# Research & Recommendations

Public Realm

Mary Coughlin Nora Tufano

### Pawtucketville & the Public Realm



#### Introduction

The public realm encompasses everrything from public schools to parks to streets and sidewalks. Pawtucketville's public realm has strong open space assets, most notably the Lowell-Dracut-Tyngsboro State Forest and the Lowell Heritage State Park, which runs along the Merrimack River. It is also home to UMass Lowell's North Campus, which includes additiona green space.

The fabric of Pawtucketville is considerably less urban than much of the rest of Lowell. West Pawtucketville in particular is much less dense and more suburban. It is also primarily a car-driven culture, with very few locations accessible on foot or by public transit, and little bicycle infrastructure. Access to the neighborhood is limited by its three bridges that connect it to the rest of Lowell.

#### **Elements of the Public Realm**



On a square-foot basis, Pawtucketville has more open space than almost any other neighborhood in Lowell.

Perhaps the most unavoidable

aspect of the public realm, Right

of Way primarily includes streets

and sidewalks.

**Open Space** 



Right of Way

Waterfront

In addition to public space concerns, the waterfront is also highly susceptible to flooding and environmental concerns.

#### **Our Goal**

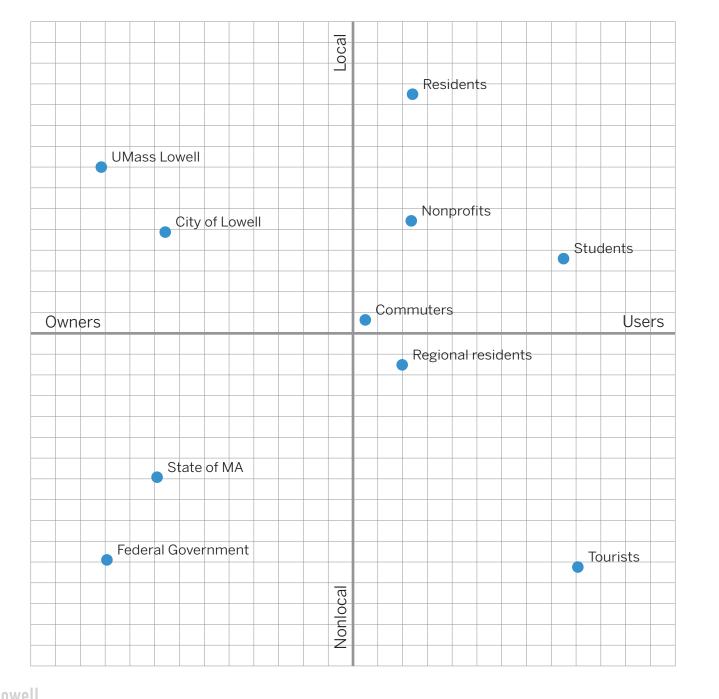
We utilized both empirical research and conversations with community members to understand the current conditions of Pawtucketville's public realm. Based on this research and outreach, we established a set of recommendations for Pwtucketville's public realm moving forward.

Our recommendations all center around a desire for connectivity. All three proposals rest on the idea of a central spine for Pawtucketville that connects the neighborhood from East to West, and from the Merrimack to the State Forest.

We believe that if these recommendations are adopted, Pawtucketville can become a central node for recreation and health within Lowell and the region.

#### Who has a stake in the public realm?

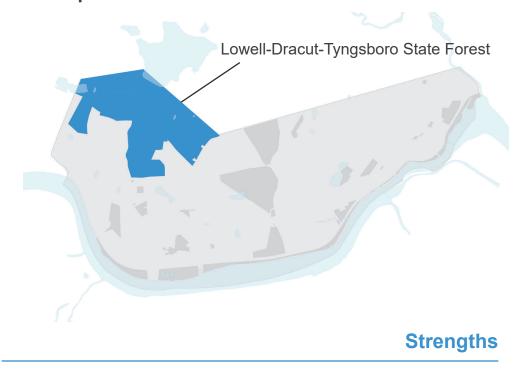
Stakeholders in the public realm can include anyone who lives in or visits Pawtucketville. For the purposes of this analysis, residents and workers have the greatest stake, as they interact with the public realm on a daily basis.



Lowell Neighborhood Initiative

orhood Neighborhood tiative Initiative

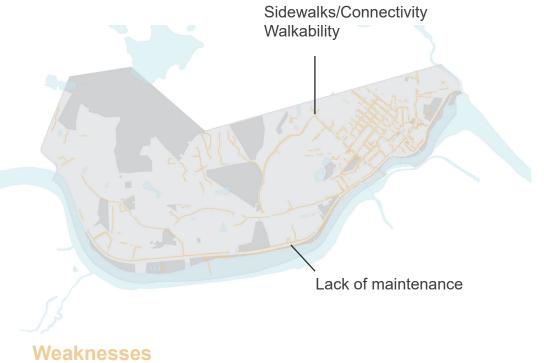
# What are the strengths, weaknesses, opportunities, and threats of Pawtucketville's public realm?



Waterfront





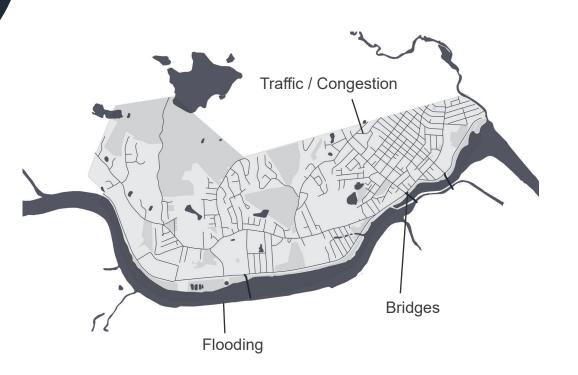




Lowell Heritage State Park









**UMass Lowell** 

Lowell Neighborhood Initiative

4

# **Current Conditions: Open Space**

#### **Users**

Neither the city nor the state release data on the number of users of open spaces in Lowell. From observation and from various online review databases (Yelp, Google, Tripadvisor), we know that parks are frequently used by families and for events. The Heritage State Park has a series of summer concerts and festivals that seem to be relatively well-attended. However, sentiment from surveyed stakeholders indicates that usage of the Forest cWould be improved upon.

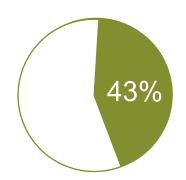
#### **State and City Owners**

Much of Pawtucketville's publicly owned land belongs to the state, not the City. State owned land includes the State Park and University of Massachusetts and is controlled by several different entities, primarily the Massachusetts Department of Conservation and Recreation.

#### The suburban character

The suburban character of West Pawtucketville in particuclar is enforced by the large amounts of open space in the area, including the Lowell-Dracut-Tyngsboro State Forest and Lowell Heritage State Park.

**Concentration of Open Space** 

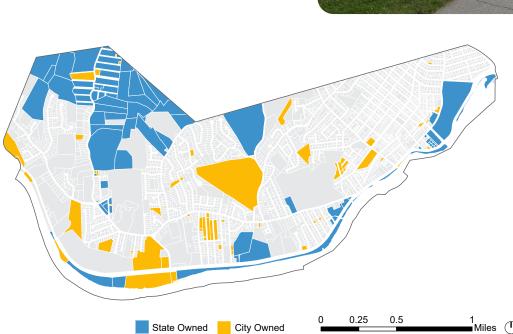


43% of Lowell's Open Space is located in Pawtucketville



**Key Spaces** 







Lowell Neighborhood Initiative

Coughlin, Tufano

## **Current Conditions: Right of Way**

#### **Overview**

Streets and sidewalks are the element of the public realm that most people interact with most frequently. While modes of interaction may vary, the right of way is key to an effective public realm.

In Pawtucketville, there are three main challenges to the right of way infrastructure: sidewalk conditions, maintenance, and connectivity.

#### **Access to Alternative Modes of Transportation**

#### **Pawtucketville**

39



#### **Lowell Overall**



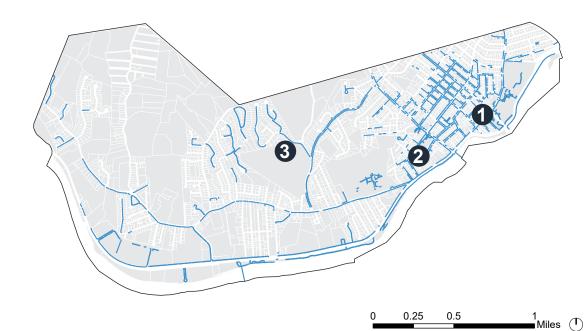
Source: walkscore.com

# **Sidewalks Streets** Neighborhood

## Lowell Initiative

#### **Sidewalk Conditions**

Pawtucketville's East-West divide is visible in the lack of sidewalks and walkability in East Pawtucketville. However, even in Pawtucketville's main corridors, sidewalks are not always as advertised.





#### **University Ave**

Pawtucketville's best sidewalks are along UMass Lowell's campus and are maintained by the university per their Master Agreement.

Lowell Neighborhood Initiative



#### Varnum Ave

The speed limit on this four-lane road is 45 mph. While it has a sidewalk, it is narrow and does not allow for passing. Across the street is the end of the Lowell Heritage State Park, which does not have a sidewalk.



#### **Acropolis Road**

As you get further into suburban West Pawtucketville, sidewalks are even sparser. Pictured here is the "sidewalk" of Acropolis Road directly across from an entrance to the State Forest.

Neighborhood

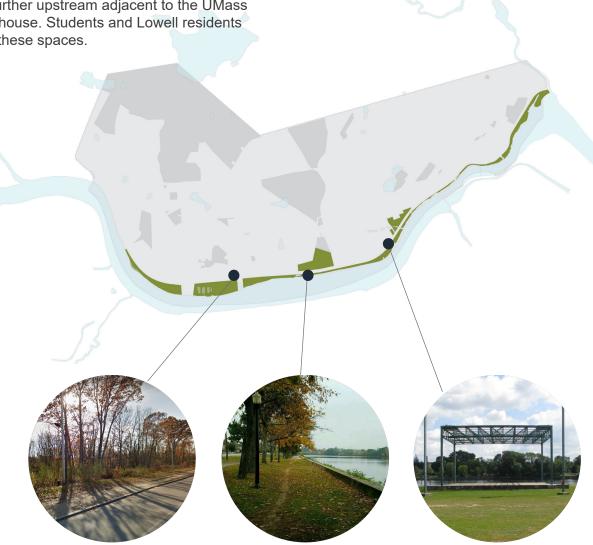
# **Current Conditions:** Waterfront

#### **Users and Stakeholders**

As stated previously, many of the most used public open spaces in the neighborhood are along the waterfont. Heritage State Park is a narrow park that runs along the Merrimack and makes up the majority of the waterfront park space. During the warmer months of the year, the neighborhood and city host festivals, concerts, regattas, and other activities in the park as well as at Sampas Pavillion, a public stage for such events. Another popular waterfront spot is Vandenburg Esplanade, which is located further upstream adjacent to the UMass Lowell boathouse. Students and Lowell residents alike enjoy these spaces.

#### **Maintenance**

After some further research, it was discovered that while these parks are frequented regularly by many, residents and students alike have complained of the waterfront's lack of maintenance in regards to both trash and smell due to sewage running into the river. Much of the riverfront open space is owned by the state and is maintained by them.



Western edge of Vandenberg Esplanade

10

Heritage State Park

Sampas Pavillion

#### Lowell Neighborhood Initiative

#### **Flood Zones and Wetlands**

While the river is one of the great attractions of Pawtucketville and Lowell as a whole, there remains an ongoing flooding issue along the neighborhood's waterfront and several brooks. Over the past two decades there have been at least two storms that resulted in a "100 year" flood. Both of which flooded the majority of Pawtucket Boulevard along the waterfront.

Existing bodies of water
100 year flood zone
500 year flood zone



Residents and dog along Pawtucket Boulevard during flood

Flooding along Pawtucket Boulevard

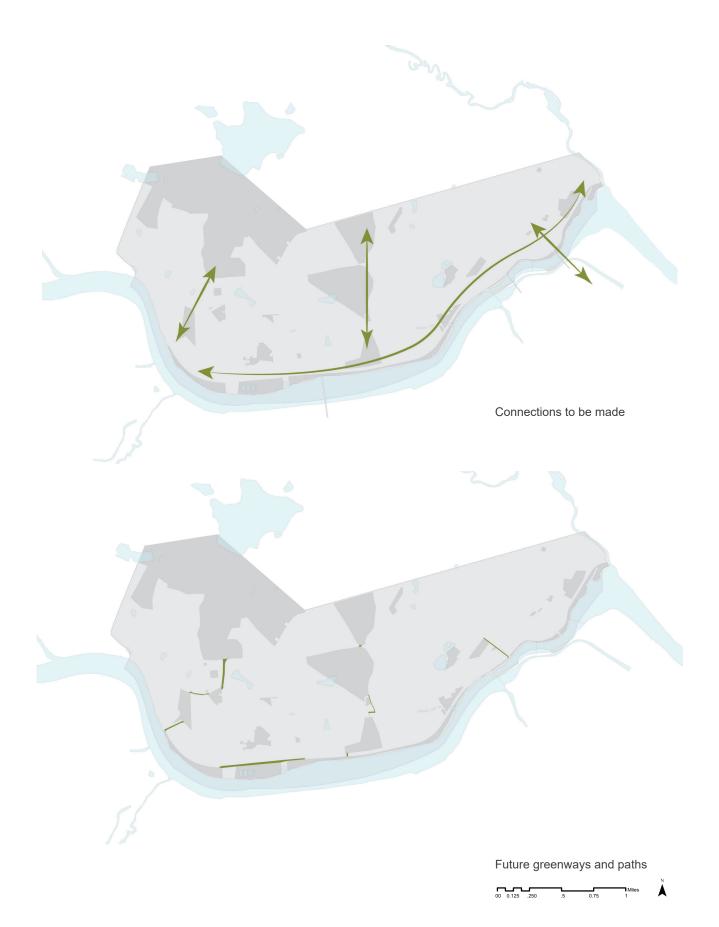
# Reccomendation I Connecting the Public Realm



# Making Connections in Pawtucketville

Over 43% of the public open space in Lowell resides in Pawtucketville. Much of this land is underutilized due to the inaccessability of it. The State Forest for example is an amazing resource for recreation, however many of Pawtuckville's residents do not take advantage of the forest because it seems difficult to get to. Our plan is to create a network of open space in Pawtuckville in order to increase the neighborhood's accessibility and walkability. By doing so, this new network will spatially unite Pawtucketville allowing for more pedestrian movement from East to West and to the North, while also enhancing the suburban Massachusetts outdoor experience.





Lowell Neighborhood Initiative

Coughlin, Tufano

#### **Making Connections in Pawtucketville**

In order to create a cohesive network of the public open spaces of Pawtucktville, greenway linkages that will include walking paths and/or bike paths will be made between the various key parks. Each greenway and pathway takes into account potential private versus public property restrictions, thus more narrow connections have to be made.



Connecting waterfront along Claypit Brook to the State Forest

UMass Lowell Shuttle Stops



14

## Reccomendation II An Improved Public Experience



#### **Creating a Sense of Place**

What does it mean to "create a sense of place"? A sense of place is made through personal experience, social interaction and local identity. In the public realm this may mean building a cohesive visual narrative that increases these interactions and experiences. When people come to Pawtucketville, we want them to know the neighborhood and it's more suburban and historical values. This can be done by including a more cohesive design throughout the pedestrian experience in public parks, open spaces, and sidewalks.

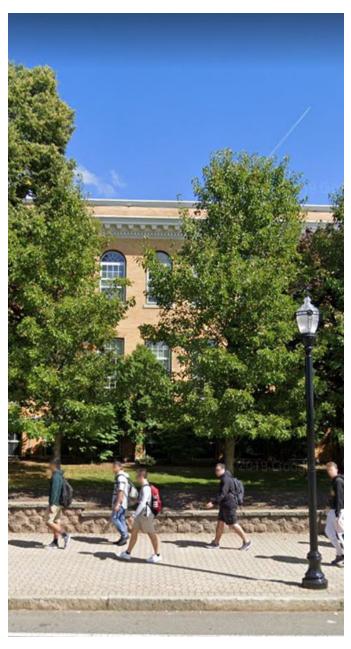
#### **Right of Way**

16

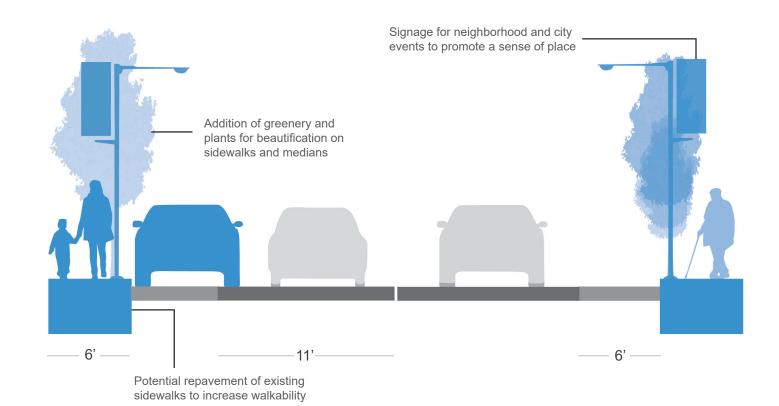
As stated previously, streets and sidewalks are the element of the public realm that most people interact with most frequently. We reccommend that streets and sidewalks include more lighting, street furniture, landscaping, the repavement of existing sidewalks and potentially widening them to enhance accessibility.

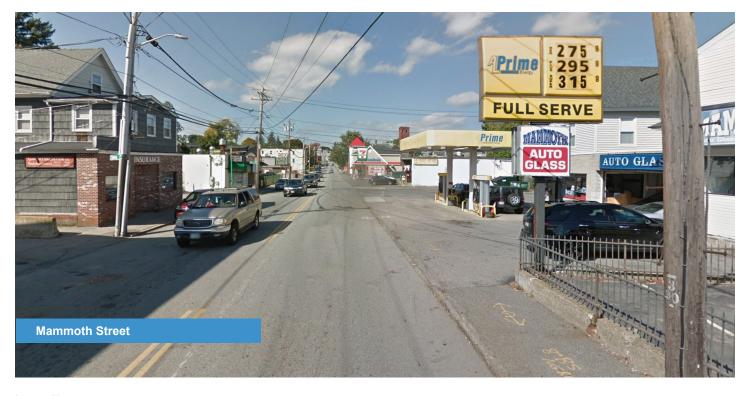
#### **Parks and Open Space**

The same should be implemented within parks and open space. We also recommend a neighborhood-wide public realm maintenance initiative. This initiative would include new trashcans along main streets and within parks as well as a volunteer based group working to keep public spaces clean in order to enhance usage and resident's happiness.



Lowell Neighborhood Initiative





Lowell Neighborhood Initiative

17

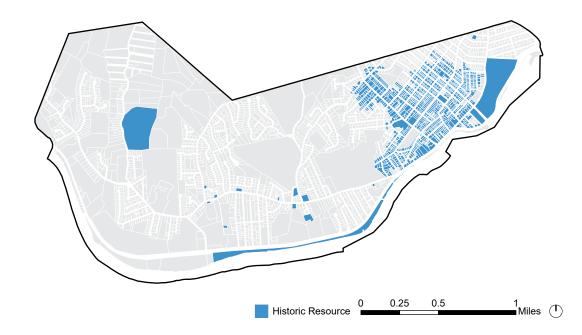
## Recommendation III Strengthening Sense of Place



#### Tying the Public Realm together

From historic floods to presidential visits to colonial burial grounds, Pawtucketville has its own history that has not always been included in the predominant narrative of the Lowell mills that is the best known piece of the town's history. This program will take advantage of the improved connectivity and experience from Recommendations I and II to bring that history to life for visitors and residents alike. Additionally, we hope that by understanding the past, visitors can also imagine the neighborhood's future.

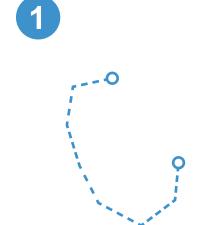


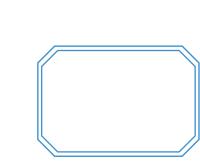


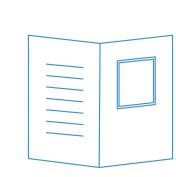
#### MERRIMACK RIVER AT PAWTUCKET FALLS, LOWELL, MASS. (OCTOBER 24)

"I think it certain, however, that the quantity of water flowing in the river was somewhat greater in 1785, as the height at Nashua was about 2 feet higher in 1785 than in 1852 as I ascertained by inquiry in 1852. The extra height in the latter year at Lowell, if any, can be fully accounted for by the obstruction [masonry bridge below dam] which did not exist in 1785" (Francis, 1885).









#### **Walking Trails**

In addition to existing trails within the State Forest, new trails would show walkers and bikers how to navigate Pawtucketville via the neighborhood's notable sites. Nodes for these trails would include the Forest, Heritage Park, and University.

#### **Plaques and Markers**

By placing plaques and markers at historic sites—from major flood lines to colonial homes—the public will interact with Pawtucketville's character spontaneously. These efforts will complement the trails and content for those who are not actively seeking out information.

#### **Publications**

For people interested in diving deeper into Pawtucketville, publications will elaborate on the site descriptions and history featured on the trails and plaques. Information will be available both in print in local businesses and offices, and online.

19

Lowell Neighborhood Initiative

Neighborhood

Initiative Initiative

## **Implementation**

20

#### **CONNECTIONS**



#### **EXPERIENCE**



Welcome to
PAWTUCKETVILLE
Annexed 1874

#### **Cost of Project**

flexible, \$2m - 16m

#### **Partners**

City of Lowell, Massachusetts Department of Parks and Recreation, Mass DOT, National Parks Service

#### **Phasing**

Phase 1: preconstruction

Phase 2: Waterfront connector project

Phase 3: West waterfront to State Forest

connector greenway

Phase 4: Central waterfront through LeBlanc park connector project

#### **Outputs**

New greenways and paths connecting the neighborhood's open spaces

#### Outcomes

A new accessible network of public open spaces connecting the waterfront, Pawtucketville residents, and city of Lowell by foot to a currently underutilized strength of the neighborhood.

#### **Cost of Project**

flexible, \$1m - 8m

#### **Partners**

City of Lowell, Massachusetts Department of Parks and Recreation, Mass DOT

#### **Phasing**

Phase 1: preconstruction

Phase 2: infrastructure maintainance

Phase 3: Sidewalk repaving

Phase 4: Addition of street and park landscaping

Phase 5: Addition of street and park furniture,

lighting, signage etc.

Phase 6: The implementation of a volunteer based park maintainence program

#### **Outputs**

New sidewalks, lighting, and greenery. A park and street maintainence initiative

#### **Outcomes**

Will improve sense of place in Pawtucketville. Not only will this improve the pedestrian right of way experience, but also it will enhance the experience of park visitors and increase property value.

#### Cost

Flexible, \$1-3 million

#### **Partners**

Lowell Historical Society, City of Lowell, Massachusetts Department of Conservation and Recreation

#### **Phasing**

Phase 1: Compile and print online and physical guides. Apply for grants for plaques and markers (National Trust, Pomeroy Foundation, etc.)
Phase 2: Plaques and physical guides in place, marketing campaign

#### Outputs

Publications and trail guides (print and online)
Plaques and markers

#### **Outcomes**

Improved sense of neighborhood identity Enhanced interaction in the public realm Increased desirability of Pawtucketville

