safety improvements at public railway crossings used by vehicles, pedestrians, and bicyclists. https://highways.dot.gov/safety/hsip/xings/railway-highway-crossing-program-overview
- **National Highway Performance Program (NHPP):** Supports condition, performance, and safety improvements on the National Highway System. https://www.fhwa.dot.gov/fastact/factsheets/nhppfs.cfm
- **Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT):** Funds projects that improve the resilience of transportation infrastructure. https://www.fhwa.dot.gov/environment/protect/
- **Surface Transportation Block Grant Program (STBG):** A flexible federal funding source for a wide range of transportation projects. https://www.fhwa.dot.gov/specialfunding/stp/
- **Transportation Alternatives Program (TAP):** Funds smaller-scale bicycle, pedestrian, trail, and Safe Routes to School projects. https://www.fhwa.dot.gov/infrastructure-investment-and-jobs-act/ta.cfm
- **Recreational Trails Program (RTP):** Provides funding for the development and maintenance of recreational trails. https://www.fhwa.dot.gov/environment/recreational_trails/
- **Safe Routes to School (SRTS):** Supports projects that improve safety for children walking and biking to school. https://www.transportation.gov/grants/SS4A
- **Statewide and Metropolitan Transportation Planning Funds (PLAN):** Federal planning funds for transportation studies and plans. https://www.fhwa.dot.gov/planning/about_planning/
- **National Scenic Byways Program (NSBP):** Supports projects that enhance and preserve designated scenic byways. https://www.fhwa.dot.gov/environment/scenic_byways/
- **State Infrastructure Banks (SIBs):** State-run revolving loan programs that provide low-interest transportation financing. https://www.fhwa.dot.gov/ipd/finance/tools_programs/federal_credit_assistance/sibs/
- **Infrastructure for Rebuilding America (INFRA):** Competitive grants for large, multimodal transportation projects. https://www.transportation.gov/grants/infra
- **Better Utilizing Investments to Leverage Development (BUILD):** Discretionary grants for capital and planning projects with regional impact. https://www.transportation.gov/grants/build-grants
- **Safe Streets and Roads for All (SS4A):** Funds planning and implementation projects to prevent roadway deaths and serious injuries. https://www.transportation.gov/grants/SS4A
- **Transportation Infrastructure Finance and Innovation Act (TIFIA):** Offers low-interest federal loans for large transportation projects. https://www.transportation.gov/tifia
- **Federal Transit Administration (FTA):** Administers federal funding programs supporting public transit. https://www.transit.dot.gov/funding/grants

- **Areas of Persistent Poverty Program (AoPP):** Provides planning funds to improve transit access in economically distressed communities. https://www.transit.dot.gov/funding/grants/areas-persistent-poverty
- **Transit-Oriented Development Planning Grants (TOD):** Funds planning to improve access to transit and support equitable development. https://www.transit.dot.gov/TOD
- **NHTSA Section 402 State and Community Highway Safety Grants (402):** Funds behavioral safety programs such as education and enforcement. https://www.nhtsa.gov/highway-safety-grants-program/section-402-state-and-community-highway-safety-grants
- **NHTSA Section 405 National Priority Safety Programs (405):** Provides incentive grants for priority safety areas, including nonmotorized safety. https://www.nhtsa.gov/highway-safety-grants-program/section-405-national-priority-safety-programs

FHWA Funding Chart

Chart from FHWA. Tribal and rural programs have been removed. See original source for detail and notes.

Activity / Project Type	ATIIP	BRI	CRP	CMAQ	HSIP	RHCP	NHPP	PROT	STBG	TAP	RTP	SRTS	PLAN	NSBP	SIBs	INFRA	BUILD	SS4A	TIFIA	FTA	AoPP	TOD	402	405
Access enhancements to public transportation (benches, bus pads, lighting, shade)	$		$	$			$	$	$	$				$	$	$	$	~$	~$	$				
Americans with Disabilities Act (ADA)/504 Self Evaluation / Transition Plan development and updates	$		$						$	$	$		$					$			$	~$		
ADA compliance retrofits; removal of accessibility barriers	$	$	$				$	$	$	$	$	$		$	$	$	$	~$	~$	$				
Battery exchange kiosk; charging station for electric bicycles and scooters	$		$	$					$	$	$				$				~$					
Bicycle plans	$		$					$	$	$		$	$					$		$	$	~$		
Bicycle helmets (project or training related)	~$				$				$	$SRTS		$											$	
Bicycle helmets (safety promotion)	~$				$				$	$SRTS		$												
Bicycle lanes on road	$		$	$	$	$	$	$	$	$		$		$	$	~$	~$	$	~$	$				
Bicycle parking (see Bicycle Parking Solutions)	$		$	$			$		$	$	$	$		$	$	~$	~$	~$	$	$				
Bicycle racks on transit	$		$	$					$	$					$		~$	~$	~$	$				
Bicycle repair station (air pump, simple tools, electric outlets)	$		$						$	$					~$		~$	~$	~$	$				
Bicycle share (capital and equipment including charging stations and outlets; not operations)	$		$	$			$		$	$					$	~$	~$	~$	~$	$				
Bicycle storage or service centers (e.g. at transit hubs) including charging stations and outlets; not operations	$		$	$					$	$					$		~$	~$	$	$				
Bridges / overcrossings for pedestrians and/or bicyclists	$	$	$	$	$	$	$	$	$	$	$	$			$	$	$	$	~$	$				
Bus stop enhancements (ADA compliance, benches, lighting, shelters, shade)	$		$	$			$	$	$	$				$	$	$	$	~$	~$	$				
Coordinator positions: State/local (CMAQ/STBG limited)				$					$	$SRTS		$						~$						

Activity / Project Type	ATIIP	BRI	CRP	CMAQ	HSIP	RHCP	NHPP	PROT	STBG	TAP	RTP	SRTS	PLAN	NSBP	SIBs	INFRA	BUILD	SS4A	TIFIA	FTA	AoPP	TOD	402	405
Community Capacity Building (develop organizational skills and processes)	~$												$					~$			~$	~$		
Crosswalks for pedestrians, pedestrian refuge islands (new or retrofit)	$		$	~$	$	$	$	$	$	$	$	$		$	$	$	$	$	~$	$				
Curb ramps	$	$	$	~$	$	$	$	$	$	$	$	$		$	$	$	$	$	~$	$				
Counting equipment	$				$	$	$		$	$	$	$	$			$		~$	~$	$				
Data collection and monitoring for pedestrians and/or bicyclists	$		$		$	$	$		$	$	$	$	$		~$	$	$	$	~$	$	~$	~$		
Demonstration projects (temporary pedestrian and bicycle projects, sometimes referred to as quick-build projects)	$				$	$			$	$	$	$			$			$						
Emergency and evacuation routes for pedestrians and/or bicyclists	$		$				$	$	$	$	$	$			$	$	~$	~$	$	$	~$	~$		
Encouragement and education activities related to safe access for bicyclists and pedestrians	~$		~$	$	$				$	$SRTS	$	$	$					~$						
Equipment: specialized equipment for maintaining pedestrian and bicycle facilities (sweepers, miniplows).	~$		~$	~$					$	$	$				$			~$						
Historic preservation (pedestrian, bicycle, transit facilities)	~$		$						$	$				$	$		~$	~$	~$	$				
Landscaping, streetscaping (pedestrian/bicycle route; transit access); related amenities (benches, lighting, shade, trees, water); usually part of larger project	$		$				~$	$	$	$					$	~$	~$	~$	~$	$				
Lighting (pedestrian/bicyclist scale with pedestrian/bicyclist project)	$		$	~$	$	$	$	$	$	$	$	$		$	$	$	$	$	~$	$				
Maps (for pedestrians and/or bicyclists) (see Idea Book)	$		$	$					$	$		$	$	$				$		$				
Micromobility projects, including scooter share (capital and equipment, including vehicles, charging stations/outlets; not operations)	$		$	$					$	$					$		$	~$	~$					

Activity / Project Type	ATIIP	BRI	CRP	CMAQ	HSIP	RHCP	NHPP	PROT	STBG	TAP	RTP	SRTS	PLAN	NSBP	SIBs	INFRA	BUILD	SS4A	TIFIA	FTA	AoPP	TOD	402	405
Paved shoulders for pedestrian and/or bicyclist use	$	$	$	$	$	$	$	$	$	$		$		$	$	~$	$	$	~$	~$				
Pedestrian plans	$		$					$	$	$		$	$			~$	$	$		$	$	$		
Public education and awareness programs to inform motorists and nonmotorized road users on nonmotorized road user safety	~$				$				$	$SRTS		$						$					$	$
Public involvement to inform decision making	$	$	$	$	$	$	$	$	$	$	$	$	$	~$	$	$	$	$	$	$	$	$	$	
Rail at-grade crossings	$		$		$	$	$	$	$	$	$	$			$	$	$	~$	$	$				
Recreational trails	$							$	$	$	$			$	$		$	~$	~$					
Resilience improvements to pedestrian/bicycle facilities to protect or enhance use.	$	~$	~$	~$			$	$	$	$	$	$	note	$	$	$	$	~$	~$					
Resurfacing, restoration, and rehabilitation for pedestrian and bicycle facilities, including preventive maintenance and bridge retrofits	$	~$	$	~$	$	$	$	$	$	$	$	$		$	$	$	$	~$		~$				
Road Diets (pedestrian and bicycle portions)	$		$	$	$		$	$	$	$		$			$	$	$	$	$	~$				
Road Safety Assessment for pedestrians and bicyclists	$				$	$			$	$			$		$			$	~$		~$			
Safety education and awareness activities and programs to inform pedestrians, bicyclists, and motorists on ped/bike traffic safety laws	~$				$				$	$SRTS		$	$		$			$			~$	~$	$	$
Safety education positions					$				$SRTS	$SRTS		$						$					$	
Safety enforcement (including police patrols)					$				$SRTS	$SRTS		$						$					$	$
Safety program technical assessment (for peds/bicyclists)	~$				$				$SRTS	$SRTS		$	$					$					$	
Separated bicycle lanes	$	$	$	$	$	$	$	$	$	$		$		$	$	$	$	$	~$	$				
Shared use paths, transportation trails, rail-trails, rails-with-trails	$		$	$	$	$	$	$	$	$	$	$		$	$	$	$	$	~$	$				
Sidewalks (new, rehabilitation, or retrofit)	$	$	$	$	$	$	$	$	$	$	$	$		$	$	$	$	$	~$	$				
Signs, signals, signal improvements (including accessible pedestrian signals). See primary source for notes.	$		$	$	$	$	$	$	$	$		$		$	$	$	~$	$	~$	$				
Signing for pedestrian or bicycle routes	$		$	$	$		$	$	$	$		$		$	$	$	~$	$	~$	$				

Activity / Project Type	ATIIP	BRI	CRP	CMAQ	HSIP	RHCP	NHPP	PROT	STBG	TAP	RTP	SRTS	PLAN	NSBP	SIBs	INFRA	BUILD	SS4A	TIFIA	FTA	AoPP	TOD	402	405
Spot improvement programs (programs of small projects to enhance pedestrian and bicycle use or correct problems)	$		$	~$	$	$	$		$	$	$	$			$	$	~$	$	~$	$				
Stormwater mitigation related to pedestrian and bicycle project impacts	$				$	$	$	$	$	$	$	$	note		$	$	$	~$	~$	$	note	note		
Technical Assistance (see primary source)	~$			~$	$				$	$	$	$	note					~$						
Traffic calming	$		$		$		$	$	$	$		$			$	$	$	$	~$	$				
Trail bridges	$		$	~$	$	$	$	$	$	$	$	$			$	$	$	~$	$					
Trail construction and maintenance equipment; specialized equipment for trail safety education and trail assessments	$		~$						$	$	$							~$	~$					
Trail/highway crossings and intersections	$	$	$	~$	$	$	$	$	$	$	$	$		$	$	$	$	$	~$					
Trailside and trailhead facilities (restrooms, water, electric charging, but not general park amenities)	$		~$						$	$	$			$	$		~$		~$					
Training related to program goals	~$			$	$				$	$	$	$	$					$			~$	~$	$	
Training for law enforcement on pedestrian and bicyclist safety laws	~$			~$	$				$SRTS	$SRTS		$						$			~$	~$	$	$
Tunnels / underpasses for pedestrians and/or bicyclists	$		$	$	$	$	$	$	$	$	$	$			$	$	$	$	$	$				
Vulnerable Road User Safety Assessment (23 U.S.C. 148(l))	$				$				$	$		$	$		$						~$	~$		

Lifecycle Cost Opinions

Approximate cost opinions were developed by identifying likely project cost elements and applying estimated unit costs on a per-mile basis. Preliminary cost opinions include a 30 percent contingency to account for items that are undefined or typically unknown prior to final design. Unit costs are expressed in 2024–2025 dollars and are based on historical bid data from RIDOT.These cost opinions do not include easement or right-of-way acquisition; permitting, inspection, or construction management; or ongoing operations and maintenance costs.

Detailed cost opinions have been provided to the City. The summaries below represent a subset of the highest-scoring projects. All cost opinions presented are planning-level estimates and are subject to change as projects advance through design and into construction. Toole Design Group, LLC has no control over labor and material costs, competitive bidding outcomes, or market conditions, and makes no expressed or implied warranties regarding the accuracy of these estimates relative to actual bids or final project costs.

Treatment Cost Summary	**Approximate Cost**	
Shared Use Path - 12' wide, 3' landscape buffer	$2.2M	Cost/Mile
Neighborhood Greenway + curb extensions + minor sidewalk work	$396k	Cost/Mile
Separated bike lane on each side - flexpost	$261k	Cost/Mile
Advisory shoulder and speed humps	$178k	Cost/Mile
Separated bike lane on each side - curb stop	$532k	Cost/Mile
Bike Blvd, sidewalks, parking mitigations, street trees	$3.01M	Cost/Mile
Neighborhood greenway+ improved EBBP entrance	$248k	Cost/Mile

Priority Project Cost Table

ID	Street	Description	From	To	Miles	Treatment	$*
1	First St	Separated Shared Use Path on First Street	Veterans Memorial	Warren Ave	0.18	SUP - 12' wide, 3' landscape buffer	$$
2	Forbes St	Install a fully separated Shared Use Path on Forbes Av.	Willett Ave	Wampanoag Trail	1.3	SUP - 12' wide, 3' landscape buffer	$$$
3	Veterans Memorial Parkway	Install 3-4 protected crossings on Veteran's Memorial Parkway to ensure safe bike path access	Lyon Ave	Mercer St	0	Protected Crossing	$
4	Juniper St	Neighborhood Greenway + curb extensions + minor sidewalk work	1st St	S Broadway	0.8	Neighborhood Greenway + curb extensions + minor sidewalk work	$
5	Lyon Ave, N Carpenter St, Orchard St	Sidewalks, parking mitigation, traffic calming, street trees	Veterans Memorial	Grove Ave	1.07	Bike Blvd, Sidewalks, Parking mitigations, Street Trees	$$$
6	Fenner Ave, Smith St, Allen Ave	Phase 1: Neighborhood Greenway + improve EBBP entrance	Creek at Dartmouth Ave	East Bay Bike Path	0.72	Neighborhood Greenway+ Improved EBBP Entrance	$
7	Ferris Ave	Advisory bike lane and traffic calming to elementary school, connect parking lot to Ten Mile Greenway	Route 1A/Pawtucket Ave	Ten Mile River Greenway	0.75	Advisory Shoulder and Speed Humps	$
8A	Newman Ave	Separated on road facility by the graveyard, improve crossing with Pawtucket, room for shared path to the bridge (no sidewalks currently)	Greenwood Ave	Pleasant St	0.52	Separated bike lane on each side - curb stop	$$
8B	Newman Ave		Pleasant St	City line	0.27	SUP - 12' wide, 3' landscape buffer	$$
9	Estrelle Dr, Grassy Plain Rd, Reardon Av, Rounds Ave	Bike lane into advisory bike lane between Willett and Wampanoag, connect to either side of park path	Willett Ave	Wampanoag Trail	1.6	Advisory Shoulder and Speed Humps with Pavement Marking Removal	$
10	North Broadway	Fully separated bike lane, crossing improvements & traffic calming, better parking regulation	Dewey Ave	Greenwood Ave	1	Separated bike lane on each side - curb stop	$$

** Approximate costs: $=<500k, $$=501k-2M, $$$= >2M*

APPENDIX I: CONCEPT DESIGNS

Concept designs are used here to propose ideas before detailed engineering begins. These are intended to be a clear, visual way to show how streets, sidewalks, bicycle facilities, and transit elements may function together. While we think these are a foundation for solid implementation designs, they might take a different shape during actual design and construction.

Design elements, such as speed humps or other traffic calming features, might be exchanged for other design elements based on the needs of the Department of Public Works. What should not be exchanged is the function of the element, as most of the roads identified in this plan need engineering and design changes to encourage safe vehicle behaviors.

Concept 1: First Street

The First Street bikeway will address the current gap in the East Bay Bike Path between the intersection of First Street and Veteran's memorial and Warren Avenue. The connection will be a fully grade separated shared use path. The block between Veteran's Memorial Parkway and Mauran Avenue will take a portion of the western parcel and retain traffic in both directions. The portion between Mauran Avenue and Warren Avenue will be converted to a one-way with the other lane being converted to active transportation use.

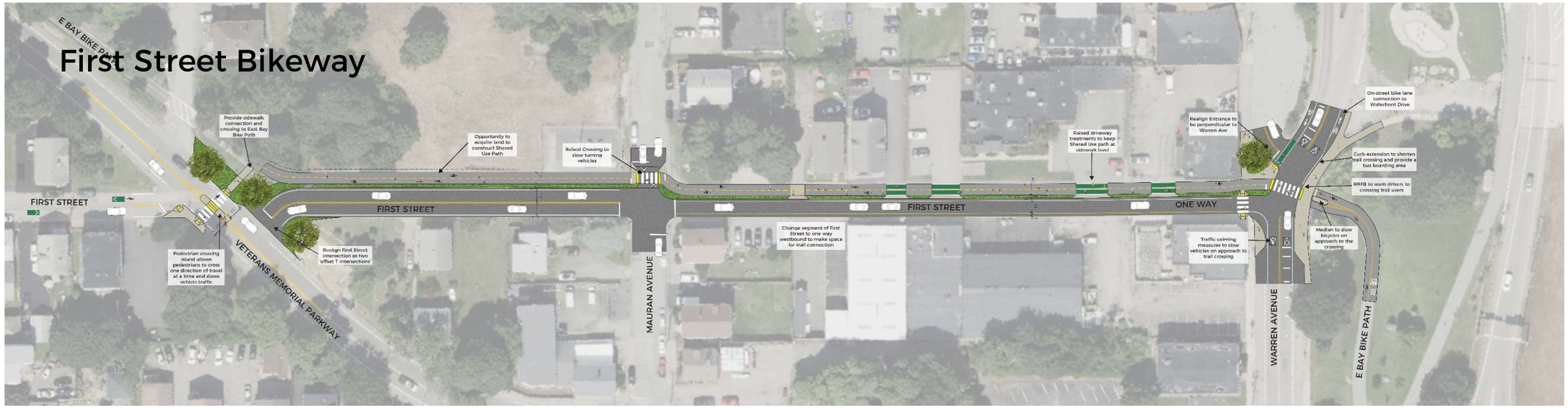
Concept 2: Juniper Street

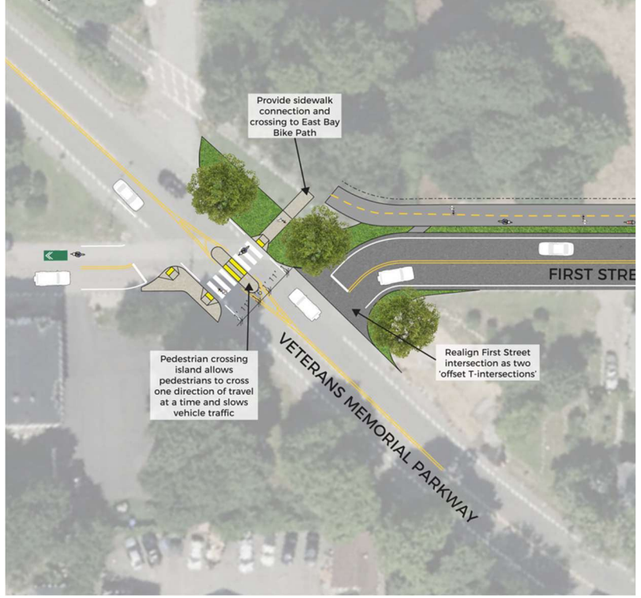
Juniper Street provides an example of a possible Neighborhood Greenway design. These facilities include traffic calming features like speed humps, curb extensions, raised intersections, or other design elements that slow traffic. Juniper Street was selected as a n alternative to a dedicated facility on Warren Avenue, as it runs parallel and connects to First Street.

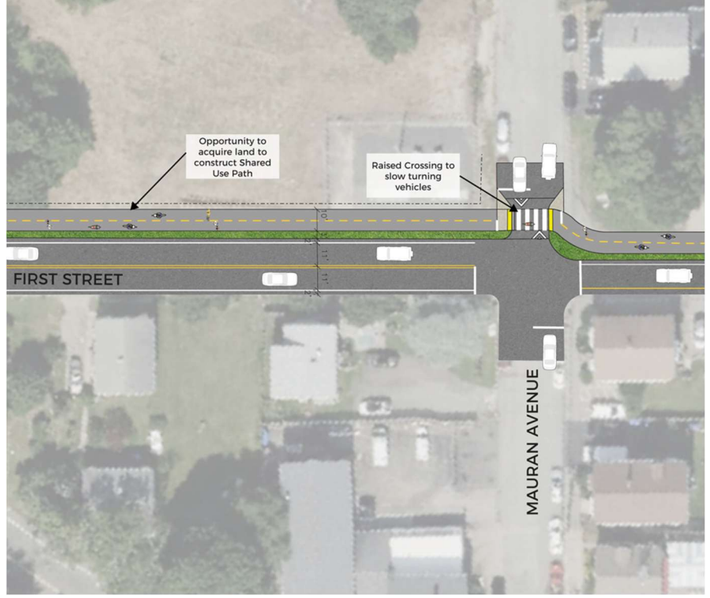
Concept 3: Veteran's Memorial Parkway & Mercer Street

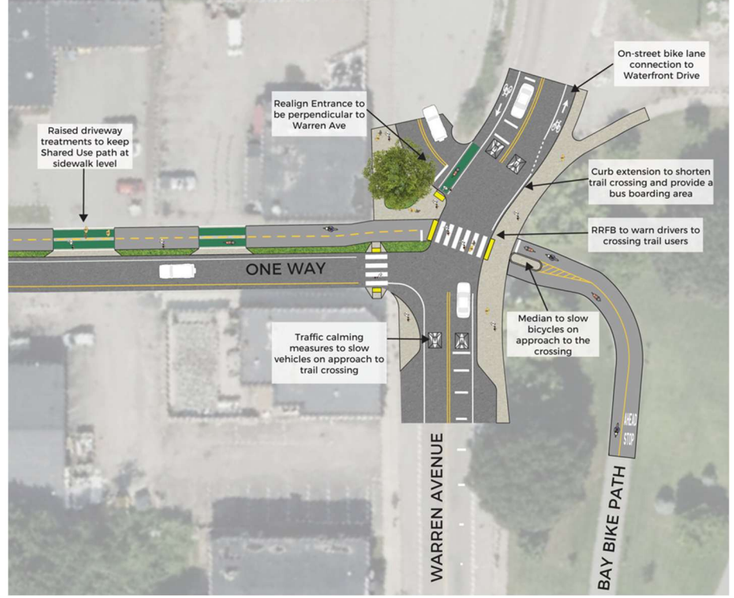
Veteran's Memorial Parkway is difficult to cross. A realignment of Mercer Street can create room for a protected intersection. This will increase access to the bicycle path, and improve the quality of the small memorial park. Some sort of traffic calming, as well as a marked intersection, and signal is necessary to ensure pedestrian safety in crossing.

First Street Bikeway

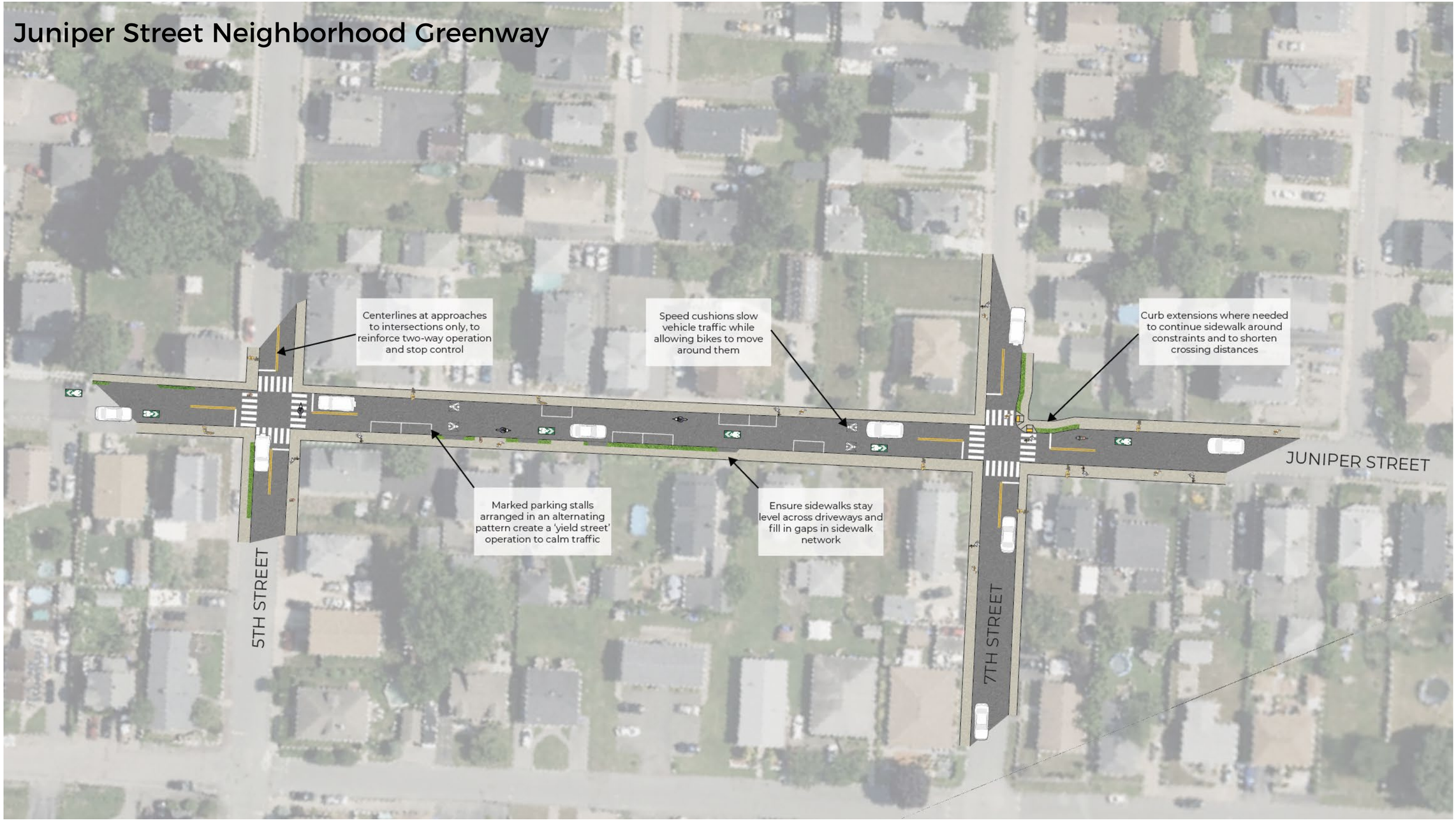








Juniper Street Neighborhood Greenway



Veteran's Memorial Parkway Crossing