PVD GREAT STREETS

Policy Recommendations

This chapter includes an assessment of and recommendations regarding policies, processes, and regulations that govern and provide context for Great Streets and Urban Trails in the City of Providence. This includes descriptions of the existing framework of regulations, policies, programs, and stakeholders, identification of gaps in the current process, and recommendations for improvement. The recommendations derive from a number of sources, including document review, interviews and discussions with key stakeholders, and best practices research.

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https://www.providenceri.gov/planning/great-streets/

Assessment of Regulations, Programs, and Policies

This chapter includes an assessment of and recommendations regarding policies, processes, and regulations that govern and provide context for Great Streets and Urban Trails in the City of Providence. This includes descriptions of the existing framework of regulations, policies, programs, and stakeholders, identification of gaps in the current process, and recommendations for improvement. The recommendations derive from a number of sources, including document review, interviews and discussions with key stakeholders, and best practices research. Although this chapter includes many recommendations related to a variety of needed improvements to policies, processes, and regulations, the recommendations generally align with five key areas of focus:

- Revise outdated and enact new City ordinances related to mobility
- Align City policies and procedures to invest in and preserve great streets
- Prioritize safety and comfort for people who walk, ride bicycles, and use public transit
- Advocate for friendlier state laws and policies related to mobility
- Expand opportunities for engagement, education, and encouragement

Legal Framework

The legal framework for City departments profiled in this chapter is City Charter Article X – City Departments (Providence, RI Code of Ordinances). Ordinance Articles VII–IX½ cover Public Works, the City Engineer, Traffic Engineering, and Planning and Development. Appendix A[1] presents relevant ordinance language. The City Departments section of this chapter contains additional discussion of ordinances governing each profiled department.

Several other City Ordinance sections are flagged and recommended to be updated to further support the Great Streets Initiative. See the actual ordinance language for specifics and Appendix A for more detail.

2014 Zoning Ordinance

The City's current Zoning Ordinance became effective on December 24, 2014, and contains amendments up to and including July 27, 2018. The Zoning Ordinance guides building dimensions, design, and uses in established zoning districts. Sections of the Ordinance important to Great Streets govern off-street parking requirements – including shared vehicular parking, bicycle parking requirements, placement and dimensions of driveways and curb cuts, trees and landscaping, signs, and lighting.

City of Providence Code of Ordinances Chapter 14 – Licenses

Vendors

Article IX, last revised in 2015, regulates temporary vendors, including those operating in the public realm. Section 14-171 assigns the Department of Public Works with responsibility for reviewing and confirming that proposed locations do not "interfere with public access to and along the sidewalk" before granting approval.

Registration and Licensing of Bicycles

While Article XI is titled, "Registration and Licensing of Bicycles," other than the title and definition of a bicycle, there are no requirements relating to bicycles in this article; the remainder of this article applies to pedicabs.

City of Providence Code of Ordinances Chapter 15 – Motor Vehicles and Traffic

Parking

Section 15-2 includes the following penalties for violating parking rules that are directly applicable to bicycle and pedestrian movement. There is no specific fine listed for parking in or blocking a bicycle facility.

- Parking so as to obstruct the flow of traffic: $75
- Parking within twenty-five (25) feet of corner: $30
- Parking in marked bus stop: $30
- Parking on marked crosswalk or within intersection: $30
- Parking on sidewalk: $100

1 Pending

Bus Lanes

Sections 15-55—15.57 established exclusive bus lanes on portions of Washington Street, Weybosset Street, and Empire Street in 1962 with implementation of the Westminster pedestrian mall. This is notable because many cities, including Providence, are establishing bus-only lanes to improve transit operations.

Bicycles

Sections 15-70—15-75 date from 1946 and cover a number of requirements for operating a bicycle. These requirements are out of date and likely not enforced as written. For example, Section 15-73 prohibits carrying a passenger on a bike. This effectively prohibits carrying passengers on cargo bikes, bikes with trailers, child seats, and other common desired means of bicycle transportation.

Reasonable Speeds

Sections 15-108–15-109 include provisions for reducing speeds at intersections, and when geometry dictates care. Some cities have updated such ordinances to lower citywide speed limits.

Use of Motorized Devices on Sidewalks

Section 15-131 prohibits use of some motorized devices (except scooters, wheelchairs for persons with disabilities, and Segways) on sidewalks, streets, public parks, or other City-owned property.

City of Providence Ordinance Chapter 18 – Parks and Recreation

Section 18-29 (subsection a) obligates the Board of Parks Commissioners to superintend maintenance and control of public parks, including "avenues…and all other property thereon or therein."

City of Providence Ordinance Chapter 23 – Streets, Sidewalks, and Public Places

Snow and Ice Removal

Sections 23-13–23-17 cover removal of snow and ice and prohibit placement of removed snow into already plowed areas or onto streets. See Implementation Guide Chapter 4 for details on the importance of snow removal from sidewalks and Urban Trails.

Skateboards

Passed in 1965, Section 23-31 prohibits riding a skateboard on any street, highway, sidewalk, or pedestrian mall within city limits. This is antiquated and should be repealed.

City of Providence Complete Streets Resolution

The City of Providence's Complete Streets Resolution, enacted January 5, 2012, encourages the City's Department of Planning and Development and Department of Public Works to "use Complete Streets concepts in planning and redevelopment of transportation related infrastructure" and requests both departments to incorporate Complete Streets principles as it develops plans and ordinances, reviews development projects and funds transportation and other infrastructure.

As written, the 2012 resolution is supportive and encouraging but not as strong as it should be. Formal adoption of the Providence Great Streets Master Plan will dramatically expand integration of Complete Streets principles into planning and implementation processes. Recommendations for changes to policies and procedures within this chapter will address existing gaps in the process.

City of Providence Traffic Calming Guidelines and Program

Providence's Traffic Calming Design Guidelines define traffic calming as 'measures instituted to reduce traffic speeds and cut-through traffic volumes on city streets to improve public safety and neighborhood livability'. Measures are mostly physical (street width, deflecting or vertically altering vehicle paths). Regulatory measures such as stop signs and speed limit signs are not part of the current traffic calming scope.

The Guidelines are meant to assist City departments in implementing traffic calming throughout the city. An interdepartmental committee, the Traffic Calming Advisory Group (TCAG), reviews traffic calming requests and advises DPW, other City departments, and City Council on the appropriateness of traffic calming measures in response to requests. The TCAG

Current traffic calming thresholds

A traffic calming request is eligible for preliminary approval if:

- *≥ 15% of vehicles were traveling faster than 30 mph*
- *≥ 20% of vehicles were traveling faster than 35 mph during a 2-hour period on 2 days*
- *On a local road, average daily traffic was > 3000 vehicles per day*
- *On a road narrower than 18 feet, ≥ 10% of vehicles were traveling faster than 25 mph, or*
- *The past 3 years of crash history on the street shows a high incidence of speed-related crashes*

consists of the City Traffic Engineer and traffic engineering staff, the Assistant City Engineer, and representatives from DPD, Providence Police, Providence Fire, and the Providence City Council. TCAG recommendations are advisory and the DPW Director is vested with the authority to make decisions on which projects to advance to implementation.

As noted in Section II, Traffic Calming Review Process,

> *A request to the Traffic Calming Advisory Group (TCAG) for installing a traffic calming device can be initiated many ways. Requests can come through any individual, city council resolution or request, through neighborhood groups, City departments or as part of a transportation or streetscape project. At this time the TCAG will be a group that reacts to requests instead of taking a proactive role in seeking out areas needing traffic calming. The TCAG will provide recommendations to the Public Works Director on the request with the final decision being that of the Public Works Director.*

Providence's program is reactive by design, does not limit how many and from whom requests may be initiated, does not restrict where traffic calming may be implemented, and does not adequately explain the process in a transparent manner to community members. Traffic calming programs have been in place for more than 20 years in a number of U.S. cities with some dating back even longer. Because traffic calming programs are popular, to conserve resources, a number of cities have changed their programs in important ways. See the Recommendations section of this chapter for a discussion of recommended improvements to the City's traffic calming program.

Other Procedures, Policies, and Programs

Sidewalk Repair Standard Operating Procedure

Implementing Urban Trails and Great Streets presents an opportunity to improve conditions for people walking along and crossing streets. The City of Providence has a draft Sidewalk Repair Policy, which guides how the City plans, executes, and maintains sidewalk repairs. This policy considers factors such as ADA compliance, sidewalk condition, available funding, adjacent and nearby uses, volume of people walking, and existence of legal claims. As described in the Policy, the City of Providence Department of Public Works (DPW) visits each location where there is a request for sidewalk repair or legal claim related to sidewalks and assigns a condition of good, fair, or poor based on the existence and extent of cracks, defects, and trip hazards. Field notes are stored in the City's Sidewalk Repair Database.

In 2017, DPW contracted with a company to conduct a complete inventory and condition evaluation of all sidewalks in the city. This resulted in an overall condition rating for each sidewalk in the city.

As noted in the current Policy:

> *Prior to each construction season, the DPW will decide which sidewalks are assigned to be repaired based on a balance of these factors, with the goal being to improve overall safety for pedestrians on a macro level, while at the same time decreasing the City's exposure to claims for trips and fall claims attributed to known sidewalk defects. Additionally, directing assets to repair a pedestrian corridor or block rather than spot fixes results in cost efficiencies in construction.*

Each Urban Trail or Great Streets project is an opportunity for coordination where a scheduled sidewalk repair could be accomplished in conjunction with an Urban Trail project. Because the Sidewalk Repair Policy already articulates prioritization factors specific to sidewalks, an Urban Trail or Great Street recommendation in the same corridor should not be a sidewalk repair prioritization factor. Rather, an Urban Trail or Great Street project can supplement the list of sidewalk repairs identified by DPW for each construction season. As stated in the current Policy:

> *Occasionally, a project funded and constructed by the Rhode Island Department of Transportation, the Providence Department of Planning and Development or the City's Capital Improvement Plan will include sidewalk repairs in the project scope.*

Capital Improvement Program

The Capital Improvement Program (CIP)—as applied to Great Streets—includes street, sidewalk, traffic calming, Complete Streets, off-road path, parks, and sewer projects. Street and sidewalk projects are typically paving or maintenance. The City's pavement management program is currently part of the CIP. Sewer projects include proactive and reactive repairs and some of these can include associated restoration work of roads and sidewalks.

See discussion of CIP under DPD and Department of Public Properties in the City Departments section of this chapter for more information.

Community Development Block Grant (CDBG)

Through these annual federal formula funds, the City funds projects and programs related to housing affordability, parks and open space, transportation infrastructure, quality of life issues, economic development, and workforce development. This program is an important potential funding source for special Great Streets projects and appropriate coordination is needed to ensure Great Streets principles are considered for all applicable projects.

Speed Camera Location Selection Criteria Memorandum

According to this draft document, prior speed camera placements on low-volume streets throughout Providence did not produce many violations while results on arterial streets were better. The proposed strategy prioritizes schools, arterials or collectors, and vulnerable crash corridors identified in the 2017 Vulnerable Road User Safety Action Plan. The strategy also identifies camera placement on streets with an identified speeding issue confirmed by studies. Speeding is defined as when traffic counts show 1 percent of traffic exceeding 30 mph or when enforcement yields at least two violations in four hours of enforcement. The memo also lays out procedures for formally relocating speed enforcement cameras. The placement of future speed cameras appropriately prioritizes critical locations.

Right-of-Way Encroachment Rules

DPW rules adopted on March 5, 2012, govern excavation and construction of encroachments not for habitation (e.g., awnings, canopies, marquees, signs, architectural embellishments, foundations, wheelchairs, etc.) and encroachments for habitation (balconies, bay windows, arcades, overhangs, basements vaults, subterranean parking garages, etc.). DPW must find the encroachment will not impair public health, safety, or welfare and — if supported by the ground within the public right-of-way — does not have an adverse impact on access for people walking or using wheelchairs.

These rules are consistent with Great Streets. City staff resources are needed to ensure compliance. This includes internally communicating planned and ongoing construction activities.

Overnight Resident Parking Permit Program

This permit program allows vehicle owners/lessees to purchase a permit ($100 for Providence-registered vehicles and $200 for non-Providence vehicles) to park overnight on local streets as designated by the City Traffic Engineer. Other parking restrictions (daytime prohibitions or time limits, snow emergencies, and street sweeping) still apply. If two-thirds of a street's residents sign a petition in opposition, the City may exclude the street from the program and the overnight parking ban continues.

Public Utilities Agreement

This agreement incorporates Standards to be Employed by Public Utility Operators when Restoring any of the Streets, Lanes and Highways in Providence, applicable ordinances, and A Plan for Supervision of Utility Cuts.

As noted in Appendix A, "Under the Standards, [utility companies] are required to obtain permits for work in City streets and guarantee the work for a period of Five (5) years. The Standards impose a permit fee of Seventy Five Dollars ($75) per excavation and include work standards and safety requirements. They include provisions governing excavation, backfill and compaction, and pavement restoration. Finally, the Standards include two provisions that are designed to lead to better coordination between the Utilities and Providence. The first is the Street Paving Program under which the Utilities will receive advance notice of Providence's paving plans. The second is the Utility Coordinating Committee which will be composed of representatives of City departments and the Utilities and will meet regularly to coordinate utility work in City streets."

Utility projects, particularly those that affect sidewalks, present an opportunity to piggyback improvements to the public realm. In general, larger planned projects present the greatest opportunity. Note the current agreement does not explicitly address bicycles. As discussed below, the 2014 Bicycle Master Plan recommended adding provisions to this permit process to prevent roadway patches from creating hazards for people riding bicycles, providing bicycle detours when temporarily closing roads, and pavement marking replacement.

Road and Sidewalk Opening Standards for Contractors

A November 20, 2017, Public Works document outlines rules and regulations to assist contractors on proper standards to be employed for public roadway and sidewalk opening. The City requires contractors excavating or constructing within the public right-of-way to obtain a road opening permit. Unlike the utility agreement, bicycle-related provisions are included. Similar to utility projects, contractor activities present an opportunity to piggyback improvements to the public realm.

Valet Parking Guidelines

The Traffic Engineering Division has established guidance for valet parking licensing and operation that requires among other things, all cars to be parked in an off-street lot that the applicant controls and not on a city street. It also prohibits blocking the public right-of-way. The potential blocking of bike lanes, sidewalks, Urban Trail crossings, or other important facilities requires enforcement.

Vulnerable Road Users Safety Action Plan

The purpose of the January 2017 Vulnerable Road Users Safety Action Plan, is to "identify and utilize available data to evaluate crash patterns involving people walking or riding bicycles and develop a citywide approach that improves safety and complements ongoing initiatives in the City of Providence. By effectively using data to identify problem areas and risk factors, funding can be focused on areas and approaches with the greatest potential to reduce fatal and serious injuries to vulnerable roadway users." The Action Plan includes strategies aimed at improving young user safety, improving older user safety, improving infrastructure, increasing compliance with traffic laws, and focusing on specific corridors. Corridors with data and identified countermeasures include Broad Street, Chalkstone Avenue, North Main Street, Westminster Street, Smith Street, Washington Street, Cranston Street, Francis Street, Hope Street, Angell Street, Branch Avenue, Elmwood Avenue, Manton Avenue, Allens Avenue, Pine Street, Steeple Street/Memorial Boulevard, Douglas Avenue, Hartford Avenue, Admiral Street, and Dorrance Street.

2014 Bicycle Master Plan

Bike Providence[2] is Providence's 2014 Bicycle Master Plan. The plan's intent was to "provide the framework to identify, prioritize and implement bicycle facilities in the City of Providence." The plan provided an existing bikeways inventory, compiled crash data, listed ongoing and planned bicycle facility projects, and evaluated level of traffic stress, among other tasks. In addition to recommending projects, recommendations applicable to the City's Great Streets Initiative included the following discussion. Items with a check mark (✓) indicate those which have been completed since 2014. Recommendations not yet completed have been incorporated into the recommendations of the Great Streets Master Plan and updated as needed.

General recommendations include:

- Modify the current City roadway design standards and regulations to include a Complete Streets approach.
- Modify the City pavement management program to include consideration for City streets that are on the bike network. Evaluations of pavement surface conditions should take into account defects that may impact bicycles such as longitudinal cracks and unsafe drainage grates.
- Include provisions in the City's utility/roadway opening permit process to consider roadways in the bike network. For example, utility patches must not create a hazard for bicycles, and temporary road closures and detours must accommodate bicyclists. Bikeways pavement markings that are covered over or damaged by road/utility repairs must be replaced.
- (✓) Modify the City's current zoning and development regulations to include provisions for a Complete Streets approach and for bicycle parking in new and redevelopment projects.
- Develop a policy and designs to permit commercial establishments to replace on-street parking with on-street bike parking stalls/bike corrals.
- In addition to recommendations on education and evaluation, the plan recommended enhancements to enforcement activities. See discussion of Public Safety.

The Big Jump

The City of Providence is one of several US cities selected to participate in PeopleForBikes' Big Jump project. The Big Jump project, which includes technical assistance and professional development assistance, is helping ten cities radically reimagine their bicycling infrastructure, while at the same time helping propel communities nationwide into a better future for biking. During the coming years, the Big Jump effort will continue to assist the City with additional technical assistance, professional development, and implementation of the Great Streets Initiative.

Bike Share

Launched in 2018, JUMP bikes, in partnership with the City of Providence and private sponsors, is a membership-based dockless bike share program. The bikes have a pedal-assist motor. Although the bikes can be locked to any public bike rack, street sign, or parking meter (as long as it does not block accessibility on sidewalks), the system also includes 40 JUMP-branded bike racks. JUMP redistributes bikes throughout the day to balance supply with demand.

E-Scooter Share

Providence's E-Scooter Share Program launched in October 2018. Two companies, Spin and VeoRide, received permits to operate 300 e-scooters each during the 2019-20 second year of the program. Operators are responsible for meeting requirements specific to safety, distribution, equity, maintenance, operations, parking, and data sharing as outlined in updated regulations DPW issued in December 2018.

Shared Mobility: Insights from data

- In the first year of the scooter pilot, 169,000 trips were taken on scooters and 282,500 on JUMP bikes. 50,000 people rode JUMP bikes and 25,000 rode scooters.
- JUMP trips averaged 2 miles, 10-15 minutes, and 8-12 miles per hour. Scooter trips averaged half a mile, 6 minutes, and 4 miles per hour.
- The biggest factor correlating to high ridership in 2017-8 was temperature. The second biggest factor was whether colleges were in session.

2 Bike Providence: A Bicycling Master Plan for Providence, November 2013

City Commissions Directly or Indirectly Involved with the Public Realm

Bicycle and Pedestrian Advisory Commission

This Providence Bicycle and Pedestrian Advisory Commission (BPAC) is charged with serving as the advisory body to the Mayor, City Plan Commission, Department of Public Works, Department of Planning and Development, and Office of Sustainability on matters pertaining to bicycling and walking in the City. The BPAC is comprised of seven public members appointed by the Mayor. Staff of the Department of Planning and Development, Department of Public Works, and Office of Sustainability serve as non-voting Ex-Officio members. The BPAC may also: examine the need for transportation related to people walking or riding bicycles; promote programs and facilities for people walking and riding bicycles; educate and inform the public and local officials on issues related to people walking or riding bicycles; perform special studies and projects as requested by the City, including reviewing development plans and site plans which may have a significant impact on people walking or riding bicycles; facilitate citizen participation; study changes in laws, regulations, and best practices and advise the City with respect to such changes; promote intergovernmental and public/private cooperation and coordination; and advise the public and City on matters affecting the relationship between public realm improvements and parks, schools, transit stops, and other major facilities.

Enacted in 2012, Executive Order 2012-1 (Creating the Bicycle and Pedestrian Advisory Commission) established the Providence Bicycle and Pedestrian Advisory Commission (BPAC). Enacted in 2016, Executive Order 2016-1 (Creation of a Review Process for Road and Sidewalk Projects and Complying with the City's Complete Streets Resolution) requires DPW and DPD to present all significant street, sidewalk, or trail repair or construction projects to the BPAC for review during both the project's initial scoping phase and preliminary design phase. Significant projects include those identified in Bike Providence, any street categorized as an arterial or collector road, or any project within 300 feet of a school or City recreation center. BPAC also reviews projects under RIDOT jurisdiction. (See RIDOT discussion in External Agencies section of this chapter.)

The establishment of BPAC and subsequent expansion of its role has increased project coordination and implementation of new facilities. The requirement for two BPAC reviews ensures sufficient community input on final plans. However, for non-controversial projects, a second review may be unnecessary. The Department of Planning and Development currently assists and staffs the BPAC.

City Plan Commission

The City Plan Commission (CPC) is a citizen board charged with developing the City's plans for preservation, revitalization and growth. With the assistance of DPD staff and general public, the City Plan Commission develops the City's Comprehensive Plan and ensures that all planning documents are consistent with the goals and policies of the Plan. The commission reviews all land development projects, applications for changes, requests for street abandonment, and the City's Capital Improvement Program. The Department of Planning and Development currently assists and staffs the CPC.

Downtown Design Review Committee

The Downtown Design Review Committee (DDRC) conducts development plan review in the D-1 zoning district. The D-1 zone encourages and directs development in Downtown to ensure that new development complements the existing historic building fabric and character, historic buildings are preserved and maintained in keeping with the historic nature of Downtown, development encourages active street life, and that greenways and open spaces are incorporated into Downtown. The Department of Planning and Development currently assists and staffs the DDRC.

Capital Center Commission

The Capital Center Commission (CCC) is charged with adopting, implementing, and administering a plan of development for the Capital Center Special Development District, a 79-acre redevelopment in the heart of downtown Providence. The CCC reviews public realm improvements within the Capital Center District. The Department of Planning and Development currently assists and staffs the CCC.

Historic District Commission

The Historic District Commission (HDC), established in 1960, is charged with protecting the unique physical character, historic fabric, and visual identity of the city. The HDC reviews and regulates development and exterior renovations in Providence's designated Local Historic Districts. The Department of Planning and Development currently assists and staffs the HDC.

Board of Parks Commissioners

The Board of Parks Commissioners has jurisdiction over all green spaces of the City, all parks including Roger Williams Park Zoo and Roger Williams Park Museum, North Burial Ground, and other city-owned or controlled cemeteries, public recreational areas of all types-- including those on or adjacent to school property--, and all forestry functions including the setting out, care, and removal of trees, shrubs, and other plants on city streets as well as on properties for which it is responsible.

City Departments Directly Involved with the Public Realm

A number of City departments have regulatory and/or permitting roles that directly or indirectly involve the City's right-of-way. Two of these departments -- the Department of Planning and Development (DPD) and Department of Public Works (DPW) -- have the most substantial roles, and as such, this chapter reviews specific charter and ordinance language for these two departments.

Department of Planning and Development (DPD)

DPD develops and administers standards for land use, design, construction, and housing that are consistent with the Providence Tomorrow Comprehensive Plan. The Department provides staff support to the City Plan Commission, Downtown Design Review Committee, Capital Center Commission, Historic District Commission, and Bicycle and Pedestrian Advisory Commission (BPAC). (Some right-of-way improvements require review by one or more of these commissions as discussed in the Commissions Chapter.) Importantly, DPD is leading the Great Streets Initiative. Among other responsibilities, DPD's Special Projects Division plans and develops public realm projects in conjunction with the Department of Public Works (DPW) and other external agencies such as the Rhode Island Department of Environmental Management (RIDEM) and Rhode Island Department of Transportation (RIDOT). See Appendix A for relevant charter and ordinance language.

Based on the City Charter, DPD's role with respect to the public right-of-way is advisory. As discussed in the next section, the Department of Public Works is charged with approving all plans and granting permits. While DPD's responsibilities include developing and periodically reviewing the Capital Improvement Plan (CIP), the Director of the Department of Public Properties currently oversees the CIP.

Department of Public Works (DPW)

DPW is responsible for issuing permits for all work involving modifications to the right-of-way and public utilities. DPW's Engineering Division currently oversees inspection and construction management of streets, sewers, storm drains, traffic signals, traffic signs, pavement markings, construction projects, maintenance projects; planning, design and project management of components of the CIP. The City Traffic Engineer is charged with reviewing all traffic and public right-of-way modifications. See Appendix A for relevant charter and ordinance language.

With the exception of 2006 changes to the charter governing DPW, ordinances covering public works and traffic engineering date to either 1946 or 1948. Importantly, Sec. 2-113 assigns the DPW Director superintendent responsibility for all streets, highways, and sidewalks. Sec. 2-135 assigns the city engineer responsibility for preparing plans for construction projects.

While per Sec. 2-153, the Mayor appoints the traffic engineer, Sec. 2-152 establishes a traffic engineering advisory committee that has "no administrative or regulatory powers." Per Sec. 2-156, "the traffic engineer shall have authority to make all needful rules and regulations for the regulation and control of traffic in the city not inconsistent with the laws of the state..." Per Sec. 2-158, "All design drawings prepared by other departments of the city government for the construction of proposed highways, bridges, parking terminals and other traffic handling facilities, shall be submitted to the traffic engineer for a review and recommendation..." These rules assign all control and review responsibility to the traffic engineer. While the traffic engineer serves at the pleasure of the Mayor, at the same time because the advisory committee has no powers, the traffic engineer has no approval board with which to work.

Parks Department

The Parks Department oversees the selection, planting, and maintenance of all street trees in Providence as well as improvements within the City's public parks. Assets include neighborhood parks, downtown parks, Roger Williams Park, recreational facilities, a community sailing facility, conservation areas, playgrounds, boat launches, and community gardens. See Appendix A for relevant charter language.

School Department

Among other responsibilities, the Providence School Department oversees all school properties within the city. Some properties include playgrounds and other recreational facilities. Safe walking and bicycling access to city schools is a key consideration for Great Streets and many other project prioritization considerations, including traffic calming. City Ordinance Chapter 22 covers City Schools.

Department of Public Properties

Among other responsibilities, the Department of Public Properties is responsible for management, maintenance, upkeep, and expansion of the City's 17,000 street lights. The Director also manages the City's Capital Improvement Program (CIP). Per the City Ordinance, this function is not explicitly assigned to Public Properties but is under the purview of DPD. See Appendix A for relevant charter language.

Department of Public Safety

The Providence Department of Public Safety (DPS) includes the police, fire, communications, and homeland protection departments and an emergency management agency. The police department supports the traffic calming program by conducting speed studies, serving on the Traffic Calming Advisory Group (TCAG), and enforcing traffic and parking regulations. The fire department also serves on the TCAG.

See Appendix A for relevant charter language.

External Agencies

This section outlines the public agencies the City of Providence most often works with, including the Rhode Island Department of Transportation (RIDOT) Rhode Island Public Transportation Authority (RIPTA), and Rhode Island Department of Environmental Management (RIDEM).

Rhode Island Department of Transportation (RIDOT)

RIDOT operates and maintains much of Rhode Island's transportation infrastructure. In addition to the freeway network, roads designated as state routes fall under RIDOT jurisdiction. RIDOT reviews and issues permits (generally through the Physical Alteration Permit Process) for work done on these routes or projects that impact RIDOT-owned or maintained traffic signals. Utility companies doing work within RIDOT right-of-way must coordinate with RIDOT for utility permits.

Streets in Providence under RIDOT jurisdiction include:

- Most bridges over state and federal highways
- Broad Street (West Franklin to Elmwood)
- Elmwood Avenue (Broad to Park/City Line)
- Smith Street (North Main to Mount Pleasant/City Line)
- Charles Street (Smith to Randall)
- Randall Street (Charles to North Main)
- North Main Street (Randall to Hillside/City Line)
- Killingly Street (Hartford to Maria/City Line)
- Hartford Avenue (Route 6 to Killingly/City Line)
- Allens Avenue (Eddy to Montgomery/City Line)

Division 9 of RIDOT's Highway Design Manual has basic provisions covering the design of facilities for people walking and riding bicycles. Section 910.01 notes, "Providing for safe and efficient travel for both bicycles and pedestrians should be an integral part of the design process." However, the Highway Design Manual dates to 2008, before many new design concepts for bicycling, walking, and micromobility were well established. New and updated design resources for these modes have since been published. The State completed a Bicycle Mobility Plan (BMP) in 2019 that is scheduled for release in 2020.

Rhode Island Public Transit Authority (RIPTA)

The Rhode Island Public Transit Authority (RIPTA) is a quasi-public, independent authority. Established in 1966, RIPTA operate public transit services throughout the state. RIPTA's principal bus hub is at Kennedy Plaza in Downtown Providence. RIPTA, in close coordination with the City of Providence, is currently implementing a significant change to bus service and facilities in Downtown. The Downtown Transit Connector will provide high-frequency transit service (every 5 minutes in each direction) between the Providence Amtrak/MBTA Station in Capital Center and Hospital District in Upper South Providence. There will be six paired stops along the corridor, each designed with a unique and highly-visible identity. Stops will include shelters, real-time bus arrival signage, and other passenger amenities. The Downtown Transit Connector (DTC) will be an "enhanced bus corridor" that provides riders with improved service frequency and reliability through the inclusion of Transit Signal Prioritization (TSP) which extends the duration of green traffic signals for buses (and emergency vehicles) along the corridor, special signal phases allowing buses to "jump" the traffic queue and move ahead of regular traffic, and dedicated bus lanes.

A consideration for future Great Streets planning is the need to have accessible, properly-sized, properly-spaced, and welcoming bus stops. The 2017 RIPTA Bus Stop Design Guide establishes design principles applicable to future projects. This includes concepts for potential floating bus stops made necessary by parking-protected bike lanes or curb-adjacent separated bike lanes where buses must load and unload passengers by deploying a ramp. ADA does not permit deployment of bus ramps to the street, as the ramp slope is excessive. The RIPTA system map presents the Rapid Bus route, Key Corridor routes, and local bus routes within Providence.[3] Most of these streets are arterial roadways and a number are also RIDOT-owned.

RIPTA is releasing a statewide Transit Master Plan in 2020 and has coordinated with the City to ensure the plan complements the City's Great Streets Master Plan.

Rhode Island Department of Environmental Management (RIDEM)

The Rhode Island Department of Environmental Management (RIDEM) is charged with protecting, restoring, promoting, and managing Rhode Island's environment and natural resources to preserve and improve quality of life. Through funding and other assistance and support RIDEM helps communities support the clean up and reuse of contaminated industrial properties, improve stormwater management and water quality, protect open space, sustain and restore sustainable wildlife habitats, promote and increase outdoor recreation, develop a network of recreational facilities (including bicycle paths and trails), reduce greenhouse gas emissions, and improve resiliency.

San Souci Greenway, Gano Gateway, and several small projects especially around the Woonasquatucket Greenway were funded by the 2016 Green Economy Bond.

Existing Project Development and Delivery Processes

With the goal of developing policy and process recommendations to improve delivery of the Providence Great Streets Initiative, this section describes the existing project development and delivery process for public realm projects in Providence and identifies gaps in the process. The findings derive from staff interviews and discussions, consultant team analysis, and best practices research. Two projects selected by City staff provide examples of challenges and opportunities. This section also references important matters covered elsewhere in the report.

Existing Challenges and Gaps

The National Complete Streets Coalition's "Ideal Complete Streets Policy Framework" suggests applying Complete Streets policies to both new and retrofit projects, including design, planning, maintenance, and operations for the entire right-of-way. Under this policy framework, all transportation improvements are seen as opportunities to create safer, more accessible streets for all users, including people walking, riding bicycles, and using transit, regardless of scale. Other elements of effective Complete Streets project development and delivery programs are:

3 https://www.ripta.com/statewide-system-map

- Strong collaboration and communication among departments and staff
- Few areas of confusion or lack of clarity, leading to more results with less effort
- Accepted design standards
- Established and clear procedures for addressing exceptions and for measuring performance
- Clear and streamlined process with agreed-upon timelines and expected contributions
- Offers workshops and other training opportunities to planners and engineers

Because Providence's planning, design, and construction resources are finite, it is essential that the City create a framework for implementation each time a project opportunity arises, regardless of its source. At present, while efforts are underway to improve efficiencies throughout City government, there are numerous barriers to coordination that may lead to lost opportunities. Some barriers are due to competing interests or lack of resources, which may lead to reactive work and lack of time available to properly plan. Substantial maintenance and repair backlogs require additional staff capacity and funds to properly address. Coordinated projects take longer to develop due to lack of standard procedures. Projects that require interdepartmental or interagency coordination lead to further delays.

Additionally, staff training and professional development resources are inadequate to educate staff on new approaches, and project management and construction management staffing do not exist within DPD or DPW leading to over-reliance on consultants.

Existing Origins and Sources of Potential Public Realm Projects

In a resource-constrained environment, it is critical to capitalize upon every potential project opportunity. This means identifying and tracking all potential projects that alter the public realm, whether planned or unplanned. In Providence, street alteration projects derive from a number of places and sources, including:

Capital Improvement Program

The Capital Improvement Program (CIP) is a five-year program that includes street, sidewalk, sewer, and Complete Streets projects. Street and sidewalk projects are typically paving or maintenance. The City's pavement management program is currently part of the CIP. Sewer projects include proactive and reactive repairs and some of these can include associated restoration work in the road and sidewalk. According to the 2017-19 CIP:

> *[DPW] requests for fiscal years 2018-22 include roadway repair, maintenance, and reconstruction; bridge and dam repair; Complete Streets work including curb extensions, striping, traffic calming, and bicycle and pedestrian amenities; and sewer and stormwater management system maintenance, repair, and construction, including the installation of green infrastructure.*
>
> *DPP requests for 2018-22 includes upgrades and repairs to City Hall, fire department upgrades and repairs, recreation center repairs and fire alarm upgrades, police training alarm upgrades, and playing field improvements.*

Traffic Calming

The City's current traffic calming program focuses on residential street improvements to slow traffic based on project priorities screened and advanced through an established process. See "Modify the City's traffic calming procedures and guidelines" within the recommendations section of this chapter and "Traffic Calming Guidelines and Program" within the Existing Regulations, Policies, Programs, Plans, and Initiatives section of this chapter for more detailed information on the City's current traffic calming program.

Projects Advanced by State Agencies

Examples include RIPTA's Downtown Transit Connector project, RIDOT repaving or major construction projects that impact or take place on streets within Providence, and RIDEM-funded projects.

Neighborhood Improvement Funds (NIF)

NIF are neighborhood infrastructure dollars available through the City's general fund and allocated by the City Council. These funds can be used for a variety of infrastructure needs in their respective wards, including community centers, playgrounds, schools, road paving, traffic calming, and sidewalk repairs.

CDBG Allocation

Through this federal allocation from the U.S. Department of Housing and Urban Development (HUD), the City funds projects to address housing affordability, parks and open space, transportation infrastructure (particularly sidewalks and traffic calming), quality of life issues, economic development, and workforce development.

311 Requests

In most instances, the city addresses 311 requests by making repairs to streets and sidewalks.

Specific Plans

This includes recommended improvements identified in Bike Providence, the Comprehensive Plan, special area plans such as the Woonasquatucket Vision Plan or 2014 City Walk Study, neighborhood plans, corridor plans, or other infrastructure projects which may have associated restoration work in the street or sidewalk.

Private, Community, and Non-Profit

Developments

Projects that others propose and come before the City may identify needed improvements to street and sidewalk infrastructure. These projects sometimes include mitigation funds to pay for these or other improvements.

Utility Work

Utility companies often must open city streets to gain access to infrastructure below ground. The City Ordinance (Sec. 23-35) governs requirements for properly restoring streets and sidewalks.

Competitive Grant Funded Projects

The City often receives competitive grant funds to advance, implement, or maintain projects from state and federal agencies and national or local foundations. Sources of state grants include the State Transportation Improvement Program (STIP), Highway Safety Improvement Program (HSIP), and RIDEM Green Economy Bond. Other grants are funded by USDOT, EPA, local organizations like the Rhode Island Foundation, or national organizations like PeopleForBikes. Grant-funded projects typically require approval from and extensive coordination with the funding organization.

Recommendations

Recommendations included in this section are based on a combination of best practices research from other US cities and a thorough analysis of Providence's existing policies, procedures, and regulations.

Research and findings of best practices are based off of cities within different geographic regions of the country, with characteristics similar to Providence and Complete Streets programs which offer valuable lessons for Providence. The purpose of this research is to identify practices that may assist development and implementation of the City of Providence's Great Streets Initiative. Interviews with the following cities were conducted in the spring of 2019:

- Missoula, Montana: located in the upper Midwest with a population of 73,340
- New Orleans, Louisiana: located in the southeast with a population of 393,292
- Portland, Maine: located in the upper northeast with a population of 66,882
- Seattle, Washington: located in the upper northwest with a population of 724,745
- Worcester, Massachusetts: located in the northeast with a population of 185,677

This report also discusses best practices of several other cities that were not interviewed but were researched for this report.

Although this chapter includes many recommendations related to a variety of needed improvements to policies, processes, and regulations, the recommendations generally align with five key areas of focus:

- Revise outdated and enact new City ordinances related to mobility
- Align City policies and procedures to invest in and preserve great streets
- Prioritize safety and comfort for people who walk, ride bicycles, and use public transit
- Advocate for friendlier state laws and policies related to mobility
- Expand opportunities for engagement, education, and encouragement

Revise Outdated and Enact New City Ordinances Related to Mobility

Create a New Great Streets Ordinance that Replaces and Strengthens the Existing Complete Streets Resolution and Formally Integrates the Great Streets Initiative into City Procedures

The City of Providence's existing Complete Streets resolution, adopted in 2012, is supportive and encouraging but not as strong as it should be.

The form of enabling legislation used by other cities to enact Complete Streets varies. Seattle's and New Orleans' programs were enacted through ordinance, while Missoula's program was authorized through resolution, Worcester's program by department policy, and Portland's program by council order. By definition, municipal resolutions are generally for temporary actions. Ordinances are for government actions that are intended to be permanent.[4] Given that the City of Providence's Complete

4 An ordinance is a municipal law that prescribes general, uniform and permanent rules of conduct relating to the corporate powers of the municipality. An ordinary ordinance, as opposed to a charter ordinance, is intended to be reasonably permanent. A resolution is generally less permanent and address-

Streets policy was originally enacted by resolution and its Great Streets Initiative is intended to replace the program as a permanent function and service, an ordinance is warranted.

The National Complete Streets Coalition (NCSC) is the leading authority in Complete Streets policy and program implementation. Its Complete Streets template offers substantive policy and program parameters that are often considered when crafting a Complete Streets law or policy. (See Inset 1.) All but one of the surveyed cities use the NCSC template.

Based on a review of NCSC guidance and Complete Streets ordinances, resolutions, and policies, it is recommended that the City of Providence's Complete Streets Ordinance include the following in order to align with NCSC policy parameters:

- A clear description of the **Vision, Users, and Modes** intended to be covered by the ordinance
- **Inclusions and Exceptions**: Inclusions should be listed and representative of all activity in the public realm. Exceptions should also be clearly laid out and may include projects where there is a documented absence of need or there is an equivalent project within or along the same corridor with the same service. In some cities, exceptions must be approved by City Council.
- **Connectivity**: Potential opportunities to coordinate with other projects should be called out.
- **Context Factors and Prioritization:** Establish and include "context factors" that prioritize investments, and provide explanation of why these factors are important. "Context factors" should be drawn from the Providence Great Streets Master Plan and Implementation Guide. An example from Portland's Complete Streets Council Order is determining "whether the corridor provides primary access to one or more significant destinations" and prioritizing its value in the context of the community's immediate needs, history, and available resources. The City of Providence should develop a clear prioritization methodology to help decide which projects to implement first. Below is suggested language to include in the Ordinance:
  - **Connectivity**: A project's prioritization score shall be elevated if it connects to an existing or funded project. An exception may be made where a project that is a distance away from an existing or funded project can be reasonably connected in the short or mid term, and has its own connectivity benefits (e.g. to destinations such as schools or parks).
  - **Safety**: A project's prioritization score shall be elevated based on the pedestrian and bicycle crash history (number of crashes per linear mile for crashes occurring within a quarter mile of the project).
  - **Demand**: A project's prioritization score shall be elevated based on the anticipated demand of people walking and riding bicycles in accordance with population density, nearby destinations, employment centers, and other related factors.
  - **Environmental Justice and Equity**: A project's prioritization score shall be elevated based on proximity to populations corresponding with Environmental Justice indicators, such as households in poverty and households without access to vehicles.
- **Design Guidance**: Missoula's resolution mandates use of the "best and latest design guidance, standards, and recommendations."
- **Performance Measures**: Insert measures that will quantify performance of the program, similar to performance measures listed in the City of Missoula Complete Streets resolution, including miles of connected Urban Trails:
  - Total miles of connected Urban Trails built
  - Number of new curb ramps installed along city streets
  - Number and type of traffic calming devices installed
  - Number of new street trees planned
  - Crosswalk and intersection improvements
  - Percentage of transit stops accessible via sidewalks and curb ramps
  - Bicycle and pedestrian count data
  - Transit ridership data, including automated passenger counter (APC) data
- **Urban Design Factors**: The ordinance should reference urban design factors such as streetscape improvements, landscaping and street trees, human-scaled lighting, public art, street furniture, wayfinding signage, and active ground floor uses.
- **Implementation**: Missoula's City departments and their responsibilities for program implementation and "everyday program decision making" are listed in their Complete Streets policy. Identification of program funding sources and methods for inter-departmental coordination is mandated. Portland, Maine uses CDBG funds for Complete Streets improvements within Environmental Justice communities.
- **Construction Mitigation**: Cleveland Heights' (Ohio) policy includes a provision requiring safe accommodations for people walking and riding bicycles during construction. According to NCSC, this is often overlooked.
- **Training and Professional Development**: The City of Missoula's transportation planners and engineers are regularly provided access to training in ADA, mobility and access, and Complete Streets within departmental budgets.

es municipal matters of a special or temporary nature.

Inset 1

2019 NCSC Complete Streets Best Practices Policy Text Excerpts – Environmental Justice

Des Moines, Iowa

"In creating Complete Streets/ the City recognizes equity as a motivation and will prioritize vulnerable users and those residing in the environmental justice (EJ) areas identified by the Des Moines Area Metropolitan Planning Organization (MPO)."

Des Moines Area MPO, Environmental Justice Report, August 2016

"To ensure fair treatment, the MPO studies seven Degrees of Disadvantage to identify EJ areas, or those areas with large populations of traditionally underserved individuals...The Degrees of Disadvantage methodology looks at U.S. Census Bureau data at the tract level to determine where EJ areas are located in the region. Data is obtained for seven population groups including nonwhite population, car-less households, persons in poverty, single heads of households with children, persons over 65, limited English proficiency (LEP), and persons with a disability. A Degree of Disadvantage is identified for a population group if the census tract exceeds the regional average for the population group. Census tracts considered EJ are disadvantaged for at least six of the seven population groups"

Baltimore, Maryland

Equity Lens.

A. Separate reporting by geographic subunit. In preparing the annual report, the department must separately report data by geographic subunit (e.g., census tract, traffic analysis zone, or the like).

B. Separate reporting by race, income, and vehicle access. The annual report must separately report data into the following categories:

a. Populations that are above and below the median number of persons of color for Baltimore city.

b. Populations above and below 50 percent no vehicle access.

c. Populations with a median income above and below the median household income for Baltimore city.

Accountability to Communities. The transportation department, in consultation with the complete streets coordinating council advisory committee, shall conduct public meetings and other community engagement and outreach activities to present the complete streets annual report to the public and solicit public input.

Milwaukee, Wisconsin

"5. When considering the various elements of street design, the City shall give priority as follows:

a. Above all, safety is imperative, with pedestrian safety having the highest priority followed by the next most vulnerable types of users.

b. Street design elements that encourage and support walking, biking, and transit trips in a manner that considers the context of the surrounding community as well as the broader urban design needs of the city.

c. The City recognizes that not all modes can receive the same degree of accommodations on every street, but the goal is for users of all ages and abilities to safely, comfortably and conveniently travel across and through the network.

6. The Department of Public Works shall prioritize universal and equitable investment in underserved communities throughout the City which lack existing infrastructure that encourages walking, biking, and transit trips, as well as areas where data indicate crash risk and health disparities."

- **Environmental Justice**: In addition to including equity as a consideration in project prioritization, Providence should take steps to ensure that these investments are meaningful to front-line communities: establish working relationships with community stakeholders; create with them investment strategies to address specific needs; and define a reporting mechanism to assess productivity.

  Milwaukee's policy acknowledges that there are disparities in communities, with some neighborhoods disinvested in. Street design can alleviate some of those disparities. The policy emphasizes health equity disparities such as crashes happening in predominantly low-income communities of color. The policy establishes a framework for navigating those conversations.

Update Ordinance Language for Operating a Bicycle

Sections 15-70—15-75 of the Code of Ordinances date from 1946 and are significantly out of date. For example, Section 15-73 prohibits carrying a passenger on a bike. However, cargo bikes and bikes with trailers and child seats often carry passengers.

Repeal Ordinance Prohibiting Skateboarding

Section 23-31 of the City's Code of Ordinances prohibits riding a skateboard on any street, highway, sidewalk or pedestrian mall, passed in 1965, is antiquated and should be repealed.

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

The demand for parking is expected to continue to change as more people avail themselves of new mobility options such as bike share e-scooter share, Transportation Network Companies (TNCs) such as Uber/Lyft, improved public transit, and autonomous vehicles. Parking requirements should reflect these trends. Many cities encourage developers to incorporate features into their projects that encourage travel and lower the need for parking. This includes providing incentives that lower the requirements if certain amenities are included in project proposals.

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

The CIty should study fines and ordinance language used by other cities to establish an appropriate dollar value. In Atlanta, drivers are fined $100 for parking automobiles in bike lanes or on multi-use trails, while fines for tractor trailers are more significant at $1,000. Atlanta's police department also runs an education campaign to discourage parking in bike lanes. Washington, DC recently increased the fine for parking in a bike lane from $65 to $150, and New Orleans fines drivers $300 for parking in bike lanes.

Align City Policies and Procedures to Invest in and Preserve Great Streets

Establish Transportation Impact Study Requirements and Guidelines for Specific Street Types

An important goal of the Providence Great Streets Initiative is to identify and implement ways to more efficiently construct public realm improvements. At present, when projects such as on-street bike lanes are considered, the internal review process can take longer than may be needed, particularly for certain streets. When a proposed project may eliminate or narrow a vehicular travel lane or eliminate parking, concerns about impacts often trigger the need for studies. Such studies are often costly to undertake and time-consuming. Furthermore, to the extent that transportation impact studies focus only on a narrow range of impacts, such as vehicle level of service (LOS or VLOS, see discussion below on LOS), they may not adequately address impacts to other modes or accurately represent the benefits a project is likely to bring about.

To address these challenges, the City should consider adopting a policy that:

- Limits requirements to conduct transportation impact studies to certain street types;
- Permits projects to advance without such studies on other street types;
- Requires transportation impact studies to consider a range of impacts and benefits to all modes of transportation, considering the context of the proposed project; and
- Is consistent with the goals and policies of the City's Great Streets Master Plan. For example, the study should give deference to the goals of creating a connected network of Urban Trails and Great Streets, making transportation more affordable, improving quality of life, and becoming carbon neutral. Studies should also be consistent with a measurement or LOS policy if adopted by the City (discussed below). This policy foundation should inform how the study evaluates likely impacts and benefits.

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

Regular updates to the projects listed in the Great Streets Master Plan will be important to maintain the Plan's relevance, address new needs and issues as they emerge, and mark projects as complete once they are constructed.

Modify the City's Traffic Calming Procedures and Guidelines

Providence's traffic calming program is reactive by design, does not establish clear prioritization of projects, and does not adequately explain the process or make information about it available to community members. Traffic calming programs have been in place for more than 20 years in a number of U.S. cities with some dating back even longer. Because the need for traffic calming is great and resources are limited, a number of cities have changed their programs in important ways, including establishing prioritization methodologies to determine proactively how the many important projects can be phased. While the City should not restrict constituent input about where traffic calming should occur, a clear prioritization methodology should be publicized and proactive projects should be undertaken.

One pitfall traffic calming programs face relates to their usual focus on individual streets. When one street is traffic-calmed in a neighborhood or small area, there is a potential that adjacent streets that have not received similar treatments may see diverted traffic at speeds similar to those experienced on the traffic-calmed street prior to installation.

The City should modify its traffic calming procedures to be more transparent and predictable, include new thresholds, criteria, and solutions, and be proactive rather than reactive by:

- Preparing and publishing user friendly public information to a webpage that describes the policy and process and includes documents for download, digital applications, and contact information.
- Conducting TCAG meetings at times when and locations where members of the public are able to attend;
- Reevaluate quantitative thresholds for traffic calming suitability in light of the proposed zone-based approach and pedestrian safety.
- Applying flexibility and context-sensitivity to the review of traffic calming applications. All traffic calming requests made by the community represent a safety need, either real or perceived. Traffic calming features should be applied in accordance with the Providence Great Streets Implementation Guide, which identifies which types of traffic calming are appropriate based on street type.
- Adopting use of new traffic calming solutions or interventions such as chicanes, diverters, neighborhood traffic circles, and raised crosswalks/intersections. Traffic calming projects should lead by considering ways to support multiple goals of the Providence Great Streets Initiative. Specifically, many traffic calming features are well-suited to provide stormwater management, habitat, and aesthetic benefits, in addition to serving a traffic calming function. All traffic calming interventions must consider maintenance capabilities to ensure adequate resources are available to maintain new features.
- Developing a zone-based traffic calming program that allows groups of streets within neighborhoods to be comprehensively evaluated for traffic calming. The resulting implementation would strategically occur on several streets, in part to prevent higher-speed traffic diversion to surrounding streets. Residents could submit traffic calming applications to the City, which would evaluate them based on published evaluation metrics and create a traffic calming plan for selected applications. The City of Boston's Neighborhood Slow Streets program operates in a similar manner and is a useful reference. Based on neighborhood comments as well as City input and previous traffic calming requests, while not necessarily an exhaustive list, key traffic calming areas are included in the Neighborhood Visions chapter of this document.

The traffic calming in place in the City of San Francisco incorporates the above approaches is a good model for application in Providence. See https://www.sfmta.com/getting-around/walk/residential-traffic-calming-program.

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

A first year Project Management Plan (PMP) should be established and should answer five key questions:

- In what department will the program be located; how will be it managed, staffed, and funded?
- What other City departments and entities will be responsible for elements of the program; what will be their roles, responsibilities and decision making authority; how will program work activities, work products and decisions be coordinated and communicated; and how will professional collaboration, information sharing and training be fostered?
- Will there be a Great Streets advisory group or oversight committee; what role will it have in shaping the design of the program?
- How will the public be engaged in the program?
- What is anticipated to be accomplished in 6 months, 8 months and 12 months?

After executing the first year PMP and informed by its outcomes, the City of Providence should consider constructing a multi-year PMP as the program evolves and grows over time.

A key decision point is where the Great Streets program will be located within the City's departmental structure. The City should study potential reorganization of City staff to improve efficiencies, reduce gaps and redundancies in workflows, and position the City to become a leader in mobility and public realm investments. Lessons learned from other cities may be helpful to the City of Providence. In Missoula, the planning unit administers the program but its engineering, construction, and maintenance functions are performed by the Department of Public Works and the Department of Parks and Recreation. (See Inset 2.)

Another key part of Missoula's initiative is an integration of Complete Streets principles into the Missoula Long Range Transportation Plan. The document establishes a goal to triple bicycle and pedestrian mode share percentages and more than triple transit modal share percentages by Year 2045. In Missoula's roadway project planning process, the transportation and parks planners assist the design engineers with Complete Streets design and placement opportunities. During the project design, review and approval phases, the City Engineer inclusively circulates 30 percent, 70 percent, and final design plan sets to Transportation Planning, relevant Public Works divisions, and Parks and Recreation. "We red line them with our comments and recommendations and send back," he says and "if the project is large... or has regional implications, we have a sit down session." In the construction and maintenance phases, collaboration continues on amenities such as protected bike lane striping.

New Orleans Public Works recommends that the details of how the program will work should be fully vetted before an ordinance is enacted. The roles and responsibilities of City leadership, department heads, program staff, stakeholders, advocates, and citizens should be agreed to by them before ordinance action. Creation of an 'out years strategy' was also recommended, forecasting how program staffing, resources, and funding will be decided and addressed over time.

As for public engagement, some improvements to current practice could involve:

- For projects that include changes to a major street's striping, on-street parking, or traffic patterns, holding neighborhood meetings in addition to the currently required Bicycle and Pedestrian Advisory Commission meetings.
- Sending mailed abutter notices in more instances.
- Distributing informational flyers to doors along project routes.
- Posting informational flyers along project routes.
- Holding more informational briefings with relevant members of City Council during the project development process.

Establish a Great Streets Project Screening System and Checklist to Ensure Coordination

Many cities have policies requiring coordination to take advantage of every potential construction project. In other words, if the City or any other entity is going to alter the street for any reason, if the street is identified as needing improvements within the Great Streets Master Plan, the proposed improvement should be

Inset 2

City of Missoula - Complete Streets Program Shared Responsibilities

Department of Development Services – Transportation Planning Services Division (Lead):

- Complete Streets Transportation Planning and Policy
- Bike and Pedestrian Office: bike and walk promotion, traffic calming, pedestrian and ADA compliance strategies; Bicycle Facilities Master Plan.

Department of Public Works

- Street Maintenance Division: street cleaning, snow and ice removal, alley grading, leaf collection, storm water drain maintenance, street construction projects, chip sealing, maintenance of State routes in city, maintenance of bike lanes
- Traffic Services Division: street and traffic sign fabrication, installation, and maintenance; roadway striping application and maintenance; crosswalk, road messages, and curb marking applications and maintenance; sidewalk concrete grinding program; traffic and pedestrian studies; and snow removal on city bridge sidewalks.

Department of Parks and Recreation

- Maintenance and planning of parks, primary commuter network of trails, regional trails, and open space
- Maintenance of medians, sidewalks adjacent to parks and on bridges
- Urban forestry; tree planting and maintenance

implemented as part of the alteration. Whatever the source, each project should be viewed as an opportunity to implement the Great Streets Master Plan. In order to do so efficiently, staff must know exactly what is planned for streets and there must be a defined a process in place to efficiently advance the plan.

Except for emergencies, no construction activity should occur without prior consultation. The consultation should determine:

- What is the proposed plan for the street?
- Is another project programmed within the same section of street or an adjacent part of the public realm and for when?
- Is there an opportunity to implement the Great Streets Master Plan with the other project?
- If not, why not?

The following language should be considered as part of the City of Providence's screening policy:

> *It is the City of Providence's policy to implement any approved Great Streets Initiative project at the first available opportunity. Any construction activity on the street or sidewalk identified as needing improvement as part of the Great Streets Master Plan, shall be coordinated through [insert position name]. If the Great Streets concept cannot be advanced, the reasons shall be documented and distributed accordingly and included in a record system for Great Streets implementation. Except for emergencies, no construction activity shall occur without prior consultation.*

The City of Seattle created a Complete Streets Project Checklist, which is a digital tool available to SDOT project managers responsible for the initial planning and 30 percent design of new transportation improvement projects. It is meant to empower managers with information that broadens their understanding of Complete Streets application possibilities.

Providence's checklist could initially contain simple coordination tools and GIS data. In the out years, the functionality and use of the tool should be increased. The ultimate goal should be to have one data source for all City public realm engineering, planning, maintenance and construction specifications and standards; all mode-specific master plans; all relevant regulatory and zoning provisions; and all relevant GIS mappings.

Update Road and Sidewalk Opening Standards to Capitalize on Project Opportunities for Great Streets Implementation

The permit process and standards should be updated to ensure patches do not create hazards for people riding bicycles and that temporary road closures and detours accommodate bicyclists. It should also be mandated that Urban Trail of bicycle-related pavement markings that are covered over or damaged by road work be replaced in a timely manner.

Provide Additional Resources to the Providence Parks Department

The Providence Parks Department needs additional staff and equipment to maintain the City's Urban Trails, roadways and pathways within City parks and green spaces.

The maintenance experiences, challenges, and practices of comparable cities are discussed in this section. The City of Seattle has interesting, successful methods but its geographic location, size, weather, transportation footprint, and the magnitude of its resources are not comparable. If interested, visit https://streetsillustrated.seattle.gov/ to view the City's Right-of-Way Improvements Manual - *Seattle Streets Illustrated 2017*.

The cities of Missoula, New Orleans, Portland, and Seattle have fully functional Parks Departments that maintain parks, urban forestry, greenway trails, and public spaces such as boulevard planting strips, medians, and sidewalks adjacent to parks.

In Missoula, sidewalk upkeep and snow clearance are the responsibility of abutting property owners. This is enforced through Code. If property owners are non-responsive, Public Works clears sidewalks and the City bills them. In Missoula's downtown, the Downtown Business Improvement District offers some maintenance and snow removal assistance for protected facilities such as bike lanes and sidewalks. For the rest of the network, the Department of Public Works is responsible for sidewalk and roadway clearance, maintenance, replacement, and repair. It is responsible for street sweeping and keeping bike lanes free of debris. Every fall, it examines infrastructure assets and schedules improvements.The City of Missoula's Snow Plowing Priority Plan, which summarizes snow procedures, may be accessed at https://www.ci.missoula.mt.us/558/Snow-Removal. Their Parks and Recreation Department maintains boulevard planting strips, medians, and sidewalks adjacent to parks and on bridges. The department has its own equipment and schedule for the care of public trails such as the City portion of the Bitterroot Trail, the Milwaukee Trail, and what is known as the "primary commuter network" of trails.

In New Orleans, the Department of Public Works is responsible for maintaining the City streets. Maintenance of the parks and green spaces is split between the New Orleans Recreation Development Commission (NORDC) and the Department of Parks and Parkways. NORDC maintains local parks and playgrounds. Parks and Parkways maintains regional parks, mows medians, and maintains street trees. The Department of Sanitation is responsible for removing trash, sweeping, and garbage collection on City and state routes.

In Portland, Maine, public realm maintenance is divided between Public Works (DPW) and Parks and Recreation. DPW is responsible for areas within the roadway right-of-way such as sidewalk maintenance, roadway paving, and cleaning, signage, snow

plowing, and street sweeping. It has an Asset Management Plan and conducts roadway pavement condition ratings every 2 to 3 years. In the downtown, a tax (less than 1 percent) is levied in the Business Improvement District. This funds the cleaning of sidewalks by DPW crews. For the remaining sidewalks, the responsibility is with the commercial and residential abutters.

The City of Missoula Parks and Recreation Department is responsible for the maintenance of street trees, parks, plazas, shared use paths, sidewalks, and snow plowing in areas outside of the roadway right of way.

In Worcester, the DPW is responsible for maintenance. In some areas, business or community groups sponsor landscaped areas and contribute to their upkeep (e.g. – Shrewsbury Street). Residents are responsible for clearing abutting sidewalks except those adjacent to public property such as parks and conservation lands.

Update Sidewalk Repair Standard Operating Procedures To Incorporate Great Streets and Urban Trail Projects

The development of the Urban Trail Network will provide a boost to the City as it works to address the backlog of sidewalk repair needs given available resources. Therefore, the following framework is recommended for Urban Trail and Great Street implementation in relation to the Sidewalk Repair Policy:

- Where the Sidewalk Priority Heat Map in the Sidewalk Repair Standard Operating Procedure indicates a medium or high priority, on-street Urban Trail or Great Streets projects shall include basic repairs to the adjacent sidewalk or sidewalks along the same street in accordance with Section 5 of the Sidewalk Repair Policy.
- Where the Sidewalk Priority Heat Map in the Sidewalk Repair Standard Operating Procedure indicates a low priority, on-street Urban Trail or Great Streets projects may include basic repairs to the adjacent sidewalk or sidewalks along the same street in accordance with Section 5 of the Sidewalk Repair Policy.
- An on-street Urban Trail project may be implemented without sidewalk repairs if a separate project that includes repair of the sidewalk (to a level of quality consistent with the Sidewalk Repair Standard Operating Procedure) for the same street is already funded, programmed in the Capital Improvement Program, a condition of a private development, or otherwise obligated to be completed through a separate process.
- All projects shall meet regulatory requirements, e.g. ADA compliance.

This framework assumes adoption of the draft Standard Operating Procedure without substantial changes to the referenced sections and graphics.

Adopt Policies Regarding Transportation Impact Assessments

While the City of Providence has no formal Level of Service (LOS) policy, concerns about LOS degradation in the near-term and for longer planning horizons have led to a lack of clarity about what is acceptable in an urban environment, and have potentially impeded implementation of projects that would greatly benefit Providence residents. Vehicular level of service (LOS or VLOS) is a method of describing traffic delay using a range from A to F. VLOS A represents free flowing traffic and F represents significant congestion. Many agencies, including RIDOT, have long-standing policies to maintain a minimum VLOS on certain roadways and intersections. However, as traffic volumes continue to increase, maintaining VLOS requires agencies to add capacity by widening these roads and intersections. Such an approach is increasingly inappropriate for urban streets and can negatively impact other road users.

In some instances, Great Streets projects that make an area safer for people walking, taking transit, or riding bicycles may lower VLOS. When analyzing the potential impacts of Great Streets projects, the City of Providence should rely on context-sensitive factors such as crash frequency, crash severity, safety, mobility, vehicle speeds, access, land use, and throughput and not on VLOS.

This is consistent with national practice. Recent developments in engineering analysis methods now account for multimodal LOS measures, which address some of the shortcomings of relying solely on VLOS. Further, the use of LOS may not be appropriate altogether. According to a November 30, 2017 Federal Highway Administration (FHWA) webinar on “LOS in the New World of Performance Measurement,” LOS’s use may limit the range of potential design solutions considered and lead to capacity expansion. Other findings included:

- The AASHTO Green Book makes clear that designers and engineers should use context and make judgments.
- LOS is an indirect recommendation, not a Federal requirement.
- The requirement for 20-year traffic forecasts applies to changes to the Interstate highway system but not for other roadway classes.
- The FAST Act repealed the provision for specifically improving LOS at intersections.

Florida DOT has undertaken significant research in the area of context-sensitive solutions by emphasizing all modes of travel and flexibility. They have replaced the term “Standards” with “Targets.” Targets are responsive to all users for context, roadway function, network design, and safety.

In 2014, the State of California enacted SB 743, which states that “traffic congestion shall not be considered a significant impact on the environment” within California Environmental Quality Act

(CEQA) transportation analysis.[5] Several California municipalities (e.g. Livermore, Redwood City, San Jose, and San Francisco), have adopted policies that either replaced LOS altogether or limited its application in downtown or transit-oriented districts. Closer to Providence, the City of Cambridge requires developers to analyze LOS for vehicles and pedestrians. City policy allows a project-induced VLOS reduction depending on the existing LOS but prohibits degradation of LOS for people walking.

Moving away from LOS as a critical measure for Great Streets implementation means other measures may be more appropriate to consider. For example, for streets with closely spaced intersections, vehicle queue lengths are important to ensure motor vehicle traffic does not block upstream intersections. Many tools are available for analysts to evaluate and then mitigate such scenarios.

The following language is adapted from the Chicago DOT Complete Streets Design Guide LOS Policy and should be considered as part of the City of Providence's LOS Policy:

> In a typical project, people walking shall enjoy the highest LOS, while drivers shall have the lowest. All LOS shall be relative by mode.
>
> There shall be no minimum vehicle LOS for any project. Within [insert boundaries] the default maximum VLOS for City-initiated projects shall be E. This is not to say that the MVLOS must purposely be lowered, but efforts should not be made to increase it above E. Developer-initiated projects may not negatively impact the MVLOS, unless corresponding increases are made in level of service for people walking, people riding bicycles, or transit.
>
> LOS evaluations shall consider cross flows (especially people walking) as well as corridor flows.
>
> Delay for people walking at signals shall not exceed 60 seconds.
>
> City staff shall utilize multi-hour evaluations instead of peak-hour only calculations.
>
> LOS evaluation shall only be required for projects [exceeding a certain threshold]. It should be calculated when required by funding sources, but shall always be balanced with other factors.

Use and Price Curb Space More Efficiently and Flexibly

Create a working group comprised of various City staff who plan, maintain, use, and enforce curbside space in the City of Providence and other stakeholders such as business improvement districts, residents, business owners, and rideshare companies, to establish a vision and goals for geofencing zones, flexible curb, and dynamic pricing policies. Geofencing uses GPS satellite navigation systems to determine the ground position of cars, curbs, and streets and establishes specific boundaries or zones that delivery drivers and rideshare drivers and users and are routed to through technology in their phones or vehicles. Dynamic use and pricing of curbside spaces allows for rules to change depending on time, demand, and revenue considerations. Dynamic uses, pricing structures, and geofencing reflects anticipated growth in use of ride-hailing and delivery services by Providence residents.

The City should work with stakeholders to identify streets with the most traffic congestion and implement dedicated zones to create safer conditions for rider drop-offs, pick-ups, and deliveries and reduce congestion in key areas. It is important to work with stakeholders to identify the best locations for these activities.

The City should also increase capacity to manage curb space dynamically by building and using a central GIS-based repository of all curbside spaces citywide. Other key issues the City should address include how curb usage will be monitored and enforced, and how potential fees might be collected. New policies should be clearly communicated through signage, paint, and public notices. New regulations and policies must be seen and easily understood by all users in order to be effective.

Coordinate Traffic Signals Citywide

Traffic signal coordination aligns green lights times for adjacent intersections to improve the flow of vehicles along corridors and improve the operation of turning movements for drivers. According to FHWA " Studies have proven the effectiveness of signal coordination in improving safety. The Institute of Transportation Engineers' Traffic Safety Toolbox cites two studies of coordinated signals with intersection crash frequencies that dropped an average of 32 percent... Signal coordination can also contribute to a decrease in red-light running."[6]

5 http://www.dot.ca.gov/hq/tpp/sb743.html

6 https://safety.fhwa.dot.gov/intersection/other_topics/fhwasa08008/sa4.cfm

Continue to Integrate Art and Cultural Planning into Mobility Investments

Living up to Providence's reputation as the "Creative Capital", the CIty continually finds ways to creatively integrate local arts and cultural organizations into infrastructure investments. During a demonstration event on Broad Street in 2018, the City hired three local artists to create temporary ground murals. Using tempera paint, artists and dozens of community members reclaimed excess pavement to create vibrant curb extensions and public plazas. Based on the overwhelmingly positive feedback received during the demonstration event, the CIty should expand the use of ground murals and other similar art integration into mobility projects.

In 2018, the City of Providence Department of Art, Culture + Tourism also convened local partners to generate a series of site-specific performances and temporary art works along the banks of the Woonasquatucket River in anticipation of the upcoming investment in the Woonasquatucket River Greenway. This project is supported by the National Endowment for the Arts and will culminate in a celebration along the river in summer 2019. Following the demonstration event, partners will convene to refine a vision for permanent art infrastructure as part of the larger Greenway project.

The CIty should find additional ways to integrate art and local cultural organizations as additional investments are made and further expand the reach of community members who become engaged in such projects.

Public art and interpretive signage that highlights significant historic or cultural elements will be important parts of the Urban Trail Network, creating interest points along the network that celebrate the diverse cultures of the CIty's neighborhoods.

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

To avoid costly and time consuming studies and to test effectiveness before deploying expensive permanent solutions, many cities experiment by using demonstration projects (sometimes referred to as tactical urbanism). Providence's City Walk project deployed such an approach in the summer of 2018 with great success. The use of demonstration projects is appropriate in locations where concerns about long-term impacts are present, but where the proposed solution is seen as highly beneficial and worth trying. In other projects, such as resurfacing, restriping, minor residential street reconstruction, or spot improvements such as intersection signal retiming and curb ramp construction, the basic Great Streets principles of safe, healthy, inclusive, and vibrant should be applied.

Demonstration projects are low-cost, temporary changes to the built environment, that test ideas to improve local neighborhoods and gathering places prior to investing in costlier permanent solutions. For examples of recent projects, see: https://www.street-plans.com/tactical-urbanism-projects/

Develop a Program to Incentivize Business and Property Owners to Install Bicycle Parking

An increasing number of cities incentivize their businesses to install bicycle parking, including:

- Denver, Colorado: The City's Public Works Rules and Regulations describe a streamlined year-round application process. There is no fee for the installation of the standard U Rake and permit fees for other rake types are waived if the request is in a high demand bicycle parking area. The City regulates the type and location of the installation to ensure the highest usability and safety.
- Pittsburgh, Pennsylvania: The City's Bicycle Parking Guidelines enable businesses to install a standard bike rack. After the application is approved, the business itself installs the rack in accordance with location and design specifications. It is maintained by the City. The business pays a $25 permit fee in addition to the cost of purchasing and installing the rack.
- Portland, Oregon: Administrative Rule TRN 10.9 enables the City to install a free bicycle rack on the sidewalk in front of the requesting business as long as the location meets minimum requirements. The business may request up to two free racks. Each additional rack is $150.
- Rockville, Maryland: The new City Bike Rack Grant Program enables businesses to request – through application – bicycle parking on their property or within public right of way at or near their location. There is no cost to the applicant. The City purchases and installs the inverted-U racks which require a parking space of 72" x 24" and if placed along a sidewalk or pedestrian path, a five-foot clear walkway.

For Providence, bicycle parking near employment, retail, and other destinations enables viable non-motorized transportation options. A mechanism for businesses to request bicycle parking at and near their establishments should be considered.

Evaluate Overnight Resident Parking Permit Program Fee Structure

The City should study and compare fees associated with overnight parking permits in Providence to other US cities to ensure this resource is properly priced. If fees are raised, a tiered fee structure should be used to reduce burdens on low-income households.

Update the City's Public Utilities Agreement to Incorporate Bicycle-Related Provisions

The Public Utilities Agreement should be updated to ensure utility patches do not create hazards for people riding bicycles and that temporary road closures and detours accommodate bicyclists. It should also be mandated that Urban Trail of bicycle-related pavement markings that are covered over or damaged by utility work be replaced in a timely manner.

Prioritize Safety and Comfort for People Who Walk, Ride Bicycles, and Use Public Transit

Deploy Leading Pedestrian Intervals (LPIs) and Increase Pedestrian Signal Timing

LPIs begin the walk signal before the light turns green for cars. Increased pedestrian signal timing ensures people of all ages and abilities have time to walk across the street safely. Cambridge, Massachusetts combines concurrent pedestrian phasing with LPI operations. This practice is recommended in the Boston MPO 2015 Pedestrian Signal Phasing Study which further advises the best concurrent phasing conditions are when the pedestrian flow is less than 1,200 persons/daily; there are conflicting turning vehicles of less than 250 vehicle/hour; there are low concentrations of older and very young pedestrians and students; the intersections have good sight distances; and the length of crosswalks is less than 55 feet.

LPIs help address concerns about whether there is sufficient time for people to safely walk across streets. The current City of Providence practice is to follow guidance in Section 4E.06 (Pedestrian Intervals and Signal Phases) in the Manual on Uniform Traffic Control Devices (MUTCD).[7] The guidance provides the City with some flexibility and establishes parameters for deploying LPIs, which give people walking a 3 to 7 second head start when entering an intersection with a corresponding green signal in the same direction of travel. Studies show that LPIs reduce pedestrian-vehicle collisions as much as 60 percent. According to FHWA, LPIs increase the visibility of crossing pedestrians; reduce conflicts between pedestrians and vehicles; increase the likelihood of motorists yielding to pedestrians; and enhance safety for pedestrians who may be slower to start into the intersection. Applications have been successful in Stamford, Connecticut which operates the state's first LPI. The City plans to expand its use. In New York City, pedestrian fatalities have fallen 45 percent since 2013. This is partly attributed to the recent installation of 832 LPIs bringing the total number citywide to 2,334; a seven-fold increase since 2013. LPIs are recommended in the NACTO Urban Design Guide. Moreover, according to national research [Transportation Research Record 2198, 2010], a before-and-after comparison to evaluate the safety effectiveness of LPIs found a 58.7 percent reduction in pedestrian–vehicle crashes at the tested intersections. Because of the low cost for implementation, use of LPI is further justified.

Simultaneously, the City should study increases to pedestrian signal timing at intersections citywide to ensure adequate time is provided, especially at intersections that require people to cross multiple lanes of vehicular traffic.

Implement Automatic Recall of WALK signals

Automatic recall of WALK signals provides a WALK indication as part of each signal cycle without a push button. This should be implemented at signalized intersections but not at mid-block locations. Most intersections in Providence use concurrent pedestrian phasing, where people walking cross with the parallel vehicle phase and vehicles turn left or right across crosswalks after yielding to people walking in them. Automatic recall would not impact the City's use of concurrent phasing.

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

According to America Walks, "A no-right-turn-on-red (NRTOR) policy [prohibits] RTOR unless otherwise permitted at specific locations by posted signs. NRTOR policies could ban right turns in urban or high-pedestrian-density areas at all times or only during daytime hours, which is the time most pedestrian crashes occur."[8] The City of New York, where pedestrian activity is very high, has such a policy.

The main benefit of a citywide policy is it eliminates the need to install and maintain NTOR signs at each signalized intersection. However, applying NTOR in less dense locations where pedestrian activity is low leads to inconsistent driver behavior and enforcement challenges.

Section 2B.54[9] of the MUTCD provides NTOR sign guidance:

A No Turn on Red sign should be considered when an engineering study finds that one or more of the following conditions exists:

a. Inadequate sight distance to vehicles approaching from the left (or right, if applicable);

b. Geometrics or operational characteristics of the intersection that might result in unexpected conflicts;

c. An exclusive pedestrian phase;

d. An unacceptable number of conflicts between people walking and driving with right-turn-on-red maneuvers, especially involving children, older people, or persons with disabilities;

e. More than three right-turn-on-red accidents reported in a 12-month period for the particular approach; or

f. The skew angle of the intersecting roadways creates difficulty for drivers to see traffic approaching from their left.

7 https://mutcd.fhwa.dot.gov/htm/2009/part4/part4e.htm

8 https://americawalks.org/ban-right-turns-on-red/

9 https://mutcd.fhwa.dot.gov/htm/2009/part2/part2b.htm

Signal Detection and Actuation - Detection in Bike Lane and Bike Box. Souce: NACTO.

America Walks guidance adds the following to this list:

- Central business districts and dense urban areas where there are significant variation in traffic volumes and people walking
- Intersections:
  - With high traffic speeds on the intersecting street
  - Where there are heavy volumes of people walking
  - Where disabled persons request it
  - Adjacent to parks and hospitals
  - At school crossings
  - At railroad crossings
  - At traffic signals with three or more phases

Increase Enforcement to Prevent Blocking of Intersections, Crosswalks, Bike Lanes, Bus Stops, and Sidewalks

Both police officers and parking enforcement personnel should be directed to patrol for and issue citations when encountering vehicles or other obstructions impeding people walking or riding bicycles or blocking bus stops. Special attention should be paid to valet locations.

Increase Enforcement of Sidewalk Snow Removal

Due to existing capacity issues, additional funding is needed to dedicate staff members to inspection and enforcement of the City's snow shoveling regulations.

Expand the City's Use of New Technologies

Technologies to consider include:

- A network of strategically mounted traffic and security cameras that feed into and are monitored real-time within a Public Safety information center;
- A remotely controlled LED lighting system that safely illuminates the Urban Trail Network;
- Bicycle and pedestrian detection systems tied to traffic signal operations;
- Transit signal priorities; and
- Dynamic message signing.

New Orleans, Louisiana has a Traffic Camera Safety Program to deter red light violations, reduce speed violations, increase driver awareness, and reduce collision severity. The City has found the program deters repeat offenders. Over 80 percent of those receiving a traffic camera citation and pay it, do not repeat the offense.

In Worcester, information generated by security cameras on traffic signals is fed into the Worcester Police Department real-time crime center.

Transportation technologies in Seattle include traffic cameras and signal and roadway detection systems for pedestrians, bicycles, and the visually impaired. The citywide traffic camera network enables the public online access to real-time congestion information and images, and traffic advisories. There is transit signal priority (TSP) for Sound Transit buses, streetcars, and light rail trains. The City also uses dynamic message signs for en-route drivers.

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

As noted previously, the 2017 RIPTA Bus Stop Design Guide establishes design principles applicable to future projects. Because many stops are old, it will take some time to implement improvements to the bus stop network. As the Great Streets Initiative advances, it will be important to include bus stop redesign as part of the planning process.

Advocate for Friendlier State Laws and Policies Related to Mobility

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

The current RIDOT Design Manual, which dates to 2008, needs updating to reflect new design concepts for bicycling, walking, and micromobility. Many state departments of transportation have revised their design manuals to incorporate context sensitive solutions that better accommodate people who walk, ride bicycles, and use other micromobility options. The Massachusetts Department of Transportation published its Project Development and Design Guide in 2006 and a Separated Bike Lane Planning & Design Guide in 2015.[10] Tennessee DOT's (TDOT's) 2019 updates[11] to its design guide includes a section on multimodal design, which states:

> It is TDOT's policy to create and implement access and mobility for users of all ages and abilities through the planning, design, construction, maintenance and operation of new construction, reconstruction and retrofit transportation facilities that are federally or state funded. Users include, but are not limited to, motorists, bicyclists, pedestrians, transit-riders, and freight carriers. The intent of TDOT's policy is to promote the inclusion of multimodal accommodations in all transportation planning and project development activities at the local, regional and statewide levels, and to develop a comprehensive, integrated, and connected multimodal transportation network. These guidelines have been developed to assist TDOT, local agencies, consultants and others in providing multimodal facility design that fulfills the intent of this policy. TDOT's Multimodal Project Scoping Manual is an additional multimodal design resource.

Work with the State Legislature to Adopt the "Idaho Stop Law" to Improve Safety

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. Until recently, Idaho was the only state that had both a stop as yield rule and a red light exception that allows people riding bicycles to proceed through red lights after yielding. In 2019, Arkansas became the second state to enact Idaho Stop. In 2017, Delaware approved a variation, Delaware Yield, which applies only to stop signs.

Idaho Stop is reported to have reduced bicycle injuries by 14 percent in the state the year after passage. Moreover, a 2010 Berkeley study found bike safety to be 30 percent better in Idaho cities than comparable peers. The law is supported by the League of American Bicyclists. Changes to state laws would be necessary to implement this measure in Rhode Island.

Photo: JUMP

10 See https://www.mass.gov/lists/design-guides-and-manuals

11 See https://www.tn.gov/content/dam/tn/tdot/roadway-design/documents/design_guidelines/DG-S9.pdf

Expand Opportunities for Engagement, Education, and Encouragement

Expand Youth Bicycle Education Programming to Citywide

Bicycle education programming helps encourage youth to ride bicycles, teaches safe riding skills, and increases their long-term comfort with accessing new bicycle infrastructure.

From 2015 to 2017, Providence piloted Pedal Power bike education classes at two elementary schools and several recreation centers in partnership with local non-profit, Recycle-A-Bike. The six-week classes teach youth safe bicycle riding skills and include group on-road field trips so youth can become familiar with local bicycle infrastructure and safe routes from their neighborhoods to schools, regional trails, local parks, and other civic institutions. By providing this programming at all 11 recreation centers for just two years, the CIty could engage 260 youth ranging in age from 11 to 14 (and their families).

Expand the City's Street Ambassador Approach to Public Engagement

New and innovative community engagement techniques, such as the City's existing Street Ambassador approach, further advocacy, coordination, and involvement from community members, especially those typically marginalised from traditional planning processes. Expanding upon the City's successful launch of a Street Team as part of the City Walk project in 2018, the City should continue to support the Street Ambassador program to hire, train, and deploy community members at community events and in everyday environments to inform community members of upcoming public realm improvements, collect input on projects being planned or considered, and spread awareness of opportunities for further engagement. In particular, this team should focus on additional areas to increase equity in the City's mobility work. Street Ambassador approaches allows 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 low-income memberships for the City's bike share and scooter share programs.

Establish a "Friends of the Urban Trail Network"

A "Friends of" group would build on and strengthen existing relationships to ensure vocal, sustained community support for this work, while uniting various organizations around a common purpose, shepherding our urban trails to completion, and developing a stable maintenance plan. This group should be a coalition of existing neighborhood organizations and other groups already engaged in the Urban Trail Network and projects included in it like City Walk, the Downtown Providence Parks Network, and the Woonasquatucket River Greenway.

Re-launch Safe Walking, Driving and Biking Public Safety Campaign

In 2018, the City launched a #PVDTrafficSafety campaign to provide information on new changes to street markings and traffic signals (such as bike signals, bus signals, bus only lanes, two-stage turn boxes, green ladder crossings) coming to Providence. The campaign was created to teach community members to navigate these new markings and signals and why such improvements are important for keeping all road users safe.

Expand and Enhance Community Rides

On the first Thursday of every quarter, Mayor Elorza leads Bike the Night, an inclusive community ride that brings community members together for a eight- to ten-mile slow ride through different neighborhoods. The City should work with community partners, neighborhood groups, institutions, and businesses to expand and further enhance these rides or similar rides such as "Providence Bike Jam" to reach more residents and community members.