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INTRODUCTION

Introduction

Fatal crashes on our roadways are increasing across the country. In the United States, there were 42.795 motor vehicle traffic fatalities in 2022. This was nearly a 10% increase in the number of fatal crashes and deaths from 2020.

Providence is no exception to this problem. Between 2019 and 2023, 39 people lost their lives on Providence streets. Over 300 more people were seriously injured.

A Mindset Shift on Safety

Even one life lost is too many. The City of Providence has committed to achieving Vision Zero, or zero deaths and serious injuries on our streets, by 2030.

In February 2024, Mayor Brett P. Smiley signed a Vision Zero Policy approved unanimously by Providence City Council. This policy established by resolution the 2030 target year for eliminating roadway fatalities and serious injuries.

The Vision Zero Policy established a planning structure for creating and updating a plan for achieving the 2030 Vision Zero target: an internal Vision Zero Task Force and a public Vision Zero Advisory Group. The Task Force is charged with oversight of the Action Plan development, implementation, and monitoring.

Purpose of This Plan

The Vision Zero commitment formalized a focus on safety improvements the City has taken for a number of years. This plan incorporates national best practices and leverages existing plans and policies already in place (see the Related Plans section on page 5).

The strategies in this plan are organized around the goals articulated in these previous plans:



Goal 1: Eliminate serious injuries and fatalities from traffic collisions by 2030. Vision Zero Pledge



Goal 2: Reduce the share of trips taken in private automobiles by encouraging and investing in alternatives, while still maintaining quality infrastructure and connections, such that driving alone makes up approximately half the share of trips that it does in 2024.

Comprehensive Plan



Goal 3: Reduce climate pollution to 45% below 1990 levels by 2030; 80% by 2040; and to Net-zero emissions by 2050.

Climate Justice Plan RI Act on Climate

In addition to synthesis of these plans and identification of measures necessary to meet the three targets, this plan integrates data analysis to identify priority locations for safety improvements.

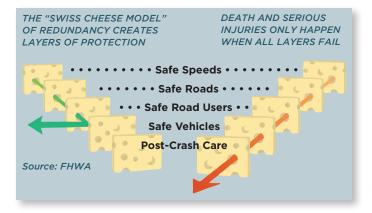
Guiding Principles: The Safe System **Approach**

To eliminate fatal and serious injury crashes in Providence, the City is adopting the Safe System Approach. This new approach is grounded in the belief that severe, life-altering crashes are unacceptable. It acknowledges that traffic crashes are not inevitable "accidents," but are preventable through targeted and sustained action. Other core principles for understanding the Safe System Approach include:

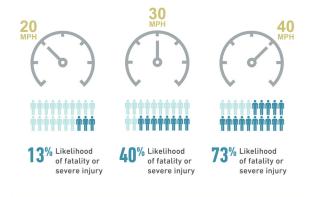
 People Make Mistakes: People will inevitably make mistakes and decisions that can lead to or contribute to crashes. We must design our streets to ensure that when crashes do occur, they do not result in death or serious injury.

- Our Bodies Are Vulnerable: Human bodies have physical limits for tolerating crash impacts before we are killed or seriously injured. Our transportation system should be designed around these vulnerabilities.
- Safety is Proactive: Communities must go beyond reacting to severe crashes when they occur. Taking proactive action to fix safety issues where there is a high risk of severe crashes is just as important.

According to the Safe System Approach, safety issues and severe crash risks must be addressed with multiple layered solutions. Strengthening all parts of the transportation system means that if one part fails, the other parts still protect people. The "Swiss Cheese model" illustrates this concept - only when all layered solutions fail do deaths and serious injuries happen.



Several of these solutions center on lowering vehicle speeds. This is because the higher the speed of a car in a crash, the less likely people are to survive. This graphic shows the likelihood that someone outside a vehicle will be killed or seriously injured when struck by a vehicle traveling 20, 30, and 40 miles per hour. Even relatively small differences in speed can affect crash severity.



Data Citation: Tefft, B.C. (2011), Impact Speed and a Pedestrian's Risk of Severe Injury or Death (Technical Report). Washington, D.C.: AAA Foundation for Traffic Safety



Safe Speeds: People are less likely to survive a high-speed crash. At lower speeds, drivers can stop more quickly and react to unexpected conflicts. A reduction in speed also reduces the force of the impact and improves the likelihood of survival for everyone involved in a crash.



Safe Roads: Designing streets to accommodate human mistakes can greatly reduce the severity of crashes that occur. A wide range of interventions that improve visibility, reduce conflicts at intersections, and slow speeds can be effective. This also includes physically separating people traveling at different speeds, with sidewalks and protected bike lanes.



Safe Road Users: The Safe System Approach is about systems-level solutions and guides the focus away from individual circumstances and blame in severe crashes. However, this systems-level change must include strategies to help all road users behave safely on the road. These might include road user education, giveaways of safety equipment like lights and reflectors, implementation of street design interventions that encourage safer behavior, and other similar interventions.



Safe Vehicles: Motorists account for the largest share of road users, operating heavy vehicles that can be dangerous to other road users. But vehicle design can help manage the frequency and severity of crashes. Action on safe vehicles largely occurs through policy change and might address how design can improve visibility for the driver, occupant safety, crash outcomes for people outside the vehicle, and crash avoidance technology.



Post-Crash Care: People who are injured in a crash rely on emergency first responders to quickly locate and stabilize their injuries and transport them to medical facilities. Post-crash care can also include forensic analysis at the crash site, traffic incident management, and other activities

These mobility planning structures are widely supported, with mobility policies of groups such as **AAA** and **AARP**, for example, aligning closely with the goals of safety and increasing mobility choices besides single-occupancy motor vehicles.



Vision Zero Policy

The February 2024 Vision Zero Policy used the language of Vision Zero rather than of the Safe System Approach, but these two ways of thinking about street safety are nearly identical. The Federal Highway Administration uses the phrase "Zero is our goal. A Safe System is how we will get there."

In the February 2024 policy, the City's leadership adopted three principles to guide the elimination of roadway fatalities and serious injuries:

- 1. Human life shall be prioritized over ease of movement for motor vehicles.
- 2. People inevitably make mistakes, but these mistakes should not result in death or severe injury; therefore, transportation systems are designed to anticipate these errors so that all transportation users can function safely within the system.
- 3. It is unacceptable for any one group to suffer disproportionate effects of traffic collisions based on their race, age, ability, or income.



On February 21, 2024 Mayor Brett P. Smiley, City Council President Rachel Miller, and sponsor Councilor Sue AnderBois gathered on North Main Street to recognize the signing of the Vision Zero Policy passed unanimously by City Council.

Related Plans

This plan connects with and incorporates aspects of several statewide and local plans that relate to transportation. These initiatives and their relationship to the Providence Safe Streets Plan are described in the table.

TABLE 1 RELATED PLANS

Initiative	Summary
Great Streets Master Plan (2020)	A "Complete Streets Master Plan" based on the principle that every street in Providence should be safe, clean, healthy, inclusive, and vibrant. Based on public engagement throughout 2019, it created an envisioned "urban trail network" map and proposed recommendations for City policies and procedures to advance its complete streets goals. Strategies contained in the Great Streets Plan and updates to the Urban Trail Network are integrated into the Action Plan.
Comprehensive Plan (2024)	The state-required Comprehensive Plan was updated in 2024 based on almost a year and a half of public engagement. The centerpiece of the Comprehensive Plan is a vision for land use in the city, which the city's zoning ordinance is then legally required to reflect. Other chapters, including the Mobility chapter, describe a vision for the city and steps to achieve the vision, but do not have the same legally binding nature as the Land Use chapter. Mobility strategies contained in the Comprehensive Plan are integrated into the Action Plan.
Climate Justice Plan (2019)	The City's Office of Sustainability centered equity in the development of its sustainability plan, and the resulting Climate Justice Plan examines the multiple impacts of emissions in the city, including those created by the transportation system. Mobility strategies contained in the Climate Justice Plan are integrated into the Action Plan.
Transit Master Plan (2020)	Part of the state's Long Range Transportation Plan, the Transit Master Plan or "Transit Forward" evaluates the opportunities for enhanced transit around the state and proposes routes for increased service. Strategies within City jurisdiction supportive of the Transit Master Plan are integrated into the Action Plan
PVD Tree Plan (2023)	The PVD Tree Plan focused on Providence's urban forest and how to best cultivate the benefits of urban tree canopy. While mostly the content does not directly relate to transportation, the benefits of trees to walkability and their simultaneous impact on sidewalk accessibility is discussed in the plan with some detail. These strategies related to mobility contained in the PVD Tree Plan are integrated into the Action Plan.
RI Bicycle Mobility Plan (2020)	Part of the state's Long Range Transportation Plan, the Bicycle Mobility Plan identified a statewide map of envisioned bike routes as well as policy and procedure recommendations for state agencies to support bicycling in Rhode Island. Strategies contained in the Bicycle Mobility Plan are integrated into the Action Plan, and routes proposed for bicycle facilities in the state's plan were considered for inclusion in the update to this plan's urban trail network map.



COMMUNITY ENGAGEMENT & COLLABORATION

Community Engagement and Collaboration

The City of Providence performed extensive public engagement and stakeholder collaboration to assemble this plan. Community representation and feedback from the private sector, community groups, and overlapping jurisdictions were incorporated, and the plan was aligned with other governmental plans and planning processes as much as possible.

Public Engagement Activities

The City's goals for the public engagement process were to:

- 1. Reach a diverse and representative group of Providence community members
- 2. Learn more about the transportation safety issues people face in Providence and the types of solutions they would like to see
- 3. Inform community members of the upcoming Providence Safe Streets construction projects and solicit initial input on design.

Understanding that different people prefer different engagement formats, the City provided varied opportunities for both online and in person outreach. Promotional materials, meeting materials, and online resources were made available in both English and Spanish, and paid Spanish interpreters were present at public meetings. Opportunities for engagement were promoted through social media, flyers put up on the street and delivered to abutting properties, partner and City email lists, business canvassing, and Street Team outreach. In all forms of engagement, the City strove to meet people where they are to reach beyond the constituencies who are already engaged on

transportation safety. The following engagement activities took place during the fall of 2024:

Storymap and Online Survey

The City published a **Storymap** with an introduction to the Safe System Approach, an overview of recent crash history in Providence, and a documented path forward for installing safety improvements along key corridors. A public survey and interactive web map allowed people to submit their feedback and outline their priorities for safe streets in Providence. The survey received almost 300 responses across 25 neighborhoods in Providence.

Neighborhood Open House Meetings

The City held four open-house style public meetings located close to upcoming Providence Safe Streets construction projects (see Figure 1 on page 10 for neighborhood reach). Over 65 people attended the meetings held at the following locations:

- Wednesday, October 9, 2024 at Bell Street Chapel from 6-8pm
- Tuesday, October 15, 2024, at the Play Space in the Children's Friend building from 6-8pm
- Wednesday, October 23, 2024 at the **Olneyville Library from 6-8pm**
- Tuesday, October 29, 2024 at the Doorley **Municipal Building from 6-8pm**

Examples of public comments from these meetings, the public survey, and the Comprehensive Plan outreach are shown in the Strategies section on page 36.

Street Team Outreach

A team of paid community members engaged with people about the project on the ground, including sharing public meeting dates and links to the storymap and survey. The Street Team members promoted the project at existing events and on busy sidewalks near upcoming construction project locations.

Vision Zero Advisory Groups

In addition to the engagement activities described above, the Vision Zero Policy specified two advisory bodies to the formation of this plan: an internal Vision Zero Task Force, and a community-oriented role for the Green and Complete Streets Advisory Council. The Task Force met several times throughout 2024 to inform department leaders of the process and to solicit input, and the Advisory Council met monthly, providing community input on the contents of this plan.



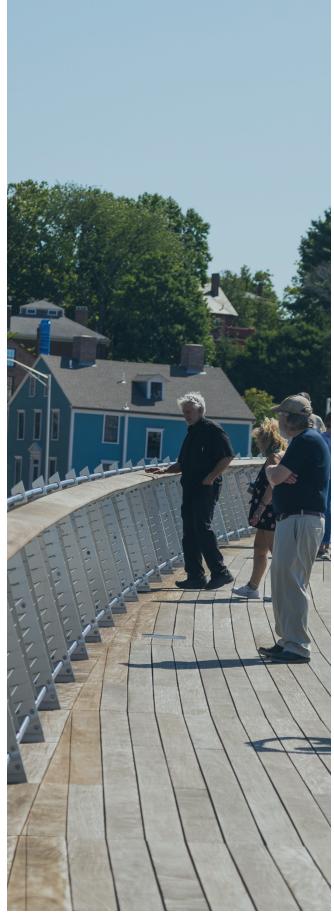
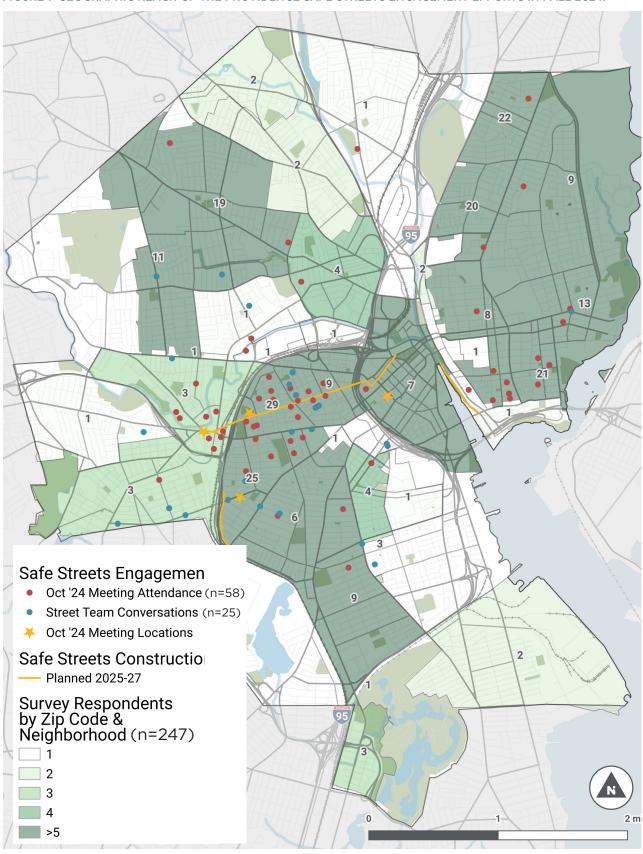


FIGURE 1 GEOGRAPHIC REACH OF THE PROVIDENCE SAFE STREETS ENGAGEMENT EFFORTS IN FALL 2024.

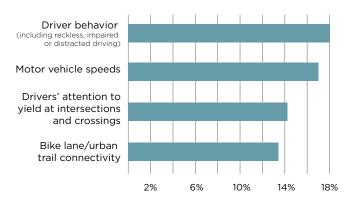


Engagement during October 2024 focused on the areas close to where construction projects were under development. Further updates to this plan will emphasize outreach in areas of the City that did not participate extensively in that round of engagement.

What We Heard

The public survey provided an opportunity for individuals to share their experiences getting around Providence. Questions focused on asking respondents about their main transportation safety concerns and the types of strategies they would like to see implemented for improving safety and comfort on Providence's streets. Respondents had the opportunity to share their concerns about safety at specific locations through an interactive map. Figure 2 details the top four safety concerns shared by respondents.

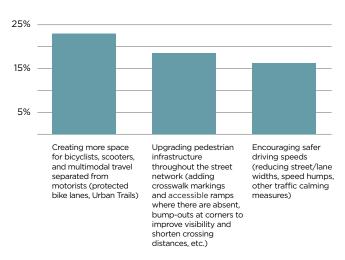
FIGURE 2 PUBLIC SURVEY TOP 4 SAFETY CONCERNS



Top 4 responses = 505*

Following the top safety concerns, respondents strategies they would like to see implemented in Providence. Figure 3 depicts the overall top three.

FIGURE 3 PUBLIC SURVEY TOP 3 SAFETY MEASURE **PREFERENCES**



Top 3 responses = 455*

The freeform comments received across multiple modes of engagement largely reflected the comments made in the Safe Streets survey. The most common comments articulated general support for making transit, bicycling, and walking easier to choose for more people. Many comments suggested particular strategies, and many of those strategies were represented in the Comprehensive Plan. The details of these public comments are shown in the Action Plan chapter associated with the relevant strategies.

Related **Engagement Processes**

While this plan conducted extensive public engagement during Fall 2024, it also drew on multiple rounds of community feedback conducted as part of previous, related plans:

- For the Climate Justice Plan, in the fall of 2018, the City worked with community members from the Racial and Environmental Justice Committee to conduct 40 interviews with community members of color in addition to the citywide survey that reached over 150 people.
- In Spring 2019, the City hosted 12 neighborhood meetings about the Great Streets Plan during which 275 comments were made by more than 180 attendees. In addition, 242 comments were made on an online map recommending urban trail connections or intersection improvements. A street team of community members also spoke to people throughout the city to determine priorities for inclusion in the plan.
- The Comprehensive Plan update received over 400 comments about mobility throughout 73 community events in 2022 and 2023. Online, there were more than 2,000 comments, and all of this input contributed to draft plans vetted publicly by the City Plan Commission and City Council throughout 2024, with more comments on refinements to the plan offered at each public hearing.

^{*}Respondents could select more than one option



DATA ANALYSIS

Data Analysis

Analysis of transportation safety data will focus the City's action on the greatest opportunities to reduce severe crashes. Working towards the City's Vision Zero goal will require consideration of both where and how the most severe crashes have occurred in the past, and where and how they are likely to occur in the future. Looking at reported crashes, we can target known safety issues for walking, bicycling, and driving. The safety analysis process also identified risk factors for severe crashes throughout the network so the City can take proactive action - even where severe crashes have not occurred before.

The focus of this safety data analysis is on crashes that cause fatalities or serious injuries.1 Every crash that causes fatalities or serious injuries devastates those that survive it. These impacts often extend beyond the crash victims themselves, to their friends, families, and communities. The City is focused on eliminating the most severe crashes that occur on the City's streets.

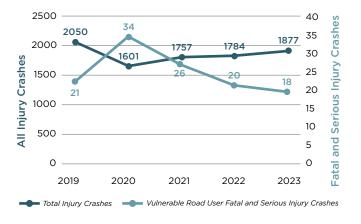
Crashes in Providence Today summarizes existing patterns and historic trends in crash characteristics. This sets a baseline for fatal and serious injury crashes in Providence and aims to identify common characteristics among the most serious crashes that can be targeted for action.

Providence's High Priority Network highlights the streets where targeted action has the greatest potential to reduce serious injuries and fatalities on the City's streets. Streets were selected for the High Priority Network based on their history of severe crashes and/or predicted risk for severe crashes.

Crashes in **Providence Today**

From 2019 to 2023, there were 9,069 reported² crashes in Providence that resulted in an injury to one or more of the people involved. 36 of the crashes resulted in fatality and 284 caused serious injuries. The Safe System Approach focuses on crashes that result in a fatality or serious injury, as explained above. All injury crashes are included in this analysis to highlight characteristics that are more pronounced in fatal and serious injury crashes. Figure 4 outlines the injury severity by mode over this five-year period, showing the raw number of crashes and the crash severity distribution by mode.

FIGURE 4 ALL INJURY CRASHES AND FATAL AND SERIOUS INJURIES OF VULNERABLE ROAD USERS **OVER A 5-YEAR PERIOD**



On average, 64 fatal and serious injury crashes occurred every year from 2019 to 2023. Fatal and serious injury crashes peaked in 2020 at 93, a year marked by the COVID-19 pandemic when the number of total injury crashes in Providence was at a five-year low. This mirrors national trends, which saw a decrease in overall driving during the pandemic that allowed for more speeding. This resulted in fewer overall crashes in 2020, but more severe crashes.

A serious injury refers to an injury that prohibits an individual from doing activities they previously were able to do before the crash occurred. This might include severe wounds or lacerations, abdominal injuries, or paralysis.

This data is based on crashes that were reported to the City of Providence Police Department in which at least one injury was recorded. However, it is not possible to know the number of crashes that go unreported. Completion of crash reports and interpretations of crash injury severity may also differ from officer to officer.

TABLE 2 5-YEAR TRENDS IN ALL INJURY CRASHES AND FATAL AND SERIOUS INJURY CRASHES.

		otor nicle	Pede	estrian	Bio	ycle	То	tal
	#	%	#	%	#	%	#	%
Fatal	21	0.27%	13	1%	2	0.61%	36	0.40%
Serious Injury	180	2%	91	10%	13	4%	284	3%
Minor Injury	476	6%	132	15%	69	21%	677	7%
Possible Injury	7,178	91%	652	73%	242	74%	8,072	89%
Total	7,855	100%	888	100%	326	100%	9,069	100%

crashes and head-on crashes were both less common crash types. However, single-vehicle crashes resulted in 4 times as many fatal and serious injury crashes compared to all injury crashes while head-on crashes accounted for 2 times as many. Single vehicle crashes include those in which a driver has run off the road and/or struck a fixed object circumstances often associated with high-risk behaviors like driving under the influence, distracted driving, and aggressive driving.

When people are walking, bicycling, or are otherwise outside of a vehicle, they are at a greater risk of fatal and serious injury crashes.

Crashes involving someone walking or bicycling accounted for 13% of all injury-causing crashes in the city, including those that only caused minor injuries. However, crashes involving people walking and bicycling accounted for 37% of all fatal and serious injury crashes - more than double the share among all injury crashes. Figure 5 shows a full breakdown by mode. This means that people walking and bicycling are especially at risk of the most serious crashes.

This only tells the story of crashes that are reported by the police. Some people choose not to report a collision to the police even if it causes injury. Similarly, near misses at places that people know are risky are not captured in the official crash data. The fear of crashes may keep people from choosing to walk or bike where infrastructure doesn't make their experience safe and comfortable.

Angle crashes, including crashes known as "T-bone" crashes, were the most prevalent type of collision in fatal and serious injury crashes involving only motor vehicles. This type of crash describes a wide range of circumstances and accounted for 41% of all injury crashes and 35% of fatal and serious injury crashes. Rear-end crashes were the next most common injury crash type (34%) but were a much smaller share of fatal and serious injury crashes (12%). Single-vehicle

FIGURE 5 VEHICLE AND BIKE AND PEDESTRIAN CRASHES BY INJURY TYPE

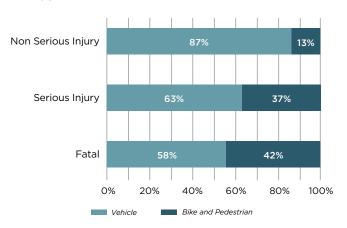
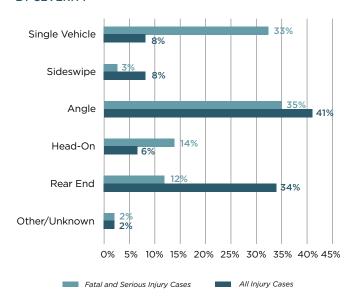
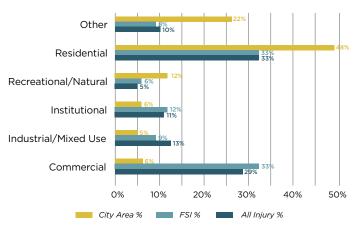


FIGURE 6 VEHICLE CRASH MANNER OF COLLISION BY SEVERITY



Commercial and residential land uses saw the highest share of fatal and serious injury crashes. Fewer crashes occurred in residential areas relative to their share of the City by area. Conversely, commercial land uses saw a far larger share of crashes relative to their share of the City. While institutional and industrial/ mixed use land uses only make up 6% and 5%, respectively, of Providence land use area, nearly double the share of fatal and serious injury crashes occurred in these areas.

FIGURE 7 PERCENTAGE OF PROVIDENCE LAND USE BY INJURY CRASH TYPE



The complete analysis of crash patterns during this period can be found in Appendix A.

Providence's High Priority Network

The High Priority Network will be used to focus efforts on improving streets to save the greatest number of lives and work towards achieving the City's Vision Zero Goal. With limited resources to dedicate to safety projects, it is important that the City prioritizes the places where interventions will have the greatest impact on creating safer and more comfortable travel experiences.

To develop the High Priority Network, the analysis combines two data types:

- Crash History capturing where crashes reported to the police have taken place in the past
- Modeled Crash Risk capturing where crashes are likely to occur in the future

The locations of historical reported crashes were mapped and every street in the network was assigned a score based on the frequency and severity of crashes that have occurred there in the past. The modeled crash risk was also incorporated to identify locations where these serious injuries may occur in the future, based on factors such as speed limits, proximity to destinations, roadway context factors, and land use context factors. These analyses are based on national Vision Zero best practices, adapted to meet the needs and context of Providence's people and streets. A full description of the analysis methodology can be found in Appendix B.

Figure 8 shows the roadways segments that have the highest number of fatal and serious injury crashes. This street network includes 30.6 miles that represent 7.1% of the Providence roadway. (See Table 3 on page 25 for a more detailed list of the top priority intersections).

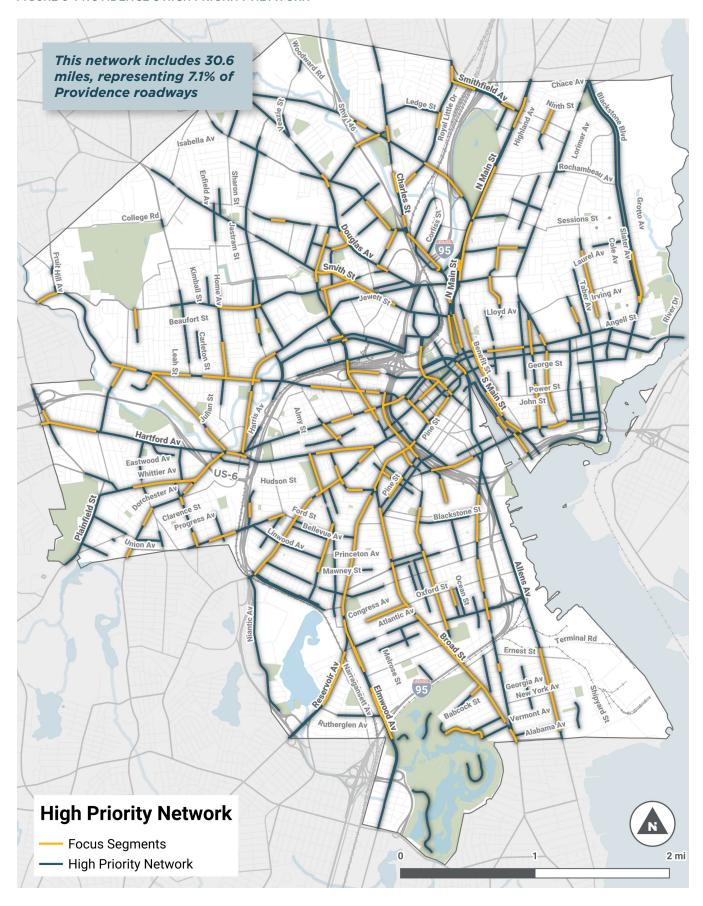
Figure 9 shows Focus Segments by mode. highlighting the street segments that need the most urgent attention by each mode - biking, walking, or driving - in Providence. Isolating the High Priority Network Focus Segments by mode provides further clarity on safety concerns that are unique to each type of road user and mode type. It also identifies locations where appropriate safety interventions can be implemented to meet the needs of that specific roadway user.

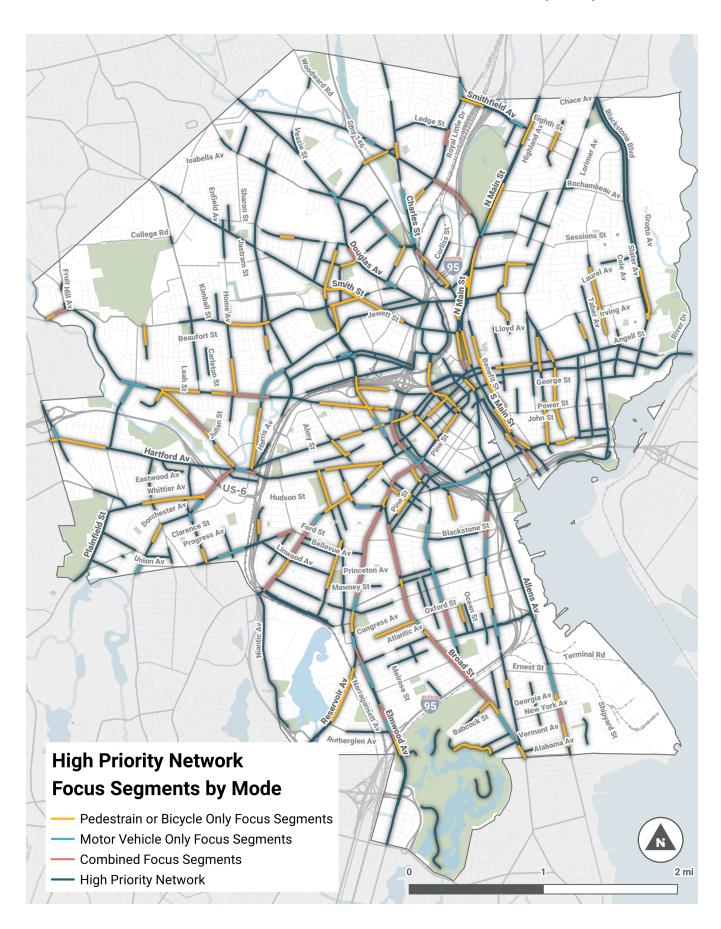
High Priority Network by the Numbers

27% of Providence's streets are on the High Priority Network, with 7.1% of Providence's streets on the **Focus Segments**

85% of fatal and serious injury crashes from 2019-2023 occurred along the High Priority Network

- 100% of historical bicycle fatal and serious injury crashes
- 92% of historical pedestrian fatal and serious injury crashes
- 80% of motor vehicle

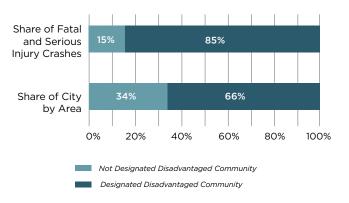




Transportation Equity in Providence

The likelihood of a fatal and serious injury crash occurring is not distributed equitably across time and place. Disadvantaged communities in Providence are disproportionately impacted by these crashes. The federally-developed Climate and Economic Justice Screening Tool (CEJST) defines disadvantaged communities as areas meeting both the low-income threshold and at least one category of burden (which includes a wide range of factors related to public health, housing and transportation affordability, workforce development, and environmental burdens). These represent communities that face the greatest risks from climate change and past and ongoing systemic discrimination. Using these metrics, 66% of Providence's land area falls into a disadvantaged community designation. However, fatal and serious injury crashes during the study period overwhelmingly occurred in these communities. Eighty-five percent of all fatal and serious injury crashes in Providence from 2019 to 2023 occurred in disadvantaged communities, shown in Figure 10. This is consistent with nationwide trends showing that people outside of vehicles, older adults, people with disabilities, people of color, and people walking in lower-income areas are more likely to be killed when walking.1

FIGURE 10 SHARE OF FATAL AND SERIOUS INJURY CRASHES IN DISADVANTAGED COMMUNITIES



Historic Disinvestment

Providence, along with many US cities in the 1930s and 1940s, was involved in discriminatory home lending practices backed by the federal government's Home Owners' Loan Corporation. This practice, also known as redlining, involved identifying neighborhoods of color in Providence as "hazardous" or "definitely declining" to restrict these groups of people from applying for loans to purchase homes. While this practice is illegal today, the impacts of redlining persist and have dictated where and how streets are constructed and maintained. Historic redlining is connected nationwide with elevated roadway fatalities nationwide, particularly for pedestrians.²

Figure 12 on page 21 shows the percentage of the High Priority Network that falls within previously redlined neighborhoods. 57.4% of the High Priority Network miles are within historically designated "hazardous" or "definitely declining" zones. Many of these formerly redlined neighborhoods are today classified as disadvantaged communities and see a disproportionate share of fatal and serious injury crashes. The present-day "disadvantaged communities" account for 71% of High Priority Network miles (see Figure 13 on page 22).

These patterns create a strong impetus for Providence to focus transportation safety investment in historically marginalized communities.

Taylor NL, Porter JM, Bryan S, Harmon KJ, Sandt LS. Structural Racism and Pedestrian Safety: Measuring the Association Between Historical Redlining and Contemporary Pedestrian Fatalities Across the United **States**, 2010-2019. Am J Public Health. 2023.

²⁰²⁴ Dangerous by Design Report, Smart Growth America

Cost-Burdened Households Are More Exposed to Risk

In addition to historic inequities, communities are faced with the growing cost of housing, which has increased substantially in recent decades, impacting disadvantaged communities particularly low-income and communities of color. Housing costs are a burden for many Providence residents, and incorporating transportation costs alongside housing costs reveals that 42% of residents are burdened by 45% of their income going to these essential living expenses.

Reducing those transportation costs is important for many Providence residents: 17% of households do not have access to a vehicle. By neighborhood, 47% of Downtown, 47% of Upper South Providence, 42% of Federal Hill, and 33% of Smith Hill households do not have access to a vehicle. All four of these neighborhoods are identified as disadvantaged communities by the CEJST criteria. This is important because people who rely on walking, public transit, and biking face a greater risk of fatal and serious injuries in the event of a crash (see the Crashes in Providence Today section on page 14). Figure 11 shows the percentage of fatal and serious injury crashes by zero vehicle households.

FIGURE 11 TOP PROVIDENCE NEIGHBORHOODS WITH ZERO VEHICLE HOUSEHOLDS BY PERCENTAGE OF FATAL AND SERIOUS INJURY CRASHES

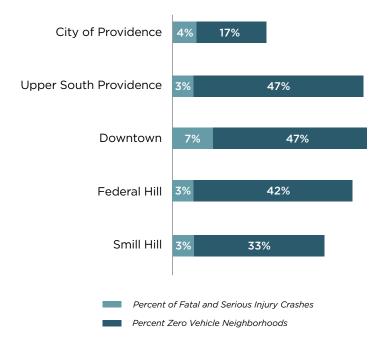




FIGURE 12 HIGH PRIORITY NETWORK AND HISTORIC DISCRIMINATION

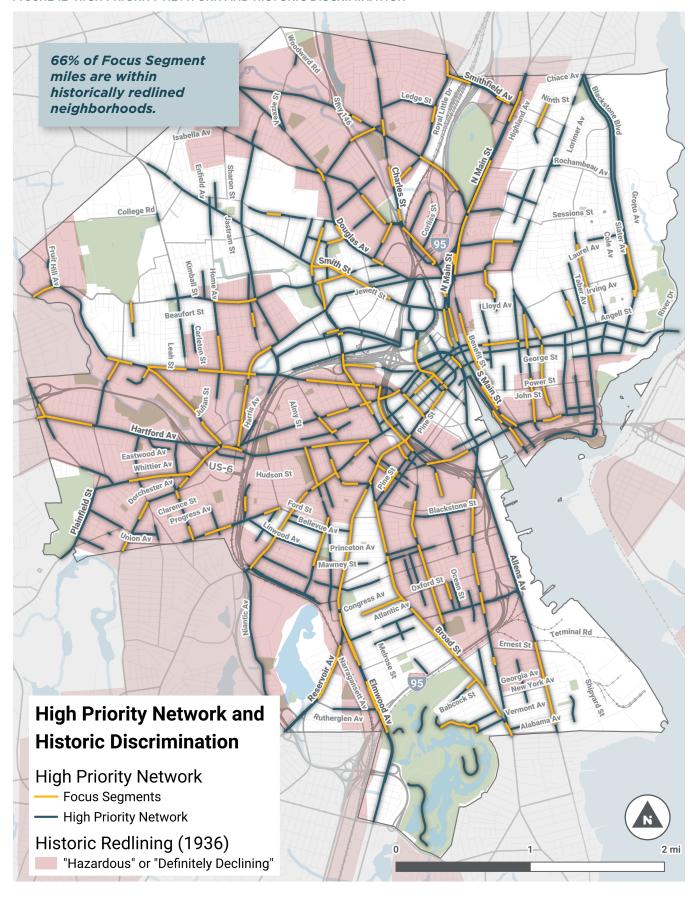
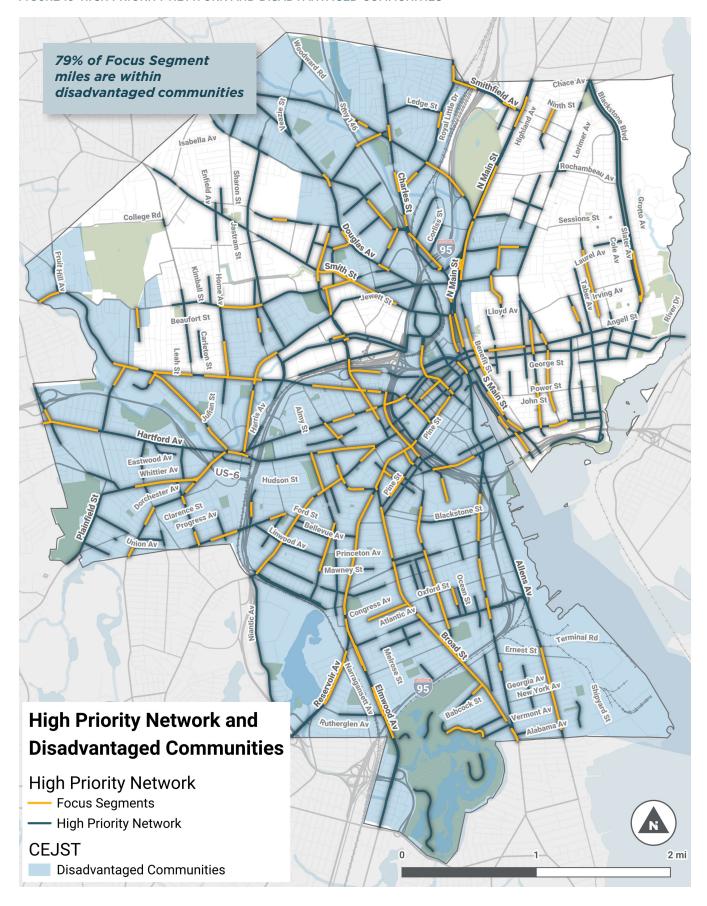


FIGURE 13 HIGH PRIORITY NETWORK AND DISADVANTAGED COMMUNITIES





ACTION PLAN

Targeted Intersections for Safety Interventions

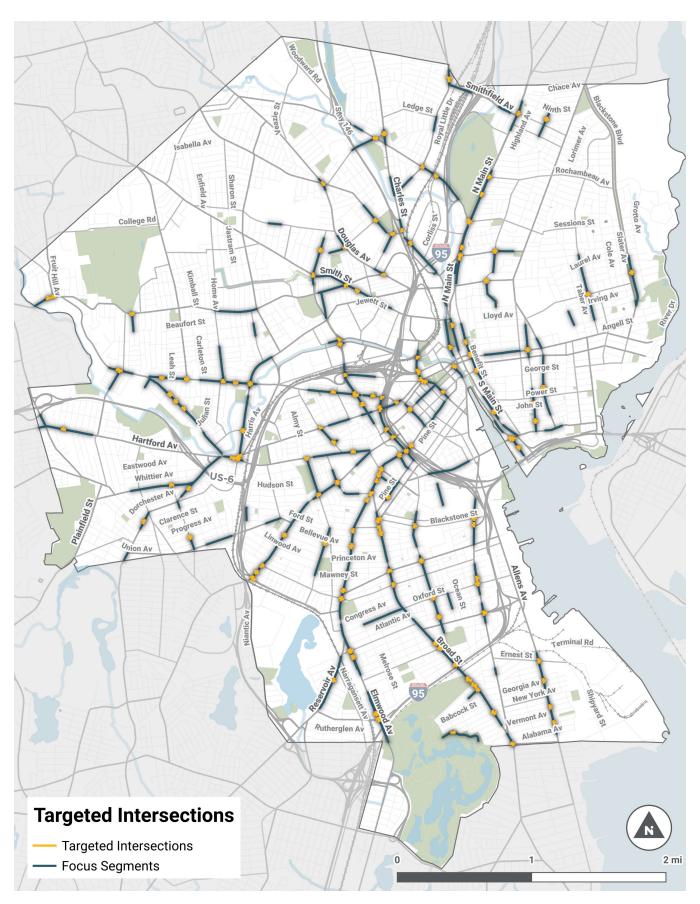
Building off the High Priority Network methodology, the City of Providence assembled a targeted list of historically unsafe or high-risk intersections across the city. Intersections are historically some of the most dangerous locations on roadways as they are locations where differing modes of transportation converge. To identify the critical intersections for safety improvements, intersections were analyzed based on safety by mode - vehicle, bicycle, and pedestrian. The rankings of these three modes were equally weighed to create a composite list of intersections where safety treatments are of highest priority and critical for improving the safety and comfort for all modes. For the comprehensive list of intersection ranking, see Appendix C.

TABLE 3 TOP TARGETED INTERSECTIONS RANKED IN ORDER BY AVERAGE SCORING

Intersection	Vehicle	Pedestrian	Bicycle	Priority Modes	Jurisdiction
Memorial Blvd / Francis St	Tier 1	Tier 1	Tier 1	All	City
Broad St / Fricker St / Lockwood St	Tier 1	Tier 1	Tier 1	All	State
Broad St / Pearl St	Tier 1	Tier 2	Tier 1	Vehicle, bicycle	State
Broad St / Portland St	Tier 1	Tier 1	Tier 2	Vehicle, pedestrian	State
Charles St / W River St / Ashburton St	Tier 1	Tier 1	Tier 2	Vehicle, pedestrian	City
Cranston St / Potters Ave	Tier 1	Tier 1	Tier 2	Vehicle, pedestrian	City
Elmwood Ave / Cromwell St	Tier 1	Tier 1	Tier 2	Vehicle, pedestrian	State
Elmwood Ave / Arch St	Tier 2	Tier 1	Tier 2	Pedestrian	State
Cranston St / Messer St / Hanover St	Tier 2	Tier 2	Tier 2		City
Broad St / Parkis Ave	Tier 1	Tier 2	Tier 2	Vehicle	City
Cranston St / Benedict St	Tier 2	Tier 2	Tier 2		City
Broad St / Dartmouth Ave / Harvard Ave	Tier 3	Tier 1	Tier 1	Pedestrian, bicycle	City
Plainfield St / Atwood St	Tier 2	Tier 2	Tier 2		City
Cranston St / Bellevue Ave	Tier 2	Tier 2	Tier 2		City
Broad St / John J Partington Way / W Franklin St	Tier 1	Tier 1	Tier 3	Vehicle, pedestrian	Mixed
Broad St / Byfield St / Detroit Ave	Tier 1	Tier 1	Tier 3	Vehicle, pedestrian	City
Atwells Ave / Academy Ave / Putnam St	Tier 1	Tier 1	Tier 3	Vehicle, pedestrian	City
Broad St / Cahir St / Stewart St	Tier 1	Tier 1	Tier 3	Vehicle, pedestrian	State
Cranston St / Althea St	Tier 3	Tier 2	Tier 2		City
Cranston St / Waverly St	Tier 2	Tier 3	Tier 1	Bicycle	City
Broad St / Adelaide Ave / Colfax St	Tier 1	Tier 1	Tier 3	Vehicle, pedestrian	City
Cranston St / Anthony Ave	Tier 2	Tier 1	Tier 3	Pedestrian	City
Dorrance St / Eddy St / Exchange Ter / Fountain St / Francis St	Tier 2	Tier 1	Tier 3	Pedestrian	City
Elmwood Ave / Wilson St	Tier 2	Tier 3	Tier 2		State
Charles St / Admiral St	Tier 3	Tier 2	Tier 2		City

^{*}Note, Tier 1= most critical, Tier 2= critical, Tier 3= important

FIGURE 14 PROVIDENCE'S TARGETED INTERSECTIONS FOR SAFETY INTERVENTIONS



People walking and riding bikes are more likely to be struck by vehicles at intersections,1 where they might experience conflicts with turning drivers or rely on drivers to yield at crossings. The intersections that represent the highest priority for these modes are listed below. <u>Underlined</u> intersections are the highest priority for the safety of people walking and bicycling.

Targeted Intersections for Pedestrian Safety

- 1. Atwells Ave / Dean St / Barker St
- 2. Memorial Blvd / Francis St
- 3. Atwells Ave / Cutler St
- 4. N Main St / Pettis St / Pleasant St
- 5. Elmwood Ave / Potters Ave
- 6. Broadway / Knight St
- 7. Broad St / John J Partington Way / W Franklin St
- 8. Broad St / Fricker St / Lockwood St
- 9. Charles St / W River St / Ashburton St
- 10. Broad St / Portland St
- 11. Cranston St / Bridgham St
- 12. Broad St / Dartmouth Ave / Harvard Ave

Targeted Intersections for Bicycle Safety

- 1. Broad St / Pearl St
- 2. Memorial Blvd / Francis St
- 3. Knight St / Carpenter St
- 4. Westminster St / Battey St
- 5. Plainfield St / Webster Ave
- 6. Elmgrove Ave / Lloyd Ave
- 7. F C Greene Memorial Blvd / Carr St
- 8. Reservoir Ave / Yarmouth St
- 9. Broadway / Valley St / Westminster St
- 10. Washington St / Empire St

Treatment options for consideration for these intersections are further outlined in the Infrastructure Toolbox section.

Infrastructure **Toolbox**

Achieving the City's Vision Zero goal will require sustained action to transform the design of the street network. The safety treatments in this section represent a toolbox of interventions to guide this transformation. These treatments will be implemented systemically throughout the High Priority Network where they have the greatest potential to address safety issues, beginning with the places that have been targeted for the most urgent action.

Each entry in the toolbox includes information about the Safe System Roadway Design Hierarchy, potential for systemic intervention, and appropriate context(s) for implementation. The selected treatments are proven to improve safety for people using all modes of transportation. They are organized around the following themes identified through public engagement and analysis of past crashes:

- Safer speeds
- Safer crossings
- Better separation
- Better visibility

Safe System Roadway **Design Hierarchy**

with the Safe System Approach.

To communicate the roles and relative potential of different design treatments to address fatal and serious injuries crashes, each design treatment is connected with its place(s) in the Safe System Roadway Design Hierarchy. This is a framework developed by FHWA for prioritizing design treatments and strategies in transportation projects based on their alignment

The Safe System Roadway Design Hierarchy recognizes physical changes to the street environment as more effective than changes that rely on individual road users to make safe decisions. It includes four tiers that are arranged from most to least aligned with Safe System principles.

Improving Intersections for Pedestrians and Bicyclists, FHWA (2022)

FIGURE 15 SAFE SYSTEM ROADWAY DESIGN HIERARCHY



Systemic Implementation

USDOT and the SS4A program encourage participants to focus on making low-cost, highimpact changes to the transportation system as a whole. Implementing street design changes over a large area, or "systemic implementation," can contribute to culture shift by changing road user behavior and expectations citywide. Some types of treatments are a better fit for this approach than others. Some characteristics of safety treatments that are suitable for systemic implementation include:

- Low cost, allowing for efficient implementation over a larger area
- Basic design needs, contributing to low cost and allowing for faster action

- Compatible with rapid implementation using flexible materials like flexposts, striping, concrete barriers, etc.
- Few implementation constraints or trade-offs that might raise costs or require additional engagement/coordination, including impacts to parking, existing traffic capacity, and drainage

All of the selected treatments have demonstrated effectiveness in addressing the risk factors for serious and fatal crashes in other communities. Design treatments implemented in Providence will be evaluated for their effectiveness, such that over time the City can hone in and focus efforts on the investments with the greatest demonstrated impact.

Street Context

The treatments selected are applicable to a wide range of street types and contexts, summarized as follows:

- Local: Street within a residential neighborhood that primarily carries local traffic (e.g. Federal Street, Pearl Street)
- Collector: Street that connects between neighborhoods and between arterials (e.g. Blackstone Street, Dean Street)
- Arterial: Street that connects with the wider regional transportation network and carries significant vehicle traffic (e.g. Broad Street, Cranston Street)

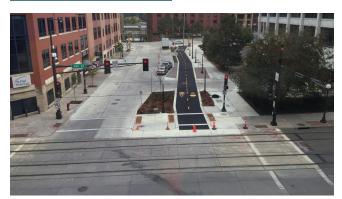
Each toolbox entry includes guidance on appropriate context(s) based on national guidance. This can serve as a starting point for selecting the right treatment in a given location. FHWA encourages planners and engineers to apply design flexibility² to create a safer transportation system for people traveling by all modes, which may sometimes involve implementing design changes outside their typical contexts.

Achieving Multimodal Networks: Applying Design Flexibility & Reducing Conflicts, FHWA (2016)

Toolbox

A. Lane Reductions

Theme(s)	Safer Speeds, Better Separation, Better Visibility
SSA Hierarchy Tier(s)	Tier 1
Approx. Cost per Location	Varies
Rapid Implementation	Yes



Reduction in the number of vehicle travel lanes on a multilane street, maintaining one travel lane in each direction. Lane reductions, also known as "road diets," can eliminate severe conflicts like multiple threat pedestrian crossings, slow driver speeds, and create space for separated bike lanes, parking, expanded sidewalks, etc.

Considerations

- May be appropriate for roadways with less than 25,000 vehicles per day, but requires traffic analysis to confirm (See Action Plan Strategy 2).
- Dedicated turning lanes can be added where required to maintain flow at major intersections; a center turning lane can also be considered where there are a high number of driveways

Context

 Low to moderate volume streets with more than one lane per direction

Resources

- FHWA Proven Safety Countermeasures
- NCHRP 1036: Roadway Cross-Section **Reallocation Guide**
- FHWA Traffic Calming ePrimer
- ITE Traffic Calming Fact Sheets

Lane reductions are associated with a 19-47% reduction in total crashes.

B. Separated Urban Trails

Theme(s)	Safer Speeds, Better Separation, Better Visibility
SSA Hierarchy Tier(s)	Tier 1
Approx. Cost per Location	Varies
Rapid Implementation	Yes



Dedicated lanes for people biking, scootering, and skating that are physically separated from vehicle traffic, improving safety and comfort for both bicyclists and drivers. Separated bike lanes can be buffered from vehicle traffic by physical materials and/or vehicle parking, or installed at the sidewalk level. Additionally, separated bike lanes encourage slower vehicle speeds through lane narrowing and edge friction.

Considerations

- May require additional attention to signal operations for bicyclists (see **Signal Separation**)
- Can be designed as one-way or two-way facilities
- Implementation of separated bike lanes on bus routes requires special attention to bus stop design
- On streets with parking, daylighting is important to ensure that bicyclists are visible to turning drivers at intersections
- Separated bike lane design and implementation require coordination with the Department of Public Works to incorporate maintenance considerations, particularly related to snow removal
- Where separated bike lanes are implemented through a reduction in the number of lanes (see Lane Reductions)

Context

- Collector streets
- Arterials

Resources

- AASHTO Guide to the Development of Bicycle Facilities
- NACTO Urban Bikeway Design Guide
- FHWA Proven Safety Countermeasures

Upgrading bike lanes to be separated urban trails can reduce bike/vehicle crashes by up to 53%.

C. Signal Separation

Theme(s)	Safer Crossings, Better Separation
SSA Hierarchy Tier(s)	Tier 1, Tier 3
Approx. Cost per Location	Low (<\$50k)
Rapid Implementation	N/A



Separation of movements into different phases at traffic signals to reduce conflicts. This approach can be applied in a number of ways to resolve different types of multimodal safety challenges. Common examples of signal separation include the use of exclusive pedestrian phases and the separation of walk signals and bicycle signals from driver right or left turn phases.

TABLE 4 RECOMMENDED HOURLY TURNING TRAFFIC THRESHOLD FOR TIME-SEPARATED BICYCLE MOVEMENTS AT SIGNALIZED INTERSECTIONS

	Motor Vehicles per Hour Turning Across Protected Urban Trail				
Protected Urban Trail Operation	Right Turn	Left Turn Across One Lane	Left Turn Across Two Lanes		
One-way Urban Trail	≥ 150	≥ 100	≥ 50		
Two-way Urban Trail	≥ 100	≥ 50	ANY		

Source: AASHTO Guide for the Development of Bicycle Facilities, 5th ed.

Considerations

- The AASHTO Bike Guide recommends that bicyclist crossings be separated from driver right turns at intersections when right and/or left turns during the peak hour exceed certain thresholds (see Table 4).
- Signal separation for bicyclists should also be considered in locations where more than 5% of turning traffic volume is heavy vehicles
- Implementation requires that there be right or left turn lanes for any movements with separated phases to accommodate queues
- Thresholds for signal separation in Providence should be adopted as part of a signal policy (see Action Plan Strategy 3)

Context

 Signalized intersections with high turning traffic

Resources

- AASHTO Guide to the Development of **Bicycle Facilities**
- NCHRP Report 969: Traffic Signal Control **Strategies for Pedestrians and Bicyclists**
- NITC Improving Walkability Through Control **Strategies at Signalized Intersections**

D. Protected Intersections

Theme(s)	Better Visibility, Safer Crossings, Better Separation, Safer Speeds
SSA Hierarchy Tier(s)	Tier 1
Approx. Cost per Location	Varies
Rapid Implementation	Yes



Intersections with corner islands and set back bicyclist/pedestrian crossings to slow driver turns and improve sightlines between people walking, bicycling, and driving.

Considerations

 Corner islands may constrain truck turns, and sometimes can be designed with mountable aprons allowing trucks to make wider turns

Context

 Signalized intersections with separated bike lanes

Resources

- AASHTO Guide to the Development of **Bicycle Facilities**
- NACTO Urban Bikeway Design Guide

E. Pedestrian Crossing Islands

Theme(s)	Safer Crossings, Safer Speeds
SSA Hierarchy Tier(s)	Tier 1, Tier 2
Approx. Cost per Location	Low (<\$50k) - Medium (\$50k - \$200k)
Rapid Implementation	Yes (with specialized materials)



Protected median areas that provide people walking across the street with a safe waiting space to cross a multi-lane roadway.

Considerations

- The island should be the width of the crosswalk and at least 6' deep, with preference for 8'-10'.
- The waiting area should be flush with the street and provide detectable warning panels on both sides where it meets the crosswalk
- May impact parking as lanes must transition around center island
- Most effective for mid-block or uncontrolled crosswalks

Context

- · Collector streets
- Arterials

Resources

- FHWA Proven Safety Countermeasures
- NACTO Urban Street Design Guide: **Pedestrian Safety Islands**

Pedestrian crossing islands can lead to an up to 56% reduction in pedestrian crashes.

F. Speed Humps

Theme(s)	Safer Speeds
SSA Hierarchy Tier(s)	Tier 2
Approx. Cost per Location	Low (<\$50k)
Rapid Implementation	Yes



Rounded humps in the roadway that encourage slower driver speeds. Typically speed humps are installed in a series to slow speeds along an entire corridor.

Considerations

- Speed humps are usually spaced 260-500 feet apart
- May be inappropriate in some contexts, like on hills, bus routes, or primary emergency response routes
- Speed lumps are an alternative that provide slots, allowing passage of wider vehicles such as buses and emergency vehicles
- A coordinated approach to traffic calming is important to reduce speeds throughout the network, as opposed to shifting inappropriately fast traffic between streets as speed humps are implemented

Context

- Local streets
- Some collector streets
- Arterials in rare cases

Resources

- FHWA Traffic Calming ePrimer
- ITE Traffic Calming Fact Sheets

Average speeds between speed humps can be reduced by 20-25%. Installed in a series, they are also estimated to divert about 20% of traffic to other routes.

G. Chicanes

Theme(s)	Safer Speeds
SSA Hierarchy Tier(s)	Tier 2
Approx. Cost per Location	Low (<\$50k) - Medium (\$50k - \$200k)
Rapid Implementation	Yes



Offset curb extensions or alternating on-street parking that introduce curves into drivers' path of travel, encouraging slower speeds.

Considerations

- Most appropriate for yield streets or streets with one lane in each direction
- Curb extensions can be designed with channels next to existing curbs to allow bicycles to pass through

Context

- Local streets
- Collector streets

Resources

- FHWA Traffic Calming ePrimer
- ITE Traffic Calming Fact Sheets
- NACTO Urban Street Design Guide: Chicanes

H. Raised Crosswalks

Theme(s)	Better Visibility, Safer Crossings, Safer Speeds	
SSA Hierarchy Tier(s)	Tier 2, Tier 4	
Approx. Cost per Location	Medium (\$50k - \$200k)	
Rapid Implementation	No	



Source: Erica Fischer on Flickr

Crosswalks raised to sidewalk height to increase the visibility of people walking across the street, encourage slower vehicle speeds, and improve driver yielding. Raised crosswalks eliminate the need for curb ramps and reduce accessibility issues related to ponding/icing.

Considerations

- On arterials, can be installed across side streets to slow turns on and off the major street
- Implementation often involves impacts to drainage
- Entire intersections can also be raised. effectively providing raised crossings across all intersection legs

Context

- Local streets
- Collector streets
- Across side streets on arterials

Resources

- FHWA Traffic Calming ePrimer
- ITE Traffic Calming Fact Sheets
- FHWA STEP Guide to Pedestrian Safety at **Uncontrolled Crossings**

Individual raised crosswalks can reduce 85th percentile speeds to 20-30mph when crossing the crosswalk.

I. Curb Extensions

Theme(s)	Better Visibility, Safer Crossings, Safer Speeds	
SSA Hierarchy Tier(s)	Tier 2, Tier 4	
Approx. Cost per Location	Low (<\$50k) - Medium (\$50k - \$200k)	
Rapid Implementation	Yes	



Extensions of the sidewalk into the roadway at intersections and crossings, usually for the length of one parking space. Curb extensions improve pedestrian crossing visibility, shorten the crossing distance, and tighten the curb radius to encourage slower driver turning speeds.

Considerations

- When implemented through construction, often involve impacts to drainage
- Curb extensions can be designed with channels next to existing curbs to allow bicycles to pass through

Context

 Any street with on-street parking or wide shoulders

Resources

- FHWA Traffic Calming ePrimer
- ITE Traffic Calming Fact Sheets
- NACTO Urban Street Design Guide: **Curb Extensions**
- FHWA Proven Safety Countermeasures

J. Daylighting

Theme(s)	Better Visibility, Safer Crossings
SSA Hierarchy Tier(s)	Tier 2, Tier 4
Approx. Cost per Location	Low (<\$50k)
Rapid Implementation	Yes



Restriction of parking adjacent to intersections, crosswalks, and active driveways to improve visibility and sightlines. Daylit areas can be kept clear with curb extensions or flexible materials like flexposts, planters, and bike parking corrals.

Considerations

- Daylighting provides greater safety benefits when installed with physical materials, making intersection approaches feel narrower and forcing tighter driver turns
- Curb extensions are one way of daylighting intersections, and they have the added benefit of shortening the distance for people walking across the street

Context

Any street with on-street parking

Resources

- FHWA Proven Safety Countermeasures
- NACTO Urban Street Design Guide: **Visibility/Sight Distance**
- NYCDOT Daylighting and Street Safety: An Analysis

K. Left Turn Hardening and Slow-Turn Wedges

Theme(s)	Better Visibility, Safer Crossings, Safer Speeds	
SSA Hierarchy Tier(s)	Tier 2	
Approx. Cost per Location	Low (<\$50k)	
Rapid Implementation	Yes	



Raised elements at intersections that force drivers to make slower, tighter turns, improving yielding to pedestrians in the crosswalk. Left turn hardening commonly involves modular bumps and/or flexposts along the centerline to prevent "corner cutting." Slow turn wedges are placed at corners using striping and barriers to slow vehicles turning left or right, typically on one-way streets.

Considerations

 Centerlines can also be hardened in locations where lane departure to make left turns is a common behavior contributing to crashes

Context

- Collector streets
- Arterials

Resources

- NYCDOT Turn Calming Program
- Arlington, VA Multimodal Safety **Engineering Toolbox: Hardened Centerlines and Turn Wedges**
- Orlando, FL Quick Build Project Guide: **Left-Turn Hardening and Slow Wedges**

Turn calming treatments can reduce average turning speeds by 34-53%.

L. Leading Pedestrian Intervals (LPIs)

Theme(s)	Safer Crossings, Better Separation
SSA Hierarchy Tier(s)	Tier 3
Approx. Cost per Location	Low (<\$50k)
Rapid Implementation	N/A



Addition of a "head start" of a few seconds for people crossing the street at signals, allowing them to enter the crosswalk before the light turns green for drivers and reducing conflicts with turning vehicles.

Considerations

 Typically LPIs begin 3-7 seconds before the light turns green for drivers

Context

- Any signalized intersection with pedestrian crossings
- Providence installed LPIs at 108 traffic signals in 2024

Resources

FHWA Proven Safety Countermeasures

M. Speed Feedback Signs

Theme(s)	Safer Speeds
SSA Hierarchy Tier(s)	Tier 4
Approx. Cost per Location	Low (<\$50k)
Rapid Implementation	N/A



Traffic control devices that show drivers their current speed, increasing their awareness.

Considerations

 Speed feedback signs are most effective when used in combination with physical traffic calming elements

Context

- Collector streets
- Arterials
- See Action Plan Strategy 27 (Issue more tickets for violations impacting safety, providing the Traffic Bureau with the necessary resources and using technology where appropriate)

Resources

NHTSA Countermeasures That Work

Strategies

Action Plan Goals

The three goals of the Action Plan, deriving from the Comprehensive Plan Objective M5 and other adopted plans described on page 5 are:

- 1. To eliminate all traffic deaths and serious injuries by 2030
- 2. To shift the modes of travel in the city such that driving alone makes up half the share of trips that it did in 2024, reducing vehicle miles traveled (VMT) by 11% by 2035 and 20% by 2050
- 3. To reduce climate pollution to 45% below 1990 levels by 2030; 80% by 2040; and to Net-zero emissions by 2050

The three goals of this plan are largely intertwined among the strategies outlined in the following pages, and it can be difficult to separate which strategies primarily serve safety goals, which serve mode shift goals, and which serve climate goals. For example, safety serves the goal of mode shift, as a greater feeling of safety can lead to more people choosing to walk or bike, while mode shift serves the climate goal, as fewer car trips can reduce emissions.

There are also some small tensions between the goals: fewer cars on the road due to mode shift can lead to higher speeds and less safety, and electric vehicles that are heavier due to batteries can lead to more severe crashes. These tensions, however, are small compared to the overlapping benefits of all three goals. To determine which strategies are necessary for the achievement of each goal, each strategy in the following pages includes indication of which goal it primarily serves. Each strategy describes its grounding in research, existing plans, public comments, and precedent from places that have implemented it.

Following the description of the strategies, the Pathway to Zero outlines approximate timelines for implementation of the strategies.

How We Get There

As described above in the Safe System Approach objectives, there are multiple components necessary to achieve the safety goal. Most cities' Vision Zero programs focus significantly on Safer Speeds and Safer Roads, as these are the most directly within cities' jurisdiction.

Similarly, the mode shift goal from the Comprehensive Plan breaks out each major mode of travel and sets objectives that each non-automotive mode be improved such that it makes up a higher share of trips than in 2024, which is necessary to achieve the overall goal of reducing the percentage of trips taken by car. The percentage of trips that would need to be made by each nonautomotive mode in 2035 to achieve the Comprehensive Plan's goal can be estimated based on current levels measured in the U.S. Census and levels observed in other cities.



Mode shift is part of achieving the climate goal as well, alongside vehicle electrification. Even with rapid adoption of electric cars, at least a 20% reduction in VMT is still needed to meet emissions targets.

Mineral extraction for large **EVs also impact** environmental resources and human rights, so the more emissions are reduced by mode shift and smaller EVs, the better. For these reasons, strategies that increase the feasibility of walking, bicycling, or taking transit for more people are marked as serving the climate goal.

As Providence grows in population, mode shift away from driving alone is necessary just to maintain current VMT levels, let alone reductions in line with the climate goal.

TABLE 5 MODE SPLIT IN PROVIDENCE

Mode Split in Providence	2023 Level	National Context	2035 Target
Driving alone	70%	Lowest 22% (NYC)	35%
Carpooling	12%	Highest 24% (Passaic, NJ)	18% (1.5x)
Bus	3%	Highest 33% (Union City, NJ)	12% (4x)
Train	2%	Highest 10% (Stamford, CT)	8% (4x)
Walking	8%	Highest 28% (Cambridge, MA)	16% (2x)
Bicycling	1%	Highest 18% (Davis, CA)	5% (5x)

TABLE 6 RELATIONSHIP OF VMT, MODE SPLIT, AND POPULATION GROWTH IN PROVIDENCE

Percent of commute trips "Driving Alone"	Current population	5% population growth	10% population growth	15% population growth
70%	Same VMT	5% higher VMT	10% higher VMT	15% higher VMT
65%	6% lower VMT	1% lower VMT	3% higher VMT	8% higher VMT
60%	12% lower VMT	8% lower VMT	4% lower VMT	1% higher VMT
55%	19% lower VMT	15% lower VMT	10% lower VMT	6% lower VMT
50%	25% lower VMT	21% lower VMT	17% lower VMT	13% lower VMT
45%	31% lower VMT	28% lower VMT	24% lower VMT	21% lower VMT
40%	37% lower VMT	34% lower VMT	31% lower VMT	28% lower VMT
35%	43% lower VMT	41% lower VMT	38% lower VMT	35% lower VMT

Action Plan Strategies

In the context of the overlap between the goals, the following strategies identify which goals are served by each strategy.

Install daylighting around crosswalks to improve visibility

Responsible Agency: DPW, Planning | Goals Served: Safety, Mode Shift

Summary

"Daylighting" refers to installing permanent or temporary materials near corners, crosswalks, and bus stops to increase the visibility of people walking and enforce illegal parking rules. Some designs can also reduce crossing distances for crosswalk users, limiting their exposure to potential conflicts with car traffic.

The City should establish daylighting standards to implement citywide and create a prioritization plan based on the High-Priority Network in this plan to proactively install daylighting treatments. Different versions of daylighting could use temporary materials, curbed bump-outs, or in the interim could even begin with increased enforcement of existing parking restrictions close to crosswalks.

This strategy has been a cornerstone of cities that have succeeded at achieving Vision Zero targets such as Hoboken, New Jersey.

What does the research say?

Daylighting can reduce crashes 14-30% and pedestrian injuries by 30%. Daylighting without vertical elements was shown to have no safety benefit in NYC, temporary materials reduced pedestrian injuries by 32%, and daylighting by curbed bump-outs reduced pedestrian injuries by 70%. Daylighting has been a particularly significant strategy in cities that have successfully achieved their Vision Zero goals.

Plan References

COMPREHENSIVE PLAN

Sustainability, Resilience, and the Environment

Prioritize street projects that incorporate ancillary benefits including heat island mitigation, stormwater retention, traffic calming, complete streets configurations, and open space

Mobility

Install sidewalk bump-outs at corners to increase pedestrian visibility and enforce illegal parking rules adjacent to crosswalks, where possible

See Infrastructure Toolbox I & J

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"A way to prevent cars from parallel parking so close to the side streets so that cars don't pull out from side streets into oncoming traffic just to be able to see if a car is coming or not. This is the scariest part of driving in Providence and I see others inching out anxiously, too."

- Lancaster, PA
- · Fremont, CA
- Hoboken, NJ Portland, OR
- · Jersey City, NJ
- San Francisco, CA
- · Pittsburgh, PA
- Boston, MA
- · Washington, DC
- Alexandria, VA



Establish street design standards consistent with safety best practice and implement whenever capital, maintenance, or restoration work allow

Responsible Agency: DPW, Planning | Goals Served: Safety, Mode Shift

Summary

At locations where people must walk across motor vehicle traffic, safety of people walking should explicitly be prioritized over traffic flow. Clear, quantified benchmarks of traffic congestion should be established as the only exceptions to default pedestrian safety measures. Define a target level of pedestrian crossing stress for all intersections, according to a set of criteria. Existing procedures to balance safety and traffic flow should be evaluated and formalized into a traffic analysis policy that follows best practice guidance. The policy should include:

- Road Diet candidate thresholds: The lowest-volume 4 lane undivided streets should be prioritized for conversion to 3 lanes, up to 25,000 ADT or 875 vph during peak hour according to FHWA guidance, especially prioritizing 4-lane streets under 10,000 ADT or 750 vph during peak hour. Six-lane streets with volumes less than 35.000 ADT should also be considered for road diets.
- Using 16-hour or 24-hour traffic volumes for analysis over peak hour volumes
- No growth rate for volumes unless required, in which case a sensitivity/mode shift analysis should be conducted.
- Focus on volume-to-capacity ratio over level of service, with a peak-hour V/C under 1.2 established as acceptable.
- · Incorporate the Safe Systems Design Hierarchy and the latest guidance from AASHTO and NACTO. In particular, NACTO's Urban Street Design Guide and the third edition of the Urban Bikeway Design Guide should be incorporated. The Implementation Guide supplementing the Great Streets Plan should also be integrated, including context-specific criteria for selecting design vehicles.
- Integrate stormwater mitigation and green infrastructure into streetscape projects based on the standards and location priorities identified by the green infrastructure task force. As part of the Green Streets Program, Portland, OR has vegetated curb extensions to manage stormwater.



Source: City of Seattle

Plan References

COMPREHENSIVE PLAN

Built Environment

Develop streetscape standards that enhance the pedestrian experience and incorporate high-quality design elements that are economical and easy to maintain

Mobility

Improve safety where pedestrians must cross motor vehicle traffic, prioritizing pedestrian safety over traffic flow

GREAT STREETS MASTER PLAN

Work with the State Legislature to Require RIDOT to Update Highway

Adopt Policies Regarding Transportation Impact Assessments

RI BICYCLE MOBILITY PLAN

Adopt the Bicycle Level of Traffic Stress (BLTS) analysis methodology and use for road projects alongside motor vehicle service analysis

See Infrastructure Toolbox A

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"Narrowing streets with a strong road diet where drivers have been shown to speed or drive recklessly"

Where else does this?

- Austin, TX
- · Seattle, WA
- Ohio

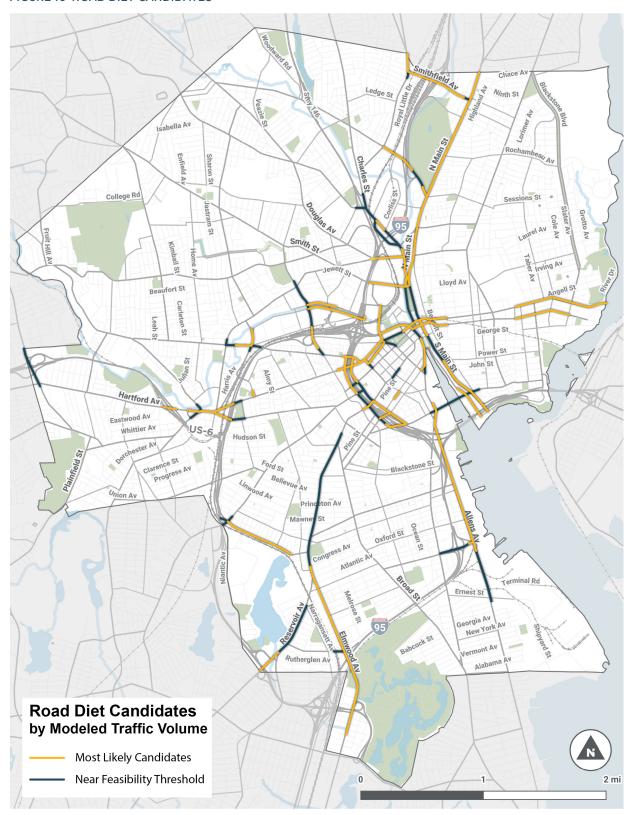
What does the research say?

Road diets can reduce total crashes 24-47%, pedestrian crossing islands can reduce total crashes 46%, and speed tables can reduce fatal crashes by 36%.

Establish street design standards consistent with safety best practice and implement whenever capital, maintenance, or restoration work allow

Responsible Agency: DPW, Planning | Goals Served: Safety, Mode Shift

FIGURE 16 ROAD DIET CANDIDATES



Establish standards for traffic signals and implement citywide

Responsible Agency: DPW | Goals Served: Safety

Summary

There are many standards available to the City to adopt that would reduce the time taken to improve safety at traffic signals. Recent steps to implement Leading Pedestrian Intervals (LPIs) citywide should be accompanied by adoption of standards for walk signals similar to those recommended by the Green & Complete Streets Advisory Council and incorporate additional best practices for signal timing and technology.

Some features that should be integrated into signal standards include:

- · Automatic pedestrian recall
- Bike signals where appropriate
- · Coordination of nearby signals
- · LPIs/protected crossing phases + more ped time
- · 60- or 90-second cycle lengths
- Backplates with retroreflective borders
- Adjustments to Intersection Clearance Intervals
- Auditory feedback for visual impairment accessibility
- New technologies for automatic detection of pedestrians & bicyclists
- Rest on Red for overnight operation on appropriate corridors

What does the research say?

Federal research on "Proven Safety Countermeasures" includes multiple different changes to traffic signals, quantifying safety improvements. For example, collisions involving pedestrians are reduced 13% by LPIs, 55% by Pedestrian Hybrid Beacons, and 47% by Rectangular Rapid Flashing Beacons (RRFBs).

Research by MassDOT found that in certain conditions, coordinating traffic signals to incentivize slower speeds can result in 57-78% less speeding with minimal impact to travel time.



Plan References

COMPREHENSIVE PLAN

- Update all traffic signals to provide pedestrian phasing such as Leading Pedestrian Intervals or exclusive pedestrian phasing and keep signal cycles short and efficient to minimize waiting and unsafe crossing
- Increase the number of intersection crossings that provide dedicated bicycle signal phases

GREAT STREETS MASTER PLAN

- p94 Coordinate Traffic Signals Citywide
- Deploy Leading Pedestrian Intervals (LPIs) and Increase Pedestrian Signal Timing; Implement Automatic Recall of WALK signals

See Infrastructure Toolbox C & L

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS SAFE STREETS PLAN

"Intersections have pedestrian, bike, and car signals to coordinate safe crossing for everyone."

"Drivers who are turning do not yield to pedestrians in this city. I feel significantly more endangered by turning drivers than drivers going straight. Intersection signals that either prevent drivers from turning at all, or offer an all-direction pedestrian crossing (while all vehicle traffic is stopped), would be helpful."

- pedustrian walk sign times should comt down to the yellow light is most cases - I hade to stop and See it it my gran for so long who I would'be gone!

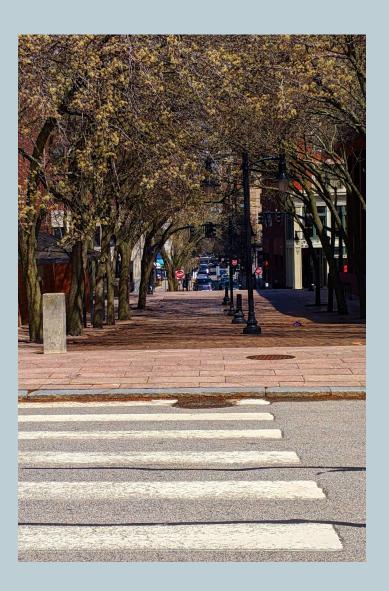
- Boston, MA
- Los Angeles, CA
- Montgomery County, MD
- Massachusetts
- · Seattle, WA
- Ohio
- Portland, OR San Francisco, CA
- ACTION PLAN | 41

Add crosswalk markings and accessible ramps to every crosswalk location where they are absent

Responsible Agency: DPW, Parks | Goals Served: Safety, Mode Shift

Summary

Intersections where people are walking should have marked crosswalks, adding pedestrian signal equipment as necessary, to enhance the visibility of people walking and driver compliance of yielding the right of way. Where the curb ramps at marked crosswalks are not compliant with federal requirements or are missing, they should be brought up to standard. A plan for addressing these violations by 2035 should be made and implemented, prioritizing locations with high pedestrian demand and existing marked crosswalks that are missing curb ramps.



Plan References

COMPREHENSIVE PLAN

Mobility

Add crosswalk markings and accessible ramps to every crosswalk location 3.D where they are absent

People and Public Spaces

5.E Encourage pedestrian access to and passive use of designated conservation areas

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"I frequently walk and push my two small children in a stroller... The lack of curb ramps make it difficult to cross intersections with the stroller, but I manage to lift the stroller up and down. Overall, it is very unfriendly for a mom with two kids to walk just from my house to the elementary school or library."

- · Athens-Clark County, GA
- Saratoga, CA

Determine and implement standards for crosswalk comfort and accessibility

Responsible Agency: DPW, Planning | Goals Served: Mode Shift

Summary

Determine a standard acceptable distance between crosswalks depending on a street's context, and create a prioritized list of new crosswalks to add based on these standards. Identify thresholds for enhanced crossing treatments like Pedestrian Hybrid Beacons (PHBs), Rectangular Rapid Flashing Beacons (RRFBs), and raised crossings. Identify key destination types where new midblock crossings should be considered to enhance safety of people visiting those destinations. Consider how to integrate these standards into development, restoration, or other roadway projects.

Portland example

Portland, OR established advisory standards for the maximum distance between marked crosswalks of 530 ft within Pedestrian Districts (~every other block), 800 ft outside Pedestrian Districts (~every three blocks, only when transit stop or 20 crossings/hr), and within 100 ft of every transit stop. These standards also specify that marked crosswalks "should generally be at least 200 feet apart." Portland staff caution that policy prioritizing the highest needs of the entire pedestrian system is more important than rigid focus on minimum distances, and that the maintenance cost of beacons and other treatments should be considered.

Where else does this?

- · Portland, OR
- · Cleveland, OH

Plan References

COMPREHENSIVE PLAN

Built Environment

Develop streetscape standards that enhance the pedestrian experience and incorporate high-quality design elements that are economical and easy to maintain

Mobility

Improve safety where pedestrians must cross motor vehicle traffic, prioritizing pedestrian safety over traffic flow

See Infrastructure Toolbox E & H

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"Having those crosswalks that you click and shine bright yellow to inform drivers people are crossing. Sometimes at night drivers don't see you if you wear dark clothing."

"Wider sidewalks and narrower streets. Raised cross walks as much as possible. Prioritize pedestrians."



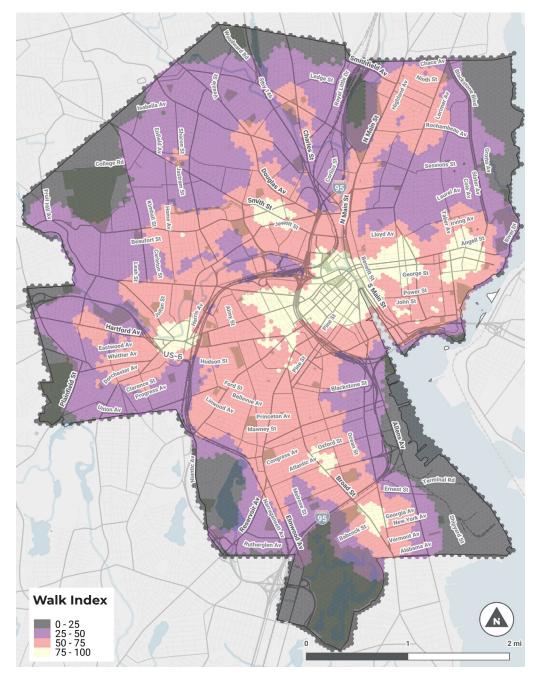
Determine and implement standards for crosswalk comfort and accessibility

Responsible Agency: DPW, Planning | Goals Served: Mode Shift

Walk Index

In some parts of the city, daily destinations are easier to reach by foot merely due to their proximity. Replicating a methodology for computing a walk index based on local destinations, this map identifies places where, if sufficient infrastructure exists, people are more likely to be able to walk to where they need to go. An analysis such as this could be the basis for differentiating design standards for crosswalks and other pedestrian accommodations, such as Portland's designation of Pedestrian Districts.

FIGURE 17 WALK INDEX





Strategically expand where right turns on red are prohibited

Responsible Agency: DPW, Council | Goals Served: Safety

Summary

When drivers are allowed to turn right from a red light, it is harder to ensure the safety of people in the crosswalk as drivers are looking in the opposite direction for a gap. Many locations in Providence already have "No Right Turn on Red" signage, and this coverage should expand to all locations where doing so would increase safety. To increase compliance with these right turn restrictions, it is also important to take steps to remind drivers to pay attention to the signs, such as increased enforcement and more conspicuous signage.

What does the research say?

Restricting right turns on red can reduce close calls between drivers and pedestrians by 80%, and reduce failures to yield to pedestrians by 92%.



Plan References

COMPREHENSIVE PLAN

Mobility

- Where possible, restrict right turns from a red light at any location where unrestricted turns are detrimental to pedestrian safety
- Prohibit right turns at red lights in more locations

GREAT STREETS MASTER PLAN

Implement No Right Turn on Red (NTOR) Signage Where Pedestrians Regularly

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"Cars turning are probably the biggest problem-generally not looking."

"No turns on red, unless posted; Besides no right on red signs add to all red signals, a red right turn arrow."

- · Potomac, MD
- · San Francisco, CA
- Washington, DC
- Portland, OR
- Ann Arbor, MI
- · Cambridge, MA

- New York City
- Seattle, WA
- · Indianapolis, IN
- · Arlington County, VA
- Montgomery County, MD
- · Atlanta, GA

Responsible Agency: DPW, Planning | Goals Served: Safety, Mode Shift, Climate

Summary

Some of the most common mobility comments received as part of the community engagement for both this plan and for the Comprehensive Plan were desires for improved, safer and better connected infrastructure for walking and biking. The City has continuously developed plans for improved sidewalk infrastructure and a connected network of "All Ages and Abilities" routes where people can use active modes of transportation such as walking/rolling, bicycling, scootering, skating, and more. The network is made up of on-road Urban Trails and protected bike lanes, off-road shared use paths, and designated routes on calm neighborhood streets.

Urban Trails are an important part of Providence's approach to transportation safety. These investments make our streets safer for people who walk and bike for transportation and drive progress towards our Vision Zero goal, Urban Trails also invite more people to get around by active transportation. This is essential to meeting the City's vehicle traffic reduction targets established in the 2019 Climate Justice Plan and the 2024 Providence Comprehensive Plan.

Since 2020, requests for additions to the envisioned urban trail network have been made by community members, and as part of this plan's development, further additions to ensure all parts of the city are equitably served were evaluated. This update to the network identified areas of the city more than 1/4 mile from the envisioned network in the 2020 plan. During the public meetings and online engagement of Fall 2024, proposed routes to connect these areas to the envisioned network were proposed, along with several other additions requested by the public in the intervening years since 2020. The following map represents the new envisioned plan for Providence's urban trail network.

Different segments in the planned network serve different roles, depending on unique traffic conditions that help determine the best types of infrastructure. Some streets with low traffic stress are good alternatives to planned routes on parallel arterials until such protected urban trails can be completed. The pace of buildout will largely be determined by funding availability and transportation priorities set at all levels of government. Some routes in the planned network could be implemented within one or two years if funding is available, while other routes would involve a longer timeline due to jurisdictional complexity or geometric constraints. To achieve the Comprehensive Plan's Objective M5 (Goal #2 on page 36) for mode shift, gaps in the existing network should be eliminated and the connected network extended to more areas of the city by 2035.

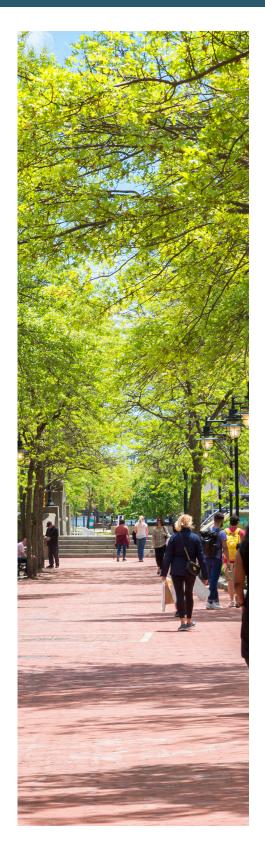


FIGURE 18 URBAN TRAIL NETWORK BY FACILITY TYPE

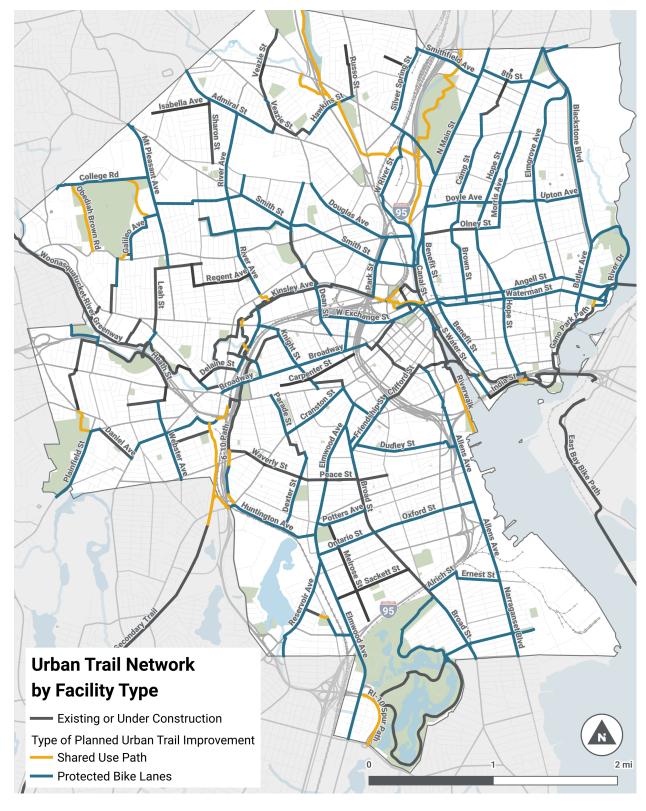
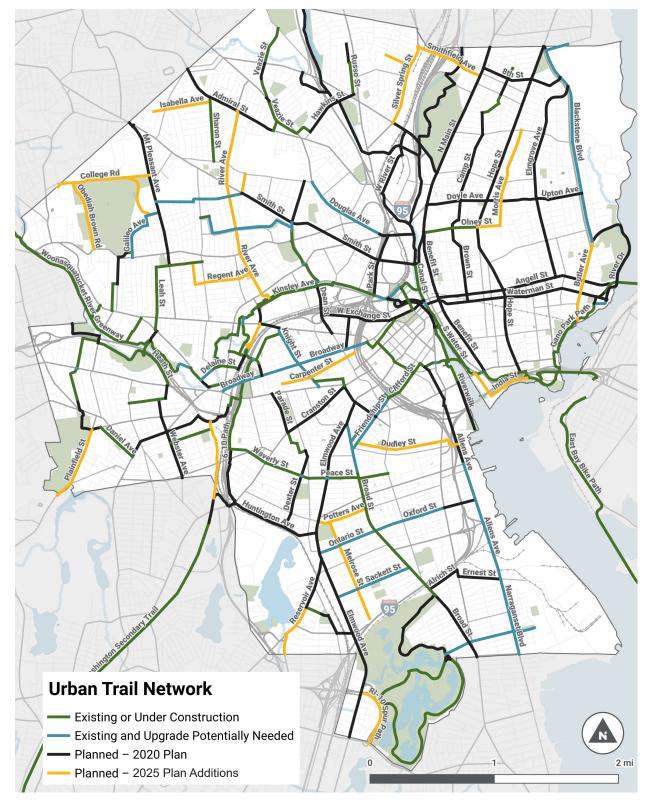


FIGURE 19 URBAN TRAIL NETWORK STATUS



Responsible Agency: DPW, Planning | Goals Served: Safety, Mode Shift, Climate

Plan References

COMPREHENSIVE PLAN

Sustainability, Resilience, and the Environment

Expand and facilitate use of non-carbon fuels and improve traffic circulation to reduce emissions and improve air quality. Prioritize development of non-car transportation options (biking, walking, scooting, etc) to eliminate emissions and improve air quality

Continue and expand investments in multi-modal transportation safety, efficiency, and electrification in line with the Great Streets Plan, RI Transit Master Plan, RI Long Range Transportation Plan, and the North Main Street Corridor Revitalization Study, to encourage mode shifts toward public transportation, walking, biking, carpooling, and electric vehicles.

People and Public Spaces

Collaborate across City departments and with community organizations to identify and implement improvements to the city's bicycle and pedestrian networks

Mobility

- Connect Providence Station to high population density neighborhoods across the city via the Providence Urban Trail network
- Provide a connected, safe and intuitive "All Ages and Abilities" network of spaces to bike without fear of car traffic within 1/4 mile of all residents, by implementing and updating the Great Streets Plan

Economic Development

Make long-term investments in city infrastructure including streets and sidewalks and bicycle lanes

Land Use

Encourage the use of non-auto transportation options through land use controls and transportation demand management incentives, including prioritizing bike lanes and infrastructure for safe pedestrian access via high quality sidewalks and protected lanes

p63 Expand new and maintain existing bike paths

See Infrastructure Toolbox F, G, K & M

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"I think we need to make all the bike lanes connected to each other and improve the safety of the worst streets in pvd to make it safer and more comfortable to walk and bike. Providence is perfect for it."

"I would really love to see more protected bike lanes! The bike lane on Broadway in federal hill is a great example. It's directly next to moving car traffic with no protection. The parked cars on the other side introduce the danger of opening car doors into bikers, as well as having cars cross over the bike lane. The inherent danger of this bike lane is a huge factor in me driving to work instead of biking."

"My brother has Down syndrome and needs to ride a tricycle, there are very few bike lanes that are wide and protected enough for him to ride in"







Responsible Agency: DPW, Planning | Goals Served: Safety, Mode Shift, Climate

The City has used a prioritization method for expansion of the urban trail network since 2020 that considers connectivity, equity, safety benefit, and expected usage.

Prioritization developed in 2020

The City of Providence prioritizes streets for Great Streets improvements based on equity, safety, connectivity, and demand. For each segment, these factors are assessed quantitatively, and a score out of 100 is calculated for each of the four factors

Equity

- Households in poverty within ¼ mile of corridor (1-5
- Households with no motor vehicle within ¼ mile of corridor (1-5 points)

Safety

- Ped/bike crashes on corridor (1-5 points)
- High crash intersections on corridor (Y/N, 2 or 0 points)
- Is the corridor among the top 25 listed in the Vulnerable Road User Safety Action Plan? (Y/N, 2 or 0 points)

Connectivity

- Connections to network segments that are under construction or complete (2 points for each connection)
- Connections to network segments that are funded (1 point for each)

Demand

- Population density within ¼ mile of corridor (1-5 points)
- Number of jobs within ¼ mile of corridor (1-5 points)
- Civic destinations within ¼ mile of corridor (1-5 points) Businesses within 1/4 mile of corridor (1-5 points)

Learning from implementation conversations with residents about this methodology in the context of previous urban trail segments, the City now weights the Connectivity factor 4x higher than the other factors. This turns out not to make too big a difference in the final ranking of projects, but it reflects the priorities articulated by residents across the city: new urban trails make more sense to people when they can see what those trails connect to.

Reassessment of prioritization

The City will identify two prioritized lists of urban trail segments, one for extensions of the existing urban trail network and one for disconnected additions, the latter to be advanced only in cases where other work (reconstruction, other pedestrian safety improvements, etc) creates an opportunity for efficient coordination with urban trail improvements. Each list will be prioritized as follows:

Equity

 Value of trail segment to Census tracts or block groups identified as priorities for racial or economic equity through local, state, and federal definitions. This value should be represented by presence of the trail segment within these areas unless an **analysis** is conducted of trail segments that most improve these areas' access to jobs, in which case this score should be based on the results of that analysis (0-10 points)

Safety

 Presence of street segments within the connection in the High Priority Network as developed in this plan. (0-10 points)

Demand

 Existing bicycle volumes on parallel routes within 1/4 mile of the segment, calculated through a combination of counts and multiple sources of citywide modeled data. (0-10 points)

Implement the traffic calming policy in the Green and Complete Streets Ordinance and amend as needed to increase deployment of traffic calming measures

Responsible Agency: DPW, Planning, Police | Goals Served: Safety, Mode Shift

Summary

The 2021 Green and Complete Streets Ordinance requires a proactive procedure to identify locations where traffic calming is needed using traffic data. The policy has not yet been implemented due to capacity constraints in the Traffic Engineering Department within DPW. The capacity bottleneck within Traffic Engineering should be addressed, proactive traffic counts in locations prioritized in the High Priority Network should be collected, and standards should be updated for how traffic calming is implemented that focus on quick and efficient conversion of traffic calming investment into safety benefits. Standards should also clarify multiple methods for calming traffic such as speed tables, chicanes, raised crosswalks, raised intersections, and which design is to be used in different conditions.



Plan References

COMPREHENSIVE PLAN

Mobility

Improve road safety by analyzing crash history and employing traffic calming

See Infrastructure Toolbox F, G, K & M

Comments

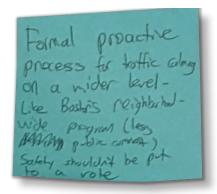


COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"Need traffic calming measures to keep freeway behaviors on the freeway, in the neighborhoods cars are guests."



- Boston, MA
- Houston, TX

Work with RIDOT to improve the safety and comfort of walking and biking on highway crossings and state-owned roadways

Responsible Agency: DPW, Intergovernmental, Planning, Sustainability | Goals Served: Safety, Mode Shift

Summary

Achieving the City's Vision Zero target is not possible without RIDOT's collaboration to prioritize the safety of its facilities over traffic flow on streets where people walk and bike. The planned update of the current RIDOT Design Manual should reflect new design concepts for bicycling, walking, and micromobility. The City should request to review and make suggestions on RIDOT's update work and engage the General Assembly if necessary. In the interim, the City should collaborate with RIDOT to improve safety of walking and bicycling on state-controlled streets in the High-Priority Network, especially highway crossings and locations where on- and off-ramps intersect with city streets.

RI Bicycle Mobility Plan Recommendations

The RI Bicycle Mobility Plan specifically recommends several changes to the Design Manual:

- · Traffic signal detectors should always be oriented to detect bicyclists on all roads except limited- access highways for either above-ground or in-ground installation
- Language should be added that emphasizes the safety needs of vulnerable roadway users (VRUs) such as pedestrians, bicyclists, and those in work zones
- · Inclusion of Bicycle Level of Traffic Stress (BLTS) or Bicycle Level of Service (BLOS) in project evaluations, with BLTS considered current best practice
- Incorporation of blanket statewide approval of current FHWA Interim Approvals for bicycle- related signals, markings, and signs
- In the Highway Design Manual, entries should be added to 'Definitions of Terms' for shared-use path, separated bicycle lane, and protected intersection to reflect guidance in the current edition of AASHTO's Guide for the Development of Bicycle Facilities
- Regarding lane width, language should be added to allow narrower lanes in certain conditions (e.g., on lowspeed and rural roads, within residential areas, etc.)
- Engineers should be given more latitude regarding bridge lane width in order to accommodate bicyclists

Plan References

COMPREHENSIVE PLAN

Sustainability, Resilience, and the Environment

- Encourage the state to lead by example by using alternative fuel vehicles for fleet and transit vehicles, decarbonizing state-owned buildings, and building infrastructure that will reduce VMT
- Work with state and other municipalities to address regional sustainability through coordinated approaches to transit, air and water quality, brownfield remediation, flood zone protection, and provision of bike paths and recreational areas

Mobility

- Work with RIDOT to improve the safety and comfort of pedestrians on highway
- Work with RIDOT to improve the safety and comfort of bicyclists on highway crossings and state-owned roadways

GREAT STREETS MASTER PLAN

Work with the State Legislature to Require RIDOT to Update Highway Design Manual

RI BICYCLE MOBILITY PLAN

- A new edition of RIDOT's Traffic Design Manual should be written to integrate bicycle-specific updates
- Make edits to the RIDOT Highway Design Manual to encourage roadway design that is more amenable to bicycle transportation
- In order to facilitate more bicycle-friendly communities, update RIDOT's 1997 Design Policy Memo 10-37, Accommodations for Bicyclists and Pedestrians

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"Advocate for changes at the state level that would require RIDOT to adhere complete street design when a municipality wants to install such measures."

Make the North told More Walkake especially our bridges and

- Massachusetts
- Tennessee
- Ohio
- Minnesota
- Washington state

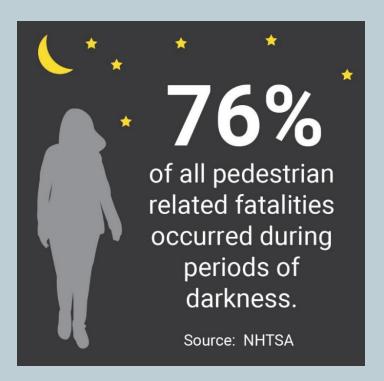
Improve street lighting of crosswalks, sidewalks, and urban trails

Responsible Agency: Public Property | Goals Served: Safety, Mode Shift

Summary

A disproportionate share of serious collisions in Providence occur at night, and recent investigation of North Main Street revealed illumination levels at crosswalks below recommended thresholds. On North Main Street, small changes to the street light output settings were able to create tangible short-term safety benefits with minimal cost. The City should evaluate potential lighting gaps alongside the High-Priority Network for prioritization, and create and implement standards for lighting levels consistent with **FHWA guidance**. This plan should include:

- · GIS analysis to identify lighting gaps
- Human-scale lighting in areas with high foot traffic, potentially using fixtures similar to those on Westminster Street in the West End
- Relocation of street lighting to "upstream" of crosswalks such that the side of someone using the crosswalk is illuminated for approaching drivers.



Plan References

GREAT STREETS MASTER PLAN

p97 Expand the City's Use of New Technologies

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"More signage and lighting at pedestrian crosswalks that are not at an intersection with traffic lights. I live right across from a library and there are constantly kids and elderly folks trying to cross at a painted cross walk that has no lights, signage or traffic light protections."

"I would like to see better lighting at crosswalks because I can't see people crossing. The lighting is terrible, and the new headlights on people's cars blind me while driving the opposite way."

- Denver, CO
- San Francisco, CA
- Indianapolis, IN
- Madison, WI
- Portland, OR
- New York City





Consider lowering statutory speed limits on local residential streets to 20 mph

Responsible Agency: DPW, City Council | Goals Served: Safety, Mode Shift

Summary

The default speed limit is 25 mph for most roadways in Providence. In line with the recommendations from NACTO's "City Limits" report and in accordance with state law which gives local governments the authority to set their own default speed limits, the City Council should reduce the default speed limit on all local residential streets to 20 mph. If a further change to state law is necessary to allow this adjustment to default speeds, the City should pursue such a legislative amendment.

What does the research say?

While safer speeds are central to the Safe System Approach, lower speed limits are only part of the path to safer speeds. Reducing speed limits on neighborhood streets has been shown to decrease fatalities by 26%. While design and enforcement to mitigate speeding is also important, research shows that just lowering speed limits can reduce actual speeds for 1-2 mph for each 5 mph change in speed limits.



Source: City of New York

Plan References

COMPREHENSIVE PLAN

Mobility

Consider lowering statutory speed limits on local residential streets to 20 mph

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

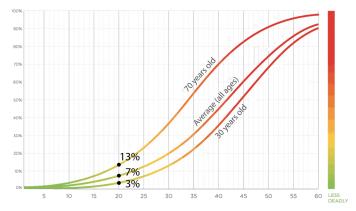
"In all residential neighborhoods on side streets implement 20 MPH maximum"

"Honestly believe that reducing the speed limit would benefit everyone."

Where else does this?

- · Seattle, WA
- **New York City**
- · Washington, DC
- Minneapolis, MN
- · Boulder, CO
- Tacoma, WA
- · Falls Church, VA
- · Cambridge, MA

THE CHANCE OF BEING KILLED BY A CAR GOING 20 MPH



Source: AAA Foundation for Traffic Safety

Provide special consideration to safety around schools through design tools to reduce speeds and creating welcoming routes for students walking or bicycling to or from school

Responsible Agency: DPW, PPSD | Goals Served: Safety, Mode Shift

Summary

According to the Safe Routes to School Partnership, when students exercise before school, they arrive focused and ready to learn. The City should partner with school stakeholders to identify and mitigate barriers to walking and bicycling to schools, and create a program to cultivate continuous safety improvement in the areas around schools. Some further considerations include:

- · Create an engineering toolkit for quick-build infrastructure projects specific to the needs of youth in school zones.
- · When siting new schools, consider walkability in location selection. When schools are located within walking distance of students and on lower-traffic roads, the experience of students walking to school can be inherently safer than when schools are on busy roads at the edge of a neighborhood.
- When conducting a Road Safety Assessment for areas near schools, ensure special consideration for the unique characteristics of student travel behavior.
- · Encourage walking school buses and bike buses, including by identifying funding for them either from flexibility in state funds for school transportation or from a local source.

What does the research say?

Children are 2.5x to 4x more likely to walk or bike to school on routes featuring sidewalks, traffic lights, pedestrian crossing improvements, and bicycle paths. Advice and events to help students and parents walk, cycle or carpool to school can lead to a 5-11% reduction in car use for school trips. Physical activity increases standardized test scores, increases attendance. reduces disciplinary actions, and increases grades.

Plan References

COMPREHENSIVE PLAN

Mobility

Prioritize ADA compliance for sidewalks abutting public schools, parks, and bus stops), CS8.U (Improving pedestrian and bicycle access to schools from the surrounding neighborhoods

Community Services and Facilities

Improving pedestrian and bicycle access to schools from the surrounding

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS SAFE STREETS PLAN

"Top priority: Standard of safety for all schools: speed camera/ flashing school zone lights and signs, speed humps/bumps at cross walks"

"Let's make it so kids can ride bikes to local schools. Create protected bike lanes to all the public schools."





Create more and better spaces that are designed for walking

Responsible Agency: DPW, Planning | Goals Served: Mode Shift, Climate

Summary

Cities around the world have experimented with extensive creative designs to improve walkability. Amenities to enhance the experience of walking such as furnishings, water, and shade, and identifying spaces away from car traffic are examples of improvements that increase the comfort of walking. Locations with high proportions of children walking should be prioritized for these improvements.

What does the research say?

Cities that have prioritized creating excellent spaces for walking have seen a 10-20% reduction in traffic. Some cities that have been particularly committed to walking have seen over 50% decrease in traffic alongside a 7% increase in business openings. Surveys of businesses after major pedestrian investments found a majority of business owners supported them, and 75-100% of business owners felt the investments would be beneficial. Another study found a 12-40% increase in economic activity following significant pedestrian investments.



Plan References

COMPREHENSIVE PLAN

Mobility

Create more and better spaces that are designed for walking

Built Environment

- Strategically invest in public infrastructure, streetscapes, and public amenities to promote Providence's civic identity and attract high-quality development
- Ensure that new developments improve pedestrian movement and provide pedestrian amenities

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"Transform some roads and dead spaces into green spaces."

"I would love an evergreen mechanism by which citizens can submit ideas to the city for small public improvements. For example, along Pleasant Valley Parkway, we have ideas for modest improvements to sidewalks, benches and greenspace"

"Pedestrianized zones, within certain neighborhood social centers, might build community, support local businesses, empower community members to choose how to use their spaces (e.g., planters or bike parking), reduce car traffic and associated emissions, improve the pedestrian experience, and reduce heating from asphalt coverage."

- Barcelona
- Oslo
- London
- **New York City**
- Paris
- Saskatoon
- Madrid

- Pontevedra, Spain
- Boston, MA
- · Madison, WI
- Burlington, VT
- · Boulder, CO

Formalize "quick-build" activities into a clear procedure for testing designs with temporary materials

Goals Served: Safety, Mode Shift, Climate

Summary

The City has begun using temporary speed lumps to test and evaluate traffic calming before the installation of permanent measures. Broaden this quick-build program to formalize a process through which temporary materials are used for a broader set of specific safety measures to test improvements before building permanent infrastructure. In creating this policy, reference best practices articulated in NACTO's Material Success, Transportation for America's Quick Build resources, People for Bikes' guide, the guide produced by Orlando, FL, Street Plans Collaborative's guide, and the "Quick-Build Guide" by Alta Planning

Every Quick-Build Street Project Needs These Nine Things:

SOURCE: PEOPLE FOR BIKES "QUICK BUILDS FOR BETTER STREETS: A NEW PROJECT DELIVERY MODEL FOR U.S. CITIES"



്റ്റ് A Team



♠ A System for Seizing Opportunity



Institutionalized Urgency



10 A Reliable Funding Strategy



A Contracting Plan



An Outreach Game Plan



Specialized Communications



Measurement

Plan References

GREAT STREETS MASTER PLAN

Develop a Demonstration Project Strategy and Toolkit to Test Projects Before Full Implementation

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"a lot more temporary speed bumps"

"flex posts should be replaced with hard infrastructure like curbs, bollards, or otherwise."

Where else does this?

· Orlando, FL



Improve sidewalk & roadway infrastructure maintenance to improve accessibility, especially in frontline communities

Responsible Agency: DPW, Planning | Goals Served: Safety, Mode Shift

Summary

When sidewalks are impassable due to poor repair, the pedestrian network is not sufficiently accessible, which discourages walking and forces people who are using the sidewalks onto less safe routes in the roadway around obstacles. Using Capital Improvement Plan funding, progress has been made to address repair issues, and the City should continue to improve maintenance of sidewalks so that accessible paths are available everywhere there are sidewalks. Work with frontline community organizations to support programs that improve community cleanliness and safety and create living wage jobs for frontline community members. Create a plan for improving the public right-of-way to be accessible in accordance with the Americans with Disabilities Act and the Public Right Of Way Accessibility Guidelines.



Plan References

COMPREHENSIVE PLAN

Mobility

- Improve maintenance of sidewalks so that accessible paths compliant with federal ADA and Public Right of Way Accessibility Guidelines (PROWAG) are available throughout the city
- Prioritize ADA compliance for sidewalks abutting public schools, parks, and bus stops

Built Environment

Preserve, enhance, extend, and connect the historic patterns and character of the city's street and sidewalk system

CLIMATE JUSTICE PLAN

- Increase sidewalk maintenance and investment in frontline communities
- Invest in infrastructure to make walking and riding bicycles safer and more accessible, especially in low-income areas, Create a citywide mobility plan that builds upon the City's Great Streets Master Plan and RIPTA's forthcoming Transit

Comments

Master Plan



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"The sidewalks are a disaster. We need to do better to improve accessibility. People with walkers and wheelchairs are being forced into the street, and this is unacceptable."





Fix sidewalks buckled by tree roots & plan to increase tree canopy while mitigating sidewalk repair issues

Responsible Agency: DPW, Forestry, Parks | Goals Served: Safety, Mode Shift, Climate

Summary

Street tree canopy improves the walkability of a street and provides co-benefits related to stormwater management and extreme heat mitigation. At the same time, the roots from street trees can create accessibility barriers on sidewalks if design, installation, and maintenance do not proactively address the problem. Providence should expand street tree coverage in line with the recommendations in the PVD Tree Plan.

PVD Tree Plan Recommendations

Target: Planting 3,000 trees per year in priority areas of the city

- 7.6: Prioritize setback tree plantings to maximize public benefits and canopy growth, using public funds to prepare sites and plant shade trees up to 20' from public rightof-ways on private property (provided property owner consent is obtained), where they have more room to grow and a better chance of survival.
- 8.3: Develop and distribute updated city-wide guidelines for strategic species and location selection, including sub-lists of species recommendations by site type. Build upon existing guidelines, including the Climate and Health Species List for Rhode Island Urban Trees and Providence Tree List.
- 20.4: Update standard design specifications in all new sidewalk renovation or construction projects in tree equity focus areas to include pre-cut tree pits or lawn strips and coordinate across municipal and nonprofit partners to install trees in them.
- 20.5: Develop interdepartmental protocols for preventing and responding to sidewalk conflicts, drawing on the "PVD Trees & Infrastructure Conflict Avoidance Guide" guide produced by the Southeast New England Program (SNEP) Network.



Plan References

COMPREHENSIVE PLAN

Sustainability, Resilience, and the Environment

Support the implementation of the Providence Tree Plan and promote private and non-profit planting efforts that increase canopy coverage, especially in low-canopy neighborhoods. Partner across various municipal agencies to prevent disruptions to existing infrastructure (sidewalks, roads, etc) so that any trees planted can be sustained and grow, without causing mobility challenges for residents)

Mobility

- Improve design standards for street trees to both provide more shade to sidewalk users and avoid trip hazards created by tree roots up-lifting the sidewalk
- Plow snow from sidewalks and bike lanes on city-owned property, including parks and schools, as well as sidewalks adjacent to bus stops
- Create a clear and implementable strategy to mitigate issues where tree growth is reducing sidewalk accessibility, while ensuring that overall urban tree canopy expands in line with targets set in the PVD Tree Plan

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"Quality Services includes sidewalks that don't cause you to trip and fall"

"A dense tree canopy in every neighborhood of the city. Street trees provide so many climate and health benefits and are dirt cheap relative to their benefits."

"Plant more trees to improve the air quality, temperature and mental health of our communities"

"My disability affects my coordination and motor skills, making tripping and falling a decently high risk for me. A lack of sidewalk maintenance makes walking Even in my neighborhood potentially dangerous since the sidewalks are in an uneven condition."

- · Charlotte, NC
- Detroit, MI
- Baltimore, MD
- Phoenix, AZ
- Washington State

Establish procedures to address sidewalk obstructions and avoid new obstructions

Responsible Agency: DPW, Planning | Goals Served: Safety, Mode Shift

Summary

The City should inventory permanent sidewalk obstructions such as utility poles, guy wires, or utility cabinets, and implement a plan for addressing them. For recurring temporary obstructions such as outdoor dining, business signage, overgrowth of plantings, or waste receptacles, the City should establish procedures and work with abutters to find alternatives. Standards should also be established and enforced for construction detours and sidewalk/lane closures to prioritize maintaining walking and bicycling connections during road projects.



Plan References

COMPREHENSIVE PLAN

Built Environment

Develop streetscape standards that enhance the pedestrian experience and incorporate high-quality design elements that are economical and easy to maintain

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"Stop blocking sidewalks! Major issue on East Side: fences, parked cars, construction materials, etc"

"Address vehicles parking on sidewalks and other blockages of sidewalks."

"the bike path from the trader joes on Wickenden, that goes behind that new apartment complex being built, is regularly blocked by construction but with no signage or consistency. i used to ride it to work every day, but now i risk it biking up Wickenden, with a line of cars stuck behind me."

Where else does this?

- Washington, DC

Seattle, WA

- · Provincetown, MA
- · Alexandria, VA



Update agreements and standards for road and sidewalk opening standards to capitalize on project opportunities for Great Streets implementation

Responsible Agency: DPW, Intergovernmental | Goals Served: Mode Shift, Climate

Summary

Utility construction and patches to restore the road afterward should be evaluated to ensure that small opportunities to improve safety are not missed. Road opening permits and utility agreements should be evaluated to ensure that suitable safety is provided during road closures and detours, and that walking and biking infrastructure is restored to the standards in this plan in a timely fashion.

Utility Coordination Best Practices

SOURCE: INDIANAPOLIS MPO

Primary factors contributing to utility related delays are:

- 1. Existing utility information and location is inaccurate.
- 2. Gaps in mapping of new and/or relocated installations prior to construction.
- 3. Insufficient communication and coordination.
- 4. Differing policies between state and local agencies.
- 5. No oversight or inspection of utility installations.
- 6. Lack of strong permitting requirements and language.
- 7 Abandoned facilities

There are roughly three main causes:

- 1. Coordination and communication
- 2. Accurate utility information during design and into construction
- 3. Lack of standard permitting requirements and policies

Some suggested best practices include:

- 1. Early utility stakeholder involvement.
- 2. Digital as-built documentation.
- 3. Standard ordinances and permit requirements.
- 4. Utilizing subsurface utility engineering (SUE).
- 5. Conducting utility pre-construction meetings.
- 6. Allowing sufficient time for planning and design.
- 7. Inspection of utility installations.
- 8. Communicating short term and long-term improvement plans.
- 9. Developing utility accommodation policies.
- 10. Establishing utility coordination councils.
- 11. Utilizing a risk register or conflict matrix for conflict management.

Plan References

GREAT STREETS MASTER PLAN

- Update Road and Sidewalk Opening Standards to Capitalize on Project Opportunities for Great Streets Implementation
- Update the City's Public Utilities Agreement to Incorporate Bicycle-Related Provisions

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"Better roads and holding people accountable that work on the roads so it doesn't feel like I'm on a carnival ride when I go from old road to new."

"Create guidelines for utility work that replaces road and walkway material in kind once any work is completed."

Where else does this?

· Washington, DC



Improve snow clearance on sidewalks and urban trails, especially in frontline communities

Responsible Agency: DPW, Planning | Goals Served: Safety, Mode Shift

Summary

Maintaining safe routes for walking and bicycling following snow events is important to ensure neighbors who must or choose to use these modes in winter stay safe. More than 40% of people continue walking in the winter, and 30 - 60% of people who ride bikes continue riding in the winter.

There are multiple summary reports of best practices for snow clearance operation on walkways and bikeways from cities around the northern United States and Canada. Some common policies from these reports could be applied to Providence:

- Integrate clearance of snow from bike lanes into snow operations prioritization: establish standards for bikeway snow clearance that include keeping vertical separation installed (e.g. after primary roadways but before touch-up and parking lanes), pre-treat bike lanes similarly to the rest of the roadway, identify specific bike routes that are kept passable, utilize smaller vehicles such as skid loaders or converted lawnmowers in locations where pickup truck plows cannot fit in a bikeway, and work with the State to ensure routes such as the George Redman Linear Path and Henderson Bridge Bike Path are cleared to a passable standard.
- Designate certain sidewalks as priorities to ensure consistent snow clearance, and in snow events greater than 3", take direct responsibility for clearing snow from those routes, potentially funded by an embellishment fee assigned to abutters; in Rochester, NY this fee has been approximately \$1 per frontage-foot.
- Integrate into the 311 system a method for snow clearance complaints, and assign appropriately credentialed staff to promptly investigate and cite non-compliant properties.

Plan References

COMPREHENSIVE PLAN

Mobility

3.K Promote and enforce policies around clearance of snow from sidewalks and bike lanes

Plow snow from sidewalks and bike lanes on city-owned property, including parks and schools, as well as sidewalks adjacent to bus stops

GREAT STREETS MASTER PLAN

p97 Increase Enforcement of Sidewalk Snow Removal

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"ensure all urban trails are cleared of snow and leaves regularly"

"major streets throughout the city should have city snow removal & salt application on side walks. Too many lazy landlords who just will pay infrequent fines rather than take care of it themselves. Portland, ME takes care of their big streets."

"Ensure that sidewalks are cleared of ice and snow. Ensure crosswalk connections to sidewalks are cleared of snow piles."

"Treat Providence like a big city-- expect people to walk, bike, and take transit, and create an environment where these things are safe and convenient. More housing places with non-car transportation, ensure sidewalks are shoveled, enforce laws about parking in bike lanes, etc."

- · Alexandria, VA
- Cambridge, MA
- Seattle, WA
- Chicago, IL
- Ann Arbor, MI
- Des Moines, Iowa
- · Rochester, NY

- State of Ohio
- Minneapolis, MN
- · Marquette, MI
- Portland, ME
- Syracuse, NY
- · Grand Rapids, MI
- Bangor, ME

Elevate transit experience to be viable alternative to driving for more people

Responsible Agency: Intergovernmental, Planning, DPW, Parks, Sustainability, DID | Goals Served: Mode Shift, Climate

Summary

Providence residents want to take the bus, but do not feel that the current transit service in the city meets their needs. Besides the 2020 Transit Master Plan, RIPTA undertakes many planning projects to improve service, and the City should support these efforts. While the urban core of Rhode Island has density and demographic conditions very favorable to excellent transit service and RIPTA is exceptionally efficient at converting state funding into service trips compared to other agencies, there are ways the State and City can support the transit experience residents are asking for:

- Improve the accessibility and comfort of bus stops and bus hubs by improving ADA infrastructure, working with RIPTA to expand the coverage of benches, shelters, and other stop infrastructure.
- Improve infrastructure to prioritize buses and bus passengers especially on the highestfrequency corridors including the creation of dedicated roadway right-of-way to the exclusive use of buses in high-frequency corridors.
- Work with RIPTA to clarify a maintenance plan at bus stops for waste removal, and to clear snow from bus stops following snow events to standards such as a 5'x8' boarding area with 4' paths connecting it to nearby sidewalk paths.
- · Advocate to electrify MBTA line to enable faster service with reduced emissions.
- Advocate to electrify RIPTA service to enable faster service with reduced emissions.
- Advocate for the creation and use of Park-and-Ride locations at the periphery of the urban core.

Plan References

COMPREHENSIVE PLAN

Sustainability, Resilience, and the Environment

Support the transition of RIPTA's bus fleet to zero-emissions vehicles, with an emphasis on transitioning routes in areas impacted by poor air quality

Mobility

- Work with RIPTA, RIDOT, and the community to prioritize and implement key transit improvements to encourage transit ridership and address climate goals
- Advocate for sufficient funding to not only maintain existing service levels but increase them 1.B in line with the recommendations of the state-adopted Transit Master Plan
- Advocate for expanded eligibility for free or reduced fare bus passes provided that the overall system is adequately funded
- Advocate for increased frequency of bus service in line with the recommendations of the 1.D state-adopted Transit Master Plan
- Advocate for new bus routes between neighborhoods and stopping at grocery stores, including on Valley Street (N7 in the 2020 Transit Master Plan), along Dean Street from the VA Hospital to RI Hospital (N9), and between Olneyville Square and Eddy Street (N13).)
- Advocate for reduced emissions from buses especially in environmental justice areas through the introduction of more electric buses
- 1.G Advocate for frequent service on more routes later into the evening
- Improve infrastructure to prioritize buses and bus passengers especially on the highest-fre-1.H quency corridors including the creation of dedicated roadway right-of-way to the exclusive use of buses in high-frequency corridors
- 1.J Ensure sufficient sidewalk and ADA infrastructure exists at bus stops and to access bus stops
- Ensure that the bus hub feels clean, safe, and welcoming for all users
- Encourage RIDOT and MBTA to provide more frequent and faster regional rail service to Boston and RI TF Green Airport, especially in off-peak hours
- 2.D Advocate to electrify MBTA line to enable faster service with reduced emissions

Land Use

Work with RIPTA to build out appropriate locations for public transit infrastructure, including current work to expand and build out the R-Line

GREAT STREETS MASTER PLAN

Work with RIPTA to Evaluate All Bus Routes and Stops to Ensure they are Accessible, Properly-sized, Properly-spaced, and Welcoming

CLIMATE JUSTICE PLAN

Increase in public transit ridership in Providence; Increase low-carbon transit options in frontline communities

Elevate transit experience to be viable alternative to driving for more people

Responsible Agency: Intergovernmental, Planning, DPW, Parks, Sustainability, DID | Goals Served: Mode Shift, Climate

Comments



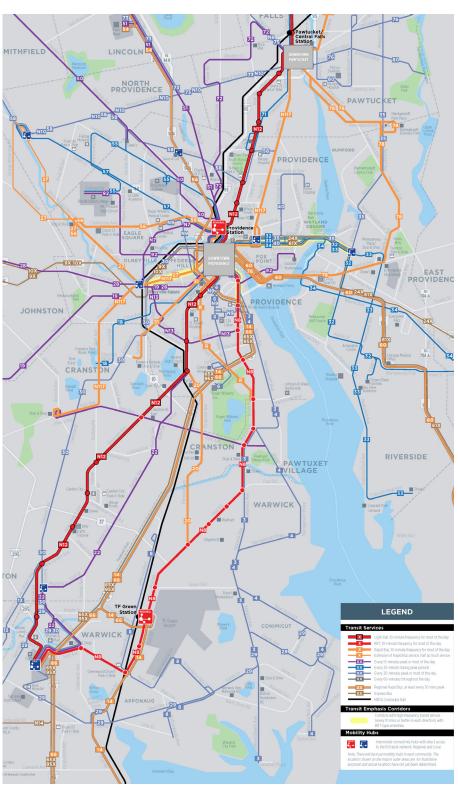


"I want more bus-only lanes."

"Modernize tools to access the busses that are here. Clean up the stops and make them stand out more. More bus lanes. Work with the MBTA to make the commuter rail more convenient and push for electrification."

"Increase bus frequency! Just 20 min at peak which is not enough esp when one doesn't show"

Butter rider amenitus at stops -shetter, bench, etc.



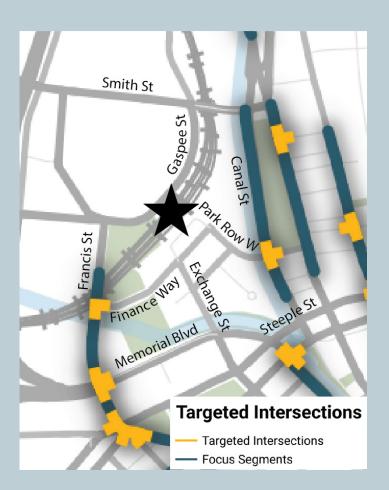
Source: RI Transit Master Plan

Improve routes to the train station for walking and bicycling to reduce traffic congestion and encourage train ridership

Responsible Agency: DPW, Planning, Intergovernmental | Goals Served: Safety, Mode Shift, Climate

Summary

The Providence Train Station served by Amtrak and MBTA Commuter Rail is an important asset to the potential for reducing VMT in Providence while maintaining strong economic opportunity. Routes for walking and bicycling to and from the train station should be enhanced to the highest levels of safety and comfort. Roads to access the station such as Exchange Street, Finance Way, Park Row West, and Gaspee Street should be prioritized for such improvements as protected urban trails, wide sidewalks, street trees, regularly spaced benches, intersection improvements, and accessibility compliance upgrades. These improvements should also be considered for Memorial Boulevard, Smith Street, Francis Street, Steeple Street, and Canal Street, in addition to safety improvements on these arterials for people getting to and from the train station.



Plan References

COMPREHENSIVE PLAN

Mobility

Improve routes to the train station for walking and bicycling to reduce traffic congestion and encourage train ridership

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS SAFE STREETS PLAN

"Create better connections from train station to surrounding areas."

"Address vehicles parking on sidewalks and other blockages of sidewalks."

- · Glen Ellyn, IL
- Amsterdam





Add wayfinding signage on bike routes to improve navigation

Summary

In 2022, the City completed a wayfinding sign plan for the urban trail network, resulting in a menu of sign types and a design template for wayfinding signs. This program should be modified as necessary and included in any new urban trail projects. A plan should be established for improving existing urban trails with this signage. Wayfinding signs should be installed on the urban trail network each year until the completed portion of the network is fully outfitted with wayfinding signs.



Plan References

COMPREHENSIVE PLAN

Mobility

4.K Add wayfinding signage on bike routes to improve navigation

RI BICYCLE MOBILITY PLAN

Create a cohesive signage and branding strategy for key bicycle routes; An p83 expansion of bicycle wayfinding, bicycle parking assistance, and funding to encourage more people to ride bicycles to events

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"Improve bicycle wayfinding signs"

"More clear Urban Trail demarcations — see San Francisco's bike system"

- · Seattle, WA
- · Portland, OR

Responsible Agency: Planning, DPW, Public Property | Goals Served: Safety, Mode Shift, Climate

Summary

Actively educate and encourage property owners and business owners to replace sub-standard bike parking infrastructure with better racks, potentially even through a program to partially subsidize the new infrastructure. Expand the number of locations with secure bike parking especially at City-owned facilities and work with stakeholders at the train station to offer secure bike parking there. Add additional standard bike racks to the public right-of-way.



Source: MBTA

Plan References

COMPREHENSIVE PLAN

Mobility

- Encourage non-car transportation at rail lines by installing secure bike parking 2.C at the Providence Station and other transit hubs.
- Advocate for secure bike parking at the train station such as lockers, a controlled access bike cage, or other designs that minimize the risk of bike theft
- Establish a program to assist private property owners in upgrading bicycle parking to a useable standard
- Explore adding enhanced bicycle parking in the public right-of-way and at City-owned facilities including secure bike parking options

GREAT STREETS MASTER PLAN

Develop a Program to Incentivize Business and Property Owners to Install

RI BICYCLE MOBILITY PLAN

- Install more bicycle parking and secure bicycle parking at Park-and-Ride locations p82
- Seek funding that would allow for the expansion of bicycle valet parking at events; More bicycle parking is needed around the state

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"Bike racks should be installed near the businesses along Broad Street where riders can secure their bikes when shopping."

"medium and long term bike parking near providence station"

- · Washington, DC
- Seattle, WA
- · Portland, OR

Improve bike- and scooter-share programs

Responsible Agency: DPW, Planning | Goals Served: Mode Shift, Climate

Summary

"Shared micromobility", or bike-share and scooter-share, is a valuable part of the transportation system providing flexible mobility options. Providence has been partnering with private companies that operate electric, dockless shared micromobility since 2018. Every operator is required by the City's regulations to provide reduced-fare memberships to qualifying customers. The City should continue to facilitate this mobility option with the following improvements:

- · Improve financial accessibility, potentially by continuing to expand use of the reduced-fare "access" plans to 10% of trips.
- Improve parking compliance by requiring devices to be left only in designated parking corrals, at least in the highestdemand areas of the city.
- Improve service levels by ensuring that sufficient distribution of vehicles in good working order are available.
- · Consider establishing a publicly-owned bike share system in collaboration with neighboring municipalities, similar to the model used in Boston's bike share system.



Plan References

COMPREHENSIVE PLAN

Mobility

Establish and implement clear standards for prioritization of curb uses, including the preference for bus stops, where needed, over on-street parking

CLIMATE JUSTICE PLAN

p75 Increase the number of trips taken using JUMP Boost plan subscriptions to 10%

RI BICYCLE MOBILITY PLAN

Create program modeled after the Metro Boston "Park & Pedal" program where car commuters are encouraged to drive (with their bicycles in their cars) to specific free parking lots outside of downtown Providence, from where they can bike to their downtown destinations on low-stress routes

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"Revamp the rental bikes/scooters. Leaving them haphazardly creates nuisance and blight. Install stations for them to be turned into to keep things orderly. These can be proper, viable alternatives to relying on cars when done properly."

"The single most important quality-of-life factor to me involves how to get around without a car. I'd love to see more scooters or even manual bicycles to rent at lower prices. I'd love to see more creative solutions to mobility."

- New York, NY
- · San Francisco, CA
- Washington, DC
- Boston, MA

Expand car-sharing coverage throughout the city

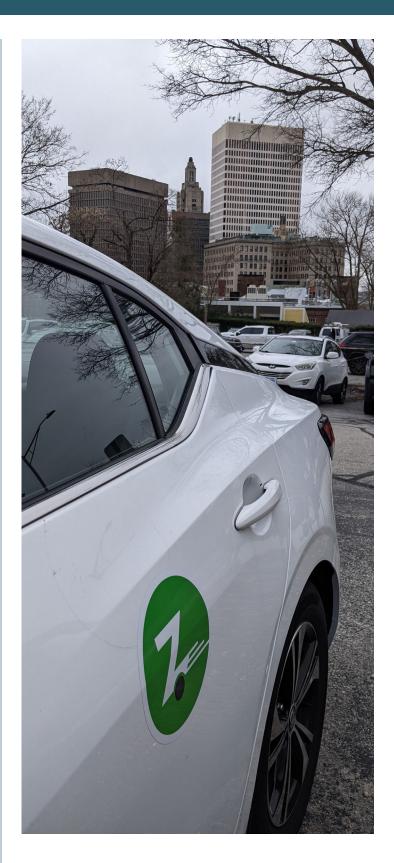
Summary

Car-sharing is available to the general public in approximately 30 Zipcar locations throughout the city, primarily clustered in Downtown and on College Hill. To be usable by more people, opportunities should be evaluated to add shared vehicles accessible to the public within a quarter-mile walk of as many City residents as possible.

What does the research say?

Each shared car available can lead to 12-15 private cars being replaced, decreasing parking demand and traffic.

- Boston, MA
- New York City
- · San Francisco, CA
- · Washington, DC
- · Seattle, WA



Manage the curbside for greater accessibility

Responsible Agency: DPW, Intergovernmental, Planning | Goals Served: Mode Shift, Climate

Summary

The City should complete the Curbside Management Plan started in 2021-22 including:

- Clear standards for prioritization of curb uses in different contexts including for bus stops, curbside EV charging, bike lanes, outdoor dining, accessible parking spaces, and loading zones:
- Improvements to the Overnight Parking Permit Program to be more intuitive and incentivize participation;
- More flexible parking meter rates to incentivize shorter duration parking in high-demand areas and longer-duration parking in lower-demand areas;
- A program for businesses and residents to create parklets within the parking lane adjacent to their location and expansion of the snow parking pilot program.
- A plan for how cars parked on-street should be relocated during snow events for properties without driveway space, such as expansion of reverse-side parking piloted in 2021-22, designation of certain parking lots for public snow parking, or designation of certain low-traffic streets where on-street parking is allowed to continue during snow parking bans.

Where else does this?

- Washington, DC
- Alexandria, VA



Plan References

COMPREHENSIVE PLAN

Mobility

- Establish and implement clear standards for prioritization of curb uses, including the preference for bus stops, where needed, over on-street parking
- Improve Overnight Parking Permit program to increase participation by evaluating the permit cost for vehicles registered in Providence, vehicles registered in Rhode Island, and vehicles registered out of state
- Formalize snow parking pilot to allow reverse-side parking and designated parking areas per ward during snow events
- Create and implement standards to increase the frequency of accessible 5.T parking spaces and loading zones in business districts
- Improve facilities to facilitate more efficient movement of freight within 6.A
- Establish incentives to shift freight deliveries on city streets to less congested times of day
- Develop an active curbside asset database showing the location and size of existing loading zones, curb cuts, hours of operation, and other pertinent infrastructure, markings, and signs.

GREAT STREETS MASTER PLAN

- p94 Use and Price Curb Space More Efficiently and Flexibly; Evaluate Overnight
- -95 Resident Parking Permit Program Fee Structure
- Create a citywide mobility plan that builds upon the City's Great Streets Master Plan and RIPTA's forthcoming Transit Master Plan

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"address on street snow parking"

"Overnight parking should be allowed - less off-street parking needed means more green space"

"Creating a city infrastructure less reliant on cars and with less space dedicated to parking"

"Requiring a certain number of loading zone spots in any given zone or block."

"Inadequate number of disabled parking spaces."



27

Issue more tickets for violations impacting safety, providing the Traffic Bureau with the necessary resources and using technology where appropriate

Responsible Agency: Police, Planning, DPW | Goals Served: Safety, Mode Shift

Summary

Equitably implemented, fines and tickets are an essential tool in the policy toolbox for making streets safer. Automated Traffic Enforcement, especially speed safety cameras, have a strong track record of safety outcomes. Expand the use of camera enforcement, where appropriate, for speeding, running red lights, and blocking the box, and consider additional technologies to address dangerous behaviors such as distracted driving. Work with Municipal Court to ensure that court officials have sufficient understanding and authority to uphold tickets from cameras and to escalate consequences for serial speeding tickets.

To ensure automated traffic enforcement is implemented fairly, emphasize equity in program design, following best practice such as <u>guidance</u> from the Vision Zero Network. Explore methods to ensure both effective deterrence of unsafe driving and respect for the cost burdens on many Providence families.

The Traffic Bureau of the Police Department traditionally leads traffic enforcement efforts. Vacancies within the Traffic Bureau should be filled and a task force should be established focused on speeding and DUI. An enforcement operations plan for priority sites informed by the analyses in this plan should be created, and training for officers on traffic safety laws, contributing factors to serious collisions, how to fill out crash reports, and Vision Zero strategies should be improved.

Parking enforcement also currently sits within the Police
Department and issues citations that can incentivize safety.
The City should direct parking enforcement efforts to
continue placing greater emphasis on parking violations
impacting safety, such as blocking crosswalks, bike lanes, bus
stops, and visibility near corners, and parking on sidewalks.

What does the research say?

Speed safety cameras <u>reduce</u> all crashes by 54%, traffic injuries by 47%, and speeding by 63%.

Plan References

COMPREHENSIVE PLAN

Mobility

- Expand the use of Speed Safety Cameras, which reduce speeding in school zones

 D by 63%, crashes on urban principal arterials up to 54%, and fatalities and injuries by 20% to 37%
- 5.E Expand camera uses to enforce other moving violations namely, blocking the box and turning right on red
- Reduce or eliminate off-street parking requirements for appropriate development

 12.B types and in appropriate zones, in coordination with management and enforcement of
 on-street parking and implementation of transportation demand management measures

Community Services & Facilities

2.M Improve enforcement of traffic regulations citywide, including by studying and utilizing new technology and best practices

GREAT STREETS MASTER PLAN

- p89 Amend the Code of Ordinances to Include Fines for Parking in or Blocking Bicycle Facilities and Increase Associated Enforcement
- p97 Increase Enforcement to Prevent Blocking of Intersections, Crosswalks, Bike Lanes, Bus Stops, and Sidewalks; Expand the City's Use of New Technologies

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"More red light cameras at busy intersections."

"Police need to give tickets to drivers who don't yield to pedestrians in crosswalk."

"actual consequences for people who routinely run lights, are on their phones, don't stop for pedestrians. Enforcing what is already law would do wonders."

"Use cameras for cars that block the box at intersections. Probably less of a safety issue but everyone is tired of those idiots causing more traffic."

- King County, WA
- · Washington, DC
- Chicago, IL
- Arlington, VAMiami-Dade, FL
- New York City
- Washington
- Virginia

Improve driving behavior, potentially by working with the state and local driving instructors on **Driver's Education**

Responsible Agency: Intergovernmental, Planning | Goals Served: Safety

Summary

In addition to evidence-based safety improvements for those influences on driver behavior that are under City control, the City should work with the Rhode Island Department of Motor Vehicles to ensure that the state driving exam and other regulations of driver's education effectively promote safe driving behavior. Ensuring teenagers are provided best-practice educational content is important, but opportunities to reduce barriers to driver's education should also be explored. Adult drivers also could be provided with continuing education for a more comprehensive effort to create a safer driving culture. At a minimum, the RI Bicycle Mobility Plan suggests changes to the Driver's Manual including:

- · The descriptions of bicycle infrastructure and pavement markings should be completely rewritten for accuracy and clarity, with diagrams added
- The section on bicyclists in roundabouts should be rewritten, with diagrams added
- The section on proper bicyclist lane positioning should be rewritten, with diagrams added
- The section on dooring should be rewritten, with a description and a diagram added to demonstrate the "Dutch Reach" to improve safety



Plan References

COMPREHENSIVE PLAN

Mobility

Improve driving behavior, potentially by working with the state and local driving instructors on Driver's Education

Community Services & Facilities

Improve enforcement of traffic regulations citywide, including by studying and utilizing new technology and best practices

RI BICYCLE MOBILITY PLAN

Amend the Code of Ordinances to Include Fines for Parking in or Blocking Bicycle Facilities and Increase Associated Enforcement

The RI DMV Driver's Manual should be updated with clearer and more up-to-date safety education

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



SAFE STREETS PLAN

"Better driver education. People drive TERRIBLY in this city and state, and I am from Providence."

"Take steps to educate and reduce angry and distracted drivers."





- · Milwaukee, WI
- Washington

Expand Youth Bicycle Education Programming

Responsible Agency: PPSD, Dept. of Recreation | Goals Served: Safety, Mode Shift

Summary

The City should work with nonprofit partners to teach youth bicycling skills at schools, recreation centers or other suitable venues. In 2015-2017 the City facilitated a bike education program in recreation centers run by Recycle-a-Bike called "Pedal Power", and more recently, the Woonasquatucket River Watershed Council has grown its school-based bike education program "Rhode to Bicycle Safety", which as of 2024 teaches road safety skills to fifth-graders in 3 Providence schools and 21 schools statewide. These programs not only give youth one of their first exposures to traffic safety skills and increase academic engagement through physical activity, but the skills taught in these programs can also help improve driving culture by increasing educational exposure about the rules of the road. Expanding these safety education programs requires few if any resources from the host location, but it does need community partnerships from the City or School Department to make the logistics and approvals work.

What does the research say?

Students with high physical activity are 86% more likely to have high academic achievement. Students receiving safety education in school report higher levels of riding a bicycle outside of school, with 2.5x increase in those meeting physical activity benchmarks. 11-12% of participants report high confidence in bicycling after safety education course (those reporting confidence in bicycling rose from 75% to 92% in another study).

Plan References

GREAT STREETS MASTER PLAN

Expand Youth Bicycle Education Programming to Citywide

RI BICYCLE MOBILITY PLAN

Allocate funding for bicycle education, particularly for youth programs to be delivered in schools and recreation centers

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

Where else does this?

- Boston, MA
- Baltimore, MD
- Cambridge, MA
- Quebec
- Washington, DC
- Arlington, VA
- · Seattle, WA
- Portland, OR
- Minnesota



Source: Woonasquatucket River Watershed Council

Facilitate the redevelopment of surface parking lots

Responsible Agency: Planning, Intergovernmental, PRA | Goals Served: Mode Shift, Climate

Summary

Facilitating the redevelopment of surface parking lots in Downtown and the Hospital District could add 11,000 housing units and \$75 million in annual tax revenue for the city, in addition to encouraging mode shift in line with this goal. However, current development conditions would need to change to enable this redevelopment. Some of these changes are outside the City's control, such as interest rates, while others are potentially within the City's authority. For example, with State approval, Rhode Island's 7% sales tax could be applied to payments at surface parking lots. Other potential tools include development incentives targeted to this sort of redevelopment as well as stronger parking management using such tools as Dynamic Curbside Pricing, a Parking Revenue Tax, a Stormwater Fee, a Parking Study & Management Plan, a Parking Stall Fee, a Parking Benefit District, creation of a Parking Authority, or a Land Value Tax. Other City actions that could increase the likelihood of surface lot redevelopment include:

- · Leverage Publicly-Owned Lots: Encourage the State to consolidate existing surface lots near State Offices into structured parking, freeing up 6 acres for redevelopment.
- · City-led Development: Have PRA and PHA proactively engage in surface lot acquisition, assembly, and development. Use tools like Tax Increment Financing, Tax Stabilization Agreements, federal and state grants, and other development finance tools, and engage in public-private partnerships with developers.
- Work with institutional partners: Start with additional TDM requirements to reduce parking demand. Facilitate the creation of a Hospital District community development organization. Work with Hospital District stakeholders to consolidate existing surface lots into structured parking, freeing up 30+ acres for redevelopment. Work with Hospital District stakeholders on land disposition plan for excess surface lots, identifying appropriate development partners.

Plan References

COMPREHENSIVE PLAN

Built Environment

Promote and incentivize the redevelopment and reduction of surface parking lots and excessive impervious surface

Mobility

Discourage new surface parking lots while encouraging the redevelopment of existing surface parking lots and more efficient use of existing on-street paved

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"Review carefully the tax status of surface parking. Providence looks like a JV city because of surface parking lots. High commercial tax rate should be switched to surface parking lots."

"Yes, I agree on allowing surface parking to be converted into car-free or car-lite development!"

"Parts of downtown have so much potential but then every other block is a parking lot"

"Land value tax, reduce the number of parking lots"



Study evidence-based tools to mitigate traffic congestion

Responsible Agency: Planning, DPW | Goals Served: Mode Shift, Climate

Summary

The City should assemble a toolbox of measures to mitigate congestion that are supported by evidence from other communities and that prioritize safety as described throughout this plan. The RI Congestion Mitigation Plan identifies locations where traffic congestion is especially pronounced around the state, and this toolbox should be applied to these locations. The Congestion Mitigation Plan also advises in section 7.1.1 that "preference be given to demand management strategies that reduce travel, while leaving high-cost capacity increases that primarily serve single occupant vehicle travel as a last resort." Solutions should be designed for typical conditions over a 24-hour period, not just peak periods. Many cities use "Transportation Demand Management" programs to implement such evidence-based congestion mitigation strategies, and the City should consider establishing such a program and integrating it into other City processes.

What does the research say?

Managing mobility more actively through Transportation Demand Management can reduce the rate of commuters driving alone by 30%. Other congestion mitigation strategies have reduced traffic by 12-33%, and even modest measures are projected to reduce traffic congestion by 6%. New York's business community calculated that traffic congestion costs businesses \$20 billion per year.



Plan References

COMPREHENSIVE PLAN

Mobility

- Consider traffic congestion mitigation measures at any locations under 5.B City jurisdiction in the RI Congestion Mitigation Plan
- Encourage employers that offer free or subsidized parking to offer workers the option to cash-out their parking on a daily or monthly basis

Land Use

Encourage institutions to minimize traffic and parking impacts on neighborhoods by adopting transportation demand management strategies to reduce driving, developing parking garages to minimize surface parking lots, and studying traffic and parking around their campuses and mitigating negative impacts

Encourage the use of non-auto transportation options through land use controls and transportation demand management incentives, including prioritizing bike lanes and infrastructure for safe pedestrian access via high quality sidewalks and protected lanes

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"There should also be attention given to reduction of congestion across the city, but particularly in the Smith Street/Valley/Olneyville section."





- London
- Milan
- Stockholm
- · Gothenburg, Sweden
- New York City
- · Cleveland, OH
- · Bellevue, WA

Encourage employers & universities to incentivize non-car transportation options

Responsible Agency: Planning, DPW, Council, Intergovernmental | Goals Served: Mode Shift, Climate

Summary

Encourage employers and universities to actively promote walking, bicycling, and taking transit to their communities; to provide subsidized transit passes to their communities; and to phase out subsidies for parking, starting with providing employees who do not use the parking the opportunity to receive the equivalent employee benefit to the parking subsidy. Collaborate with universities to improve routes for walking and bicycling near campuses and establish on-street parking policies to mitigate the impact of colleges and other major attractions, such as resident-only parking permits or enforced time limits on parking in impacted areas. Consider using the Institutional Master Plan update process to incorporate institutional active mobility plans.

What does the research say?

Providing students and employees with bus passes can reduce car commuting by 24-37%. Parking cash-out benefits can reduce car commuting 8-25%.

Where else does this?

- Buffalo, NY
- · Portland, ME
- Fort Collins, CO
- · Denver, CO
- Madison, WI
- Boston, MA



Plan References

COMPREHENSIVE PLAN

Mobility

- Encourage large employers and institutions to offer subsidized transit passes, including employees of the City of Providence
- Work with colleges and universities to improve bicycling access in the vicinity of 4.J and on their campuses
- Evaluate existing on-street parking policies and cost to residents to enhance quality of life in neighborhoods particularly impacted by major institutions and attractions
- Encourage employers that offer free or subsidized parking to offer workers the 5.S option to cashout their parking on a daily or monthly basis
- To reduce automobile use, encourage employers and the City of Providence to provide subsidized transit passes to employees, and for universities to provide subsidized transit passes to students

Land Use

Encourage institutions to minimize traffic and parking impacts on neighborhoods by adopting transportation demand management strategies to reduce driving, developing parking garages to minimize surface parking lots, and studying traffic and parking around their campuses and mitigating negative impacts

CLIMATE JUSTICE PLAN

By 2035, increase the number of employers in Providence offering RIPTA's EcoPass to their employees from 50 to 200

RI BICYCLE MOBILITY PLAN

Institute parking cash-out program, safe & secure storage for bicycles, shower and locker facilities, and on-site repair stations

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"connect better to RIC and PC as colleges should generate bike trips."

"encourage walking biking transit at big Providence events"

"We want people supporting our

restaurants, at events etc - but we don't want more cars. We need to find ways to invite more humans, but not more cars."

Electrify vehicles through City procurement and through expanding charger access

Responsible Agency: Sustainability, Planning, DPW, DIS, Parks, PPSD | Goals Served: Climate

Summary

Replacing internal combustion engine vehicles with electric vehicles is a central strategy for eliminating transportation emissions and reducing air pollution in the city. To achieve the targets in the Climate Justice Plan, the City should encourage wider installation of electric vehicle charging stations on private property such as at residential developments, gas stations and parking facilities, and also establish a program for publicly-available chargers in public right-of-way and on City property. Follow guidance from the Joint Office of Energy and Transportation such as the "Charging Forward" toolkit for urban areas and the "Community Charging" whitepaper. Create a plan to achieve growth in EV infrastructure and EV ride sharing.



Source: Bill Dickinson on Flickr

Plan References

COMPREHENSIVE PLAN

Mobility

- Encourage large employers and institutions to offer subsidized transit 5.1 passes, including employees of the City of Providence
- Encourage the installation of electric vehicle charging stations when 5.L existing gas stations are updated/rehabilitated
- Investigate ways to require new surface lots, or existing surface lots that undergo renovations, to install electric vehicle charging stations
- Advocate for reducing emissions from trucks: Identify resources and programs to improve efficiency and EV infrastructure for buses, garbage trucks, construction and other commercial trucks working in Providence's frontline communities

CLIMATE JUSTICE PLAN

- 100% of the City's fleet and school buses will be renewable by 2040
- By 2035, 43% of VMTs in Providence are electric and by 2050, 80% of VMTs are electric
- Create a citywide mobility plan that builds upon the City's Great Streets Master Plan and RIPTA's forthcoming Transit Master Plan

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"Install EV chargers within LED streetlights to provide for street-side electric charging stations/parking spots."

"Must improve the infrastructure for electric vehicles and rethink how the road system serves the neighborhoods. Electrification of the roads may be one opportunity to encourage EVs."



Reduce diesel pollution from industrial sources including trucks, especially in frontline communities

Responsible Agency: Intergovernmental, Sustainability, Planning, DPW, DIS | Goals Served: Safety, Climate

Summary

Implement the strategies identified in the Climate Justice Plan for reducing truck emissions and their public health impact. According to the Climate Justice Plan: "While climate pollution is a global problem, it is also locally harmful to human health because it releases 'co-pollutants' that are linked to asthma, chronic obstructive pulmonary disease (COPD), lung cancer, cardiovascular (heart) disease, preterm birth and low-birthweight babies, and childhood development including ADHD and reduced IQ."

The Climate Justice Plan identifies strategies for reducing truck emissions:

- · Evaluate and modify traffic patterns to reduce emissions in frontline communities: Work with the state and frontline communities to reduce transportation related air pollution, beginning with areas of high cumulative pollution. Conduct a study of truck traffic and identify corridors and neighborhoods where truck routes and related infrastructure should be eliminated or rerouted to reduce diesel emissions burden in high residential and air pollution areas. Ensure involvement of frontline community members in future corridor planning, especially related to on-ramps and other major highway projects.
- Advocate for reducing emissions from trucks: Identify resources and programs to improve efficiency and EV infrastructure for buses, garbage trucks, construction and other commercial trucks working in Providence's frontline communities.

Plan References

COMPREHENSIVE PLAN

Mobility

- 5.H Work with industrial stakeholders to reduce diesel emissions in frontline communities
- Work with RI Statewide Planning, RI Freight Committee, and stakeholders to designate truck 6.C routes and feasible restrictions on other streets including such policies as specific hours of use and parking limits
- Implement the State's EV truck charging plan, including installation of charging infrastructure for 6.D heavy-duty trucks at the Port of Providence
- Mitigate negative impacts freight traffic has on quality of life and other modes of travel
- Enforce idling regulations to minimize unnecessary tailpipe pollution
 - Evaluate and modify traffic patterns to reduce emissions in frontline communities: Work with the state and frontline communities to reduce transportation related air pollution, beginning with areas of high cumulative pollution. Conduct a study of truck traffic and identify corridors
- 6.P and neighborhoods where truck routes and related infrastructure should be eliminated or rerouted to reduce diesel emissions burden in high residential and air pollution areas. Ensure involvement of frontline community members in future corridor planning, especially related to on-ramps and other major highway projects
- Advocate for reducing emissions from trucks: Identify resources and programs to improve efficiency and EV infrastructure for buses, garbage trucks, construction and other commercial trucks working in Providence's frontline communities

Sustainability, Resilience, and the Environment

- Support enforcement of anti-idling regulations, particularly in the port area and other high-traf-2.E fic industrial and commercial areas and investigate off-street options for truck queuing and temporary parking
- Encourage, support, and implement best practices that reduce all types of harmful emissions 2.F from businesses and vehicle fleets in alignment with state mandates
- Protect neighborhoods from the impacts of freight movement, particularly by truck, by promoting appropriate travel routes and temporary staging areas
- Greatly reduce the impacts of pollution from industrial operations; fuel and materials storage; energy production; and freight movement, with attention to the health, safety, and quality of life impacts of emissions, pollutants, traffic, and nuisances on near-industry neighborhoods

CLIMATE JUSTICE PLAN

Reduce diesel truck traffic in frontline communities

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"Enforce laws already in place like idling trucks that spew pollution constantly downtown. NYC has a great enforcement plan in place."

Electrification / duse replacement in transportation System

Consider incentives for bicycle delivery

Responsible Agency: Planning, Economic Development | Goals Served: Mode Shift, Climate

Summary

Traditional delivery vehicles can be difficult to maneuver around urban streets and create air, noise, and climate pollution. Several cities around the country have piloted programs collaborating with delivery companies such as UPS to use cargo bikes for some urban deliveries instead of trucks. The City should evaluate the lessons learned from such programs, consulting reports such as "Biking the Goods" by the Urban Freight Lab, and consider creating a similar pilot program to incentivize cargo bike delivery in Providence.

What does the research say?

Increasing the use of cargo bikes for urban deliveries can speed up deliveries by 76%, reduce double-parking for unloading, potentially reduce delivery costs, and generally reduce the social and environmental cost of deliveries by 88%.

Where else does this?

- Boston, MA
- **New York**
- Seattle, WA
- · Portland, OR

Plan References

COMPREHENSIVE PLAN

Mobility

- Improve facilities to facilitate more efficient movement of freight within Providence
- Pursue creation of consolidation facilities to allow large vehicles organized by supplier to distribute goods into smaller vehicles organized by destination, of a more suitable scale for Providence's streets. Such facilities could be located at the periphery of the urban core with easy access to regional freight routes
- Encourage the use of urban-scale delivery vehicles such as cargo bicycles, medium-duty trucks, and light-duty trucks for last-mile deliveries within the city by creating regulation and incentives for companies to down-size their fleets

RI BICYCLE MOBILITY PLAN

Create incentives for delivery services operated by bicycle in urban cores, as UPS p83 is currently piloting in Pittsburgh, PA



Source: Jonathan Maus on BikePortland



Source: Harvest Cycle Compost

36 Consider supplementing State incentives for e-bikes with a City incentive

Responsible Agency: Mayor's Office, City Council | Goals Served: Mode Shift, Climate

Summary

The state rebate for electric bicycles provides the lesser of \$350 or 30% of the cost of an e-bike, or \$750 / 75% for income-qualifying residents. Some cities have begun offering local rebates for electric bike purchases as well. The City should explore this possibility.

What does the research say?

Incentives are most impactful for lower-income recipients. Participants in rebate programs report a 30-40% reduction in driving. Widespread e-bike adoption can reduce climate emissions by 12%. TREC has created an interactive tool to aid in designing e-bike incentive programs.



Source: Mission Electric Bikes

Plan References

COMPREHENSIVE PLAN

Mobility

Consider supplementing State incentives for e-bikes with a City incentive

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"continue or build on e-bike rebates"

"Subsidize the purchase of ebikes. Providence can use its purchasing power to get better prices for residents who want ebikes."

Where else does this?

The Portland State University Transportation Research and Education Center (TREC) tracks e-bike incentives programs. 38 communities provide rebate programs that Providence could emulate. The median rebate in these programs is \$300, with the median rebate for incomequalifying residents at \$1,150. Approximately one-third of communities also set a percentage of the e-bike's cost that can be rebated, with a median of 25%.

Work with the State Legislature to adopt changes to State Law to improve safety

Responsible Agency: Intergovernmental | Goals Served: Safety, Mode Shift

Summary

Existing plans call for various changes to state law, and other changes would also take advantage of safety successes from other states.

- The "Idaho Stop" law, which has been in effect in Idaho since 1982, allows a person riding a bicycle to treat a stop sign as a yield sign. Rather than stop, the person riding a bicycle is permitted to slow down, stop if required for safety, and yield the right of way to any approaching person driving or walking before proceeding through an intersection controlled by a stop sign. This law is reported to have reduced bicycle injuries by 14 percent in the state the year after passage.
- Allow bikes to proceed through an intersection when a Leading Pedestrian Interval is active.
- Revise "Frank's Law," R.I. Gen. Law § 31-15-18, to clarify that a "safe distance" means a specific number of feet (Massachusetts recently adopted 4 feet) rather than the hard-to-understand "a distance that is sufficient to prevent contact with the person operating the bicycle if the person were to fall into the driver's lane of traffic". The BMP recommends "R.I. Gen. Laws § 31-15-18 is ambiguous and unenforceable unless the bicyclist has been hit, due to the definition of the term 'safe passing' as 'a distance sufficient to prevent contact with a bicyclist if he or she were to fall into the driver's lane of traffic' The law does not address speeds under 15 mph, features when in a bike lane, and when a bike is turning left. Change the law to emulate the safe passing components of the Bicycle Friendly Delaware Act, widely considered a model for the US"
- Revise R.I. Gen. Law § 31-19-7-2 to specify that "Class 1 and Class 2 electric bicycles shall be allowable on state bicycle trails or paths"
- Revise R.I. Gen. Law § 31-10.1-4 to require helmets to be worn by anyone riding a motorcycle, not just new operators and those under 21, similar to the requirement in Massachusetts law.

- Require large classes of truck or trailer to be outfitted with safety devices such as side guards ("lateral protective devices") to protect people walking and bicycling in the event of a crash with a turning truck. Such requirements were recently passed in Massachusetts.
- Revise R.I. Gen. Law § 31-21-4(b)(4) which exempts delivery vehicles, rideshares and taxis, and private vehicles from parking in crosswalks, bike lanes, sidewalks while actively loading. Increase the number of marked loading zones. Consider similar legislation to Philadelphia's 2024 Bill 240657.
- As recommended in the RI Bicycle Mobility Plan, revise R.I. Gen. Law § 31-18-21 to remove the exemption for narrower roadways from the requirement that RIDOT accommodate people walking and bicycling, include benefits as well as costs in decision-making, and other minor language changes.
- Revise R.I. Gen. Law § 31-41.3 to either remove the requirement that speed safety cameras may only be operated in proximity to schools or expand the radius in § 31-41.3-3 to half a mile.
- Update fire code to allow for more bike friendly and pedestrian street improvements
- Allow flexibility in school transportation funding from the state to be spent on walking school buses and bike buses similar to Oregon's 2023 House Bill 3014



Work with the State Legislature to adopt changes to State Law to improve safety

Responsible Agency: Intergovernmental | Goals Served: Safety, Mode Shift

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

Plan References

COMPREHENSIVE PLAN

Mobility

4.H Consider supplementing State incentives for e-bikes with a City incentive







Source: Providence Streets Coalition

Update ordinance language for operating a bicycle

Responsible Agency: Intergovernmental, City Council | Goals Served: Safety, Mode Shift

Summary

Some language in the Code of Ordinances about bicycles dates from 1946 and is significantly out of date. Clarify language around conflicts between bicycling and walking, and remove outdated and unenforced bans on carrying passengers, riding next to others, and riding in parks.

- · Sec. 15-70. Speed of bicycles. No person using any bicycle, tricycle, tandem bicycle, or other such vehicle, shall approach a pedestrian ride or drive the same at a speed faster than the common traveling pace of pedestrians in any portion of the
 - · This section is implicitly attempting to protect pedestrians. The proposed reframing makes that protection more explicit while narrowing the scope of the clause to focus on these conflicts.
- · Sec. 15-71. Operating bicycles abreast. Not more than two (2) bicycles, tricycles, tandem bicycles, or other such vehicle, shall be operated abreast of each other.
 - Provided bicyclists yield to pedestrians and allow traffic to proceed within reason, there is no reason for this prohibition.
- Sec. 15-72. Mode of riding bicycles. No person riding any bicycle, tricycle, tandem bicycle, or other such vehicle shall remove his feet from the pedals, except in case of accident or for the purpose of braking or dismounting. Every person riding any such vehicle shall at all times keep at least one (1) hand upon the handlebar, and, except as aforesaid, both feet upon the pedals, in order to retain complete control of such vehicle.
 - While intuitive for safety, additional consequences for this behavior are not necessary beyond the risk to oneself imposed by it. Pedestrian safety is protected by the reframed 15-70.
- · Sec. 15-73. Carrying passenger on bicycle. No person while riding any bicycle shall allow any other person to be carried upon any part of such bicycle.
 - This clause prohibits cargo bikes designed to carry passengers and should be repealed, as recommended in the Great Streets Plan.
- Sec. 18-4. Riding and driving in parks. No person shall ride or drive within any park at a rate of speed exceeding fifteen (15) miles per hour. No person shall ride or drive any animal, bicycle or other vehicle except upon the roadways and paved paths driveways, nor coast with a bicycle or other vehicle down any hill except upon the roadways and paved paths, nor ride or drive any animal, bicycle or vehicle upon other than the right-hand side of the roadways and paved paths driveways, except to cross such roadways and paved paths driveways or to turn out for some obstruction, or for some animal, bicycle or other vehicle proceeding in the same direction.
 - · This clause intends to protect the landscaping in parks from damage, but due to shifts in language usage since its passage in 1946, seems to prohibit bicycling in most areas of parks. The language of the ordinance should be updated to more clearly reflect its purpose.

Plan References

GREAT STREETS MASTER PLAN

Update Ordinance Language for Operating a Bicycle

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN





Reduce or eliminate parking minimums consistent with the Comprehensive Plan

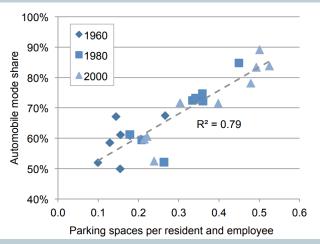
Responsible Agency: Planning | Goals Served: Mode Shift, Climate

Summary

The Comprehensive Plan recommends eliminating parking minimums where feasible and considering parking maximums. In other cities, this has reduced housing costs by allowing for more housing units to be built. At the time of this plan's publication, the changes to the zoning ordinance implementing this recommendation are not yet complete.

What does the research say?

Cities that have taken this step have found that parking minimums create 20-40% more parking lots than are needed, and that after removing parking minimums, developers were instead building the number of parking spaces that would actually be used by their project. Amount of parking is correlated with motor vehicle mode share: for every change in parking of 0.1 spaces per person, automobile mode share would change 7.7%. Removal of parking minimums can increase housing production by 40-70%. Requiring off-street parking can increase the cost of housing 12-17% or \$140-\$200 per month.



Source: McCahill, et al. 2016

Plan References

COMPREHENSIVE PLAN

Mobility

Eliminate parking minimums for new development and consider the establishment of 5.D maximum parking levels

Land Use

- In Enhanced Growth Residential areas: Allow for residential development at high densities with reduced or eliminated parking requirements, but with building height and massing compatible with existing development patterns
- In Enhanced Growth Residential areas: Allow for residential development at high densities with reduced or eliminated parking requirements, but with building height and massing compatible with existing development patterns
- Reduce or eliminate off-street parking requirements for appropriate development types and in appropriate zones, in coordination with management and enforcement of on-street parking and implementation of transportation demand management measures
- Ensure that parking regulations strike a balance between the demand for parking and the ability to develop land to its fullest potential by reducing parking minimums
- Prioritize the elimination of parking minimums wherever feasible

GREAT STREETS MASTER PLAN

Consider Zoning Ordinance Revisions that Further Lower Parking Requirements in New Developments

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

- "Parking minimums should be removed citywide, as they drive up construction costs"
- "Supportive of eliminating parking minimums red tape for small businesses, barrier to housing development."
- "Allow the market, not the zoning code to determine how much parking is needed"

Where else does this?

- · Central Falls, RI
- · Durham, NC
- · Hartford, CT
- · Austin, TX
- Bridgeport, CT

Cambridge, MA

- Oregon
- · Buffalo, NY

Evaluate departmental structures and coordinate transportation workflows internally

Goals Served: Mode Shift, Climate

Summary

Achieving the City's mobility goals requires effective management processes to ensure that all efficiencies are utilized in internal and external communication. The "Structured for Success" guide from the National Association of City Transportation Officials surveyed best practices for delivery of city transportation projects and has rich guidance that the City should seek to follow.

Evaluate how City departmental structures, processes, and distribution of responsibilities could deliver road safety projects more efficiently. Increase the budget allocated for maintenance of safe streets features in strategic ways to ensure longevity of improvements recommended in this plan. Consider whether reorganization of transportation engineering and planning functions within department structures could improve Vision Zero outcomes.

Establish processes and structures to coordinate Vison Zero implementation in accordance with the Vision Zero policy. Coordinate any road or sidewalk work from any utility or agency with implementation of this plan via the Green and Complete Streets Advisory Council, the Vision Zero Task Force, or staff review. Integrate the implementation of this plan into City processes by routinizing an update schedule, clarifying the roles of different departments in implementing the plan, and removing obstacles to plan implementation. Develop an interdepartmental process after each serious collision to ask stakeholders what factors contributed to the crash, along with near-term safety improvements at crash locations.

Plan References

GREAT STREETS MASTER PLAN

Develop Protocols for Regularly Updating Infrastructure Projects in the Great p89 Streets Master Plan

Improve Internal City Processes to Implement the Great Streets Initiative and Develop a Program Management Plan

Establish a Great Streets Project Screening System and Checklist to Ensure

RI BICYCLE MOBILITY PLAN

Adopt a policy requiring that improvements for bicyclists be considered as part of the project development process by default with justification required when they are not considered

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"getting DPW to do more construction and maintenance of bike lanes in-house"

- Washington, DC
- · Richmond, VA



Continue iterating the City's public engagement processes to enhance communication channels between community members and City transportation staff.

Responsible Agencies: Planning, Community Relations, DPW, Police | Goals Served: Safety, Mode Shift, Climate

Summary

Effective community engagement techniques such as the City's existing Street Ambassador approach are critical to advance street safety in an equitable fashion. The City should invest more in the Street Ambassador program to hire, train, and deploy community members at events and in everyday environments to collect input on projects being planned or considered, and spread awareness of opportunities for further engagement. Street Ambassador approaches allow cities to engage thousands of community members who otherwise would likely not be engaged in traditional planning processes. Street teams should also be used to publicize reduced-fare programs for the City's bike share and scooter share.

Additional public engagement practices used by other cities that should be considered in Providence include:

- · Establishing regular meetings with community leaders to share updates,
- · Designating a community relations position specifically for transportation issues to be a point of contact for community members with concerns, and
- · Sharing data about crashes, traffic volumes, parking utilization, and speeds in an open data portal.

Where else does this?

- · Boston, MA
- New York City
- · Philadelphia, PA
- Austin, TX

Plan References

GREAT STREETS MASTER PLAN

Expand the City's Street Ambassador Approach to Public Engagement

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS SAFE STREETS PLAN



Lead by example to promote walking and biking

Responsible Agencies: Sustainability, ACT | Goals Served: Mode Shift, Climate

Summary

In internal and external communication, the City should advocate for achieving Comprehensive Plan goals related to mobility. For walking and bicycling to be viewed by more people as a reasonable choice for more trips, it is important that the City communicate that these mode choices are encouraged. When public events are being publicized the include transportation information such as parking instructions, accessibility to bicycling and walking should also be indicated. The City can also lead by example with City officials sometimes making short trips by bike or by foot.



MAYOR ERIC GENRICH OF GREEN BAY, WISCONSIN, PROMOTES WALKING IN HIS COMMUNITY THROUGH THE "MOVE WITH THE MAYOR" PROGRAM

Plan References

COMPREHENSIVE PLAN

Sustainability, Resilience, and the Environment

Encourage and, when practicable, provide incentives to recycle, conserve water and energy, use renewable resources and alternative sources of energy, and use public transit and alternative modes of transportation

Arts and Cultural Resources

Promote Providence as a world-class cultural destination through initiatives including supporting live events in the public realm, supporting life at night, enhancing physical accessibility at venues and cultural facilities, marketing and lighting initiatives that encourage winter tourism, promoting walkability and multimodal access in public realm projects, and more

Community Services and Facilities

Improving pedestrian and bicycle access to schools from the surrounding neighborhoods

RI BICYCLE MOBILITY PLAN

Highlight Rhode Island's bicycle tourism potential

Create a marketing campaign encouraging bicyclists to visit from out of state, perhaps in tandem with a significant bicycling event

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"There needs to be vision, resolve, and better PR. Promote bike-bussing, make Bike-to-Work days a much bigger deal, promote bike tourism."

"more active encouragement of mode shift from City messaging"

Where else does this?

Boston, MA

Expand the calendar of events such as Open Streets and community rides

Responsible Agencies: Planning, HHS | Goals Served: Mode Shift

Summary

Open Streets events are popular in many cities around the world, giving communities recurring experiences with walking and biking and seeing streets in a different way. According to the Open Streets Project, "they provide accessible, free recreation, leading to improved public health. They are exercises in social integration, connecting neighborhoods and allowing all residents to meet in the street as equals. Local businesses can showcase their wares to new potential customers, without the outside vendors that often accompany street festivals and events."

Social bike rides are another tool for creating safe and fun environments for people to interact with their city in a new way. Many cities have an extensive calendar of open streets events and slow group rides at different times of day and targeted at different demographics. Providence should seek to cultivate similar events regularly.

What does the research say?

Open Streets events can increase business revenue by 27.5% to 57%. Investing in open streets programs can yield 2.3x return in healthcare savings. Event participation in Los Angeles exceeds 150,000 and in Guadalajara exceeds 400,000. <u>68-84% of event</u> participants spend money at local businesses or learn about new businesses.



Source: City of New York

Plan References

COMPREHENSIVE PLAN

Mobility

- Continue and expand programs that encourage more people to make trips by 4.D bicycle
- Encourage events such as Cyclovia and social bike rides accessible to a wide range of residents

GREAT STREETS MASTER PLAN

p99 Expand and Enhance Community Rides

Comments



COMMENTS ASKING FOR THIS: COMPREHENSIVE PLAN



COMMENTS ASKING FOR THIS: SAFE STREETS PLAN

"What about car-free days on Hope Street or Atwells or other main avenues that are usually to full of car traffic to safely bike on."

"car-free events"

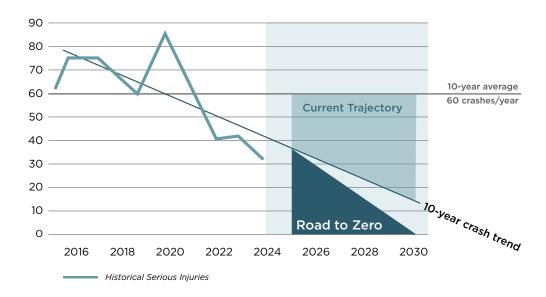
- · Boston, MA
- · San Francisco, CA
- · Wilmington, DE
- · Washington, DC
- New York, NY
- · Portland, OR

Roadmap to Zero

Achieving the City's goal of zero roadway fatalities or serious injuries by 2030 will require a sustained pace of Safety Action Plan implementation. During the most recent 10-year period (2015-2024), Providence averaged 6 fatal crashes and 60 serious injury crashes per year. Figure 20 shows crash reduction projections beginning in 2025 to achieve the goal of zero by 2030. These annual projections, which show a reduction of 1 fatal crash and about 7 serious injury crashes per year, represent annual benchmarks to keep the City on track to accomplish Vision Zero by 2030. Appendix D provides additional details on how the safety analysis, toolbox, and strategies inform the implementation of these targets for reduction in fatal and serious injury crashes.

FIGURE 20 CRASH REDUCTION PROJECTIONS BEGINNING IN 2025

Serious Injury



Fatal

