



TRANSPORTATION CORRIDORS TO LIVABLE COMMUNITIES

*Enhancing Transit, Land Use,
and Art and Cultural
Opportunities along
Providence's Highest Use Bus
Corridors*

CITY OF PROVIDENCE
DEPARTMENT OF PLANNING AND DEVELOPMENT
*IN PARTNERSHIP WITH THE DEPARTMENT OF ART, CULTURE + TOURISM
AND THE RHODE ISLAND PUBLIC TRANSIT AUTHORITY*

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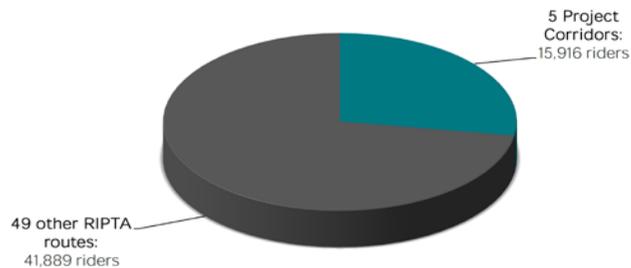
EXECUTIVE SUMMARY

Project Overview

In 2010, the City of Providence and the Rhode Island Public Transit Authority (RIPTA) were awarded a Community Challenge Planning Grant through HUD’s Office of Sustainable Housing and Communities to conduct the Transportation Corridors to Livable Communities study. The project focused on enhancing transit, land use, and art and cultural opportunities along the highest ridership bus routes in the city— Broad Street, Chalkstone Avenue, Elmwood Avenue, Manton Avenue, and North Main Street. Transportation Corridors to Livable Communities is an innovative project that will improve bus service, encourage mixed-income housing, generate jobs, and build on the City’s reputation as the “The Creative Capital” of Rhode Island by showcasing arts and cultural opportunities. By working together with RIPTA, the City has identified ways to enhance transit service, improve bus stops, add pedestrian amenities, encourage the development of mixed-income housing and create opportunities for good jobs and the arts on each of the five project corridors. With HUD’s support, the City of Providence is already in the process of implementing the changes recommended in this report in order to build upon the place-making role of transit to revitalize our City and highlight our unique neighborhoods.

TRANSIT + LAND USE IMPROVEMENTS

Increasing the effectiveness and efficiency of transit service will result in changes to how those that live and work in Providence move around the city and will reduce household transportation costs for residents in these areas by increasing transit ridership and walkability and reducing reliance on automobiles. RIPTA’s first Rapid Bus line launched in Spring 2014 on the two highest use bus routes in the state— routes 11 and 99— that run along Broad and North Main streets, connecting both Pawtucket and Cranston to downtown Providence. RIPTA used federal funds to convert these two routes to a single Rapid Bus route. Rapid Bus is similar to Bus Rapid Transit (BRT) systems seen in many other cities, without the addition of a dedicated bus lane. Buses travelling along the route have signal priority at intersections and bus stops have unique branding. Future improvements to bus stops, passenger amenities, and bus service along the other three project corridors— Elmwood, Chalkstone, and Manton avenues— will improve the transit experience and will establish these bus routes as the next to receive additional investments.



Nearly one-third of RIPTA’s statewide ridership base is comprised of the five bus routes that operate along the project corridors— Route 11 on Broad Street, Route 99 on North Main Street, Route 20 on Elmwood Avenue, Route 27 on Manton Avenue, and Route 56 on Chalkstone Avenue.

For more information on RIPTA’s Rapid Bus initiative, please refer to the “What is Rapid Bus?” section of the Executive Summary.

In addition to being the highest use bus routes in Providence, the five corridors of Broad Street, North Main Street, Elmwood Avenue, Manton Avenue and Chalkstone Avenue were also selected because of the availability of developable land for housing and new businesses to create hubs of activity near transit stops. Linking development directly to transit connects residents to jobs and employment centers, and creates jobs and investment in areas that are most in need.

To complement RIPTA's transit investment, the City is working to ensure that the five project corridors support transit-oriented development through the second phase of the project, a new Providence zoning ordinance and zoning map changes. A key long-term outcome of the project will be the redevelopment of vacant or underutilized parcels along the selected corridors to create mixed-use community hubs that are directly served by transit. The development scenarios that have been produced for key hubs along each of the five project corridors and the creation of strategies to integrate arts and culture with future development at those locations will create lively urban places that will encourage activity and enable residents to enjoy a lifestyle that is less reliant on automobiles for personal travel needs. Enhancing livability through investments in community hubs at key nodes also, in turn, ensures the success of the transit investment in those areas. Future development scenarios have been evaluated against both the desires of the community and current zoning regulations; where conflicts with current zoning exist, appropriate adjustments will be included in the City's new zoning ordinance.

“A sound transportation system not only benefits individual property owners, but also creates the foundation for a community’s long-term economic well-being.”

Lawrence Yun, Chief Economist, National Association of Realtors

LINKING TRANSIT + LAND USE TO THE ARTS

Providence is rich in cultural diversity and artistic and creative expression, yet for many of its residents, limited resources and transportation options may present obstacles from fully accessing and participating in arts and cultural opportunities. Through the *Transportation Corridors to Livable Communities* project, the City has worked to integrate arts and cultural opportunities into neighborhood-based community hubs, build community and foster neighborhood vitality through increased access and diversified cultural participation, and increase access to art, culture, and creativity at the street-level in order to catalyze social and physical change in the neighborhoods located along the key corridors.

RIPTA and the City have partnered together to implement bus stop, streetscape, and public art enhancements along the five project corridors over the coming years. Transit and pedestrian amenities along each corridor will have a cohesive look that will reflect local neighborhood culture, history, and heritage and help create a clear identity for each corridor. Over the course of this project, the City has worked with the community and local stakeholders to develop interpretive themes for each corridor that will celebrate the unique identity of these significant areas.

INTERPRETIVE THEMES:

NORTH MAIN STREET: LIVING WITH HISTORY

BROAD STREET: EXPERIENCING WORLD CULTURES

ELMWOOD AVENUE: GATEWAY TO OPPORTUNITY

CHALKSTONE AVENUE: HONORING PROVIDENCE’S WORKERS

MANTON AVENUE: CREATIVE ENERGY AND INDUSTRIAL HERITAGE

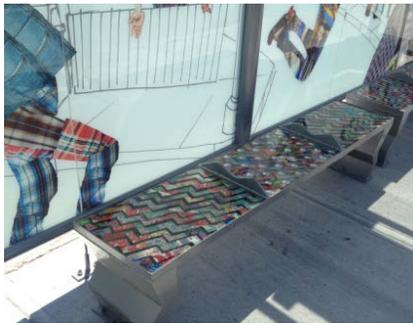
In July 2013, the City of Providence Department of Art, Culture + Tourism and the Department of Planning and Development in partnership with the Rhode Island Public Transit Authority (RIPTA), invited artists to submit concepts for art panels and seating to be included in select bus shelters along Broad and North Main streets in Providence. Artist proposals reflected the interpretive theme established for each corridor. As part of the Art in Transit program created by this partnership, thirteen artists or

For more details on the individual themes, cultural resource inventories, and corridor specific action items that have been developed for each of the five project corridors, please refer to the “Arts & Cultural Opportunities Analysis” section of each corridor sub-chapter within this report.

artist/fabricator teams were ultimately selected to produce eight panel and four seating installations for Broad Street and six panel and three seating installations for North Main Street. As funding is secured in the coming years, additional public art enhancements will be added to Elmwood, Chalkstone, and Manton avenues.

“Just one piece of public art revitalizes a whole street... It makes people look out their window or walk down the street and feel proud. And then there’s this one nice thing on the street and then there’s garbage on the street so you start picking up garbage. I’ve seen it happen, people just start taking care. And then people come from two streets over to look and you start having foot traffic and you start having community. Making that investment, and then making it multiple times along this rapid transit line, it’s like opening the gates to improvement.”

Anna Snyder, Art in Transit artist



Artwork located at bus stops along the R-Line reinforces the interpretive themes established for each corridor.



Successful examples of using cultural resources to animate key nodes include the use of a vacant store front along Broad Street for a “pop up” concert (left) to increase cultural vibrancy and SouthLight (right), a temporary light installation created for Grace Church Cemetery. In February 2013, Community MusicWorks, a community-based music education organization, partnered with Stop Wasting Abandoned Property (SWAP), a private non-profit community development corporation, to put on the series of experimental music concerts in a vacant storefront at the Trinity Square community hub on Broad Street. Developed by students at Rhode Island School of Design (RISD), the Southlight light intervention also enlivened Trinity Square and the surrounding public realm.

“Forming an identity of place can be hugely transformative. How people feel about a place helps them become community stewards.”

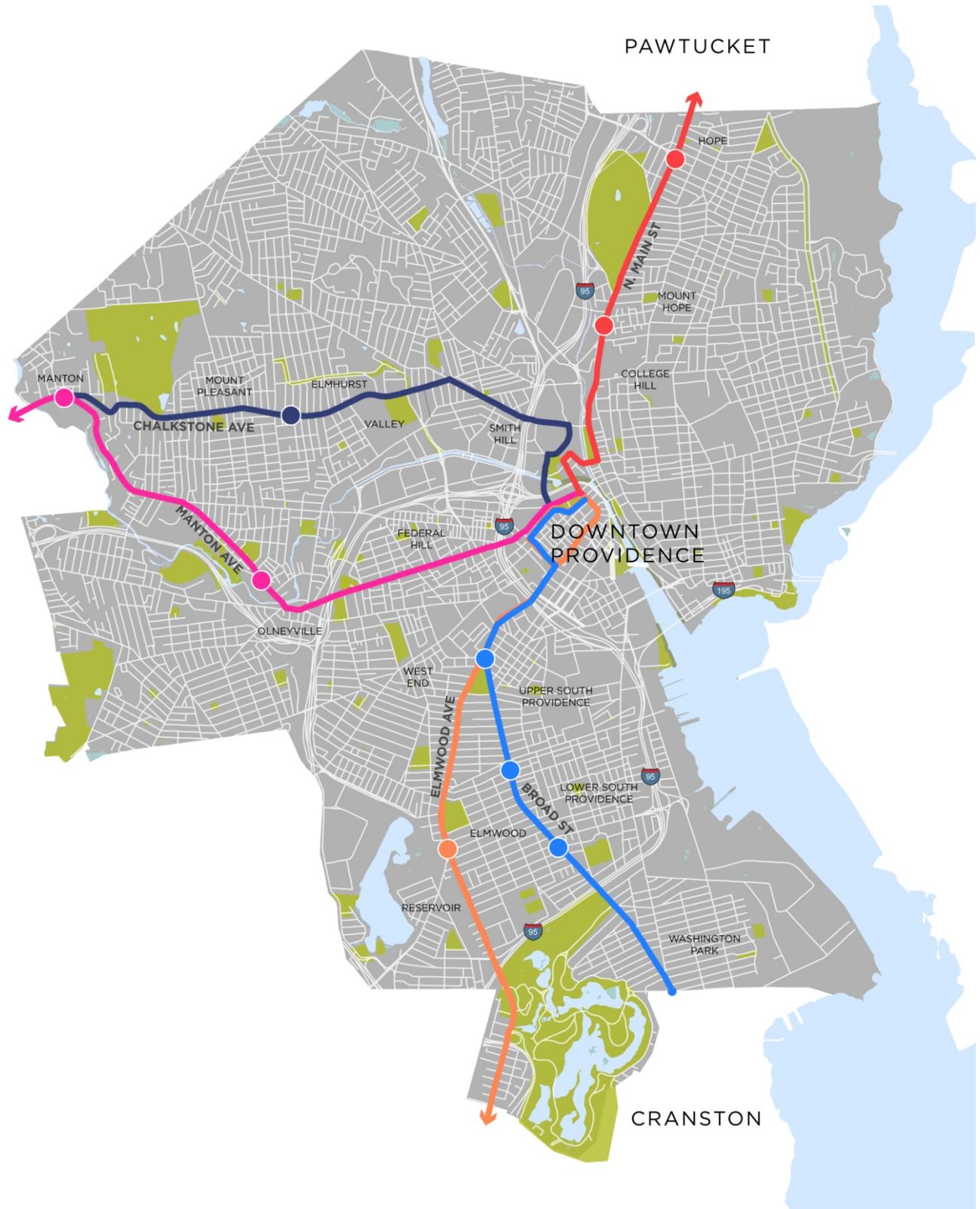
Tom Borrup, Creative Community Builders



In addition to development of themes for each project corridor, the City’s consultant, Dreeszen & Associates, worked with the Department of Art, Culture and Tourism and Department of Planning and Development staff to document existing arts and cultural resources and develop strategies to use arts and culture to animate key nodes along the five study corridors. Creative placemaking strategies that emerged from the project include: supporting programs or special events that enliven places, demonstrate viability of underused spaces, and create opportunities to participate in creative community life; reducing eyesores or hazards with artistic treatments, such temporary murals or creative fencing; and creating or modifying public places employing creative design and public art to celebrate the unique character of neighborhoods, help define communities, and, provide welcoming places to gather.

Important cultural references have been noted on wayfinding maps and cultural content located on wayfinding totems at high volume bus stops along Broad and North Main streets. At the Trinity Square R-Line stop, the totem features famed opera singer Sissieretta Jones who is buried in the nearby cemetery.

THE PROJECT CORRIDORS



North Main Street serves as a major bus route and key connector between Providence and Pawtucket. Among the many historic buildings standing along the corridor are: King's Chapel (St. John's Episcopal Church), built in 1722; First Baptist Church, built in 1726; Colony House (the former State House), built in 1731; and the Jeremiah Dexter House. The North Burial Ground, which occupies a large area along the northwestern flank of the corridor, and Roger Williams National Memorial which sits along the southern end of the corridor are important cultural resources for the City.

Although the area surrounding North Main Street was settled in the 17th century, the area did not experience any significant development until the 18th and 19th centuries as industry was established along the Moshassuck River. In the early part of the 20th century, rapid commercial expansion and urban renewal projects had an enormous impact on the physical structure of North Main Street resulting in a corridor that is primarily auto-oriented with many buildings set back from the street with ample parking areas.

Until recently, North Main Street was a key shopping destination, with retailers such as Sears and Anderson-Little serving as anchors. Over time, these major retailers have closed or moved to suburban locations. Combined with the many surface parking lots and other underutilized properties along the corridor, these vacant sites provide excellent opportunities for redevelopment and could provide the opportunity to showcase high-quality mixed-use development.



North Main Street



Trinity United Methodist Church at Trinity Square

Broad Street, RIPTA's highest occupancy bus route, is the busiest commercial area in South Providence. Over the course of about 1.3 miles it includes more than 120 merchants. The corridor stretches from the edge of Downtown and Interstate-95, south past Trinity Square and historic Grace Church Cemetery, through a busy commercial district, past the major eastern entrance to Roger Williams Park and on through Cranston.

Originally part of an Indian trail known as the Pequot Path, Broad Street was opened up in the seventeenth century and was part of the Roger Williams' original settlement that was established 1636. The area was predominantly used as farmland until the development of the first horse drawn street railway line in 1865 transformed the area into Providence's first major streetcar suburb, attracting middle and upper class single family housing to the area. After 1950, the rise of the automobile intensified suburbanization and led to a decline in the condition of housing along Broad Street. Many yards were converted into driveways and garages, and street widths were expanded,

resulting in the loss of many tree-lined streetscapes in the area. The construction of Interstate 95 physically separated Lower South Providence from the rest of the city and consequently destroyed its historical relationships with downtown and the waterfront.

Elmwood Avenue connects key destinations in Warwick and Cranston, such as the Warwick Intermodal Center at T.F. Green Airport, with downtown Providence. Elmwood Avenue has several well developed retail areas, but neighborhood residents have expressed a desire for a better quality of development and the creation of walkable mixed-use nodes along the corridor. Roger Williams Park— the largest urban park in the State of Rhode Island and crown jewel of the City’s park system— is an important destination along Elmwood Avenue.

Elmwood Avenue dates back to the system of colonial highways that linked Providence with outlying rural areas and was developed primarily between 1845 and 1930, caused by tremendous industrial and commercial expansion in Providence and by the expansion of public transit. In 1843, Joseph J. Cooke purchased farm land in the area and named the estate Elmwood with the hope of creating a model suburban community with wide streets and shade-giving elm trees. From the 1850s to the 1930s public transit accelerated the development of the area as Elmwood became a thriving suburb of Downtown. After streetcar service was eliminated in the late 1930s, Elmwood Avenue was widened significantly and the elm trees that Joseph J. Cooke planted in the 1840s were removed. As the automobile increased in popularity, businesses in the form of car dealerships, garages, and service stations proliferated along Elmwood Avenue. By the 1950s, the demand for parking reduced many of the yards in the area to surface parking.

Elmwood Avenue converges with Broad Street at Trinity Square and shares many of Broad Street’s attributes, most notably its internationalism. One neighborhood stakeholder wrote, “Elmwood is Broad Street’s calmer cousin.” Many historic homes remain along the corridor, giving the area a more residential feeling than the livelier Broad Street.

Chalkstone Avenue stretches from Smith Hill near the northern end of Downtown west through the Elmhurst and Mount Pleasant neighborhoods and converges with Manton Avenue on the west. Chalkstone Avenue has the largest concentration of retail establishments in the Elmhurst and Mount Pleasant neighborhoods, but lacks a cohesive identity in terms of scale and massing, architectural consistency, street orientation, and use patterns. While some businesses are relatively pedestrian-friendly, many are distinctly auto-oriented. A compact commercial core is characterized by gathering places and local services such as markets, bakeries, restaurants, churches, the Castle Theatre and other community services in a ten-block stretch west of Academy Avenue.

As one of the last sections of the city to be developed, the availability of large tracts of undeveloped land attracted various large educational institutions to the area. Rhode Island College, Providence College, Mount Pleasant High School, and LaSalle Academy are all located in close proximity to Chalkstone Avenue. Roger Williams Medical Center, the VA Medical Center, Triggs Memorial Golf Course and historic Davis Park— part of the City’s greenway system and an important recreation facility— also anchor the Chalkstone Avenue corridor.



Columbus Square



Castle Theatre



Atlantic Mills

Manton Avenue is the major commercial artery running from the historic commercial and industrial hub at Olneyville Square to the adjacent town of Johnston. Along the corridor, historic industrial buildings stand as vivid reminders of the region's industrial might; many have been repurposed for housing, artist studios, offices, restaurants, and night clubs. The underutilized Atlantic Mills is a dominant, iconic feature along the southern portion of Manton Avenue, while the northern portion of the corridor is dominated by a suburban style shopping plaza and Saint Thomas Regional School.

Settlement began around Olneyville Square in the early 1700s and intensified early in the 19th century. The Woonasquatucket River, which runs parallel to Manton Avenue, made Olneyville attractive to industry, and numerous mill villages popped up along its banks. One of the most important industrial facilities in Olneyville,

Atlantic Mills, was constructed in 1851 and still stands as an important landmark along the corridor. As Providence's industrial giants declined after World War II, many industries shut down, resulting in a loss of residential population in the area. In 1953, the City constructed Manton Heights, a 330-unit housing project, as part of its program to provide public housing to residents in Providence.

The recently implemented Manton Avenue Streetscape Enhancement project includes new traffic signals, ornamental street lighting, sidewalks, and street trees. The development of mixed-use nodes along the corridor would complement this investment and further enhance the vitality of this corridor.

CONSISTENCY WITH CITY, STATE + REGIONAL PLANS

The Transportation Corridors to Livable Communities project advances the goals of efficient, sustainable growth called for in several regional and local plans including:

Providence Tomorrow, a three-year, charrette-based planning process that involved approximately 2,000 residents in over 130 public meetings and resulted in both a new comprehensive plan for the City and neighborhood plans for each of the City's 25 neighborhoods;

Creative Providence, the City's cultural plan, which specifically calls for increased access to transit service near cultural hubs and creative clusters, and suggests using transit to improve connections to and between neighborhood-based cultural activities such as cultural sites, events, and programs, as a way to increase access to out-of-school cultural and educational programs that offer adults and children access to creative learning and opportunities for social mobility;

GreenPrint, Providence's strategic plan for creating a more sustainable city and accelerating the green economy;

Putting Providence Back to Work, the City's action plan for economic development;

Metropolitan Providence Transit Enhancement Study, the Rhode Island Public Transit Authority's (RIPTA's) plan for potential transit improvements to meet the growing demand for transit within Providence and the surrounding metropolitan area;



Land Use 2025, the State of Rhode Island’s plan for statewide land use planning and growth; and,

Transportation 2030, the State of Rhode Island’s long-range transportation plan.

Most importantly, this project builds upon the City’s goals for where and how the city should grow, as established in the *Providence Tomorrow* Comprehensive Plan. Through the identification of growth corridors the City aims to direct development and redevelopment to key commercial and transit corridors where there are opportunities for pedestrian-oriented, mixed-use development at densities to support an improved transit system. The community hubs identified and analyzed through the land use analysis further the City’s goals of managing growth and change by prioritizing and aligning public infrastructure investments in order to catalyze and build upon private investment.

Among the ten initiatives outlined in RIPTA’s *Metropolitan Transit Enhancement Study*, this project builds upon three of them: improving the transit experience, initiating rapid bus service, and capitalizing on transit-oriented development.

PUBLIC INVOLVEMENT

In order to ensure broad participation and input in the project, the City and RIPTA convened an Advisory Committee, five corridor stakeholder committees, and held numerous public meetings over the course of the project. Sharing knowledge of investments among partners that participated in the various committees was an essential part of the project, ensuring that each organization or department coordinates cross-programmatic, place-based approaches while implementing grants and applying for future grant funding.

The Advisory Committee, a diverse group of professionals from agencies and organizations that relate to the project goals. met quarterly over the course of the project in order to provide critical input, help review study findings, discuss the project’s progress as well as any concerns or ideas for improving the project’s outcomes, work with the City and RIPTA to help fully engage community partners and residents in the project, and help disseminate information to partner agencies and neighborhood organizations to align future investments with one another.

Additionally, corridor stakeholder committees for each of the five project corridors met bimonthly in order to help guide outreach and engagement





efforts at the neighborhood level, provide input on specific land use and transit plans that were developed for each corridor, and discuss the project's progress as well as any concerns or ideas for improving the project's outcomes. Members of the stakeholder groups included representatives from neighborhood associations, business owners and merchants associations along the project corridors, housing and redevelopment organizations from the affected neighborhoods, and major institutions and large employers along the project corridors.



Public meetings for each project corridor were held during the early phases of the land use and transit studies in order to gather input on key land use and transit decisions from community members. Affected City Council members were briefed by City and RIPTA staff throughout the study and were invited to attend corresponding Corridor Stakeholder Committee meetings. Additionally, a representative from the City Council served on the Project Advisory Committee and each of the corridor stakeholder committees.

Project Goals

PROVIDENCE FREQUENT, RELIABLE TRANSIT SERVICE.

Through this project, the City has worked closely with RIPTA to increase transit ridership, make transit an easier and more comfortable choice, and better link high ridership routes to intermodal connections, making intermodal travel easy, convenient and efficient. Many of the populations with the highest need for improved public transit— older adults, youth, low-income households, and households without

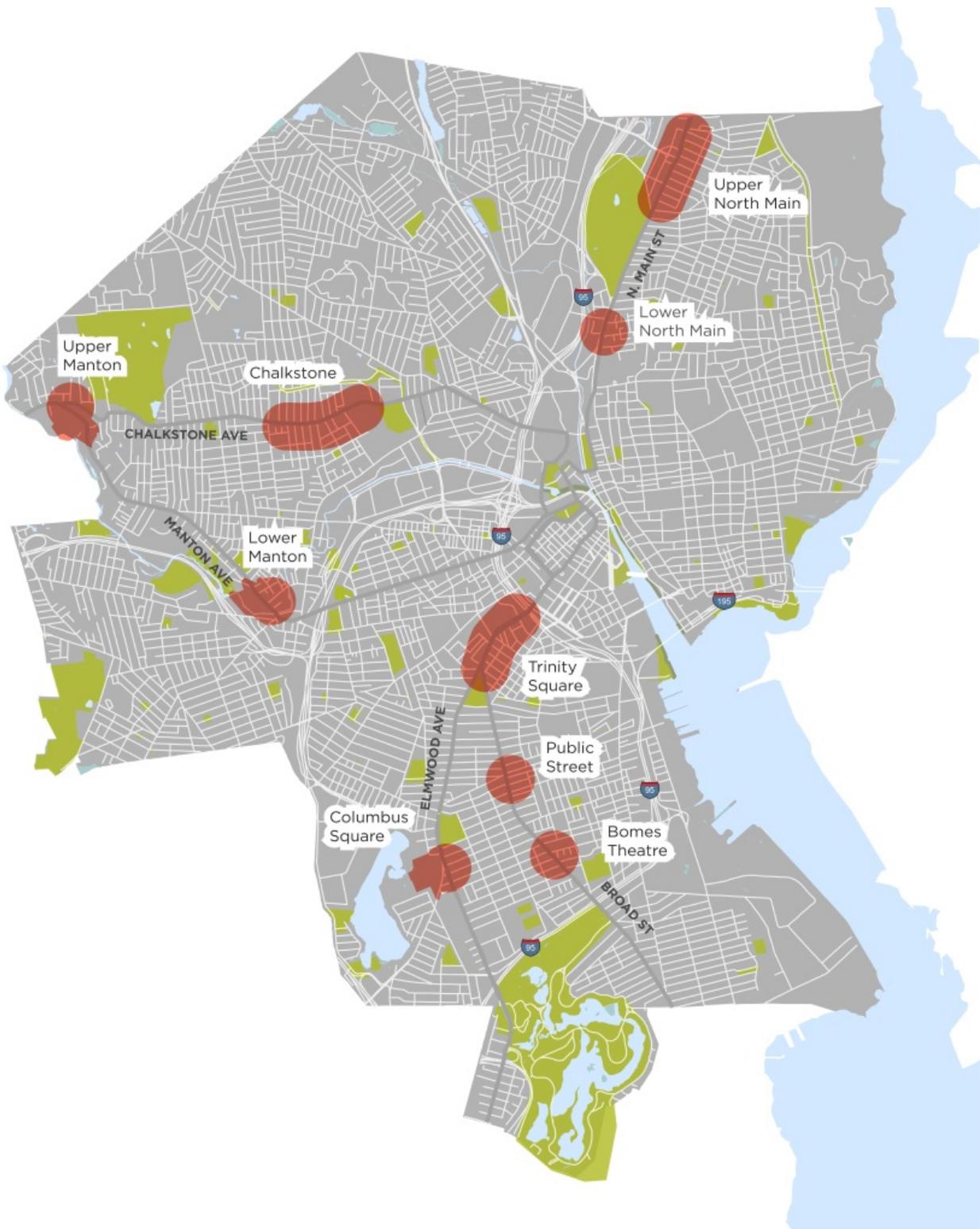


automobiles— are located along the five project corridors. Although they make up only a small percentage of the City's land area, the study areas along the key corridors contain nearly 50% of the City's population of residents over the age of 65 and over 60% of the City's population of residents who live below the poverty level. RIPTA will implement a series of enhancements such as improved bus stop spacing, increased schedule adherence through the reevaluation and reassignment of on-street supervisors, and transit signal prioritization at signalized intersections in order to provide service that is more efficient, accessible, and reliable along the five project corridors.

ENCOURAGE THE CREATION OF COMMUNITY HUBS, CONCENTRATED AROUND TRANSIT STOPS THAT ARE UNIQUE TO THE CHARACTER OF THE NEIGHBORHOOD WHERE THEY ARE LOCATED.

One of Providence's strongest assets is the unique character of each of the City's twenty-five neighborhoods. An essential goal of this project is to build upon the existing character that defines the City's neighborhoods and put in place strategies to preserve and enhance the special elements that make these areas unique, and to ensure that arts and cultural opportunities are central components of future placemaking and development efforts. Community hubs have been identified along each of the five project corridors as areas along where there is additional development capacity for housing, jobs and arts and cultural amenities. Vacant and underutilized land in these hubs creates opportunities for infill development and redevelopment that will act as catalysts for development along the rest of the project corridors. The Providence Redevelopment Authority will adopt redevelopment plans for several of the community hubs that have been identified, setting the stage for economic development in these locations.

The community hubs will be tied to key bus stops to set the stage for transit-oriented development and to encourage transit use, ultimately ensuring better connections between housing and jobs to affordable, accessible transportation. Improved access to reliable, efficient public transit reduces household transportation costs for families by as much as \$8,500 per year. With some of the study corridor areas, such as Broad Street, having an average yearly household income of only \$18,422, the savings that could be associated with a reduced reliance on individual automobiles could be significant, releasing household



In total, nine community hub locations were identified along the five project corridors.

“Residents of transit-oriented developments are five times more likely to use transit.”

“Mixed Income Housing Near Transit,” Center for Transit-Oriented Development

as encouraging companies to offer financial incentives for employees to leave their cars at home, requiring commercial and institutional developers who add parking spaces to actively discourage their use, and encouraging developers to provide facilities such as indoor bicycle storage and showers can further combat increases in vehicular traffic.

budget funds for other high-valued uses such as housing, food, and childcare, ultimately promoting additional economic activity.

Tying development directly to transit will also help to prevent significant increases in vehicular traffic as development increases in the future. Other approaches such

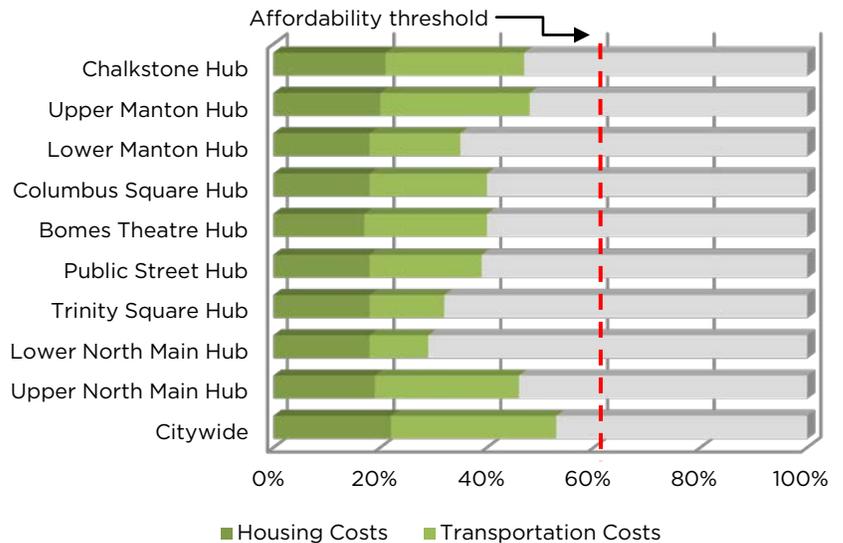
ENCOURAGE DEVELOPMENT THAT OFFERS A RANGE OF HOUSING CHOICES SERVING A VARIETY OF HOUSEHOLD TYPES AND INCOME LEVELS.

Promoting and incentivizing the development of higher density mixed-income housing at key nodes along high ridership transit corridors will increase the location efficiency of new development and increase mobility options for Providence’s diverse population. Creating mixed-income communities will also enhance social capital and employment networks for disadvantaged populations. Furthermore, promoting new residential development near transit will help ensure the success of transit investments.

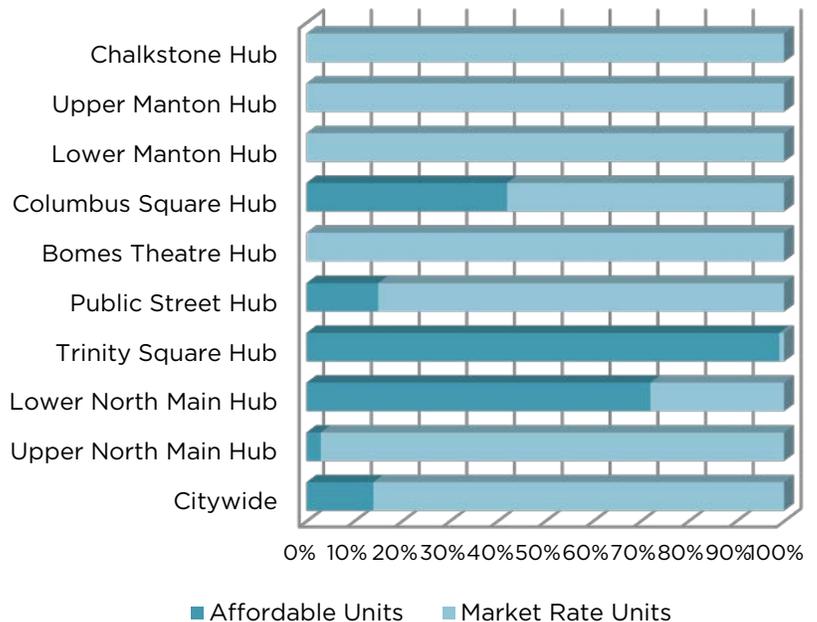
IMPROVE ACCESS TO EMPLOYMENT CENTERS.

Improved transit service and an increase in development opportunities will allow workers to more easily travel to jobs, providing more employment options to all workers, especially to lower income individuals living and working along the five project corridors. By

Current housing and transportation household costs at community hub locations (2012)



Current housing mix by community hub



analyzing the various types of businesses and jobs within each community hub, specific industries can be targeted and strategies can be developed to promote their growth and accessibility. Working with employers and workforce training providers along the corridors to understand their needs can also help identify potential future tools and strategies to incentivize transit-oriented locations for businesses. Investments in the public realm can also improve access to employment centers by enhancing the experience of those walking or biking to employers locations along and just off of the project corridors.

In 2009, RIPTA introduced Eco-Pass, a new program designed to encourage public transit usage through reduced fares. This program allows employers to purchase annual unlimited ride passes at a reduced fare rate and distribute them to their employees, subsidizing transit per ride, eliminating the need to distribute monthly fare products, and encouraging transit use among occasional riders. Eco-Pass is available to companies of all sizes and offers numerous economic and environmental benefits for both employers and employees. Although the program is currently used by some of the City's largest employers such as Nortek, Blue Cross, the City of Providence, and Edwards & Angell LLP, the City and RIPTA hope to attract other large employers along the five transit corridors to participate.

IMPROVE ACCESS TO ARTS + CULTURAL OPPORTUNITIES.

Participation in arts and culture builds communities and stabilizes neighborhoods' social diversity. Providence is rich in cultural diversity and artistic and creative expression, yet for many of its residents, participation in arts and cultural opportunities is sometimes limited.¹ In order to improve access to arts and cultural programming, opportunities and activities, the City aims to: plan for the location of arts and cultural opportunities along key transportation corridors; integrate arts and cultural opportunities into neighborhood-based community hubs; build community and foster neighborhood vitality through increased access and diversified cultural participation; encourage investment in neighborhood art, culture, and creativity to sustain social diversity and engage communities; and increase access to art, culture, and creativity at the street-level in order to catalyze social and physical change in the City's neighborhoods.

“Creative placemaking: a way to use arts, culture, and history to connect people with places in order to strengthen community and civic life.”

Anne Valk, Ph.D., Associate Director for Programs, John Nicholas Brown Center for Public Humanities and Cultural Heritage

¹ Creative Providence Cultural Assessment, 2008.

What is Rapid Bus?



In June 2014, RIPTA introduced the R-Line, a new Rapid Bus service with uniquely branded stops, frequent service and added amenities that have significantly improved the speed and attractiveness of bus service. The Broad/North Main corridor, running from the Cranston/Providence border, through downtown Providence, and along North Main Street into downtown Pawtucket, is the first corridor to be served by this improved, higher level of service. This corridor was previously served by RIPTA routes 11 and 99, the two highest ridership routes in RIPTA’s statewide system.

Over the past decade, many transit systems have successfully introduced Bus Rapid Transit (BRT) and Rapid Bus systems. These systems provide the rail-like quality of transit service, but with modern attractive buses instead of trains, and are typically less expensive to construct than rail service. While BRT systems are primarily designed to operate in exclusive lanes or roadways restricted to buses only, Rapid Bus operates on existing streets without dedicated lanes. Rapid Bus is especially appropriate in areas where restricted right-of-way does not allow the construction of dedicated transit lanes. By implementing some components of a BRT system, Rapid Bus provides a lower-cost alternative that still provides many of the same benefits of BRT.

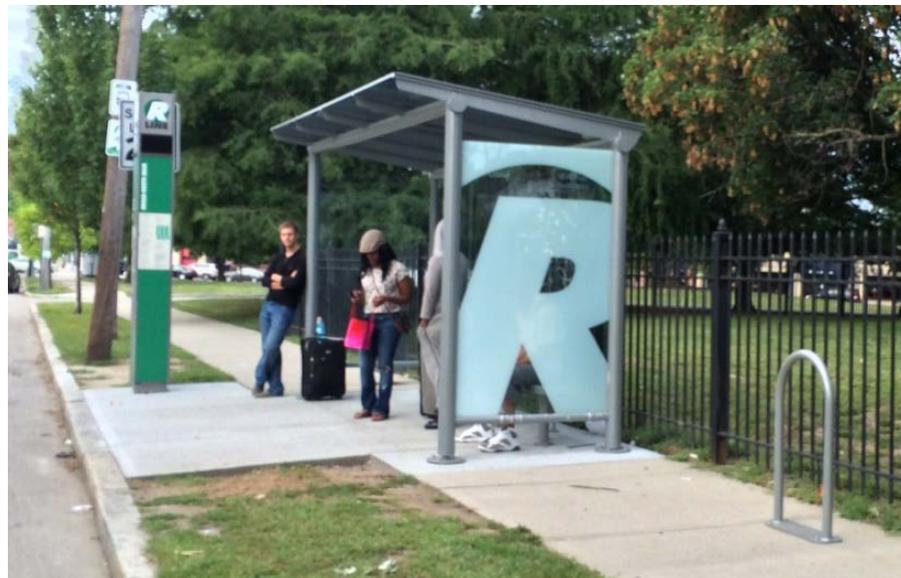
In June 2014, RIPTA officially began operating Rapid Bus service on the Broad/North Main corridor, using a mix of design elements that have resulted in improved service. This new service embodies RIPTA’s commitment to attract new riders while continuing to improve services for current passengers. In order to ensure efficient bus service along the R-Line, RIPTA conducted a bus stop inventory, evaluated stops to meet current service standards, and developed service plans for the corridor. This newly branded route features improved amenities at bus stops, geometric striping improvements, curb extensions, curb cuts, clear “no parking” zones, and signal priority at traffic intersections, making service fast, reliable, convenient, comfortable and clearly identifiable. Transit signal prioritization (TSP) provides priority to buses at all signalized intersections on the route. The R-Line also directly connects to the Providence Train Station, encouraging multi-modal transit connections.

This effort follows the Metropolitan Providence Transit Enhancement Study which first evaluated the feasibility of introducing Rapid Bus service in the metropolitan Providence area. For more information on the Metropolitan Providence Transit Enhancement Study, please visit www.transit2020.com.

RIPTA worked closely with RIDOT and the cities of Providence and Pawtucket to plan for and install the signal priority and roadwork improvements associated with the R-Line.

WHAT DOES RAPID BUS LOOK LIKE ON BROAD AND NORTH MAIN STREETS?

In Providence, there are twenty-one rapid bus stops along the R-Line between Broad Street at the Cranston border and North Main Street at the Pawtucket border. Eight additional R-Line stops are located in Pawtucket along Main Street. Community Development Block Grant funds were combined with Federal Transit Administration Transit Enhancement funds to purchase and install new bus shelters, signage, art, seating, trash cans, bicycle racks, and wayfinding information for the R-Line stops. Unique branding distinguishes the R-Line as a high service route.



The R-Line is served by uniquely branded buses and bus stops that include new bus shelters, wayfinding signage, trash receptacles, and other pedestrian amenities.

In addition to providing essential needs such as adequate cover and travel information for passengers, the R-Line bus stops play a larger role within their context. As evidenced by the implementation of the R-Line, well-sited bus stops can facilitate ridership, ease in navigation and wayfinding, assist in the branding of the transit route itself and mark neighborhood thresholds. Through RIPTA’s collaboration with the City of Providence, there has been a considerable investment in Broad and North Main streets, making these corridors more transit and pedestrian friendly while also honoring the unique character of the neighborhoods along the route.

The City of Providence and RIPTA worked together to look at the urban design issues surrounding each R-Line stop along Broad and North Main streets (as well as bus stops along the three other project corridors), compile a set of design guidelines detailing the urban design conditions and pedestrian amenities to be included at each of the stops, and establish guidelines for art and its inclusion in the project. The guidelines that were produced provide guidance on the relocation and reconstruction of bus stops, provide over-arching urban design objectives, and detail site-by-site urban design and bus stop plans. The intention of the guidelines is to provide consistency within the larger RIPTA system while allowing for unique conditions at each site and along each corridor.



Two bus shelter sizes (standard and large) along with free-standing transit totems have been installed at high and medium volume stops along Broad and North Main streets. The shelters themselves as well as the associated pedestrian improvements have contributed to the beautification of the streetscape along each corridor. Stops that are located at high-volume locations have received larger shelters as well as a higher degree of investment in additional pedestrian amenities. Lower volume stops have received a lower level of amenities as appropriate.

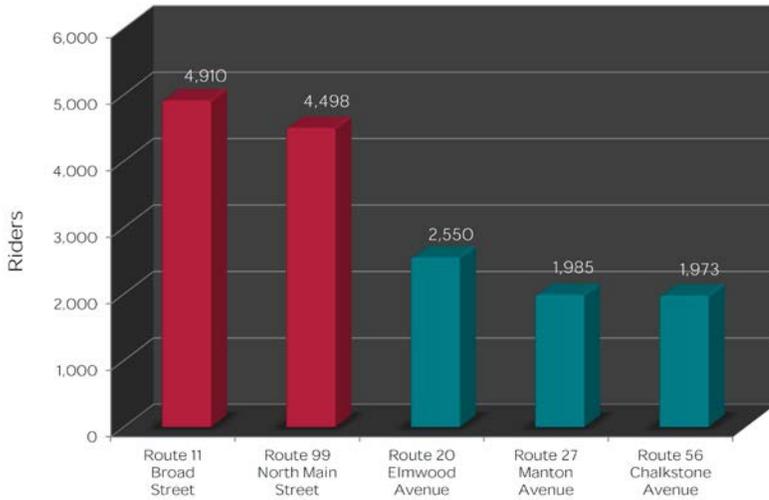


Opportunities for artistic intervention at key bus stops along the corridors were identified and have been developed in conjunction with bus shelters in one of two ways: either as a component of a prefabricated bus shelter (side panel or back panel) or as a free standing seating element. The artistic interventions replaced specific manufactured components of the shelter to seamlessly blend public art with new infrastructure. Artists were required to incorporate and adhere to several criteria including the themes that were established for each corridor. As both an art object and a transit amenity, the new shelters encourage the use of the public transit system and celebrate the unique identity of these important commercial, cultural and historic neighborhoods.

Two sizes of bus shelters (large and standard) have been installed along Broad and North Main streets.

WHAT OTHER CORRIDORS ARE BEING CONSIDERED FOR RAPID BUS?

Over time, Rapid Bus will likely be expanded to other lines in the RIPTA system. After routes 99 and 11, the highest ridership routes in Providence are Route 20 on Elmwood Avenue, Route 27 on Manton Avenue, and Route 56 on Chalkstone Avenue. RIPTA has classified these routes as “Key Bus Routes” and is working with the City and RIDOT to ensure that these corridors are “rapid ready”. In the future, these routes will have priority for additional investment.



Average weekday ridership on routes 11 and 99, which are soon to be combined into one Rapid Bus route, is significantly higher than ridership on other bus routes in RIPTA’s system.

Summary of Findings

The detailed corridor studies that were conducted for the five project corridors of North Main Street, Broad Street, Elmwood Avenue, Manton Avenue, and Chalkstone Avenue have resulted in a series of strategies and action steps in order to advance the transit, land use, and arts and culture goals of this study.

The following strategies helped guide the specific action items recommended for the general project, for specific corridors and for specific community hub locations:

- ➔ **Emerging initiatives:** Encourage existing or emerging initiatives or plans underway in order to take advantage of leveraged resources, local leadership, and momentum.
- ➔ **Transit:** Provide frequent, reliable transit service and improve the rider experience.
- ➔ **Transit-supportive development:** Encourage the creation of community hubs that support transit, offer a range of housing choices serving a variety of household types and income levels, and improve access to jobs.
- ➔ **Community capacity building:** Foster cross-cultural neighborhood-based organizing to bridge groups and strengthen capacity of neighborhood associations, businesses, and nonprofits to manage and grow local activity and development.
- ➔ **Business development:** Support local businesses and encourage programs that support façade and storefront improvements for local businesses.
- ➔ **Creative economic development:** Create jobs and enhance the capacity of nonprofit cultural organizations and creative businesses in order to integrate arts and cultural resources into economic and community development; support planning, financing, improvement, and development of key community gathering places, cultural facilities and creative sector incubators.
- ➔ **Regulations:** Amend or streamline zoning ordinances and permitting to advance opportunities for transit-supportive development and creative economic development.
- ➔ **Animation and mitigation:** Support programs or special events that enliven places, demonstrate viability of underused spaces, and create opportunities to participate in creative community life; reduce eyesores or hazards with artistic treatments, such temporary murals or creative fencing, to improve appearance and instill a positive attitude among neighbors and visitors.
- ➔ **Public art and design:** Create or modify public places employing creative design and public art to celebrate the unique to the character of neighborhoods, help define communities and to provide welcoming places to gather.
- ➔ **Streetscape:** Enhance and maintain the public realm with street trees, landscaping, and pedestrian amenities including benches, bicycle racks, and trash cans.
- ➔ **Wayfinding and placemaking:** Create signs, directories, and interpretative aids that help better define places, create visual cohesion, and help people navigate and appreciate their community.
- ➔ **Marketing:** Market and promote local businesses, attractions and programs in order to inform and attract people.

Transit, land use, and arts and cultural planning recommendations build upon previous plans including *Providence Tomorrow*, *Creative Providence*, *GreenPrint*, *Putting Providence Back to Work*, RIPTA's *Metropolitan Providence Transit Enhancement Study*, and other district and neighborhood-based plans.

KEY TRANSIT RECOMMENDATIONS

The following strategies emerged in order to ensure that RIPTA provides frequent, reliable transit service throughout the statewide system, especially along the five project corridors. Improving the rider

experience and creating dependable service that comes at frequent, consistent intervals is integral to attracting new riders while continuing to improve services for current passengers. These strategies helped guide the specific transit action items recommended for the general project, for specific corridors and for specific community hub locations. For more information on the corridor specific actions please refer to the “North Main Street Transit Analysis”, “Broad Street Transit Analysis”, “Elmwood Avenue Transit Analysis”, “Manton Avenue Transit Analysis”, and “Chalkstone Avenue Transit Analysis” sections of this report. The actions listed below are meant to be broad, citywide recommendations that can be applied to any of the five project corridors or elsewhere in Providence.

Recommendations:

- Improve bus service and the quality of bus stops along the five project corridors by removing and relocating selected stops.
- Work with RIDOT to initiate Traffic Signal Prioritization (TSP) to extend green lights for buses at traffic intersections in order to reduce running times.
- Ensure that there are clear no parking zones through signage and striping at all bus stops in order to improve accessibility and passenger safety.
- Plan for and implement passenger and pedestrian amenities including new bus shelters, seating, bicycle racks, trash cans, and wayfinding signage at bus stops along the five routes; prioritize community hub and gateway locations for implementation of amenities.
- Work with the City and local artists to create elements of public art that can be integrated into the back panels, side panels, columns, and seating elements of bus shelters at key bus stops.
- Construct queue jump lanes at traffic signals to allow buses to operate through intersections with priority over other vehicles, reducing wait times at signalized intersections.
- Work closely with RIDOT and municipalities to construct curb extensions at key bus stops as part of larger road construction projects in order to improve passenger safety and boarding times, decrease the impact on on-street parking, and increase the amount of space available for pedestrian amenities at bus stops.
- Explore partnerships with private property owners to integrate landscape improvements such as landscape buffers and pocket parks at key bus stop locations; work with willing property owners to develop conceptual plans and cost estimates, and explore funding opportunities for implementation.
- Increase the frequency of buses during morning and afternoon rush hours and during the start and end of school days in order to accommodate additional passengers and maintain service frequency.
- Create “clockface headways” with bus frequency in multiples of five minutes (rather than odd frequencies such as seven or twenty-two minutes) in order to improve passenger comfort with the system, with buses that arrive at clear, memorable intervals.
- Continue to invest in on-street supervision in order to ensure that service frequency and schedule adherence are accurately maintained throughout the day; reevaluate where this supervision will be most effective as service patterns and routes change.

- Deploy real-time information panels at high-volume bus stops to ensure passengers have accurate information regarding their bus arrival times.
- Reevaluate service needs annually in order to ensure that service is operating at its optimal level.

KEY LAND USE RECOMMENDATIONS

The following strategies emerged in order to encourage development and neighborhood revitalization, foster a stronger sense of place, and build upon the placemaking role of RIPTA's transit enhancements along the five highest use transit corridors in Providence. These strategies helped guide the specific land use action items recommended for the general project, for specific corridors and for specific community hub locations. The City's consultant team (Gamble Associates, Paul Cote, and Site Creative) worked closely with City staff to develop these recommendations.

For more information on the corridor specific actions please refer to the "North Main Street Land Use Analysis", "Broad Street Land Use Analysis", "Elmwood Avenue Land Use Analysis", "Manton Avenue Land Use Analysis", and "Chalkstone Avenue Land Use Analysis" sections of this report. The actions listed below are meant to be broad, citywide recommendations that can be applied to any of the five project corridors or elsewhere in Providence.

Recommendations:

- Create a series of transit-oriented development (TOD) districts at important transit nodes along the five project corridors in order to encourage higher density development, discourage the siting of auto-oriented uses, and ultimately help catalyze private investment in these areas.
- Develop strategies to retain and promote growth among the types of businesses and jobs that already exist along the project corridors, targeting specific industries for the community hubs.
- Work with local employers and workforce training providers to understand their needs and identify tools and strategies to incentivize transit-oriented locations for businesses that offer job opportunities at all levels.
- Invest in streetscape improvements to improve the pedestrian realm between transit stops and major employers and surrounding communities to encourage walking and transit use.
- Create and maintain an up-to-date database of properties that are vacant or available for development and use it to market available real estate and accelerate development; prioritize vacant properties on the five project corridors.
- Partner with local Community Development Corporations to advance the rehabilitation of abandoned and vacant residential properties; prioritize properties on the five project corridors.
- Establish a grant program to assist small businesses with storefront and façade capital improvements; prioritize businesses on the five project corridors.

- Consider requiring developers to actively discourage vehicular use in order to decrease vehicular traffic as development increases.
 - *Example: Cambridge, MA Parking and Transportation Demand Management Ordinance*
- Develop a plan to encourage employers along the project corridors to offer financial incentives for employees to leave their cars at home in order to decrease vehicular traffic as development increases.
- Require developers to provide facilities such as indoor bicycle storage and showers in order to decrease vehicular traffic as development increases.

Incentivize the incorporation of landscaping, public plazas, and open spaces by allowing increased density and building height where these have been included in development plans.

- Develop a planning grant program to develop a strong vision to sell the project corridors to both developers and the developers' target audiences (buyers/ tenants).
 - *Example: The Portland Development Commission (PDC) provides grants for predevelopment activities such as architectural planning studies, market assessments, and environmental studies, which further strengthens support for development projects.*
- Analyze redevelopable sites along the project corridors and assess the funds needed to prepare them for development through clearing and decontamination in order to attract development.

KEY ARTS + CULTURAL RECOMMENDATIONS

Dreeszen & Associates' cultural planning team worked closely with the City of Providence's Department of Art Culture + Tourism and Department of Planning and Development staff, project advisors, and stakeholder committees to develop strategies to employ arts, culture, and heritage to improve livability, prosperity, and public access to arts and entertainment along the five corridors. These strategies helped guide the specific arts and cultural planning action items recommended for the general project, for specific corridors and for specific community hub locations.

Recommendations specific to each individual corridor were also developed and are based on assets identified in inventories of cultural resources and the interpretive themes and artist guidelines for each corridor. For more information on the corridor specific actions please refer to the "North Main Street Arts & Cultural Opportunities Analysis", "Broad Street Arts & Cultural Opportunities Analysis", "Elmwood Avenue Arts & Cultural Opportunities Analysis", "Manton Avenue Arts & Cultural Opportunities Analysis", and "Chalkstone Avenue Arts & Cultural Opportunities Analysis" sections of this report. The actions listed below are meant to be broad, citywide recommendations that can be applied to any of the five project corridors or elsewhere in Providence.

Recommendations:

- Establish a Neighborhood Improvement Small Grant Program that invites proposals from community groups to undertake small, creative projects that help animate neighborhoods, mitigate nuisances, or define gateways and neighborhoods.

Examples of similar programs include:

- *Bloomington, Indiana: Neighborhood Improvement Grant Program* (http://bloomington.in.gov/documents/viewDocument.php?document_id=833)
- *Tucson, Arizona: P.L.A.C.E. Initiative grants* (<http://www.tucsonpimaartscouncil.org/2010/06/p-l-a-c-e-initiative-grants-funded-by-the-kresge-foundation/>)
- Establish a Neighborhood Call to Producers program that encourages proposals to program small, special events such as parades, festivals, fairs, and outdoor performances in public places.
 - *Example: Somerville, MA “Calls to Producers” ArtsUnion initiative* (<http://www.somervilleartscouncil.org/artsunion/2012>)
- Create a neighborhood passport program for youth to highlight the cultural identity of neighborhoods, promote visitation to arts and cultural sites along the corridors, and encourage participation and programming partnerships between cultural organizations.
- Encourage special events in public spaces along the corridors as is done with public parks through the City’s Neighborhood Performing Arts Initiative.
- Review and revise regulations to ensure that permitting procedures for live music to be performed safely and legally in venues and in public places are simple and consistent; refine the zoning ordinance to distinguish live music from other forms of entertainment and to ensure that regulations are consistent with the City’s goals for creative economic development, destination development, and neighborhood animation.
- Create a subcommittee to represent the City’s creative economy and cultural sector and advise the City on such topics during the rewrite of the zoning ordinance.
- Recognize artist’s work-only studios as “jobs” to ensure that they can be located in areas designated for “Jobs Only” in future land use planning. *Greenpoint Manufacturing and Design Center in New York has restored nearly one-million square feet of industrial space to small-scale artisanal manufacturing* (<http://www.gmdconline.org/>)
- Use zoning to steer cultural programming towards corridor hubs and gateways.
- Develop creative enterprise zones and use existing arts overlay districts as tools to encourage creative economic development in critical hubs.

Examples of similar programs include:

 - *Saint Paul, MN: Creative Enterprise Zone* (http://www.corridordevelopment.org/15/index.php?option=com_content&view=article&id=105&Itemid=66;)
 - *Massachusetts: Artist Enterprise Zones:* <http://berkshirecreative.org/public-hearing-on-pilot-artisgt-enterprise-zones/>
- Draw attention to cultural attractions and historic sites by creating a citywide wayfinding system that expands upon the Downtown Vehicular Wayfinding Plan with complementary designs for consistency of traveler experience.
 - *Example: Hartford, CT:* <http://thequiltplan.org/news>

- Draw attention to cultural attractions and historic sites along corridors by identifying funding to implement the full plans for corridor amenity enhancements, including pedestrian wayfinding signage at key bus stop locations.
- Develop interactive, online route mapping that merges RIPTA bus stop and route information with links to cultural attractions and events listings.
 - *Example: Syracuse, NY Connective Corridor system (<http://connectivecorridor.syr.edu/>)*
- Promote use of the Cultural Resource Inventory through the City's online resources and social media; encourage cultural organizations, neighborhood and business associations, artists, developers, scholars, researchers, grant makers, arts advocacy organizations, and others to explore the cultural inventory maps and databases of the corridors, make connections, employ local cultural resources, and contribute to the inventory by adding previously unlisted assets.
- Use the cultural asset mapping that has been completed for the five project corridors to identify and build upon nodes of youth arts learning activity.
- Identify funding to implement public art at gateway locations.

Next Steps

In order to implement the transit, land use, and art and cultural recommendations compiled in this study and to promote the place-making role of transit along these five corridors, the City has identified the following next steps:

RE: ZONING PROVIDENCE

In July 2013, the City began working with Camiros, Ltd., a planning and zoning firm based in Chicago, to develop a new zoning ordinance and zoning map changes. The last general amendment to the City of Providence Zoning Ordinance occurred in 1994; since that time, zoning amendments, both to the text and map, have been made to address specific issues as they emerged. This project, unlike the piecemeal amendments over the past ten years, is comprehensive and meant to address the variety of issues and conditions present in the City today as well as realize the land use goals of adopted policies. Specifically, the new ordinance will facilitate appropriate and desirable transit-oriented development within the identified hubs along the five different corridors.



PROVIDENCE REDEVELOPMENT AGENCY (PRA) DEVELOPMENT PLAN

The Department of Planning and Development will provide the recommendations from the three-dimensional build-out analysis of the City’s nine hubs to the Providence Redevelopment Agency so that they may serve as a reference for the PRA to help guide future development within the City.

POPUP PROVIDENCE

Together with the Providence Redevelopment Agency (PRA), the Department of Planning and Development launched PopUp Providence, an urban place-making program that introduces interactive, artistic, and cultural displays and interventions throughout the City’s 25 neighborhoods. The wide variety of installations aims to enliven city spaces and engage residents, workers, and visitors in their community. Some of the first-year projects include art installations, music instruction and performance, and a ‘parklet.’



“PopUp Providence will bring vibrancy and civic engagement to our city’s dynamic neighborhoods and downtown spaces.”

Mayor Angel Taveras

PopUp Providence launched in November 2013 with the installation of two “Before I Die” chalkboard walls at Grant’s Block and Kennedy Plaza. These boards, which are part of an international project, allow passers-by to share their personal aspirations while also activating public space.

NORTH MAIN STREET

North Main Street Introduction

As a key connector between Providence and Pawtucket, North Main Street serves as one of RIPTA's major bus routes. Over the course of about 2.3 miles, the corridor demarcates the transition from downtown core to the city's periphery. The corridor stretches from the City's border with Pawtucket, south past the historic North Burial Ground, through a suburban-style commercial district, past the Rhode Island School of Design, and ends at Roger Williams National Memorial Park, just north-east of Downtown.

Among the many historic buildings standing along the corridor are: King's Chapel (St. John's Episcopal Church), built in 1722; First Baptist Church, built in 1726; Colony House (the former State House), built in 1731; and the Jeremiah Dexter House. The North Burial Ground, which occupies a large area along the northwestern flank of the corridor, and Roger Williams National Memorial which sits along the southern end of the corridor are important cultural resources for the City. To the east of the corridor, Miriam Hospital serves as an anchor health care institution.

Although the area surrounding the North Main Street corridor was settled in the 17th century, the area did not experience any significant development until the 18th and 19th centuries as industry was established along the Moshassuck River. In the early part of the 20th century, rapid commercial expansion and urban renewal projects had an enormous impact on the physical structure of North Main Street resulting in a corridor that is primarily auto-oriented with many buildings set back from the street with ample parking areas. Until recently, North Main Street served as a key shopping destination, with retailers such as Sears and Anderson-Little serving as anchors. Over time, these major retailers have closed or moved to suburban locations. Combined with the many surface parking lots and other underutilized properties along the corridor, these vacant sites provide excellent opportunities for redevelopment and could provide the opportunity to showcase high-quality mixed-use development.

The *North Main Street Transit Analysis* section of this report provides an overview of the current conditions of transit along the corridor and outlines measures to be taken to provide frequent, reliable transit service, improving the rider experience along this important transportation corridor. The *North Main Street Land Use Analysis* section of this report contains an analysis of existing conditions, vacant and underutilized land within key nodes along the project corridor, and potential build out scenarios for each key node. This analysis furthers the City's goals of managing growth and change, encouraging development and neighborhood revitalization, fostering a stronger sense of place, and building upon the placemaking role of RIPTA's transit enhancements. The *North Main Street Arts and Cultural Opportunities Analysis* section of this report summarizes the public art enhancements that have been recommended, the inventory of arts and cultural resources that was completed, and the creative placemaking strategies that were developed to employ arts, culture, and heritage to improve livability, prosperity, and public access to arts and entertainment along the corridor.

What do previous plans say about North Main Street?

Previous plans, including the Providence Tomorrow Neighborhood Plan for Hope, Mount Hope, and Blackstone (2009), the North Main Street Design Guidelines developed by the Summit Neighborhood Association (2005), and the Miriam Hospital Institutional Master Plan (2010), were evaluated in order to ensure that key elements of those plans were integrated into this planning effort.

The following elements of those plans have been incorporated into the goals for the transportation, land use, and cultural planning elements of this project:

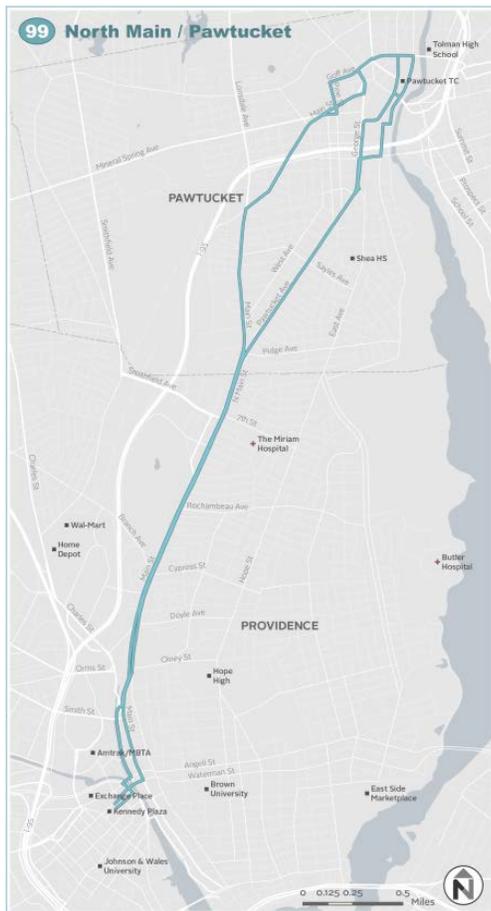
- ➔ Use streetscape improvements and wayfinding signage to create a gateway to the neighborhood and an image for the entire street.
- ➔ Improve neighborhood connections and public access to North Burial Ground.
- ➔ Create an appealing street wall by discouraging setbacks, encouraging transparent and attractive windows at street level, encouraging parking to be located at the side or rear of buildings, and requiring dumpsters, auto-businesses, and parking lots to be screened appropriately.
- ➔ Reduce the space dedicated to parking by encouraging on-street parking and shared parking among neighboring businesses.
- ➔ Ensure pedestrian safety by discouraging drive-through businesses, minimizing curb cuts, reducing vehicle speed with traffic calming measures, and adding landscaping along the sidewalk.
- ➔ **Upper North Main Street:**
 - Encourage mixed use buildings and the establishment of local businesses such as small grocery stores, bakeries, coffee shops, general stores, and movie theaters to create an active vibrant main street along the northernmost section of North Main Street between the Pawtucket line and Stenton Avenue.
 - Work with property owners and the City of Pawtucket to redevelop the former Shaw's plaza for neighborhood-serving uses at an appropriate urban scale with high quality design with a maximum building height of six stories.
 - Work with property owners to encourage the redevelopment of the former Sears and Anderson-Little sites as mixed use, at an appropriate urban scale with high-quality design, and with neighborhood amenities, with a maximum building height of four stories.
 - Promote a North Main Street merchants group.
 - Work with RIDOT to evaluate the feasibility of making Smithfield Avenue a two-way street.
 - Develop a green park in place of the vacant lot under the basketball court.

➔ Lower North Main Street:

- Improve pedestrian safety at the street crossing near Charlesgate.
- Improve the edges of the University Heights complex, both with abutting residences and along North Main Street.
- Focus streetscape improvements and enhancements for pedestrians and bicyclists at the Branch Avenue intersection.
- Enhance the landscaped street edge along the west side of the street between Branch Avenue and Olney Street.
- Continue to promote pedestrian-oriented, neighborhood commercial uses along the eastern edge of the street between Branch Avenue and Olney Street.
- Focus streetscape enhancements, improve pedestrian and cyclist safety, and create a gateway to North Main Street at the Doyle Avenue intersection.
- Improve the streetscape edge along both sides of N Main Street, especially at the Branch Avenue intersection, to establish a green, pedestrian-friendly environment.

North Main Street Transit Analysis

Previously, public transit along North Main Street was defined by Route 99, a RIPTA-operated bus route. Serving as the City’s second highest ridership route, Route 99 provided service between Pawtucket and Kennedy Plaza in downtown Providence, primarily along North Main Street. In Pawtucket, trips alternated between two alignments: one along Pawtucket Avenue and the other along Main Street. Route 99 service was through-routed with Route 11 Broad Street, and, in effect, operated as a single route between Pawtucket and the Cranston/Providence Line via downtown Providence. In June 2014, R-Line Rapid Bus service replaced Routes 11 and 99, significantly improving transit service along North Main Street.



Route map of RIPTA’s Route 99 service which has since been replaced by the R-Line.

EXISTING RIDERSHIP DATA

As one of RIPTA’s best performing routes, Route 99 (now the northern portion of the R-Line) averages 5,200 riders per weekday, 2,600 riders per Saturday, and 1,800 riders per Sunday. The route travels through portions of Downtown Pawtucket, Providence’s Hope, Mount Hope, and College Hill neighborhoods, and Downtown Providence. Pawtucket Transit Center and Kennedy Plaza operate as the two transit stations along the route and serve as 54 percent of the route’s ridership activity. Some of the main activity centers along the route include Central Pawtucket, Elizabeth Baldwin Elementary School, Miriam Hospital, Hope High School, and Downtown Providence.

The midday and afternoon peak periods carry the highest number of riders (50% and 20% of the daily total, respectively) and also the highest number of riders per trip of the day. Ridership is slightly higher inbound in the morning and outbound in the afternoon, though ridership is strong throughout most of the day in both directions. This indicates the route serves a variety of work and non-work trips.

STOP INVENTORY ANALYSIS

Along the old route 99, there were 99 bus stops (55 inbound and 49 outbound), 32 of which were located along North Main Street in Providence. Only seven of these 32 stops along North Main Street had bus shelters (six inbound stops and one outbound stop). With approximately 7.2 bus stops per mile, Route 99 stop frequency was significantly higher than the system average of 5.6 stops per mile.

During RIPTA’s analysis of North Main Street, the following issues were identified:

There is minimal space for bus maneuvering at intersections. Several stops located at intersections have insufficient bus stop lengths due to on-street parking. For bus stops on the near side of an intersection, parking should not be allowed within 100 feet of the stop line and for bus stops on the far side of the intersection, parking should not be allowed within 80 feet beyond the crosswalk or curb line extension.

Bus stop locations conflict with commercial driveways. There are numerous bus stops currently blocking commercial driveways. However, if these stops are relocated to avoid conflict with driveways, there is potential for a conflict with parking. The following bus stops were noted in RIPTA’s analysis as blocking commercial driveways:

- North Main Street at Randall Street/Doyle Avenue (northbound departure)
- North Main Street at Third Street/Frost Street (northbound departure)

EXISTING CONDITIONS ANALYSIS

The route’s high ridership contributes to high productivity and low operating costs. In its final year of operation, Route 99’s operating cost per passenger was 48-percent below the system average and it carried 70-percent more passengers per revenue hour than the system average. Despite the route’s overall high performance, it has a fairly low average speed of approximately 9.4 miles per hour. This was partially a function of slows speeds in and out of downtown Providence and Pawtucket, however, it was also a result of the large number of redundant stops (many of which were very lightly used). Route 99 also suffered from numerous bottlenecks along North Main Street, resulting in long delays. The following intersections were noted in RIPTA’s analysis as having excessive vehicle queues or as being areas of concern during peak travel periods:

Intersection	Issues
North Main Street @ Thomas Street	Shoulder/bus stop gets confused for travel lane
North Main Street @ Smith Street	Long queues
North Main Street @ Olney Street	Long delays
North Main Street @ Randall Street/Doyle Avenue	Over-capacity with long delays and queues
North Main Street @ Branch Avenue/Cypress Street	Long delays and queues; left-turning vehicles extend beyond storage bay

RECOMMENDATIONS

Bus Stop Location Improvements

Bus stops play an important role in the identity of the street and are therefore an important urban design element. The siting of bus stops and their components should enhance the transit corridor and strengthen the character of the street. Through a thorough analysis of North Main Street, RIPTA identified stops that were spaced too closely together, unsafe, or underutilized. The removal and relocation of these stops has improved schedule adherence for buses, the accessibility of RIPTA services for all patrons, and travel times for passengers. Additionally, RIPTA will benefit from reduced maintenance and fuel costs directly related to these changes.

In order to develop the R-Line and determine stop placement along North Main Street, RIPTA analyzed previous recommendations for the corridor and ultimately relocated four inbound stops and two outbound stops from the Providence-Pawtucket line to downtown Providence, while keeping seven inbound stops and 12 outbound stops in their current locations. RIPTA removed three inbound stops and four outbound stops on North Main Street entirely in order to improve bus service. All

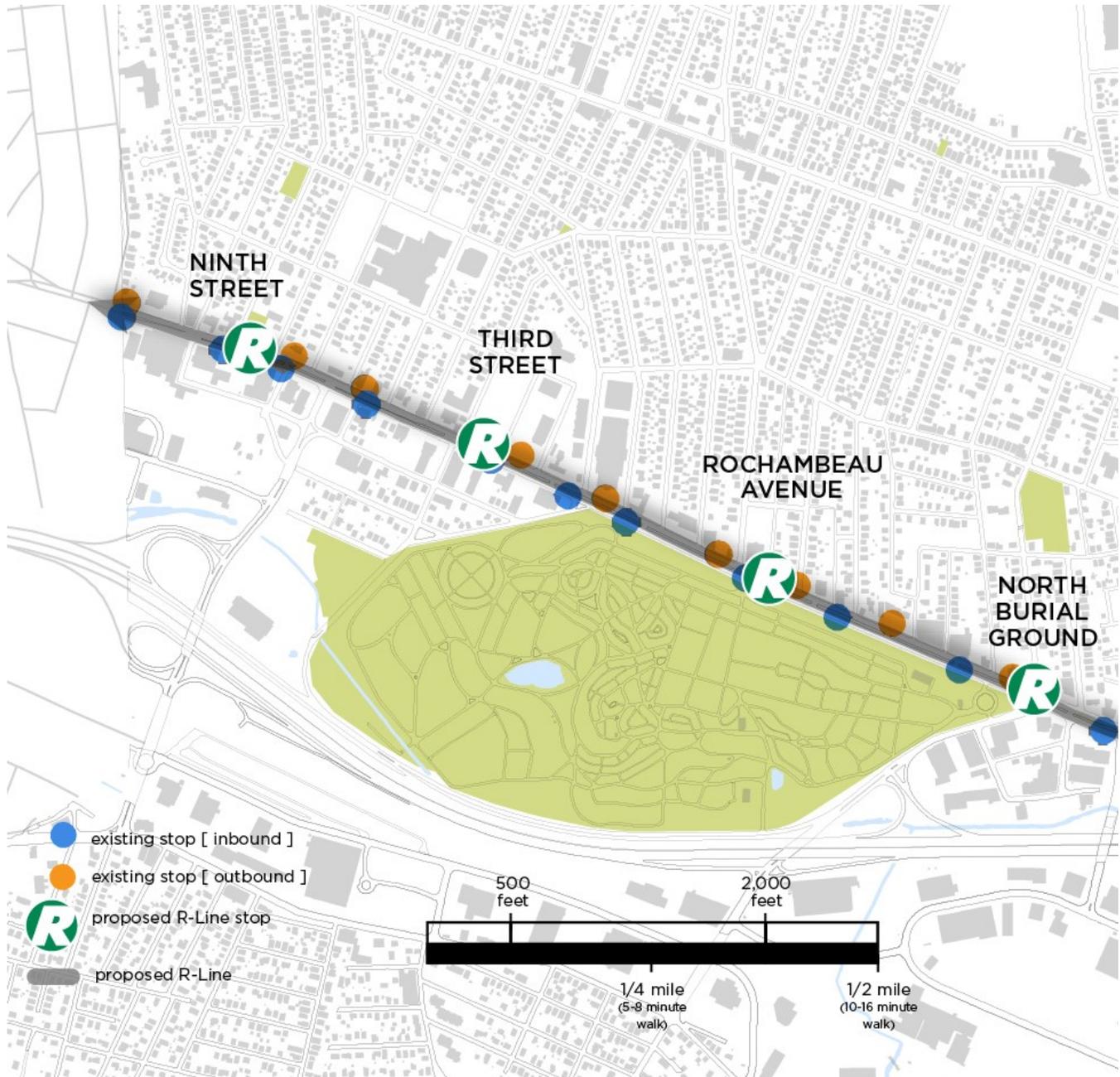
For more information on the R-Line, including branding and route information, please refer to the "What is Rapid Bus?" section of this report within the Executive Summary.

recommendations for removal or relocation were thoroughly reviewed with the public and local stakeholders. Comments and concerns gathered from the public were incorporated into the final bus stop placement. The placement of each stop was also analyzed through its impact on traffic and pedestrian sightlines and activity, as well as relationships to landmarks, landscaped spaces, and surrounding buildings. 91-percent of all of RIPTA's previous Route 11 passenger activity occurred within a 1/6-mile radius of the new R-Line stops.

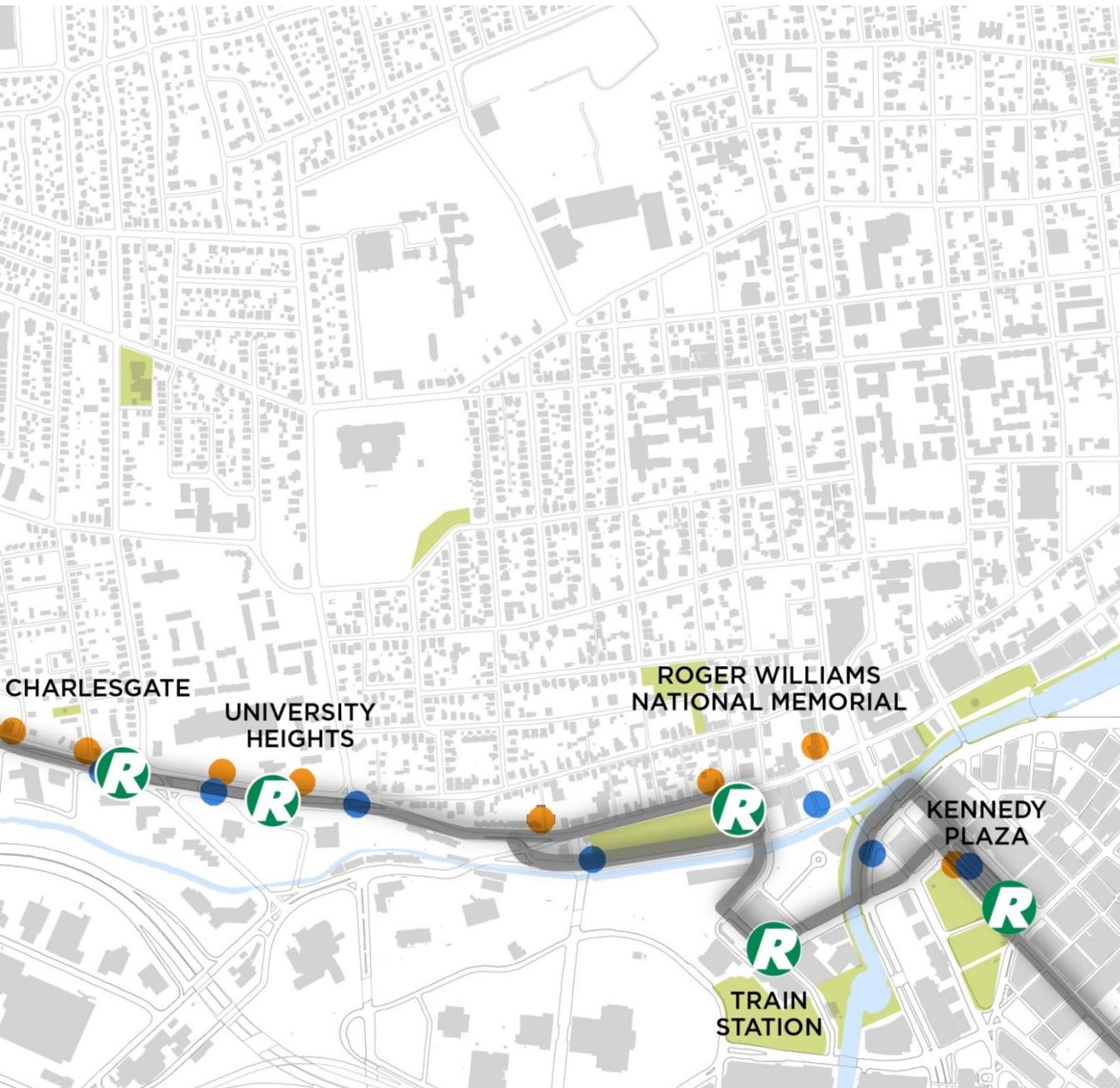
By removing and relocating some bus stops on North Main Street, RIPTA is now able to provide service that is more efficient, accessible, and reliable, and is able to ensure that stops are in ideal locations for passengers, local businesses and residents. Improved bus stop spacing has shortened travel times and minimized 'stop and go' travel along the length of the corridor.

Stops Maintained along North Main Street:

Stop	Direction	Volume
North Main @ Ann Mary	Inbound	44
North Main @ Second	Inbound	36
North Main @ Rochambeau	Inbound	32
North Main @ North Burial Ground - Southern Entrance	Inbound	70
North Main @ 670 Charlesgate North	Inbound	252
North Main @ Randall Square	Inbound	247
North Main @ Providence Center Parking Lot	Inbound	2
North Main @ Thomas	Outbound	99
North Main @ North Court	Outbound	30
North Main @ Olney	Outbound	291
North Main @ University Market Place Entrance	Outbound	151
North Main @ Pleasant	Outbound	180
North Main @ Cypress	Outbound	85
North Main @ Wilkins	Outbound	23
North Main @ Rochambeau	Outbound	17
North Main @ Edgehill	Outbound	26
North Main @ Sixth	Outbound	144
North Main @ Ninth	Outbound	20
North Main @ Hillside	Outbound	21



Bus stop changes along North Main Street



Stops Removed along North Main Street:

Stop	Direction	Volume
North Main @ Matilda	Inbound	0
North Main @ 1052 North Main	Inbound	24
North Main @ Evergreen	Inbound	22
North Main @ Jenkins	Outbound	34
North Main @ Woodbine	Outbound	35
North Main @ Second	Outbound	27
North Main @ Matilda	Outbound	47

Stops Relocated along North Main Street:

Stop	Direction	Volume (total boardings + total alightings)	Detail
North Main @ White	Inbound	91	Move to far side of Tenth
North Main @ 1168 North Main	Inbound	57	Move to far side of Sixth
North Main @ Church	Outbound	37	Move to near side of Star
North Main @ Dexterdale	Inbound	15	Move north 50'
North Main @ Industrial	Inbound	41	Move to near side of Industrial
North Main @ Fourth	Outbound	124	Move to far side of Second

R-Line Stops Installed along North Main Street:

Stop	Direction
Roger Williams National Memorial	Inbound
University Heights	Inbound
Charlesgate	Inbound
North Burial Ground	Inbound
Rochambeau Avenue	Inbound
Third Street	Inbound
Ninth Street	Inbound
Roger Williams National Memorial	Outbound
University Heights	Outbound
Charlesgate	Outbound
North Burial Ground	Outbound
Rochambeau Avenue	Outbound
Third Street	Outbound
Ninth Street	Outbound

Other Service Improvements

Traffic Signal Prioritization (TSP) now extends green lights for buses at traffic intersections, creating fewer stops and reducing running times. The implementation of TSP and related traffic signal upgrades and timing improvements have resulted in a decrease in delay times for buses as well as general traffic along North Main Street.

Striping improvements such as bus only and queue jump lanes at traffic signals will allow buses to operate through intersections with priority over other vehicles by providing an area for buses to bypass standing vehicle queues, further reducing wait times at signalized intersections. Geometric striping improvements are recommended for the following intersections on North Main Street in Providence:

- North Main Street at Smith Street: extend right lane on the North Main Street northbound approach to provide additional storage, removing five unmetered parking spaces
- North Main Street at Randall Street/Doyle Avenue: provide a right-turn/queue bypass lane on the North Main Street northbound approach
- North Main Street at Branch Ave/Cypress Street: provide a right-turn/queue bypass lane on the North Main Street northbound approach

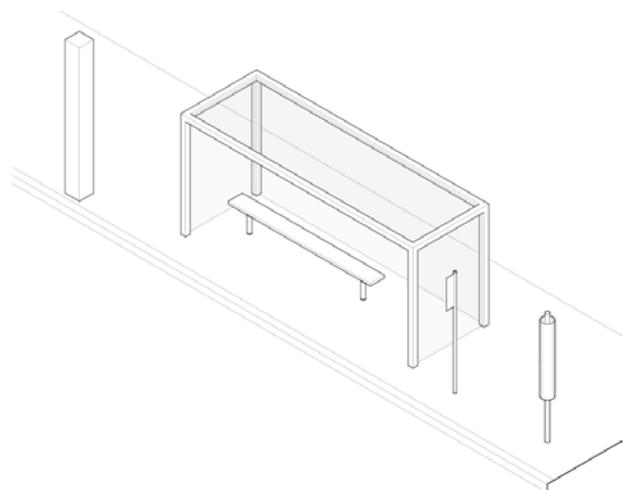
Curb extensions, accessible curb ramps, and clear “no parking” zones will improve accessibility and passenger safety. Curb extensions extend into the parking lane at intersections or at bus stops in order to slow traffic, emphasize crosswalks, shorten the pedestrian’s crossing distance, provide space on the sidewalk for vegetation, street furniture, and bus stop amenities, and keep bus stops clear of parked cars. Curb extensions at bus stops allow passengers to board a bus while it is still in the moving lane, increasing passenger safety and the efficiency of bus service. RIDOT plans to construct a curb extension at the northbound Roger Williams National Memorial stop. RIPTA is also considering constructing a curb extension at the northbound Charlesgate stop. “No parking” signs and diagonal pavement striping will be installed at all bus stop locations along North Main Street. Parking violations at bus stop locations will be enforced by the City of Providence Parking Enforcement.

Pedestrian Amenity Improvements

Enhanced passenger amenities have improved the passenger experience for those travelling along North Main Street. New, uniquely branded bus shelters, benches, trash receptacles, and wayfinding signage were installed in June 2014.

New, standardized bus stop components that have been installed along North Main Street include:

- Three new shelter types including typical three-sided shelters, cantilevered shelters that have been installed where sidewalk clearances prohibit installation of the typical three-sided shelter, and larger shelters that allow extra space for waiting passengers and space for ticket vending machines to be installed in the future;



Shown from left to right: New bus stop amenities will include transit totems, new bus shelters, new bus stop signs, and enhanced transit signs.

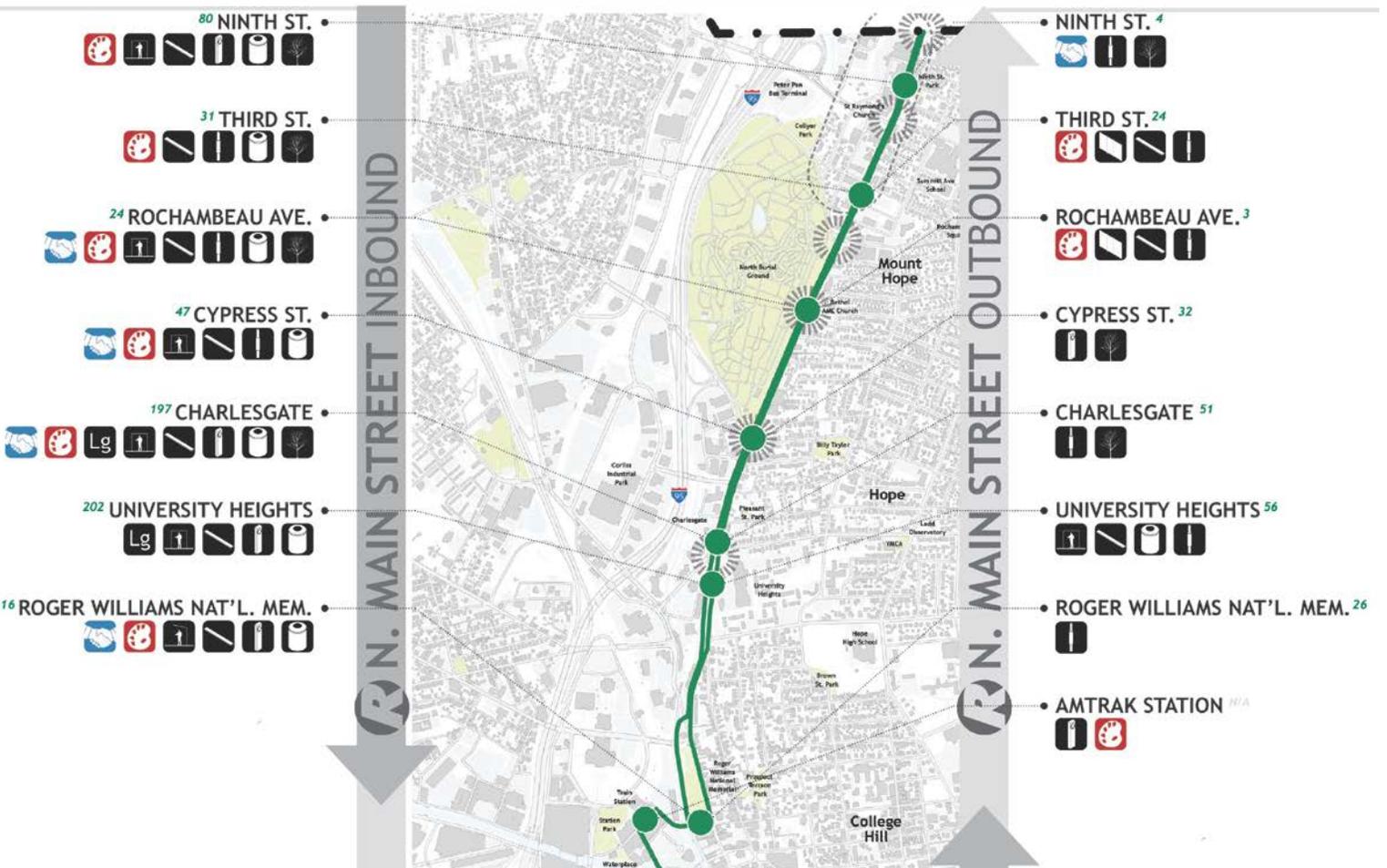
- Freestanding screens that screen parking lots, provide passengers with a buffer from the wind and provide a surface for public art;
- Freestanding transit totems that include schedule and map information for RIPTA services and additional wayfinding information;
- Enhanced transit signs that provide schedule and map information for RIPTA services; and,
- New post-mounted transit signs that replace existing RIPTA bus stop signs where transit totems or enhanced transit signs are not appropriate.

RIPTA purchased seven new bus shelters, two freestanding screens, five transit totems, nine enhanced transit signs, eight trash cans, 13 benches, and 12 bicycle racks for installation along North Main Street in Providence.

KEY

	community hubs		proposed bus stop
	community gateways		approx. current boardings/day
	public/private partnerships		transit stop art opportunities
	column & beam shelter		cantilevered shelter
	large shelter		free-standing vert. screen
	free-standing transit totem		enhanced transit sign
	free-standing bench		free-standing transit sign
	free-standing trash can		landscape components
	free-standing bike rack		

Planned bus stop improvements along North Main Street



Real-time information will provide passengers with actual arrival times at select bus stops and through web and mobile applications and will increase RIPTA’s scheduling accuracy. Real-time screens are expected to be installed in 2016 at Kennedy Plaza, Providence Station, and Pawtucket Transit. As the R-Line is further developed, additional screens will be installed at select bus stops.

Ticket Vending Machines (TVMs) will facilitate the purchase of tickets for riders and improve boarding times at key stops. A total of seven TVMs will be installed at Kennedy Plaza, Providence Station, and the Pawtucket Transit Center. The TVMS will be installed and operational by late Fall 2014.

Public art has been incorporated into select bus shelters along the corridor in order to celebrate the unique identity of North Main Street and provide a sense of orientation that connects people and places along the street in a meaningful way. In July 2013, the City of Providence Department of Art, Culture + Tourism and the Department of Planning and Development in partnership with RIPTA, invited artists to respond to the interpretive theme established for North Main Street by submitting concepts for art panels and seating to be included in select bus shelters along the R-Line. As part of the Art in Transit program created by this partnership, a total of thirteen artists or artist/fabricator teams were ultimately selected to produce installations for stops along both North Main Street and Broad Street. Seven of these thirteen artists or artist/fabricator teams have developed six panel and three seating installations for North Main Street, reflecting the corridor’s theme, “Living with History.”

For more information on the theme and artwork that will be developed for North Main Street, please refer to the “North Main Street Arts & Cultural Opportunities Analysis” section of this report.

Landscape Improvements
 Opportunities for landscape improvements at bus stop locations should be encouraged through partnerships with private property owners in order to improve the pedestrian realm surrounding the stops.

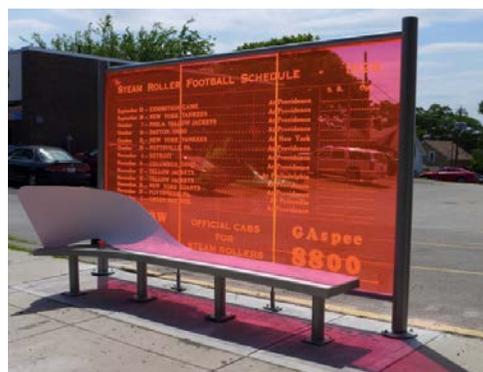
Street trees have been recommended in areas where there is space within the right-of-way and a need for enforcement of the street tree canopy. In some instances, the recommendations call for the replanting of trees that have been removed or the replacement of trees that are in poor condition.



Top: Freestanding screen designed by Erik Carlson and Eric Gould located at the Rochambeau Avenue Outbound stop.



Middle: Back panel designed by Jennifer Dalton Vincent located at the Ninth Street Inbound stop.



Bottom: Freestanding screen and bench designed by Michael Oliver Null located at the Third Street Inbound stop.

Landscape buffers have been recommended in areas where there are appropriate interstitial spaces that are otherwise underutilized or where there is a need to screen views of surface parking lots or other underutilized or unsightly areas.



Street tree planting is proposed for the Charlesgate stop and opportunities for landscape improvements have been identified for the Ninth Street stop.

The following bus stop locations along North Main Street have been identified for possible landscape improvements:

<u>Bus Stop</u>	<u>Street Trees Recommended</u>	<u>Landscape Buffer Recommended</u>	<u>Pocket Park Opportunity</u>
Ninth Street (outbound)	2-4	✓	--
Third Street (inbound)	2-4	✓	--
Rochambeau (inbound)	2-4	--	--
North Burial Ground (outbound)	1	--	--
Charlesgate (outbound)	2-3	--	--
Charlesgate (inbound)	1	--	--
TOTAL	10-17	--	--

ANTICIPATED SAVINGS

RIPTA will find savings with the implementation of the R-Line through Transit Signal Prioritization (TSP) and the realignment and removal of redundant bus stops. TSP is the primary way in which RIPTA will generate a cost savings. With this implementation, all signalized intersections on the R-Line route will provide priority to buses and thus create less dwell time for buses. Furthermore, TSP will better synchronize a series of intersections, which will allow all traffic to along down the corridor with greater efficiency.

Initial estimates indicate that these time savings will save RIPTA approximately 30 service hours per weekday. Over the course of a year, these savings will translate into approximately 7,650 fewer hours of service required to complete the same amount of work, generating a savings for RIPTA of nearly \$700,000 annually.

Total anticipated travel time savings for buses serving North Main Street:

	<u>Peak Hour</u>	<u>Anticipated Change in Travel Time</u>
Route 99 Outbound (via Main Street)	AM	-16%
Route 99 Outbound (via Main Street)	PM	-30%
Route 99 Inbound (via Main Street)	AM	-17%
Route 99 Inbound (via Main Street)	PM	-11%

The traffic signal equipment upgrades, coordination, and timing improvements alone are anticipated to reduce travel times along the study corridor between 4% and 10% for both buses and general vehicular traffic. When combined with the time savings from transit signal priority implementation and bus stop relocation and removal, travel time for buses on North Main Street is expected to be even higher. Time and fuel savings from the traffic signal upgrades and improved bus stop spacing have been invested back into the corridor, increasing the number of buses per hour from six to eight, resulting in a 33% increase in service along Broad and North Main streets.

NORTH MAIN STREET TRANSIT ANALYSIS RECOMMENDATIONS

- Improve bus maneuvering by prohibiting parking within 100 feet of stop line for bus stops on near side of an intersection and within 80 feet beyond the crosswalk or curb line extension for bus stops on far side of an intersection.
- Relocate bus stops currently blocking commercial driveways and account for potential parking conflicts.
- Improve speed by removing redundant bus stops.
- Upgrade traffic signals at intersections with excessive vehicle queues.
- Seek funding opportunities for high-capacity articulated buses for use along North Main Street as ridership grows.

North Main Street Land Use Analysis

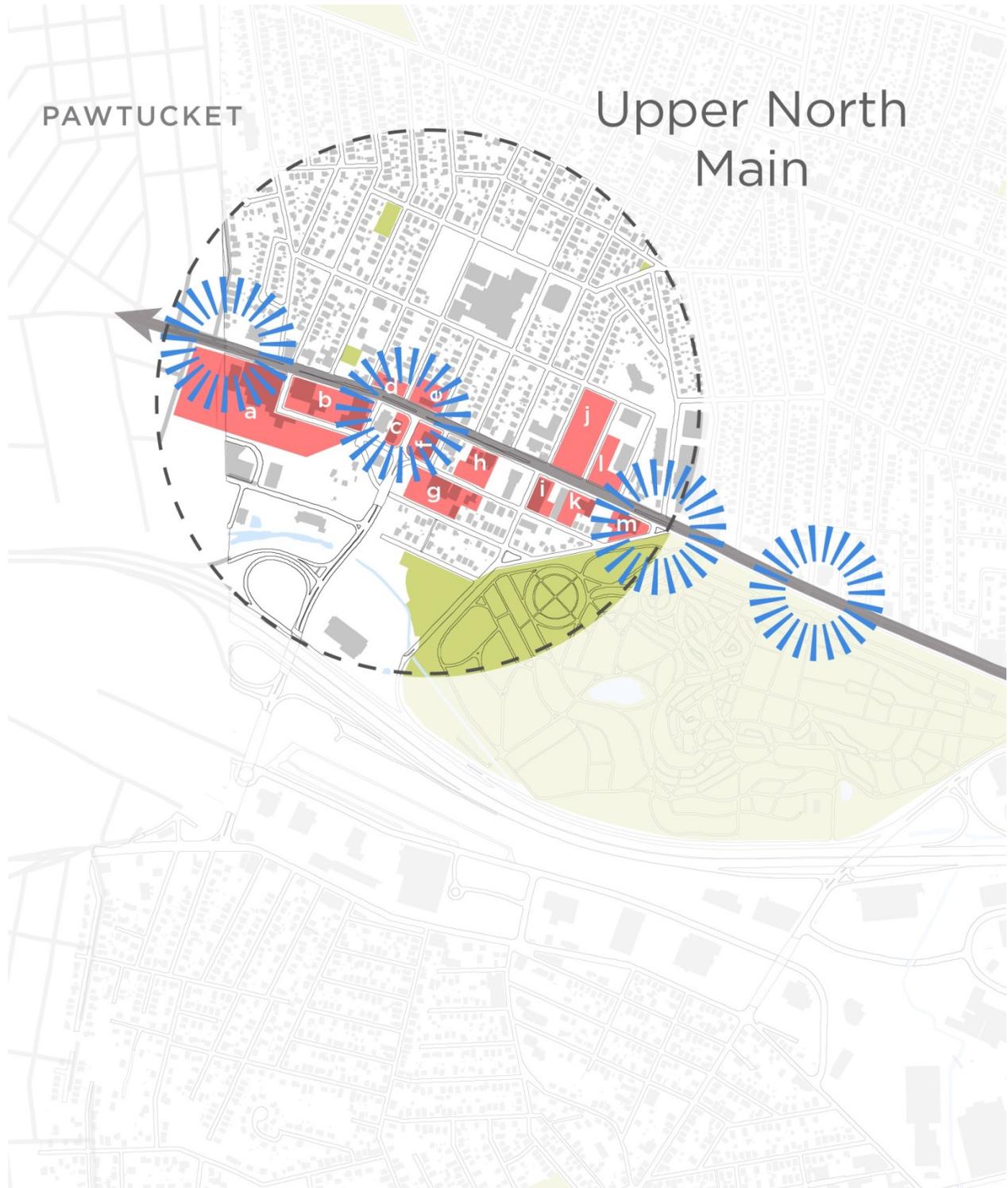
In addition to being one of the highest use bus routes in Providence, North Main Street was also selected as one of the five corridors to be evaluated as part of this project because of the availability of land to be redeveloped into housing and new businesses to create hubs of activity near transit stops. Linking development directly to transit will connect residents to jobs and employment centers and create jobs and investment in areas that are most in need. The redevelopment of vacant or underutilized parcels along the North Main Street will aid in the creation of mixed-use community hubs that are directly served by transit.

Community hubs have been identified and evaluated as areas along North Main Street where increased building height and density could be accommodated in order to encourage increased vitality, while also allowing for compatible transitions to surrounding areas. Directing investment to these hubs is critical in order to ensure the success of the transit investment in those areas and to create catalytic change along the entire corridor. Two community hub locations have been selected for North Main Street— Upper North Main and Lower North Main— and potential build out scenarios have been developed for opportunity sites within each. Future development scenarios have been evaluated against both the desires of the community and current zoning regulations; where conflicts with current zoning exist, adjustments of the ordinance are being implemented. The build out scenarios are meant to guide future development in the area by providing a framework based on best practices as well as the needs and desires of the community. In addition to longer term build out scenarios, interim uses have also been evaluated for opportunity sites within the hub locations in order to activate these important areas in the short-term. By studying possible build out scenarios on a site by site basis, the specific opportunities and limitations for each property as-of-right or under new zoning parameters can be analyzed. In most cases, the biggest barrier to redevelopment that was identified is incorporating the required surface parking on site (based on the currently required ratios for various land uses). Looking at the community hub as a whole allows more thought to be given regarding where opportunities for parking and open space exist on a district-wide scale.

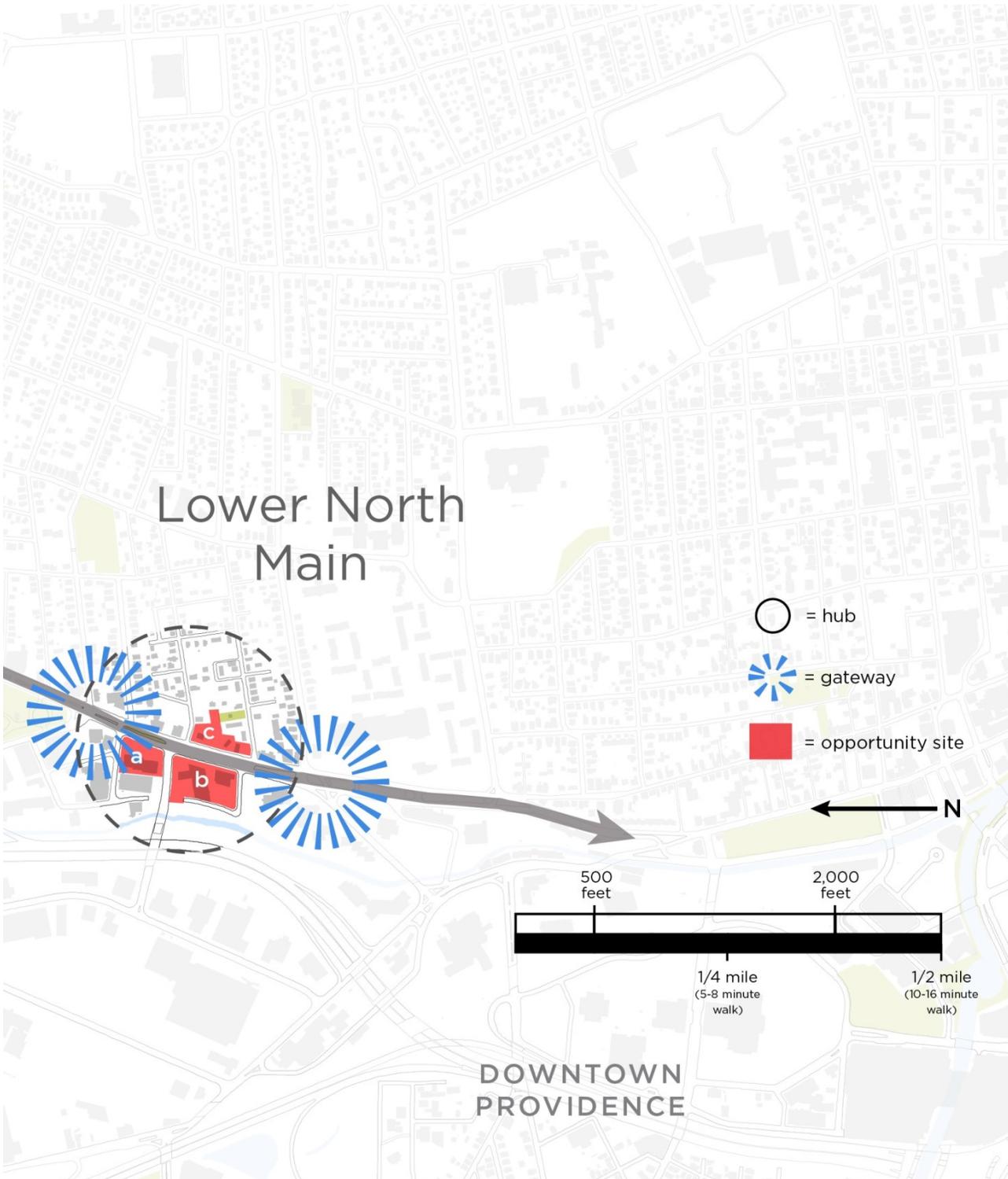
Several locations have also been identified along North Main Street as important community gateways. These wayfinding and transition points present opportunities for special treatments such as improved landscaping, special paving, signage, and public art in order highlight their symbolic importance, improve the pedestrian environment, and reinforce each neighborhood's unique identity.

While each community hub has specific site conditions and characteristics that differentiate it from other areas, there are general urban design principles that will inform redevelopment and help to shape their physical form. The following overarching design principles were established in order to guide the potential build out scenarios for each community hub:

- ➔ **AGGREGATION:** Consider small or oddly shaped adjoining properties for aggregation into larger development parcels.
- ➔ **SUBDIVISION:** Consider exceptionally large blocks for subdivision through the introduction of new streets and public plazas.



Hubs, gateways, and opportunity sites along North Main Street



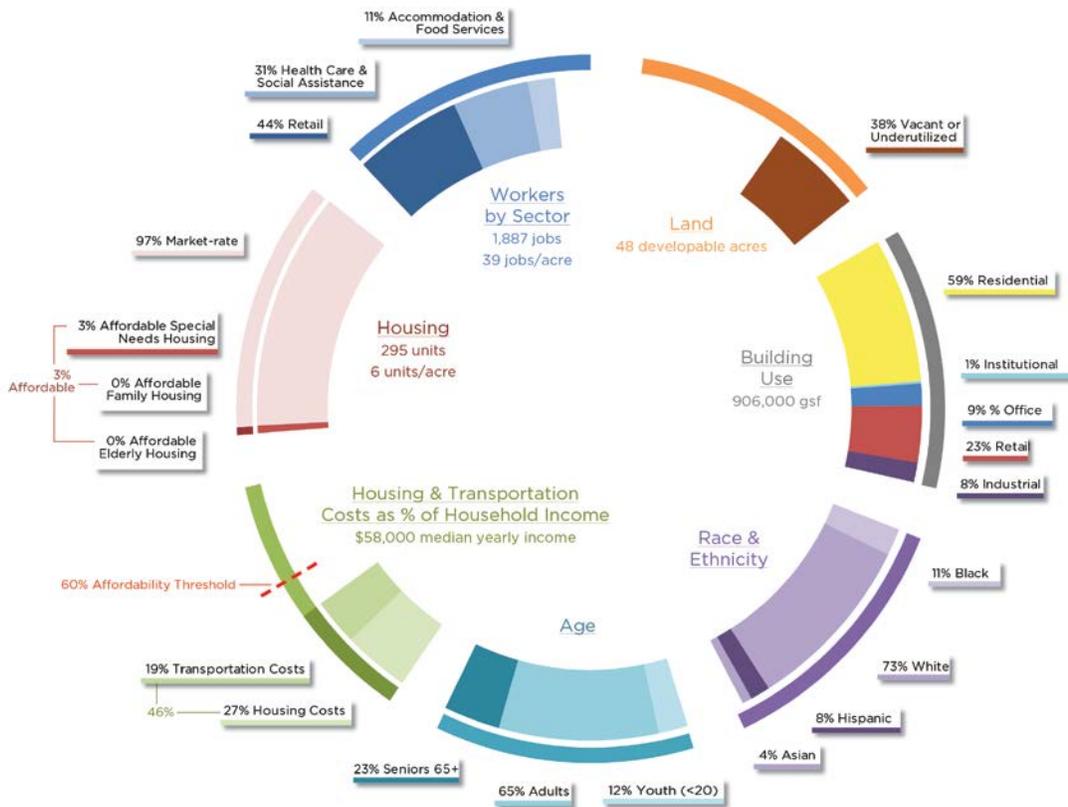
- ➔ **CONNECTIVITY:** Enhance visual and physical connections to existing open spaces that can link isolated places together.
- ➔ **DENSITY:** Increase density and building height on properties where new landscape setbacks, public plazas, or open spaces have been incorporated.
- ➔ **GATEWAYS:** Strengthen gateways that fall within community hub locations and identify existing architectural, social or historical community assets that can be better integrated into hub locations.
- ➔ **IDENTITY:** Reinforce individual corridor identities.
- ➔ **NATURAL SYSTEMS:** Leverage the presence of existing rivers or waterways to reinforce a sense of place and resolve stormwater issues.
- ➔ **PLACEMAKING:** Foster a stronger sense of place at the confluence of major streets by creating public squares and plazas.
- ➔ **STREETSCAPE:** Extend streetscape and public realm enhancements into the neighborhoods from the hubs with street trees and improved sidewalks.
- ➔ **BUFFERS:** Provide visual buffers to surface parking lots that are not feasible sites for complete redevelopment and ensure that large parking areas are broken up with planting islands and stormwater infiltration swales.
- ➔ **PARKING:** Consider sharing parking where day and night uses do not overlap.

UPPER NORTH MAIN STREET HUB

Located in the Hope neighborhood, the Upper North Main Street hub stretches from Ann Mary Street in the North to the intersection of North Main and Cemetery streets in the South. The general character of Upper North Main Street is typical of a mid-20th century, commercial strip with many curb cuts to individual parking lots and buildings that are set back from the street. Some of the hub's significant property owners include the Home and Hospice Care of Rhode Island, Miriam Hospital, Shawmut Realty Company, Ma Property Company of RI LLC, and 525 Company LLC. Despite the significant setbacks and shopping mall character, the corridor retains enough historic fabric in some small stretches to potentially create a street edge.



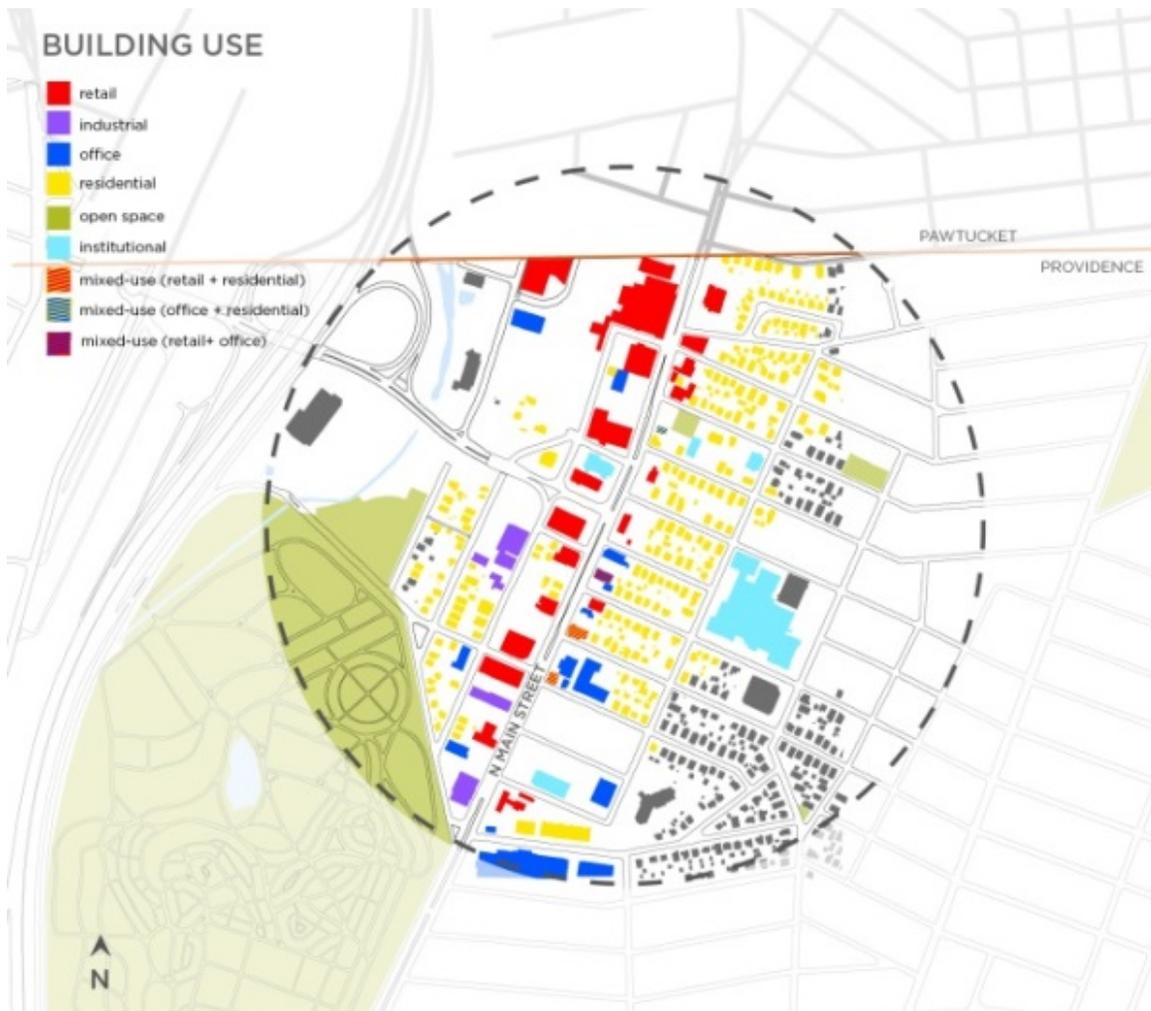
Upper North Main Street Hub at a Glance



Land area and density calculations are based on net acreage and do not include streets, parks or other right-of-ways. Housing and transportation costs were calculated using the Center for Neighborhood Technology's Housing and Transportation (H+T) Affordability Index. Age, race, and ethnicity calculations are based on the 2010 U.S. Census. Employment information was calculated using the Rhode Island Economic Development Corporation's 2010 employment database. Housing and building use information are based on data collected from the City of Providence Tax Assessor's Database.

Building + Land Use

Building uses along Upper North Main Street are primarily residential with a handful of retail buildings. The northern end of the hub consists of numerous surface parking lots and one-story commercial structures while the southern end is characterized by the prominent North Burial Ground and significant setbacks from the street edge. Many of these commercial properties along the corridor have considerable grade change and abut the single family homes in the adjacent residential neighborhood.

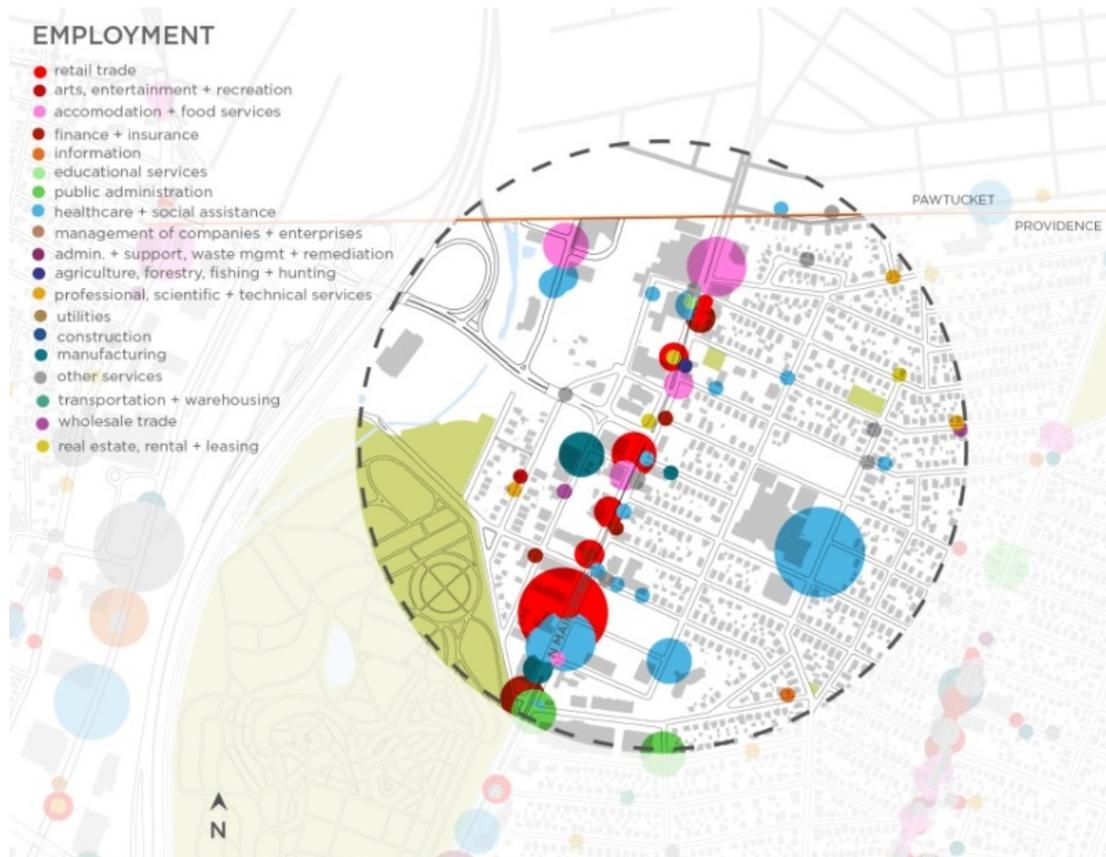


Housing

At approximately six dwelling units per acre, housing density in this area is more typical of suburban residential development than that of an urban area with frequent transit service. There are currently 613 residents within the Upper North Main Street hub residing in 295 housing units. Housing units are primarily market-rate with only three percent of all units being affordable.

Employment

Identifying businesses by sector and size creates a snapshot of current employment patterns in the Upper North Main Street hub. Just fewer than 2,000 people work within this area, nearly half of which are employed in the retail sector; another third work in health care and social assistance.



Race, Ethnicity + Age

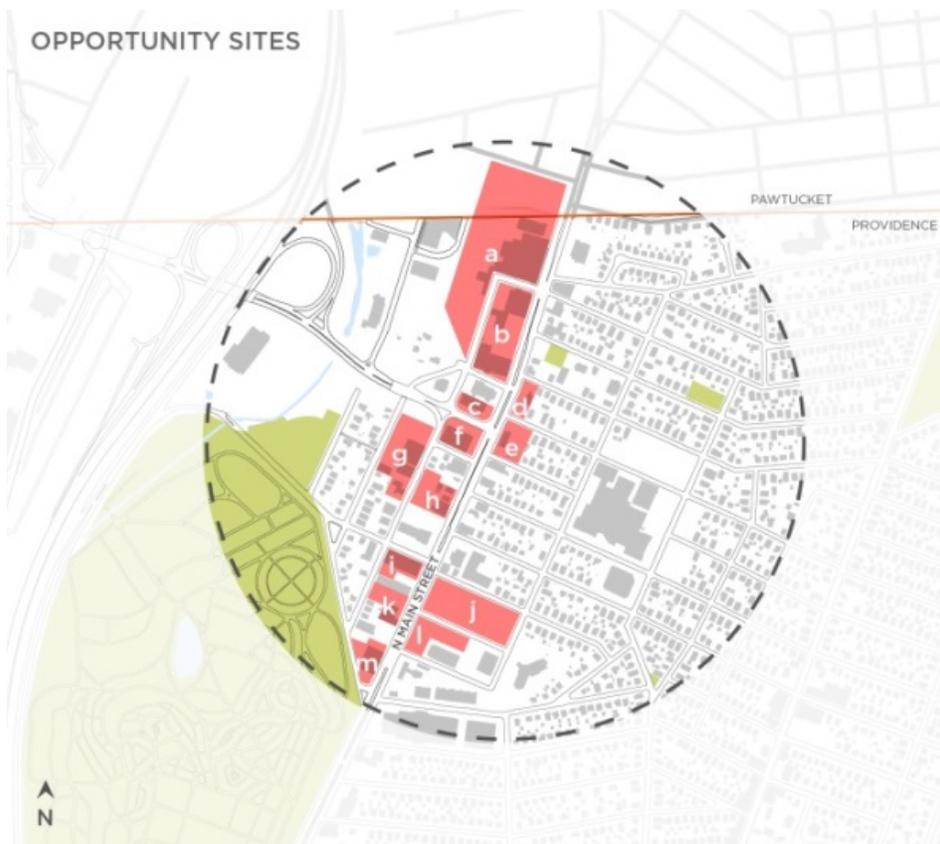
The majority of population within the Upper North Main Street hub is White (73 percent) with Black (11 percent), Hispanic (8 percent), and Asian (4 percent) populations all also represented. While most of the hub's residents are adults, almost one-quarter are considered senior citizens and 12 percent are below the age of 20.

Housing + Transportation Affordability

Given the Hub's median yearly income of \$58,000, both housing and transportation costs are considered affordable for households. Representing approximately 46 percent of total household income on average, these costs fall below the 60 percent affordability threshold.

Opportunity Sites

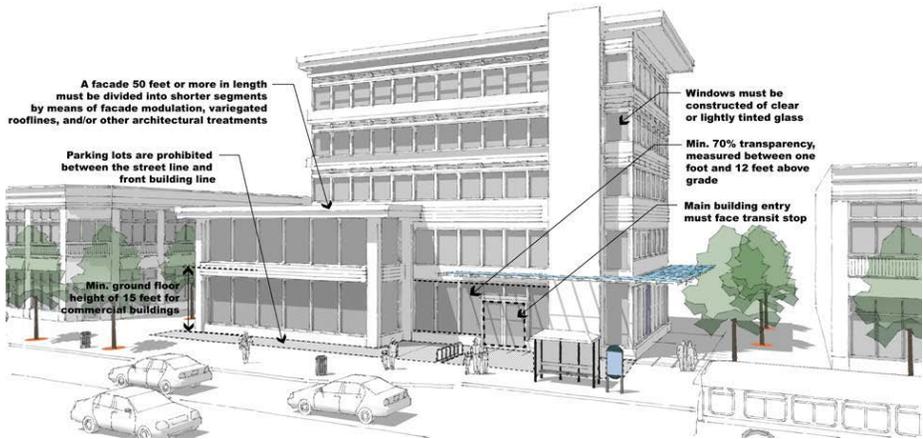
Together with the consultant team (Gamble Associates, Paul Cote, and Site Creative) the City identified various opportunity sites for future development within the hub by using a three-dimensional build-out analysis of transit-supportive densities. A total of 13 opportunity sites were identified within the Upper North Main Street hub. Future development scenarios for these sites were carefully evaluated against both the desires of the community and current zoning regulations; where conflicts with current zoning exist, adjustments of the ordinance are being implemented.



OPPORTUNITY SITE	a	b	c	d	e	f	g	h	i	j	k	l	m
ACREAGE	7.7	2.3	0.4	0.4	0.7	0.7	1.9	1.8	0.6	2.3	0.6	0.9	0.6

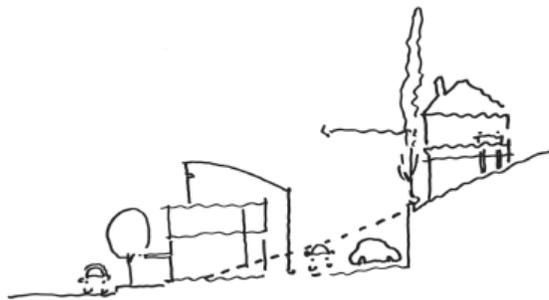
TOTAL ACREAGE **20.9 acres**

Since the completion of this build-out analysis, the City has proposed a TOD Transit-Oriented Development Overlay District within the Upper North Main Street hub. As part of the City’s new zoning ordinance, this overlay district is intended for areas where more permissive height regulations and more stringent parking regulations are appropriate because of close proximity to existing and anticipated future public transportation infrastructure. In addition to height and parking regulations, this overlay district includes design standards to reinforce a pedestrian-scale streetscape.



Proposed design standards for the TOD Transit-Oriented Development Overlay District

Key Redevelopment Goals + Opportunities



Preserve view corridors. Unlike many of the other commercial corridors in Providence, North Main Street has considerable grade change. View corridors extend over the valley to the west and south to Downtown. Sites along both sides of the street tend to be fairly narrow in their depth, which could limit their redevelopment potential. When redevelopment sites— such as Sites D and E— directly abut residential properties, additional limitations may emerge. The massing and siting of new development should take into account the specifics of geography in

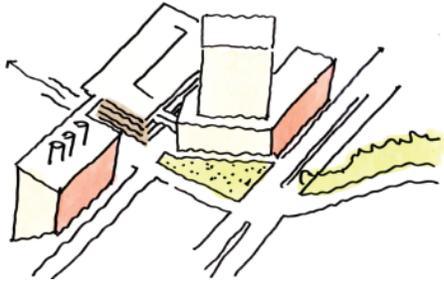
order to maximize height in areas where views will not be blocked and minimize height in places where obstruction of views would cause tension with neighbors.

Maximize density and views in relation to open spaces. Site M has a one-story building on it which occupies much of the property. The triangular shape of the site limits its redevelopment potential, but its proximity to the cemetery across the street increases the value of the land. Additional building height at this location would take advantage of views south to the open space and create a gateway into and out of the downtown core. Site aggregation should be pursued that would allow greater height in this location while accommodating shared parking in other locations.



Large parks and even cemeteries represent open space amenities for surrounding neighborhoods. The Old Burial Ground is such a space that suggests greater density on nearby sites.

Create a campus-like development at the Pawtucket border. At seven acres, there are few properties as large as Site A along Upper North Main Street. This site, a former Sears retail store, straddles the political jurisdictions of Pawtucket and Providence. Much of the west side of the site is used as a surface parking lot for nearby Miriam Hospital. As institutions reach capacity and land immediately surrounding their main

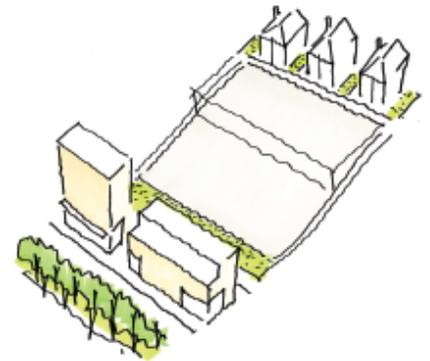


Straddling both Providence and Pawtucket, Site A would benefit significantly from a campus-like development.

campuses becomes less available, hospitals typically seek to identify non-essential programs that could move outside of their core campus. Employee parking, supply chain facilities and back-office functions can survive in satellite locations as long as shuttles and telecommunications are well managed. As Miriam Hospital continues to grow, locations like Site A are ideal to house some or all of these uses to free up territory on their main campus.

Another possible redevelopment scenario is to attract a large, campus-like tenant for Site A. The site is large enough for many different configurations and benefits from a grade change which could facilitate the construction of a shared parking facility with multiple entry and exit points. Nashua Street, between Smithfield and Ann Mary, should be extended to allow for more addresses to emerge on the site. A parking structure should be centralized to provide for connections between future development sites. The facility could also serve a park-and-ride for commuters who take the R-Line into Downtown.

Gradually adjust sites to the existing neighborhood fabric as they approach residential areas. Site J, the location of the former Auditorium, is a property that is large enough to warrant different physical approaches along its edges. Upper North Main Street is one of the city's primary major thoroughfares, and greater density should form along its length. Ground floor retail uses with a mix of other uses on upper floors would increase transit ridership and enliven the street. As Site J gets closer to the adjacent residential neighborhood, development should take on a finer grain that is more in scale with the existing single and two family homes.



Sites that have a substantial grade change should be developed in ways which takes advantage of the topography to include tiered and shared parking. When sites span multiple blocks, the form of the buildout should respect the existing residential neighborhood fabric.

Upper North Main Street Hub Land Use Analysis Recommendations

- Increase overall housing density and mix of affordable housing along corridor by adjusting zoning to allow for higher residential density and to include additional incentives for affordable housing development.
- Maximize height on sites where no view will be blocked and minimize height on sites where the view corridor is a concern by adjusting zoning to reflect the desired development and promote site aggregation.
- Promote large development at the Pawtucket border by adjusting zoning to reflect desired development and better market the site to local institutions.
- Ensure that development along the corridor transitions appropriately as sites approach the adjacent residential neighborhood.

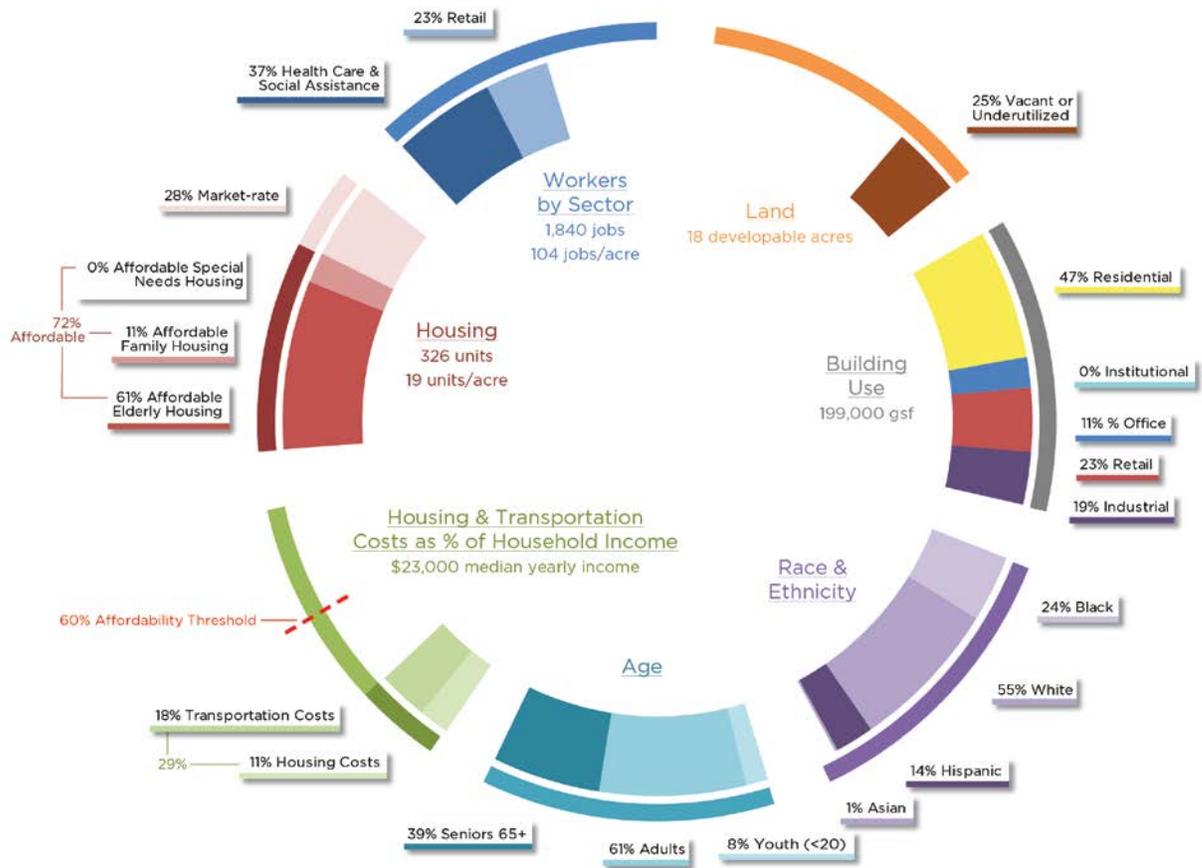
LOWER NORTH MAIN STREET HUB

Located within the Mount Hope neighborhood, the Lower North Main Street hub stretches from the intersection of Branch Avenue and North Main Street at the entrance to North Burial Ground to the intersection of Pleasant and North Main streets to the south. The hub contains mostly retail, office, and industrial space along North Main Street and residential buildings to the east of the corridor. Some of the corridor’s significant property owners include the North Main Street LLC, Printery Properties, N M Realty LLC, and the Providence Public Buildings Authority.

Although only three opportunity sites have been identified within the hub, the character of the corridor could be substantially changed through a combination of mixed-use private development and enhancements to the public open space network. Lower North Main Street has the potential to transform its character from an emerging suburban strip to a legitimate downtown gateway.



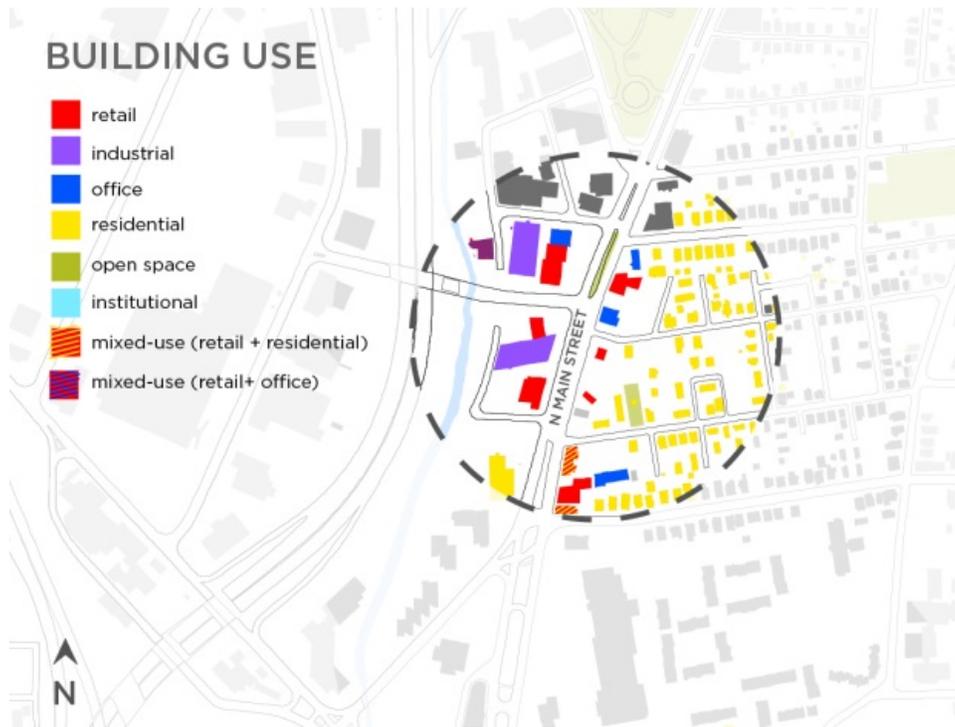
Lower North Main Street Hub at a Glance



Land area and density calculations are based on net acreage and do not include streets, parks or other right-of-ways. Housing and transportation costs were calculated using the Center for Neighborhood Technology's Housing and Transportation (H+T*) Affordability Index. Age, race, and ethnicity calculations are based on the 2010 U.S. Census. Employment information was calculated using the Rhode Island Economic Development Corporation's 2010 employment database. Housing and building use information are based on data collected from the City of Providence Tax Assessor's Database.

Building + Land Use

Building uses along Lower North Main Street are primarily residential with a handful of retail, industrial, and office buildings. Similar to Upper North Main Street, the corridor is characterized by the North Burial Ground at the northern end, several underutilized parcels on both sides of the street, and significant setbacks for retail business parking.



Housing

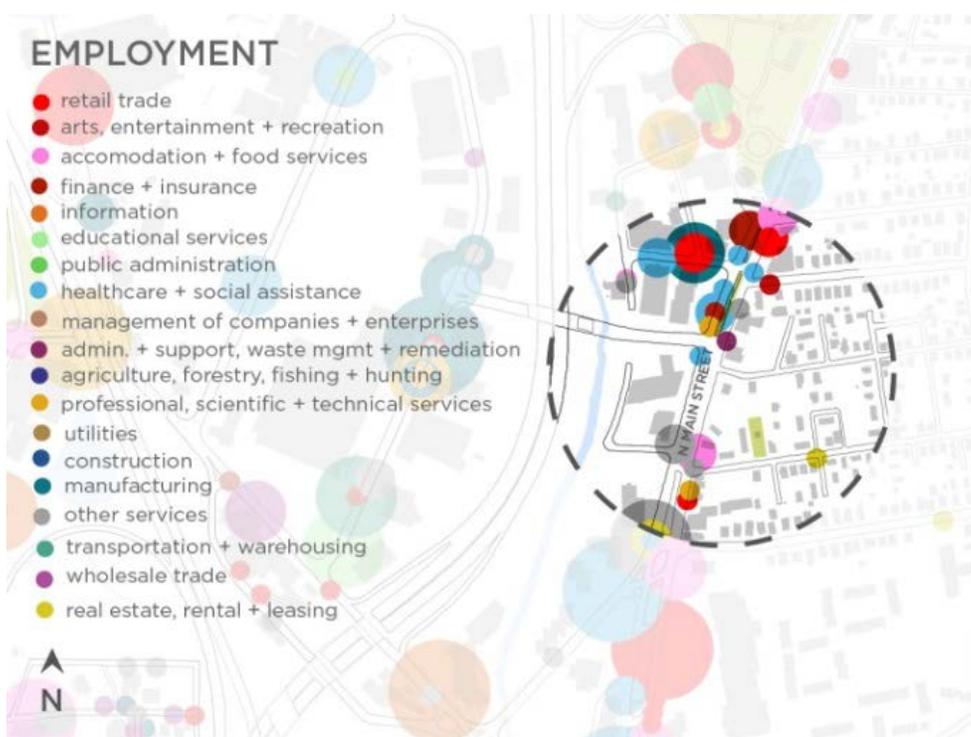
There are currently 436 residents within the Lower North Main Street hub residing in 326 housing units. Unlike the Upper North Main Street hub, over 70 percent of the existing housing within the area is affordable housing. Of the affordable housing, 61 percent is elderly housing and 11 percent is family housing.

Employment

Identifying businesses by sector and size creates a snapshot of current employment patterns in the Lower North Main Street hub. Approximately 1,840 people work within this area, over one-third of which are employed in the health care and social assistance sector; another quarter work in the retail sector.

Race, Ethnicity + Age

Lower North Main Street's population is predominantly White (55 percent), however, almost one-quarter of the population is Black. While most of the hub's residents are adults, more than one-third of the population is over the age of 64 and eight percent is below the age of 20.

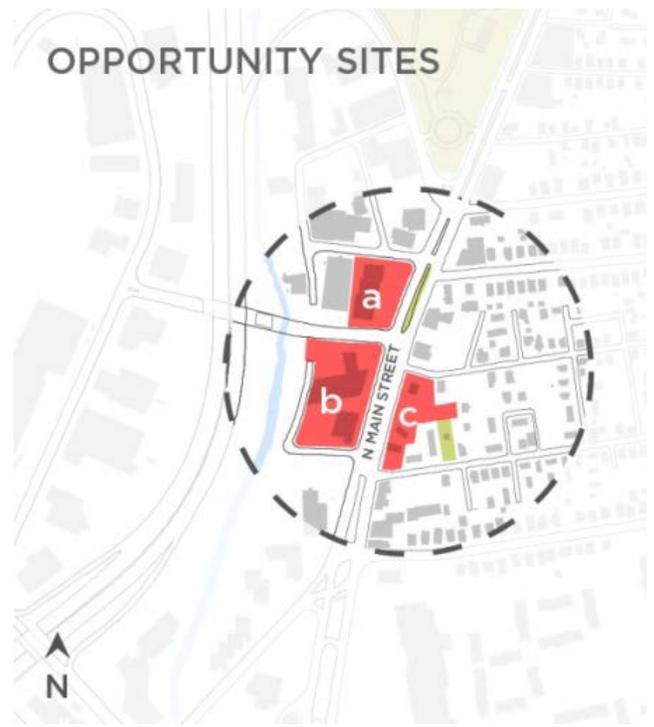


Housing + Transportation Affordability

Given the hub's median yearly income of \$23,000, both housing and transportation costs are considered affordable for households. Despite this fairly low median yearly income, average housing and transportation costs fall below the 60 percent affordability threshold.

Opportunity Sites

Together with the consultant team (Gamble Associates, Paul Cote, and Site Creative), the City identified various opportunity sites for future development within the hub by using a three-dimensional build-out analysis of transit-supportive densities. A total of three opportunity sites were identified within the Lower North Main Street Hub. Future development scenarios for these sites were carefully evaluated against both the desires of the community and current zoning regulations; where conflicts with current zoning exist, adjustments of the ordinance are being implemented.

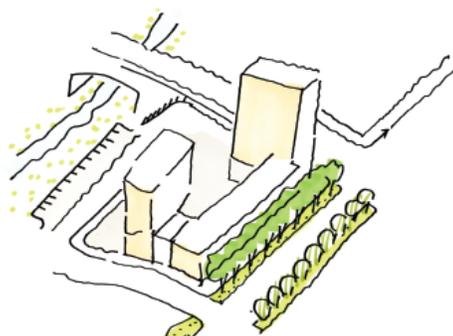


OPPORTUNITY SITE	a	b	c
ACREAGE	1.1	2.2	1.0
TOTAL ACREAGE	4.3 acres		

Key Redevelopment Goals and Opportunities

Continue to invest in improvements to the pedestrian realm and to the center landscape median.

For a large stretch of North Main Street, a center landscaped median separates north and southbound traffic. This green space provides a visual and audible buffer to oncoming traffic, and enhances the experience for cyclists, cars and pedestrians alike. Enhanced crosswalks at major intersections and improved sidewalks would further enhance the character of the corridor and create a more attractive address for new development on underutilized parcels. Sites A and B have the potential for high density, mixed-use development. The close proximity to neighborhood shopping and the parcel size could enable a mix of building forms to emerge to reinforce the street edge and allow for parking in the middle of the block.



An improved landscape median might parallel a modest green space setback that could align the park in front of Charlesgate Towers with the Fire Station.

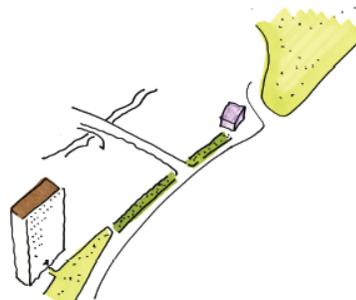
Create opportunities to connect to the river’s edge. Similar to Upper and Lower portions of Manton Avenue, a tributary of the Providence River meanders through the Lower North Main Street Hub. Hidden from view for most of its length, the natural waterbody is currently inaccessible to the public behind a chain link fence. Opportunities should be sought to orient properties towards the river in order to enhance connections to other community assets and to provide a recreational trail which could connect to the channelized portion of the river downstream. Sites A and B have a considerable grade change which could be used to provide a buffer against flooding. The two sites are divided by Industrial Drive, but the river unites them. Public access points from Industrial Drive down to Printery Street would enhance the user experience and enliven the area. Good access to the both I-95 and the R-Line suggest that these properties could be signature development sites.



Leveraging the presence of existing rivers or waterways to reinforce a sense of place is an underlying urban design principal throughout the corridors. Intelligent design can provide safeguards against flooding and facilitate stormwater runoff from adjacent development sites.

Connect the Charlesgate Towers to the Fire Station through an open space setback. Surface parking in front of commercial establishments facilitates access for patrons of the store, but does little to improve the character of the streetscape. When parking is located in front of buildings, it usually requires multiple curb cuts for the property it serves, and the relationship of the building to the street preferences the car as opposed to the pedestrian. Opportunities for shared parking should be sought to increase development on opportunity sites and to encourage greater transit ridership.

The Charlesgate Towers have an extended lawn in front of the buildings which acts as a forecourt to the apartments and creates a picturesque shaded waiting area for the bus. The existing lawn has the potential to be extended to the north in the future, linking to the fire station at Branch Avenue and



The stretch between the Charlesgate Towers and the fire station would benefit greatly from a landscape buffer.

setting up a framework for new growth. A modest 20-foot green swath in-between the edge of the sidewalk and new development would create a buffer zone to North Main Street and enhance the value of these sites. Capitalizing on prospects to foster a stronger sense of place like this would help to better integrate new development into the existing context.

Lower North Main Street Hub Land Use Analysis Recommendations

- Continue to invest in improvements to the pedestrian realm and to the center landscape median.
- Better connect the corridor to the river’s edge by developing a recreational trail along the river and adjust zoning to encourage new properties to front the river.
- Improve the pedestrian realm of vacant lots and surface parking with visual screening; identify key areas that could benefit from landscaping and other special elements.

North Main Street Arts + Cultural Opportunities Analysis

In order to better integrate art, culture, and heritage into Providence's transportation and land use planning, cultural planners worked closely with the City of Providence Department of Art, Culture + Tourism and the Department of Planning and Development to identify local cultural resources, engage neighborhood stakeholders in defining distinct attributes of each corridor, and develop strategies to apply cultural solutions that help define places, animate neighborhood hubs, mitigate problems, and inspire creative economic development.

CULTURAL RESOURCES INVENTORY

The City has catalogued existing cultural resources within a quarter mile of the North Main Street corridor. This cultural asset catalogue of North Main Street inventories the full spectrum of opportunities for cultural participation along the corridor including: the location of nonprofit arts and cultural organizations, performing and visual arts spaces, informal arts programming, public art installations, sites of historical and/or community significance, creative industries, artist housing, and public spaces.

The inventory of cultural resources along the corridor is presented here in summary, but is also available with much more detail in Appendices C and D.

To compile the cultural resource inventory, researchers searched directories, databases, and event calendars to identify and map cultural resources. Directories, databases, and event calendars from the Rhode Island Economic Development Corporation, New England Foundation for the Arts, Rhode Island State Council on the Arts, and the City of Providence Department of Arts Culture and Tourism have been combed in order to identify and map cultural resources along the corridor. An online survey and interviews with stakeholders, focus groups, community leaders, and experts from various fields have also informed the process.¹



Significant cultural resources along North Main Street include the Liberty Tree, North Burial Ground, and the Violin Shop.

¹ The cultural and creative sectors have been broadly defined using standard definitions developed by the New England Foundation for the Arts. These include resources ranging from arts and cultural organizations, public art, historic buildings and sites, creative industries, artists, parks, cemeteries, schools, local restaurants and food markets, community gardens, schools, religious institutions, and service organizations. Inventory categories were also determined by standardized NAICS (North American Industry Classification System) and NTEE (National Taxonomy of Exempt Entities) core codes.

Cultural and creative institutions and sites enhance a shared sense that a place is special. Identifying cultural resources was the first step toward identifying a distinctive theme for the corridor and ultimately developing creative placemaking strategies that have the potential to help define transportation gateways and revitalize critical hubs.

The cultural inventory for North Main Street includes 715 cultural resources. As acknowledged by the corridor’s theme, “Living with History”, historic buildings, sites, and districts represent the primary cultural resource. Over 500 historic buildings and sites— most significantly North Burial Ground, Roger Williams National Memorial, the Armory, the Liberty Tree, and the Jeremiah Dexter House— eight historic service organizations, and four historic districts were noted along North Main Street. There is also a significant cluster of creative industries along the corridor, including a cluster of 17 news media organizations, 12 photography or videography resources, nine architects or designers, nine arts galleries or dealers, and three music stores. The Rhode Island School of Design (RISD) and over 60 restaurants and live entertainment venues have a significant presence along the southern portion of North Main Street, closest to Downtown.

Important cultural attractions that were identified include:

- North Burial Ground (especially access points and interpretive trails)
- Roger Williams National Memorial
- The Jeremiah Dexter House
- King’s Chapel (St. John’s Episcopal)
- First Baptist Church
- Colony House (State House)
- Snowtown and Hard Scrabble memorials
- Milestone markers
- Rochambeau Square
- The Liberty Tree
- Miriam Hospital
- Armory
- Ninth Street Park
- Summit Park
- Collyer Park
- Billy Taylor Park
- Prospect Terrace Park
- South Main Street Park
- Rhode Island School of Design
- Rhode Island School of Design Museum of Art
- Everett Dance Theatre
- The Mount Hope, Doyle Avenue, College Hill, and Downtown historic districts



Cultural references have been noted on wayfinding maps and cultural content located on wayfinding totems at high volume bus stops along the corridor. This totem on North Main Street highlights Billy Taylor.

CORRIDOR THEME

Dreeszen & Associates' cultural planning team worked closely with the City's Department of Planning and Development, Department of Art, Culture + Tourism, and five stakeholder committees to develop interpretive themes for each of the five study corridors— North Main Street, Broad Street, Elmwood Avenue, Chalkstone Avenue, and Manton Avenue. The interpretive themes have a placemaking objective; they will contribute to a cohesive visual identity for each of the corridors, connecting people and places along the street in a meaningful way.

NORTH MAIN STREET: LIVING WITH HISTORY

North Main Street is most distinctive for its rich layers of history. Residents live amidst this history and RIPTA patrons ride through the corridor's invisible heritage, perhaps unaware of the importance of this route to the city, state, and nation. Artists and designers are called to create tangible reminders of important elements of history that are no longer apparent. As Paul Klee observed, "art does not reproduce the visible, it makes visible." Artists will help create a sense of place along the corridor and help the people who use North Main Street today recall and appreciate the cultural landscape. From its early Native American, colonial, and Revolutionary War history and the inclusive philosophy of the North Burial Ground, to a thriving African American music scene and the early 20th century sports clubs, artists may propose to manifest some piece of history or draw inspiration from or find connections between these invisible layers of North Main's history, people, events, and important places. As residents talk about "what used to be here," artists can help us see beneath the surface, to experience the invisible or connect history with the future.

This theme helped to inform local artists as they worked to integrate art into bus shelters along the corridor. The artistic interpretations of the theme reflect and reinforce North Main Street's design and unique cultural heritage. The themes for each corridor are the result of a broad public participation process that included input from community members at a series of public meetings, online surveys, interviews with local experts, numerous meetings with stakeholder committees for each corridor, a citywide project advisory committee, various focus groups, and City staff members. In addition, the themes are informed by the *Providence Tomorrow* neighborhood plans, corridor exploration, and a review of the cultural resource inventory that was completed for each corridor as part of this project.

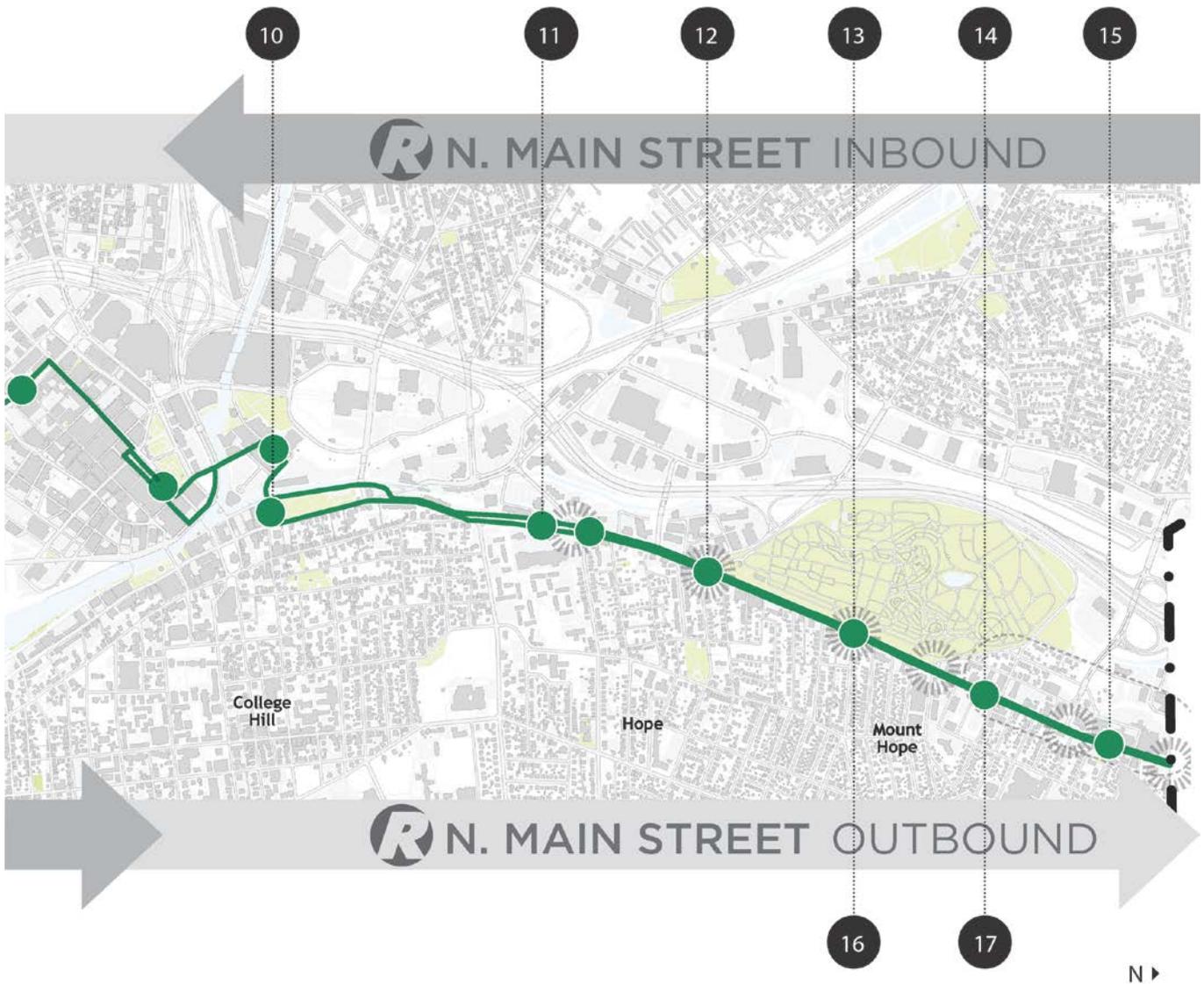
Opportunities for artistic intervention at key bus stops along the corridor were identified and developed in conjunction with bus shelters either as a component of a prefabricated bus shelter (side panel, back panel, or column) or as a free standing seating element. The artistic interventions have replaced specific manufactured components of the shelter to



Artwork installed at bus stops along North Main Street reinforces the corridor's theme of "Living with History."

seamlessly blend public art with new infrastructure. Artists were required to incorporate and adhere to several criteria including the theme that was established for North Main Street. As both an art object and a transit amenity, the shelters encourage the use of the public transit system and celebrate the unique identity of these important commercial, cultural and historic neighborhoods.

In addition to the shelter locations, several areas have been identified along North Main Street as important community gateways. These significant wayfinding and transition points present opportunities for special treatments that highlight their symbolic importance, improve the pedestrian environment, and reinforce each neighborhood's unique identity. The Charlesgate and Rochambeau gateway sites have been recommended for additional stand-alone pieces of art that will help contribute to the overall identity of the corridor and reflect the interpretive theme. The City will work to identify possible funding sources to hire artists to design and install stand-alone pieces of art at the recommended gateway sites.



10 ROGER WLMS. N.M. Inbound Seating

11 UNIVERSITY HEIGHTS Inbound Back & Side Panels + Column

12 CYPRESS ST. Inbound Back Panel

13 ROCHAMBEAU AVE. Inbound Back Panel

14 THIRD ST. Inbound Seating

15 NINTH ST. Inbound Back Panel

16 ROCHAMBEAU AVE. Outbound Freestanding Screen

17 THIRD ST. Outbound Freestanding Screen

Bus stop artwork installed along North Main Street

ARTS + CULTURAL PLANNING RECOMMENDATIONS

Dreeszen & Associates' cultural planning team met with City of Providence Art Culture + Tourism and Planning and Development staff, project advisors, and stakeholder committees to develop strategies to employ arts, culture, and heritage to improve livability, prosperity, and public access to arts and entertainment along the five corridors. Recommendations also build upon Creative Providence: A Cultural Plan for the Creative Sector; Providence Tomorrow neighborhood plans; and other plans including RIPTA's Metropolitan Transit Enhancement Study, and specific district plans. Recommendations are based on assets identified in inventories of cultural resources and the interpretive themes and artist guidelines for each corridor.

North Main Street Corridor Arts & Cultural Opportunities Analysis Recommendations

- Continue to encourage use of North Main Street for special events such as the Rock-N-Roll Half Marathon, Amica Iron Man, and Cox Marathon series.
- Build upon the North Main Street Merchants Association's work by looking for opportunities to support their efforts to encourage a robust Main Street shopping experience and promote walkability.
- Encourage cultural programming that leverages proximity to Waterfire. During the 2012 season, Roger Williams National Memorial partnered with the Rhode Island Songwriters Association to present concerts at the National Memorial on evenings when Waterfire was scheduled.
- Implement recommendations from Roger Williams National Memorial Cultural Landscape Report.
- Develop a guide for students and the creative community alerting them to creative service providers available along the North Main Street corridor and work with the *Providence Phoenix* to integrate it into their Back to School guide.

For more information on the land use analysis of the community hubs please refer to the "North Main Street Land Use Analysis" section of this report.

In addition to the above corridor-wide recommendations, the cultural planning team has identified existing conditions, emerging opportunities, and potential scenarios for increased cultural participation at two neighborhood-based community hubs along North Main Street— Upper North Main, extending from Stenton Avenue and the northern edge of North Burial

Ground north to the Pawtucket border, and Lower North Main, between Doyle Avenue and Duncan Avenue near Charlesgate. These two locations have been identified and evaluated as areas along North Main Street where increased building height and density could be accommodated, in order to encourage life and vitality, while also allowing for compatible transitions to surrounding areas. Directing investment to these hubs is critical in order to ensure the success of the transit investment in those areas and to create catalytic change along the entire corridor. The following arts and cultural strategies were tailored specifically to meet the project objectives of integrating transit, housing, economic development, and arts and cultural activities at the two identified hub locations.

Upper North Main Hub Arts & Cultural Opportunities Analysis Recommendations

- Recruit signature cultural institutions to anchor hub redevelopment, attract audiences, and catalyze complementary business development; create a creative enterprise center at the Upper North Main Hub to encourage retail and service businesses that appeal to area nonprofits, businesses and artists located in the nearby Hope Artiste Village just across the Pawtucket line. (*Local examples include: New Urban Arts on Westminster Street; AS220 on Empire and Washington Streets; and The Steel Yard in the Valley industrial district of Olneyville.*)
- Encourage music, art and dance supply shops and associated businesses to locate near the existing small cluster of stringed instrument vendors.
- Pursue opportunities and resolve challenges to ensure the vibrancy and safety of night clubs and live music venues along North Main Street in order to animate the corridor and continue an important historical tradition.
- Direct people to North Burial Ground entrances and encourage walking and the use of interactive walking & historical tour apps.
- Encourage special events at North Burial Ground to help people discover this contemplative, walkable resource.

Examples of events in cemeteries in Providence other Cities include:

- *Forest Hills Cemetery, Chattanooga, TN: annual stroll with historic commemoration events (<http://foresthillscemetery.net/news.asp>)*
- *North Burial Ground, Providence, RI: Cryptic Providence public art installations, 2008 (http://jaycritchley.com/category/projects/cryptic_providence/)*
- *Forest Hills, Boston, MA: various events (<http://www.foresthillstrust.org/calendar.html>)*
- *"To Attract Future Customers, Cemeteries Hold Parties to Die For", Wall Street Journal,; (<http://online.wsj.com/article/SB10001424052748704388504575419263519517820.html>)*
- Encourage temporary murals, artistic treatments of fencing, and other art projects in vacant storefronts or empty lots in order to mitigate the negative visual impact of vacant properties; engage neighbors and students in interactive art projects.

Examples include:

- *Portland, ME: Good Fences for Good Neighbors*
- *Seattle, WA: storefront project: (<http://storefrontsseattle.wordpress.com/>)*
- *Pittsburgh, PA: Project Pop-up (<http://www.downtownpittsburgh.com/about-pdp/pdp-initiatives/project-pop-up>)*
- Encourage a new mural on the Empire Guitar building.

Lower North Main Hub Arts & Cultural Opportunities Analysis Recommendations

- Commission iconic public art for the Doyle Avenue-North Main Street gateway location.
- Prioritize this area for wayfinding signage to help RIPTA riders and residents locate the key assets such as Roger Williams Memorial and North Burial Ground.

BROAD STREET

Broad Street Introduction

Broad Street, RIPTA's busiest bus route, is also the busiest commercial area in South Providence. Over the course of about 1.3 miles it includes more than 120 merchants. The corridor stretches from the edge of Downtown and Interstate-95, south past the iconic Trinity Square and historic Grace Church Cemetery, through a busy commercial district, past the major eastern entrance to Roger Williams Park, and on through Cranston.

Originally a part of an Indian trail known as the Pequot Path, Broad Street was opened up in the seventeenth century and was part of the Roger Williams' original settlement that was established 1636. The area was predominantly used as farmland until the development of the first horse drawn street railway line in 1865 transformed the area into Providence's first major streetcar suburb. In 1879, the first horse car line opened on Broad Street, further attracting middle and upper class single family housing to the area. After 1950, the rise of the automobile intensified suburbanization and led to a decline in the condition of housing along Broad Street. Many yards were converted into driveways and garages, and street widths were expanded, resulting in the loss of many tree-lined streetscapes in the area. The construction of Interstate-95 physically separated Lower South Providence from the rest of the city and consequently destroyed its historic relationship with both Downtown and the waterfront. Today, Broad Street is the busiest commercial area in South Providence with a wide variety of businesses including retail, medical, transportation, arts, human services, restaurants, and personal and beauty care services. Three of the City's public high schools abut the northern end of the corridor closest to Downtown.

The *Broad Street Transit Analysis* section of this report provides an overview of the current conditions of transit along the corridor and outlines measures to be taken to provide frequent, reliable transit service, improving the rider experience along this important transportation corridor. The *Broad Street Land Use Analysis* section of this report contains an analysis of existing conditions, vacant and underutilized land within key nodes along the project corridor, and potential build out scenarios for each key node. This analysis furthers the City's goals of managing growth and change, encouraging development and neighborhood revitalization, fostering a stronger sense of place, and building upon the placemaking role of RIPTA's transit enhancements. The *Broad Street Arts and Cultural Opportunities Analysis* section of this report summarizes the public art enhancements that have been recommended, the inventory of arts and cultural resources that was completed, and the creative placemaking strategies that were developed to employ arts, culture, and heritage to improve livability, prosperity, and public access to arts and entertainment along the corridor.

What do previous plans say about Broad Street?

Previous plans, including the Providence Tomorrow Neighborhood Plan for Upper South Providence, Lower South Providence and Elmwood (2009), the Providence Tomorrow Neighborhood Plan for Washington Park and South Elmwood (2009), the Southside/Broad Street Design Guidelines (2004), and A Vision for Revitalization: the Trinity Gateway Project at Grace Church Cemetery (2003) were evaluated in order to ensure that key elements of those plans were integrated into this planning effort.

The following elements of those plans have been incorporated into the goals for the transportation, land use, and cultural planning elements of this project:

- ➔ Create mixed-use commercial nodes along Broad Street from Trinity Square to the Service Road and at the intersection of Broad and Public streets; cluster redevelopment efforts, retail activities, and services to enhance the appeal of Broad Street; create an entertainment cluster around the Bomes Theater.
- ➔ Highlight the multi-cultural character of the neighborhood.
- ➔ Coordinate traffic signals and enhance bus shelters at identified commercial nodes.
- ➔ Promote the parks and historic resources by developing a cohesive wayfinding system.
- ➔ Promote business assistance programs including technical assistance, workshops, storefront improvement grants and micro-loans to attract merchants and enhance the most retail-intensive nodes on the street.
- ➔ Support existing and future merchant groups on Broad Street.
- ➔ Activate the space near the Broad Street entrance to Roger Williams Park
- ➔ Encourage improvements to Grace Church Cemetery including restoration of the main gate and caretaker's cottage, and improvements to the sidewalks, walls, and fences that define the Cemetery's edges.
- ➔ Activate Grace Church Cemetery by creating two inviting east-west pedestrian walkways, one from the Pine-Broad intersection to Elmwood Avenue, and the other from the Warren-Elmwood intersection to Broad Street. Mark the entrances to these walkways with new arches and signage that is consistent with the restored main gate.

Broad Street Transit Analysis

Previously, public transit along Broad Street was defined by Route 11, a RIPTA-operated bus route. Serving as the City’s heaviest ridership route, Route 11 provided service between the intersection of Broad and Eddy Street at the Cranston/Providence Line and Kennedy Plaza in downtown Providence, primarily along Broad Street. Route 11 service was through-routed with Route 99 North Main Street, and, in effect, operated as a single route between Pawtucket and the Cranston/Providence Line via downtown Providence. In June 2014, R-Line Rapid Bus service replaced Routes 11 and 99, significantly improving transit service along Broad Street. 91 percent of all of RIPTA’s previous Route 11 passenger activity occurred within 1/6 of a mile of the new R-Line stops.

EXISTING RIDERSHIP DATA

As one of RIPTA’s best performing routes, Route 11 (now the southern portion of the R-Line) averages 5,900 riders per weekday, 3,300 riders per Saturday, and 2,000 riders per Sunday. The route travels through portions of Downtown, Elmwood, and South Providence with Kennedy Plaza serving as the sole transit hub along the route. Some of the main activity centers along the route include Kennedy Plaza, Saint Joseph Hospital, Roger Williams Park and Zoo, and Johnson & Wales University.



Route map of RIPTA’s Route 11 service, which has since been replaced by the R-Line.

The afternoon peak period carries the highest number of riders per trip of the day. While ridership per trip is high throughout most of the day in both directions, ridership is higher inbound than outbound before 8:00 AM, and higher outbound on trips after 3:00 PM, which indicates that the route is heavily used by commuters. In addition, ridership per trip is also very strong during the midday, which indicates that the route is also heavily used for other types of trips.

STOP INVENTORY ANALYSIS

Along the old Route 11, there were 52 bus stops (24 inbound and 28 outbound), 46 of which were located along Broad Street. Only five of these 46 stops along Broad Street had bus shelters (four inbound stops and one outbound stop). With approximately 7.2 bus stops per mile, Route 11 stop frequency was significantly higher than the system average of 5.6 stops per mile.

EXISTING CONDITIONS ANALYSIS

During RIPTA’s analysis of Broad Street, the following issues were noted:

Pedestrian midblock crossings are problematic. Many pedestrians cross at midblock locations and not at the crosswalks, contributing to unsafe conditions for pedestrians and additional delay for vehicles traveling along the corridor.

Vehicles are frequently parked at bus stops. Buses are regularly being forced to stop in the travel lane for boardings and alightings because of parked vehicles adjacent to bus stops.

There is severe vehicular congestion between Trinity Square and I-95 near Downtown. This congestion occurs primarily during the midday and evening peak periods and between Prairie Avenue and Potters Street on Friday afternoons and during the summer.

Traffic signals are inefficient. It was noted that along Broad Street, since the majority of traffic signals are pre-timed, green lights are provided for side streets even when no vehicles are present, causing unnecessary delays along Broad Street.

Bus stops are located too close to intersections. Several bus stops are located too close to the corner of the intersections, interfering with traffic operations along the corridor.

Furthermore, the following intersections were noted as having excessive vehicle queues during peak travel periods:

- Broad Street at Babcock Street/Broom Street southbound
- Broad Street at Baker Street/Hawthorne Avenue southbound
- Broad Street at Thurbers Avenue/Lennox Avenue northbound
- Broad Street at Plenty Street/Willard Avenue northbound
- Broad Street at Pearl Street northbound and southbound
- Broad Street at Cahir Street/Stewart Street northbound

RECOMMENDATIONS

Bus Stop Location Improvements

Bus stops play an important role in the identity of the street and are therefore an important urban design element. The siting of bus stops and their components should enhance the transit corridor and strengthen the character of the street. By removing and relocating some bus stops on Broad Street, RIPTA is now able to provide service that is more efficient, accessible, and reliable, and is able to ensure that stops are in ideal locations for passengers, local businesses and residents.

Improved bus stop spacing has shortened travel times and minimized ‘stop and go’ travel along the length of the corridor. Through a thorough analysis of Broad Street, RIPTA identified stops that were spaced too closely together, unsafe, or underutilized. The removal and relocation of these stops has improved schedule adherence for buses, the accessibility of RIPTA services for all patrons, and travel times for passengers. Additionally, RIPTA will benefit from reduced maintenance and fuel costs directly related to these changes.

In order to develop the R-Line and determine stop placement along Broad Street, RIPTA analyzed previous recommendations for the corridor and ultimately relocated nine inbound stops and five outbound stops from the Providence-Cranston line to downtown

Providence, while keeping six inbound stops and 12 outbound stops in their current locations. RIPTA removed six inbound stops and eight outbound stops entirely in order to improve bus service. All recommendations for removal or relocation were thoroughly reviewed with the public and local stakeholders. Comments and concerns gathered from the public were incorporated into the final bus stop placement. The placement of each stop

For more information on the R-Line, including branding and route information, please refer to the “What is Rapid Bus?” section of this report within the Executive Summary.

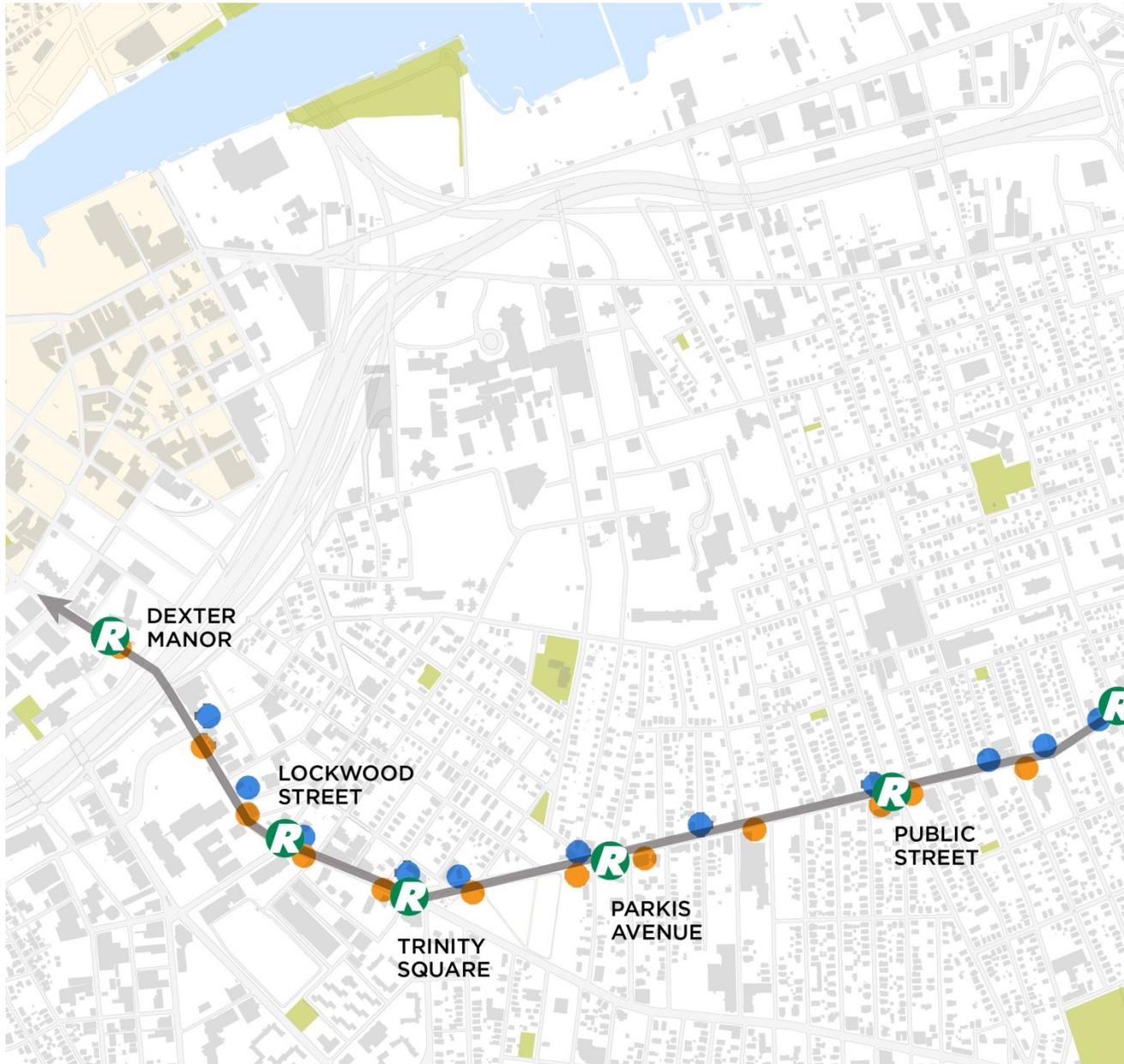
was also analyzed through its impact on traffic and pedestrian sightlines and activity, as well as relationships to landmarks, landscaped spaces, and surrounding buildings.

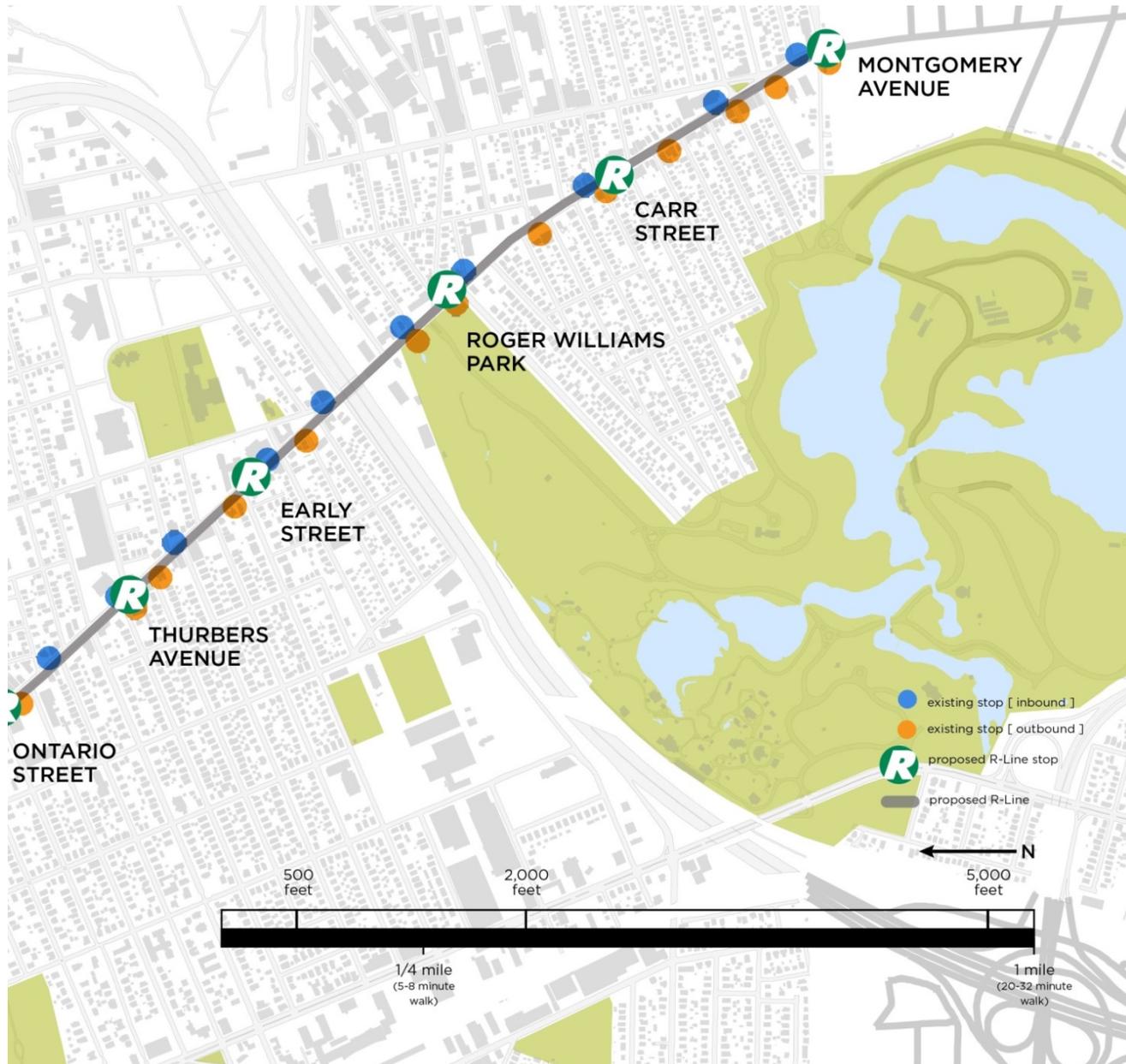
Stops Maintained along Broad Street:

Stop	Direction	Volume (total boardings + total alightings)
Broad @ Montgomery	Inbound	364
Broad @ Early	Inbound	146
Broad @ Thurbers	Inbound	342
Broad @ Massie & Oxford	Inbound	160
Broad @ Potters	Inbound	135
Broad @ Lockwood	Inbound	334
Broad @ Fenner	Outbound	198
Broad @ Lockwood	Outbound	327
Broad @ Somerset	Outbound	405
Broad @ Hayward	Outbound	76
Broad @ Willard	Outbound	169
Broad @ Laura	Outbound	133
Broad @ Lexington & Oxford	Outbound	246
Broad @ Sackett	Outbound	93
Broad @ Sassafras	Outbound	109
Broad @ Carr & Calla	Outbound	76
Broad @ Montgomery	Outbound	259
Broad @ Farragut	Outbound	110

Stops Removed along Broad Street:

Stop	Direction	Volume (total boardings + total alightings)
Broad @ Cass	Inbound	74
Broad @ Prairie	Inbound	38
Broad @ Houston	Inbound	130
Broad @ Lillian	Inbound	59
Broad @ Haywayd	Inbound	114
Broad @ Haskins	Inbound	91
Broad @ Haskins	Outbound	128
Broad @ Parkis	Outbound	210
Broad @ Public	Outbound	168
Broad @ Pennsylvania	Outbound	162
Broad @ Hawthorne	Outbound	52
Broad @ Fisk	Outbound	63
Broad @ Payton	Outbound	51
Broad @ McDonalds	Outbound	112





Bus stop changes along Broad Street

Stops Relocated along Broad Street:

Stop	Direction	Volume (total boardings + total alightings)	Detail
Broad @ Farragut	Inbound	126	Move to far side of Farragut
Broad @ Homer	Inbound	93	Move north to Calla
Broad @ Jillson	Inbound	202	Move north to Parkview
Broad @ Ella	Inbound	90	Move to opposite Gallatin
Broad @ Public	Inbound	210	Move to far side Public
Broad @ Chester	Inbound	0	Move to Wesleyan
Broad @ Parkis	Inbound	191	Move north to Blackstone
Broad @ Portland	Inbound	429	Move to near side Somerset
Broad @ Service Rd 7	Inbound	301	Move south 100'
Broad @ Cahir	Outbound	327	Move to far side Cahir
Broad @ 500 Broad	Outbound	37	Move south to Blackstone
Broad @ Glenham	Outbound	154	Move to far side Moore
Broad @ Adelaide	Outbound	200	Move to far side Thurbers
Broad @ Vernail	Outbound	107	Move north to Miller

R-Line Stops along Broad Street:

Stop	Direction
Montgomery Avenue	Inbound
Carr Street	Inbound
Roger Williams Park	Inbound
Early Street	Inbound
Thurbers Avenue	Inbound
Ontario Street	Inbound
Public Street	Inbound
Parkis Avenue	Inbound
Trinity Square	Inbound
Lockwood Street	Inbound
Dexter Manor	Inbound
Montgomery Avenue	Outbound
Carr Street	Outbound
Roger Williams Park	Outbound
Early Street	Outbound
Thurbers Avenue	Outbound
Ontario Street	Outbound
Public Street	Outbound
Parkis Avenue	Outbound
Trinity Square	Outbound
Lockwood Street	Outbound
Dexter Manor	Outbound

Other Service Improvements

Traffic Signal Prioritization (TSP) now extends green lights for buses at traffic intersections, creating fewer stops and reducing running times. The implementation of TSP and related traffic signal upgrades and timing improvements have resulted in a decrease in delay times for buses as well as general traffic along Broad Street.

Striping improvements such as bus only and queue jump lanes at traffic signals will allow buses to operate through intersections with priority over other vehicles by providing an area for buses to bypass standing vehicle queues, further reducing wait times at signalized intersections. Geometric striping improvements are recommended for the following intersections on Broad Street in Providence:

- Broad Street at Thurbers Avenue/Lennox Avenue: stripe a right-turn/queue bypass lane on the Broad Street northbound approach, removing thirteen unmetered parking spaces
- Broad Street at Plenty Street/Willard Avenue: stripe a right-turn/queue bypass lane on the Broad Street northbound approach, removing three unmetered parking spaces
- Broad Street at Elmwood Avenue: stripe a Bus Only lane on the Broad Street northbound approach, removing two unmetered parking spaces

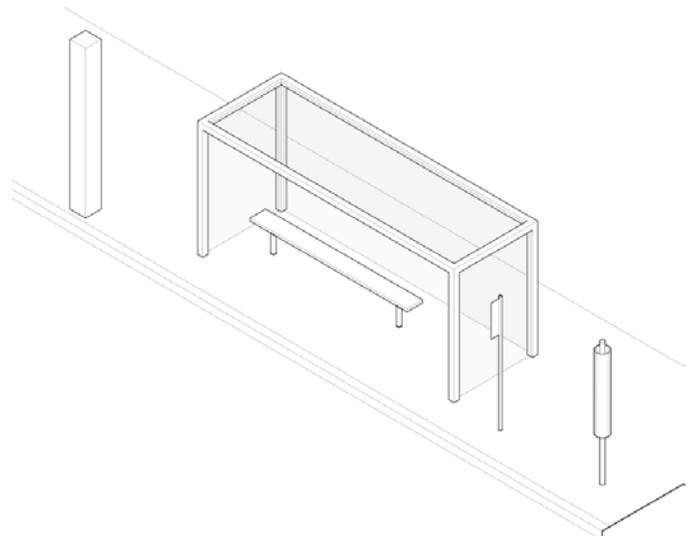
“No parking” signs and diagonal pavement striping will be installed at all bus stop locations along Broad Street. Parking violations at bus stop locations will be enforced by the City of Providence Parking Enforcement.

Pedestrian Amenity Improvements

Enhanced passenger amenities will improve the passenger experience for those travelling along Broad Street. New, uniquely branded bus shelters, benches, trash receptacles, bicycle racks, and wayfinding signage were installed in June 2014.

New, standardized bus stop components that have been installed along Broad Street include:

- Three new shelter types including typical three-sided shelters, cantilevered shelters that have been installed where sidewalk clearances prohibit installation of the typical three-sided shelter, and larger shelters that allow extra space for waiting passengers and space for ticket vending machines to be installed in the future;
- Freestanding screens that screen parking lots, provide passengers with a buffer from the wind and provide a surface for local art;
- Freestanding transit totems that include schedule and map information for RIPTA services, real-time arrival information and additional wayfinding information;



Shown from left to right: New bus stop amenities will include transit totems, new bus shelters, new bus stop signs, and enhanced transit signs.

- Enhanced transit signs that provide schedule and map information for RIPTA services; and,
- New post-mounted transit signs that replace existing RIPTA bus stop signs where transit totems or enhanced transit signs are not appropriate.

RIPTA and the City have purchased 12 new bus shelters, two freestanding screens, 11 transit totems, nine enhanced transit signs, 12 bicycle racks, 12 trash cans, and 19 benches for installation along Broad Street from Lockwood Street south to Montgomery Street.

Real-time information will provide passengers with actual arrival times at select bus stops through web and mobile applications and will increase RIPTA’s scheduling accuracy. Real-time screens are expected to be installed in 2016 at Kennedy Plaza, Providence Station, and the Pawtucket Transit Center. As the R-Line is further developed, additional screens will be installed at select bus stops.

Ticket Vending Machines (TVMs) will facilitate the purchase of tickets for riders and improve boarding times at key stops. A total of seven TVMs will be installed at Kennedy Plaza, Providence Station, and the Pawtucket Transit Center. The TVMS will be installed and operational by late Fall 2014.

Local art has been incorporated into select bus shelters along the corridor in order to celebrate the unique identity of Broad Street and provide a sense of orientation that connects people and places along the street in a meaningful way. In July 2013, the City of Providence Department of Art, Culture + Tourism and the Department of Planning and Development in partnership with RIPTA, invited artists to respond to the interpretive theme established for Broad Street and to submit concepts for art panels and seating to be included in select bus shelters along the R-Line. As part of the Art in Transit program created by this partnership, a total of 13 artists or artist/fabricator teams were ultimately selected to produce installations for stops along both North Main Street and Broad Street. Six of these 13 artists or artist/fabricator teams have developed eight panel and four seating installations for Broad Street, reflecting the corridor’s theme, “Experiencing World Cultures.”

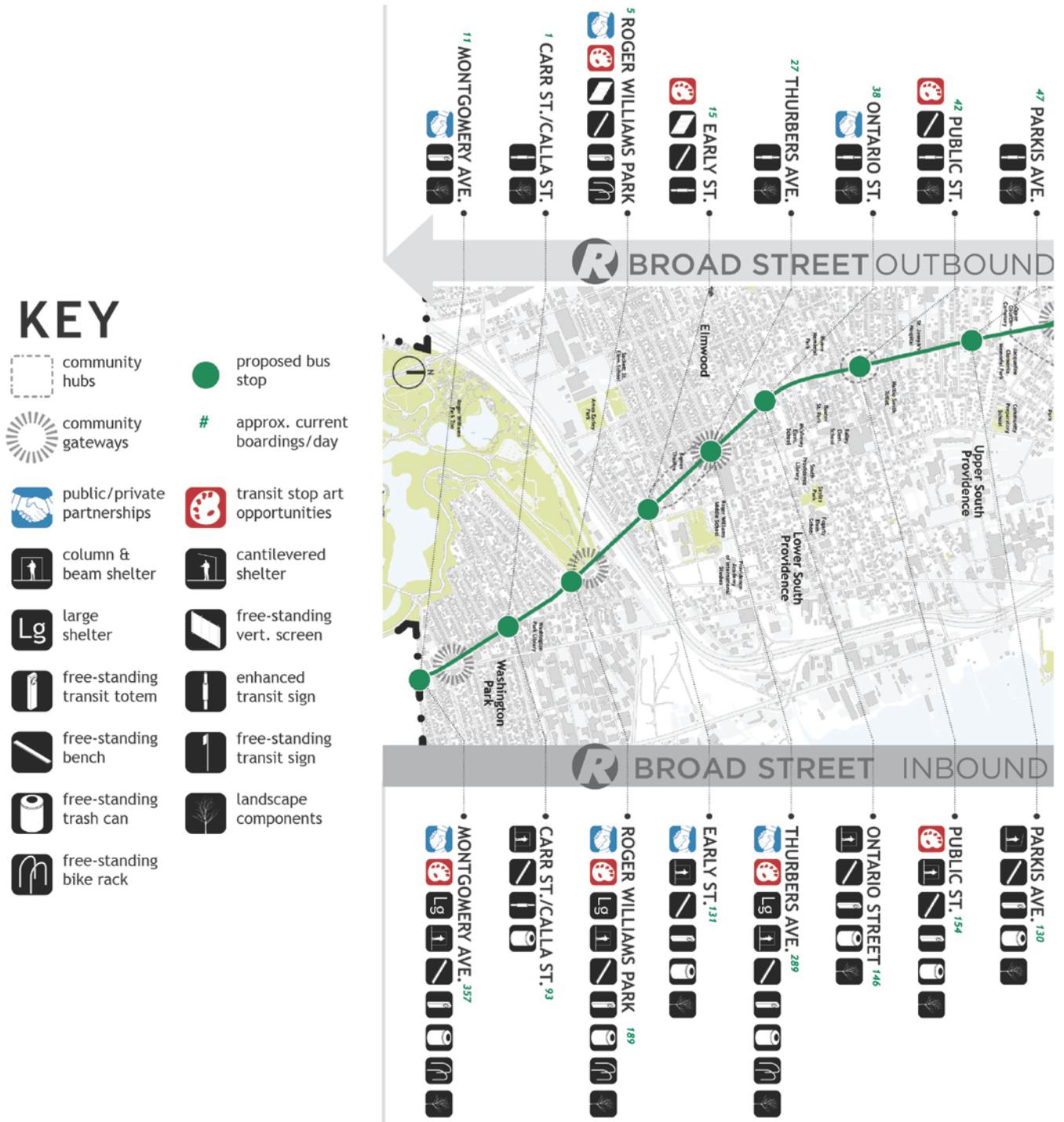
For more information on the theme and artwork that will be developed for Broad Street, please refer to the “Broad Street Arts & Cultural Opportunities Analysis” section of this report.



Bus shelter panel located on Broad Street at Montgomery Avenue designed by Lu Heintz in collaboration with the Steel Yard



Wood bench seating located at the Public Street Outbound stop, originally from the adjacent Temple Beth El, designed by Adam Bush and Kim Yasuda



Planned bus stop improvements along Broad Street

Landscape Improvements

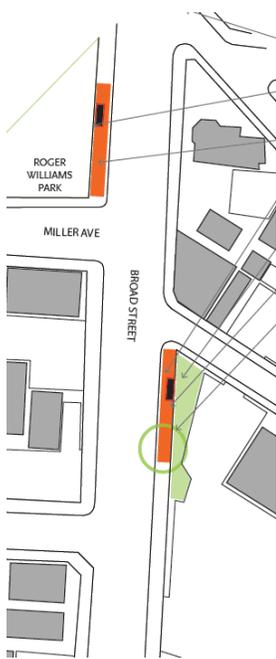
Opportunities for landscape improvements at bus stop locations should be encouraged through partnerships with private property owners in order to improve the pedestrian realm surrounding the stops.



Street trees have been recommended in areas where there is space within the right-of-way and a need for enforcement of the street tree canopy. In some instances, the recommendations call for the replanting of trees that have been removed or the replacement of trees that are in poor condition.

Landscape buffers have been recommended in areas where there are appropriate interstitial spaces that are otherwise underutilized or where there is a need to screen views of surface parking lots or other underutilized or unsightly areas.

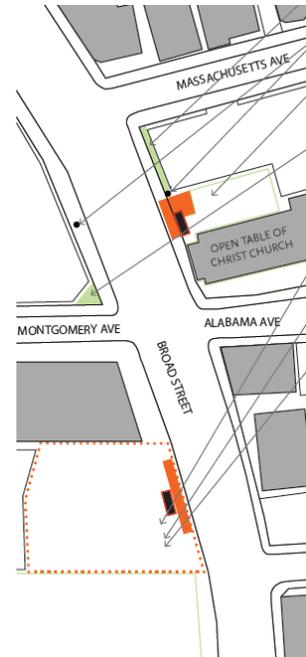
Pocket parks have been recommended in areas with existing “interstitial spaces” (such as underutilized open spaces on adjacent private property) that could support the bus shelter program and the surrounding neighborhood.



There is potential for a stormwater run-off filtration zone at the Thurbers Avenue inbound stop.



There are opportunities for pocket parks at the corner of Broad Street and Montgomery Avenue and at the corner of Broad Street and Parkview Avenue surrounding the inbound stop.



The following bus stop locations along Broad Street have been identified for possible landscape improvements:

<u>Bus Stop</u>	<u>Street Trees Recommended</u>	<u>Landscape Buffer Recommended</u>	<u>Pocket Park Opportunity</u>
Lockwood Street inbound	2-4	✓	--
Trinity Square outbound	--	✓	--
Trinity Square inbound	2-9	✓	--
Parkis Avenue outbound	1-4	--	--
Parkis Avenue inbound	1-4	--	--
Public Street outbound	2	--	--
Public Street inbound	1-3	--	--
Ontario Street outbound	1-5	✓	--
Ontario Street inbound	1	--	--
Thurbers Avenue outbound	1-3	--	--
Thurbers Avenue inbound	2-3	✓	--
Roger Williams Park inbound	1-5	✓	✓
Carr Street outbound	2-4	--	--
Montgomery Avenue outbound	2	--	✓
Montgomery Avenue inbound	2-4	✓	--
TOTAL	21-53	--	--

POTENTIAL SAVINGS

The traffic signal equipment upgrades, coordination, and timing improvements were anticipated to reduce travel times along the study corridor between 5% and 15% for both buses and general vehicular traffic. When combined with the time savings from transit signal priority implementation and bus stop relocation and removal, travel time for buses on Broad Street is even higher than originally expected.

Initial estimates indicate that these time savings will save RIPTA approximately 30 service hours per weekday. Over the course of a year, these savings will translate into approximately 7,650 fewer hours of service required to complete the same amount of work, generating a savings for RIPTA of nearly \$700,000 annually. Time and fuel savings from the traffic signal upgrades and improved bus stop spacing have been invested back into the corridor, increasing the number of buses per hour from six to eight, resulting in a 33% increase in service along Broad and North Main streets.

Total Anticipated Travel Time Savings for Buses Serving Broad Street

	<u>Peak Hour</u>	<u>Anticipated Change in Travel Time</u>
Route 11 Outbound	AM	-13%
Route 11 Outbound	PM	-33%
Route 11 Inbound	AM	-44%
Route 11 Inbound	PM	-24%

BROAD STREET TRANSIT ANALYSIS RECOMMENDATIONS

- Increase weekday service frequencies at peak times to reduce crowding.
- Reevaluate service levels frequently to ensure that passengers are being adequately served.
- Enforce parking violations at bus stops.
- Relocate stops interfering with traffic operations at intersections.
- Consider the use of high-capacity articulated buses along Broad Street as ridership grows.

Broad Street Land Use Analysis

In addition to being one of the highest use bus routes in Providence, Broad Street was also selected as one of the five corridors to be evaluated as part of this project because of the availability of land to be redeveloped to create hubs of activity near transit stops. The redevelopment of vacant or underutilized parcels along Broad Street will aid in the creation of mixed-use community hubs that are directly served by transit. Linking development directly to transit will connect residents to jobs and employment centers and create jobs and investment in areas that are most in need.

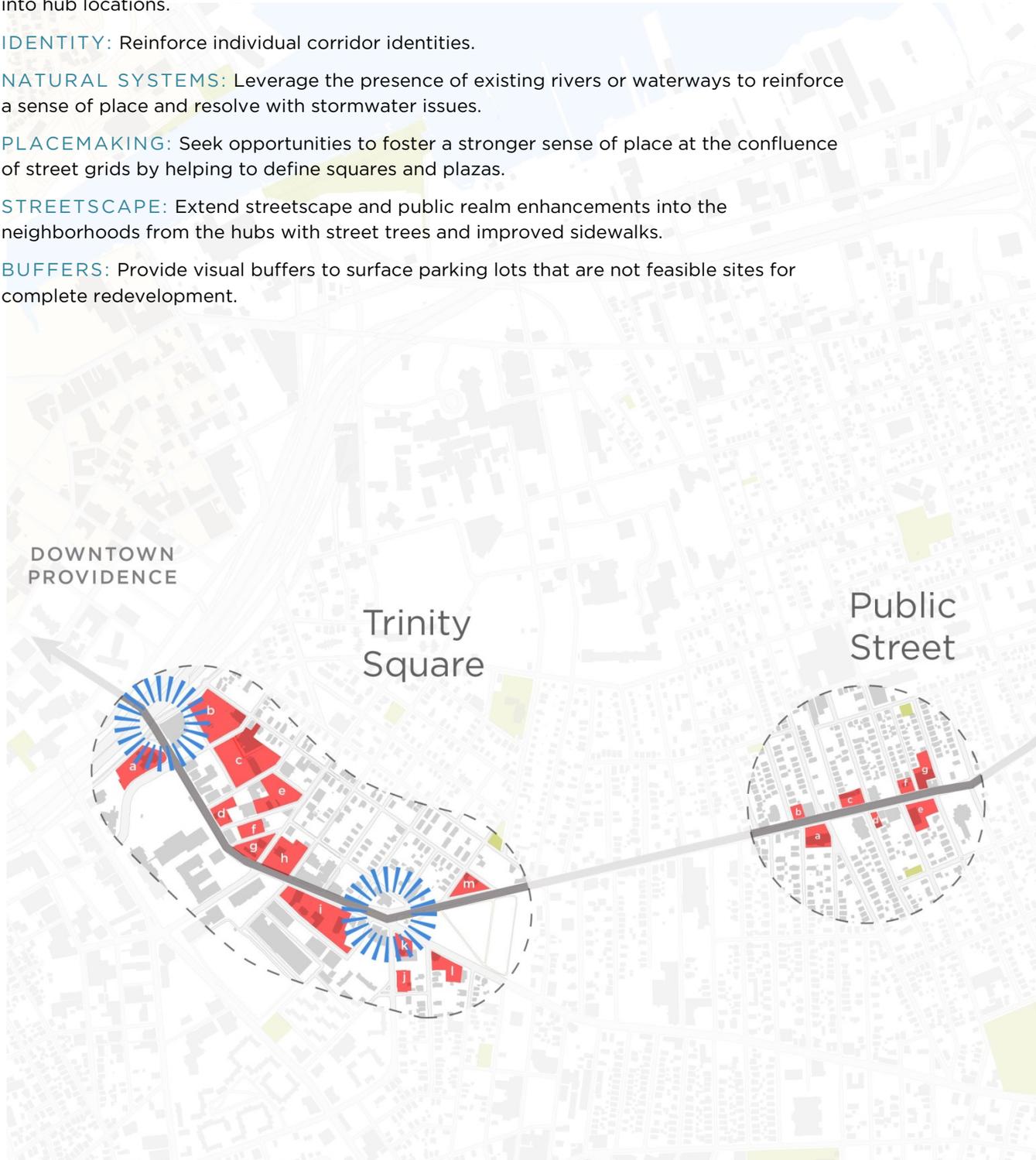
Community hubs have been identified and evaluated as areas along Broad Street where increased building height and density could be accommodated in order to encourage life and vitality, while also allowing for compatible transitions to surrounding areas. Directing investment to these hubs is critical in order to ensure the success of the transit investment in those areas and to create catalytic change along the entire corridor. Three community hub locations have been selected for Broad Street— Trinity Square, Public Street and Bomes Theatre— and potential build out scenarios have been developed for opportunity sites within each. Future development scenarios have been evaluated against both the desires of the community and current zoning regulations; where conflicts with current zoning exist, adjustments of the ordinance are being implemented. The build out scenarios are meant to guide future development in the area by providing a framework based on best practices as well as the needs and desires of the community. In addition to longer term build out scenarios, interim uses have also been evaluated for opportunity sites within the hub locations in order to activate these important areas in the short-term. By studying possible build out scenarios on a site by site basis, the specific opportunities and limitations for each property as-of-right or under new zoning parameters can be analyzed. In most cases, the biggest barrier to redevelopment is incorporating the related surface parking demand on site based on the currently required ratios for various land uses. Looking at the community hub as a whole allows more thought to be given regarding where opportunities for parking and open space exist on a district-wide scale.

Several locations have also been identified along Broad Street as important community gateways. These wayfinding and transition points present opportunities for special treatments such as improved landscaping, special paving, signage, and public art in order highlight their symbolic importance, improve the pedestrian environment, and reinforce each neighborhood's unique identity.

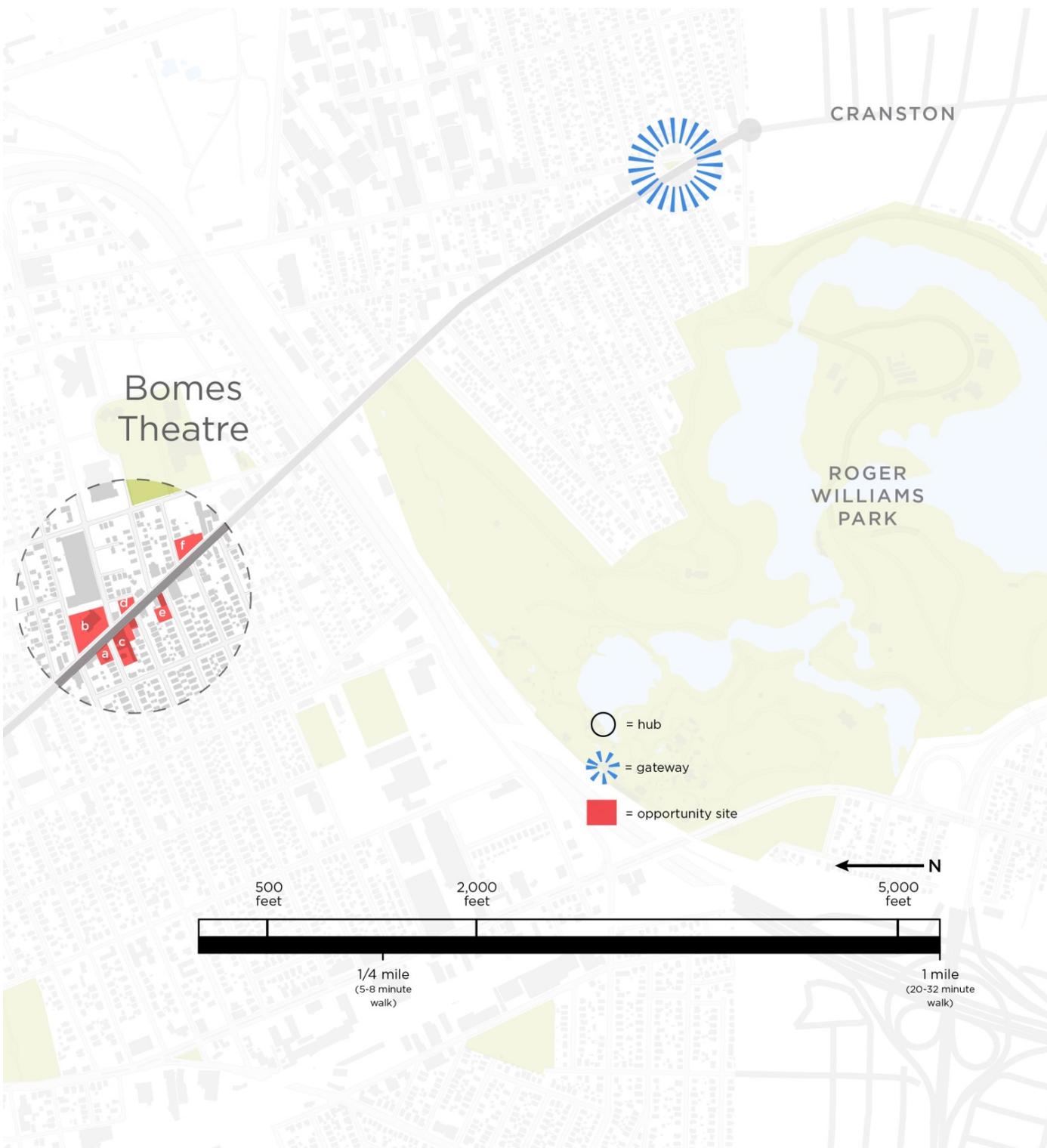
While each community hub has specific site conditions and characteristics that differentiate it from other areas, there are general urban design principles that will inform redevelopment and help to shape their physical form. The following overarching design principles were established in order to guide the potential build out scenarios for each community hub:

- ➔ **AGGREGATION:** Consider small or oddly shaped adjoining properties for aggregation into larger development parcels.
- ➔ **SUBDIVISION:** Consider exceptionally large blocks for subdivision through the introduction of new streets, open spaces, or pedestrian right-of-ways.
- ➔ **CONNECTIVITY:** Enhance visual and physical connections to existing open spaces that can link isolated sites together.

- ➔ **DENSITY:** Increase density and building height on properties where new landscape setbacks, right-of-ways or open spaces have been incorporated.
- ➔ **GATEWAYS:** Strengthen gateways that fall within community hub locations and identify existing architectural, social or historical community assets that can be better integrated into hub locations.
- ➔ **IDENTITY:** Reinforce individual corridor identities.
- ➔ **NATURAL SYSTEMS:** Leverage the presence of existing rivers or waterways to reinforce a sense of place and resolve with stormwater issues.
- ➔ **PLACEMAKING:** Seek opportunities to foster a stronger sense of place at the confluence of street grids by helping to define squares and plazas.
- ➔ **STREETScape:** Extend streetscape and public realm enhancements into the neighborhoods from the hubs with street trees and improved sidewalks.
- ➔ **BUFFERS:** Provide visual buffers to surface parking lots that are not feasible sites for complete redevelopment.

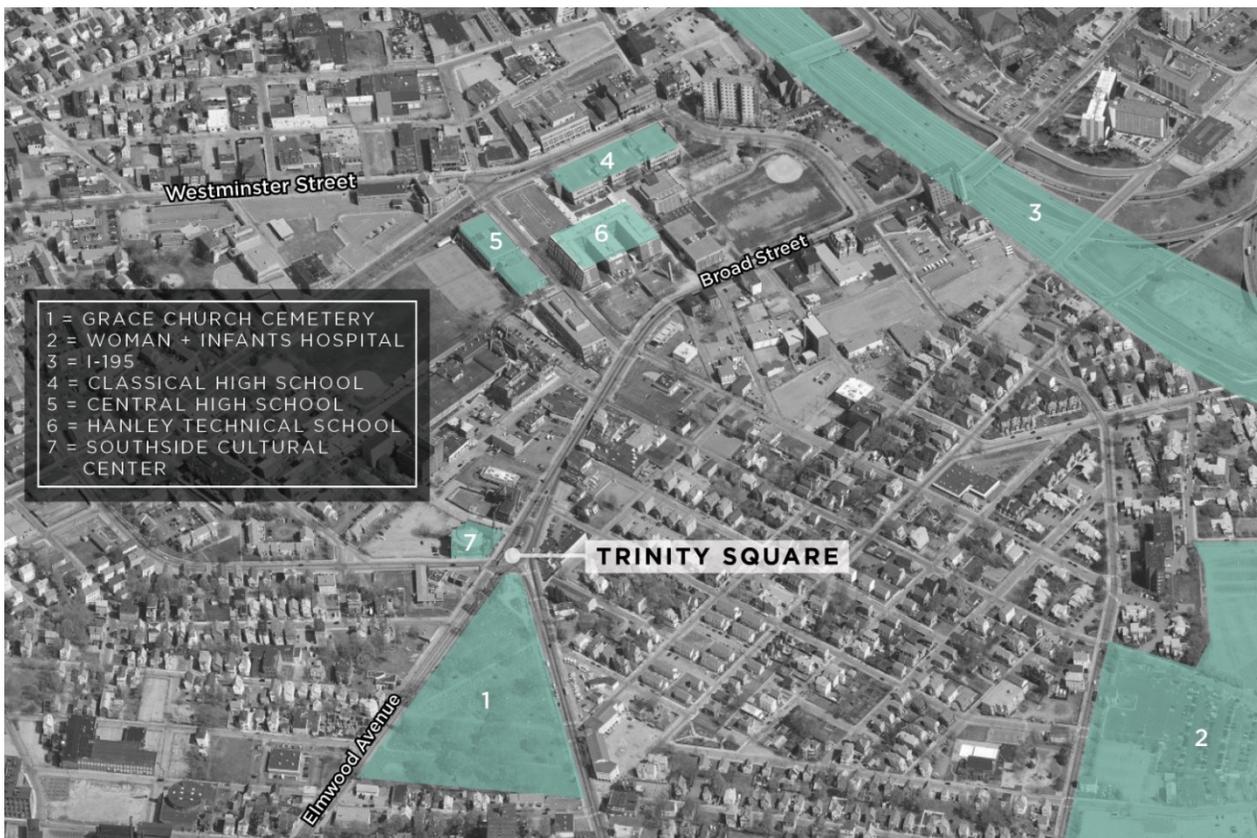


Hubs, gateways, and opportunity sites along Broad Street

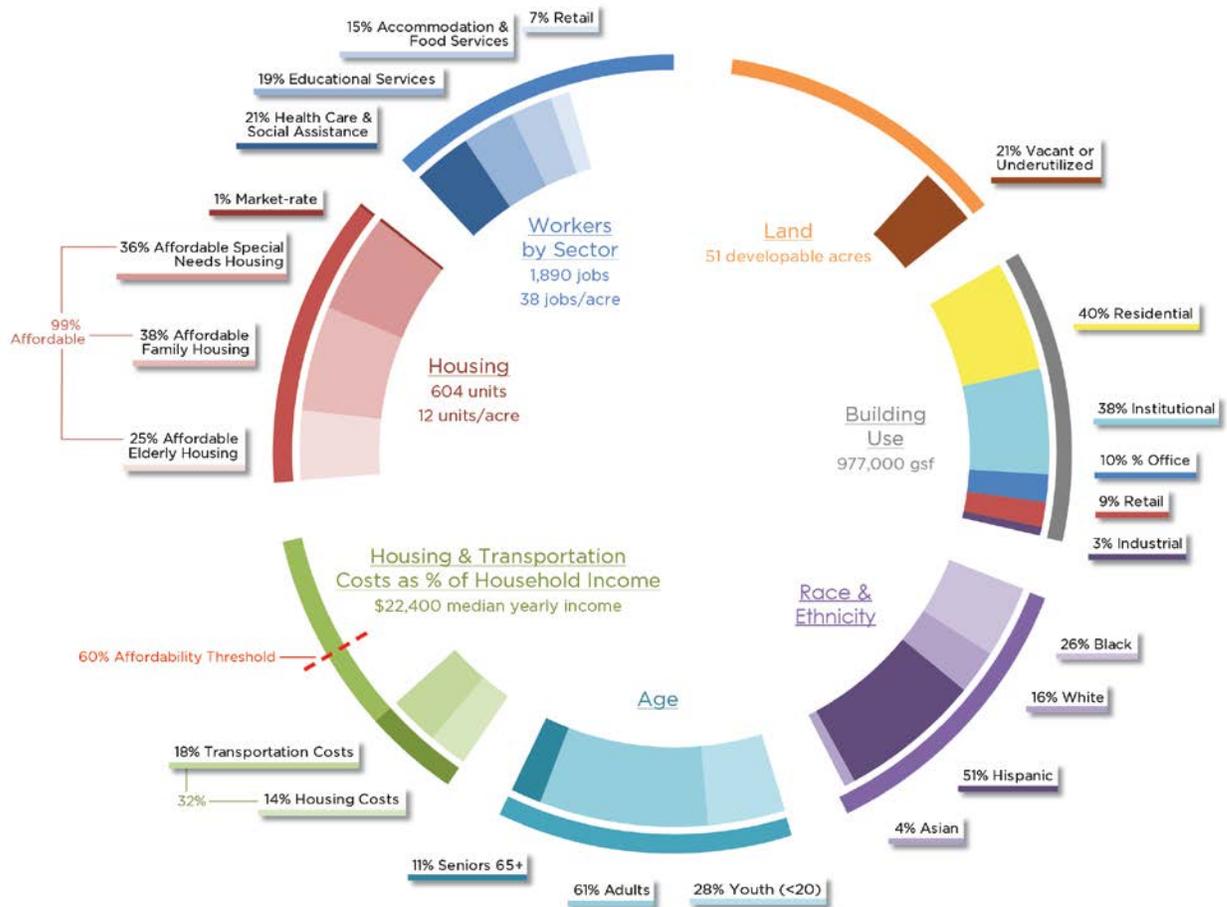


TRINITY SQUARE HUB

Located within the West End and Upper South Providence neighborhoods, the Trinity Square hub stretches from the Interstate-95 corridor on the southwest edge of Downtown to Grace Church Cemetery at the intersection of Broad Street and Elmwood Avenue. The confluence of Elmwood Avenue and Broad Street defines Trinity Square and creates one of the most vital gateways along the Broad Street corridor. Despite the wide variety of building scales and styles within the hub, the existing historic assets reinforce the role that the square plays in demarcating a place of commercial activity.



Trinity Square Hub at a Glance



Land area and density calculations are based on net acreage and do not include streets, parks or other right-of-ways. Housing and transportation costs were calculated using the Center for Neighborhood Technology’s Housing and Transportation (H+T*) Affordability Index. Age, race, and ethnicity calculations are based on the 2010 U.S. Census. Employment information was calculated using the Rhode Island Economic Development Corporation’s 2010 employment database. Housing and building use information are based on data collected from the City of Providence Tax Assessor’s Database.

Building + Land Use

Building uses along Broad Street are primarily retail with a handful of mixed-use buildings. Three of the City’s schools— Classical High School, Central High School and Hanley Technical School— abut the western side of upper Broad Street closest to Downtown, while industrial building types and surface parking lots dominate the area to the east. Closer to the southern end of the hub, Grace Church Cemetery and institutional uses including the Southside Cultural Center and the Salvation Army Community Center flank Trinity Square, while medium-density multi-family residential housing extends outward along the side streets near the Square. Some of the hub’s significant property owners include the Trustees of Trinity Unity Church, Pearl Street LLC, Islamic Center of RI Inc., JAN Co Central Inc., EPTA Properties III, Salvation Army of RI, Nerard Inc., and Southside Gateways/Broad Street Inc.

Housing

There are currently 1,087 residents within the Trinity Square hub residing in 604 housing units. Nearly all of the existing housing within the area is affordable housing, making up approximately 6% of the City’s total affordable housing stock. Of the affordable housing, 36 percent is special needs housing, 38 percent is family housing, and 25 percent is elderly housing.

Employment

Identifying businesses by sector and size creates a snapshot of current employment patterns in the Trinity Square hub. Approximately 1,890 people work within this area, 21 percent of which are employed in health care and social services; another 19 percent work in education services.

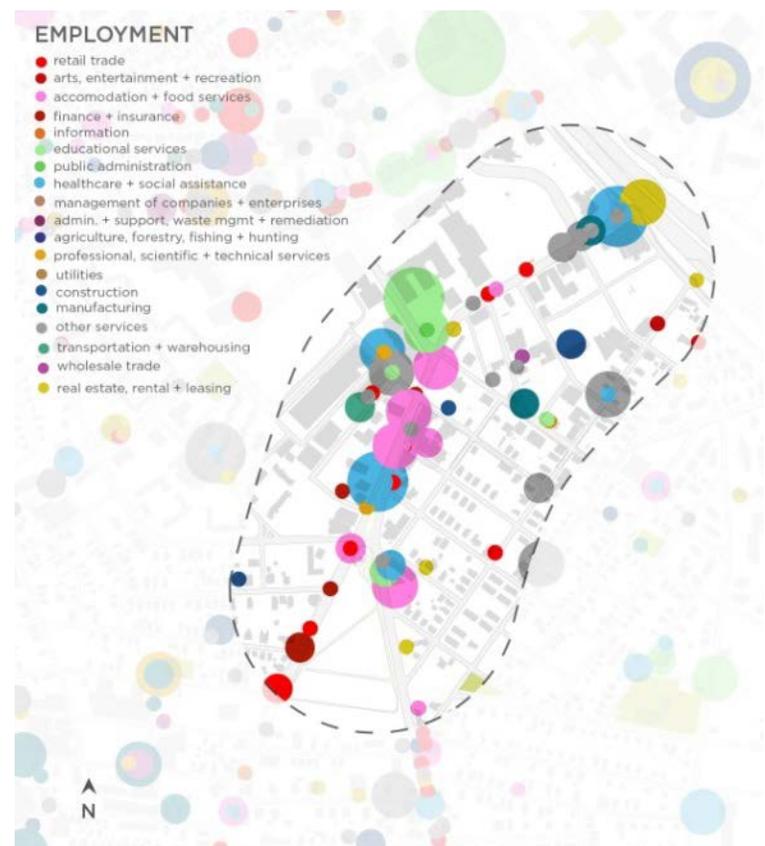
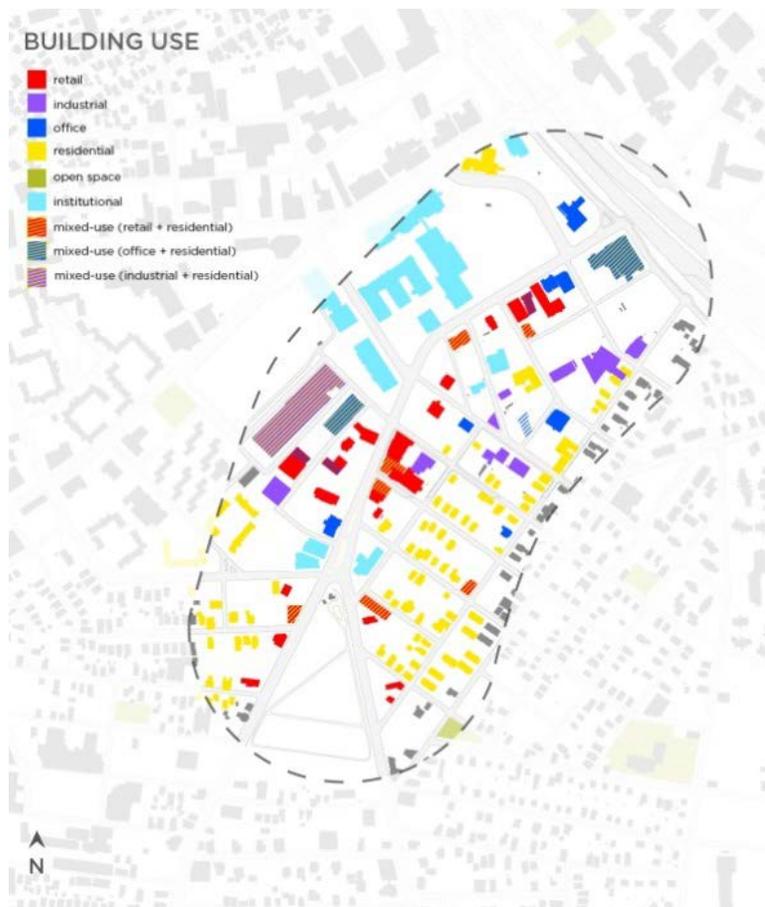
Race, Ethnicity + Age

The Broad Street corridor is extremely diverse in general and the Trinity Square Hub is no exception. The majority of the population is Hispanic (51 percent) with Black (26 percent), White (16 percent), and Asian (4 percent) populations all represented. While most of the hub’s residents are adults, approximately 28 percent are below the age of 20 and 11 percent are considered senior citizens.

Housing + Transportation

Affordability

Given the Hub’s median yearly income of \$22,400, both housing and transportation costs are considered affordable for households. Representing approximately 32 percent of total household income on average, these costs fall well below the 60 percent affordability threshold.





“SouthLight,” a temporary light installation installed at Grace Church Cemetery at the intersection of Broad Street and Elmwood Avenue in early 2014.

Interim Uses

Various temporary uses, such as pop-up shops, parks, or galleries, could potentially occupy some of the hub’s numerous vacant storefronts and parcels. In early 2014, a temporary light installation, entitled “SouthLight,” was installed at Grace Church Cemetery by students at the Rhode Island School of Design (RISD). As the City’s first community light installation, the group of students hoped to improve the cemetery’s current condition by attracting attention to the abandoned space within Trinity Square.



Opportunity Sites

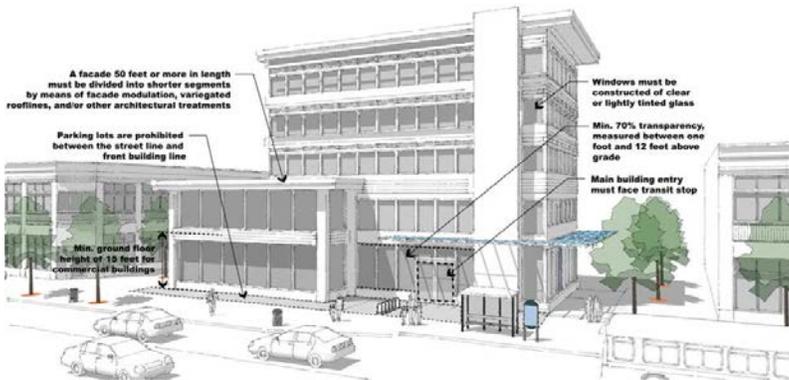
Together with the consultant team, (Gamble Associates, Paul Cote, and Site Creative), the City identified various opportunity sites for future development within the hub by using a three-dimensional build-out analysis of transit-supportive densities. A total of 13 opportunity sites were identified within the Trinity Square hub. Future development scenarios for these sites were carefully evaluated against both the desires of the community and current zoning regulations; where conflicts with current zoning exist, adjustments of the ordinance are being implemented.

OPPORTUNITY SITE	a	b	c	d	e	f	g	h	i	j	k	l	m
ACREAGE	1.2	1.8	2.5	0.4	1.1	0.4	0.6	1.1	2.1	0.2	0.4	0.6	0.5

TOTAL ACREAGE **12.9 acres**

Since the completion of this build-out analysis, the City has proposed a TOD Transit-Oriented Development Overlay District within the Trinity Square hub. As part of the City’s new zoning ordinance, this overlay district is intended for areas where more permissive height regulations and more stringent parking regulations are appropriate because of close proximity to existing and anticipated future public

transportation infrastructure. In addition to height and parking regulations, this overlay district includes design standards to reinforce a pedestrian-scale streetscape.



Proposed design standards for the TOD Transit-Oriented Development Overlay District

Key Redevelopment Goals and Opportunities

Encourage the preservation, rehabilitation and reuse of buildings that have cultural and architectural significance in order to form a basis for economic development and growth while also nurturing a unique sense of place. Despite the deterioration of building fabric and proliferation of surface parking that has diminished the character of the area, the preservation of remaining assets can still be an effective economic development strategy. Existing buildings that have retained cultural and architectural significance should be nurtured, and can form a basis for economic development and growth while new development is cultivated. New development that emerges as a result of the planned transit investments should seek to support these existing places. Many older facilities can be integrated within a new urban design framework, marbling new and old places together to make the area more interesting and authentic.

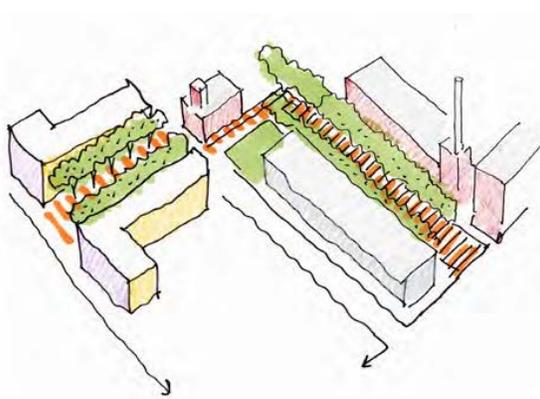
Ensure that new development highlights the existing historic assets that make Trinity Square unique. Trinity Square has a number of notable buildings that can be incorporated into a new framework for growth. The old firehouse on Central Street, Classical High School and Southside Cultural Center at the intersection of Broad and Elmwood are all buildings of cultural and historical significance. Their physical impact is diminished, however, when the buildings or spaces that surround them do more to separate than bring them together. Preserving the legacy of these places is vital to Providence’s competitive edge over other cities. If Site I were to be redeveloped in the future, a mid-block pedestrian promenade would greatly improve connectivity between Trinity Square and Pearl Street Lofts, providing a second frontage for new development while linking the nearby R-Line stop to the old firehouse.

Build upon successful redevelopment projects such as Pearl Street Lofts. Pearl Street Lofts is a good example of successful preservation and rehabilitation. Its conversion from an old factory into market rate apartments and small businesses is a sustainable approach to meeting the demand for more housing while still preserving the industrial heritage. More than just the restoration of an old building, attention was paid to the quality of the public realm around it. The high quality of the overall development raises the market value of the property and enhances the neighborhood.



Future development should highlight the corridor’s numerous historically significant buildings, such as the Southside Cultural Center.

Unfortunately, the site seems disconnected from Broad Street, as does the former fire house on Central Street which is adjacent to Pearl Street lofts.

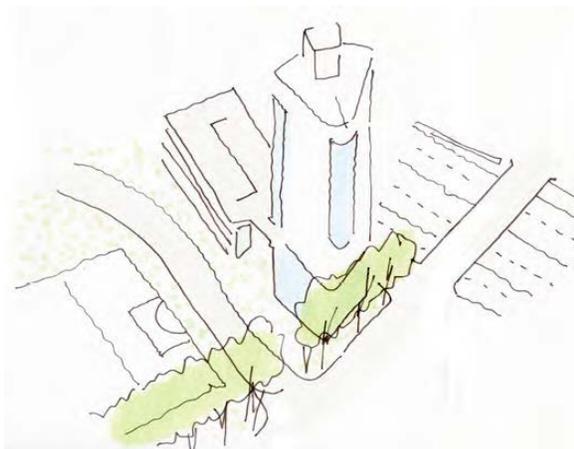


Allow for higher densities in order to take advantage of RIPTA's significant transit investment.

Along Broad Street, the Trinity Square R-Line stop has some of the highest ridership counts for the route. New development in this location should be of higher density in order to take further advantage of RIPTA's significant transit investment. Building form should allow for a mix of uses with commercial space on the ground floors in order to further activate this important node. Modest setbacks on the third or fourth floors would allow for greater overall height while not overwhelming the intimate scale of smaller scale buildings. Appropriate transitions to adjacent residential areas should be included in new development.

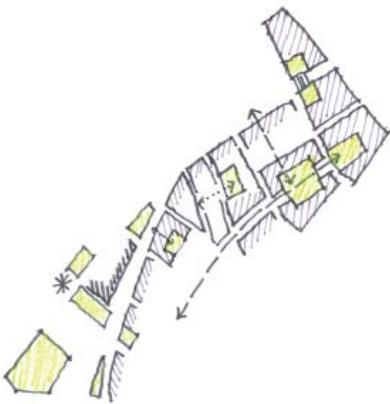
Take advantage of the parcels closest to Downtown for larger scale development opportunities.

There are very few parcels along the five transit corridors whose visibility is as high as the site at the intersection of Cahir and Broad Streets. Just to the west of I-95 and across the street from Classical High School's sports fields, this site currently has an inactive small, one story building on it. All Saints Memorial Church and the ten-story Crossroads Rhode Island building border the site to the north and south respectively. Due to its proximity to Downtown, Site A could be attractive to a large-scale commercial or office developer. Attracting a Class A office tenant would require suitable parking access, and the Service Road serves both as a convenient buffer to the highway and an efficient transportation link for the property. While structured parking outside of the downtown core is unlikely due to cost constraints, a parking structure on Site A would absorb the surface area that a parking lot alone would require and allow for greater density on this site.



Explore shared parking opportunities in order to allow for a greater number redevelopment opportunities. Some opportunity sites in Trinity Square have such particular shapes that their redevelopment is encumbered by the streets that define them, regardless of what zoning allows. For example, Site G at Broad, Lockwood and Wickham streets has a triangular geometry. Requiring on-site parking in this location diminishes the site’s development potential, and will likely only result in the type of use that is currently there: a gas station.

Ensure that new development incorporates open space. Pocket parks, open space, and landscaping improvements can help to better connect transportation investments to neighborhood centers, reinforce a sense of place and provide a rationale for increasing allowable height on sites that are adjacent to them. At bus stops, the presence of shade or a street tree canopy can make the difference between patiently waiting for public transit or not. Investment in street trees will help to encourage pedestrian activity and stimulate private redevelopment. Many vacant lots and surface parking lots would benefit from visual screening through landscaping or other special treatments to improve the pedestrian realm. In some instances, these locations are substantial enough to provide small pocket park opportunities for the neighborhood. Where feasible, sidewalks should be widened and shade trees should be encouraged along Broad Street in order to ease pedestrian congestion and improve the pedestrian realm. As development pressure emerges, the north side of Broad Street would especially benefit from additional landscape reinforcement. An open space armature linking the historic Grace Church Cemetery to Classical High School would help connect these two important points.



Consider interim uses for unoccupied storefronts and vacant or underutilized sites in order to activate the area in the short-term. One successful example of this that has already been implemented includes the use of a vacant store front for a “pop up” concert involving locally and nationally known composers. In February 2013, Community MusicWorks, a community-based music education organization, partnered with Stop Wasting Abandoned Property (SWAP), a private non-profit community development corporation, to put on a series of experimental music concerts in a vacant storefront at the Trinity Square community hub on Broad Street. The long term goals of programming these unusual spaces with community events are to increase cultural vibrancy and economic activity and encourage residents to gather in vacant storefronts and other public spaces to form community in new ways.

“[This] is a project that intends to amplify the ways in which residents of a city grow to have a deeper experience of community through their relationships with one another.”

Sebastian Ruth, Founder & Artistic Director, Community Music Works



One of Community MusicWorks many “pop up” concerts

Trinity Square Hub Land Use Analysis Recommendations

- Encourage the preservation and rehabilitation of the hub's historic buildings by ensuring that all buildings and sites of historical significance are either within historic districts or designated as such and create additional incentives for developers to restore these structures.
- Ensure that new development highlights the hub's existing historic assets by developing a form-based approach for new development to better incorporate it into the existing built realm.
- Adjust zoning to allow for higher density in order to increase density to increase ridership on RIPTA's R-Line.
- Work to attract large scale development on parcels closest to Downtown by adjusting zoning to facilitate this scale of development in this area.
- Promote shared parking solutions to increase redevelopment opportunities; eliminate the on-site parking zoning requirement for specific sites and develop shared parking alternatives.
- Adjust zoning to require elements of visual screening or to create an open space requirement for certain sizable development.
- Promote temporary uses for vacant storefronts or sites by adjusting zoning to allow for appropriate temporary uses.
- Improve connectivity between Broad Street and Pearl Street Lofts and the former firehouse on Central Street to highlight them as existing assets by installing wayfinding signage and enhancing the streetscape along Central Street.

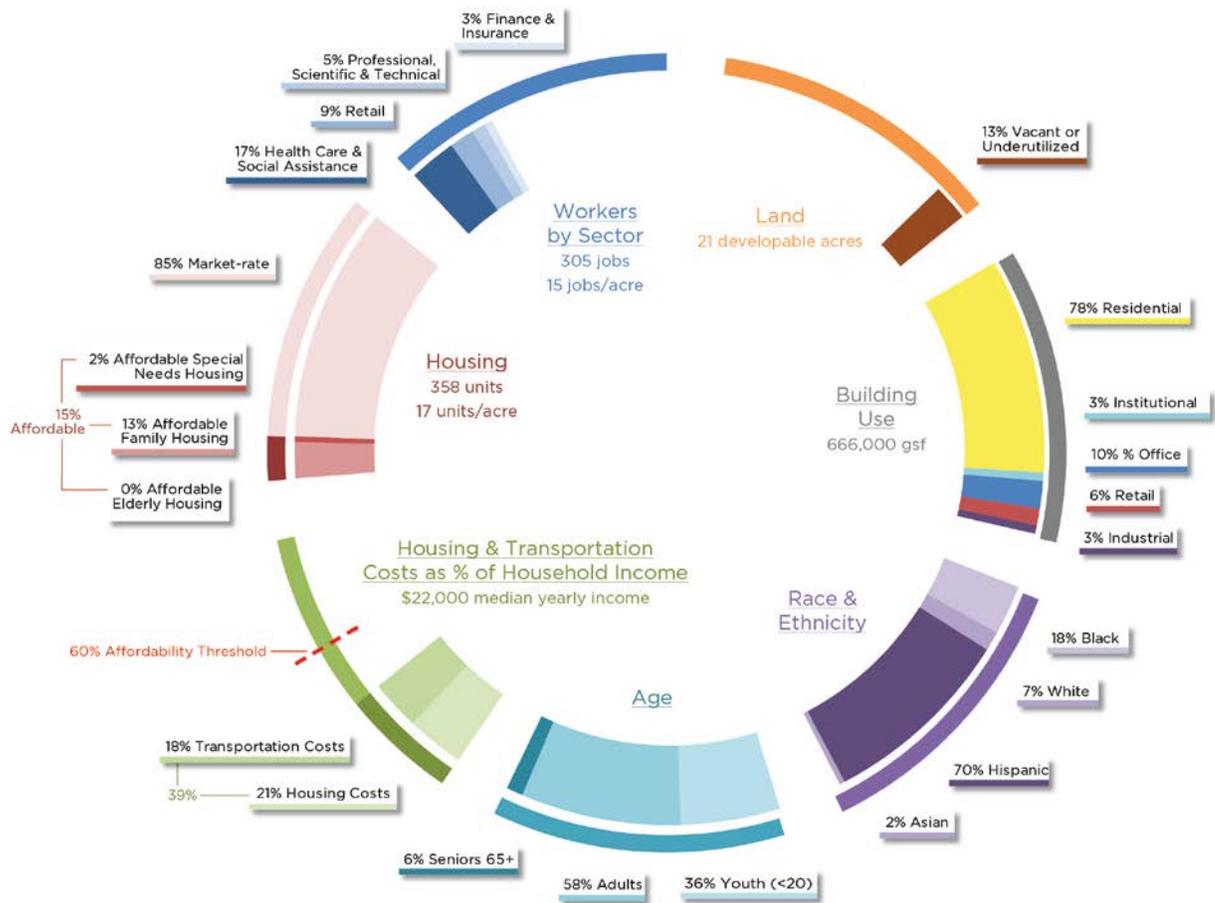
PUBLIC STREET HUB

Located at the intersection of the Upper South Providence, Lower South Providence, and Elmwood neighborhoods, the Public Street hub stretches from the intersection of Moore and Glenham streets to Norwich Avenue. The hub contains numerous prominent institutions and some of the City's oldest structures, creating a strong base for redevelopment of the surrounding communities. Some of the area's significant property owners include Congregation Shaare Zedek, Calvary Baptist Church, Broad Street Revitalization, Crossroads Rhode Island, and Brothers of the Christian School.

While some new development has recently occurred in the area, much of the existing context is suburban in character. Long-term development should create a stronger relationship to the street, with build-to lines as opposed to setback lines, as has been accomplished in other focus areas. In the short term, there are opportunities to use the shelters to help give definition to the public realm. It is expected that rehabilitation of the Broad Street Synagogue on the corner of Glenham Street will serve as a catalyst for redevelopment in the surrounding neighborhood.



Public Street Hub at a Glance



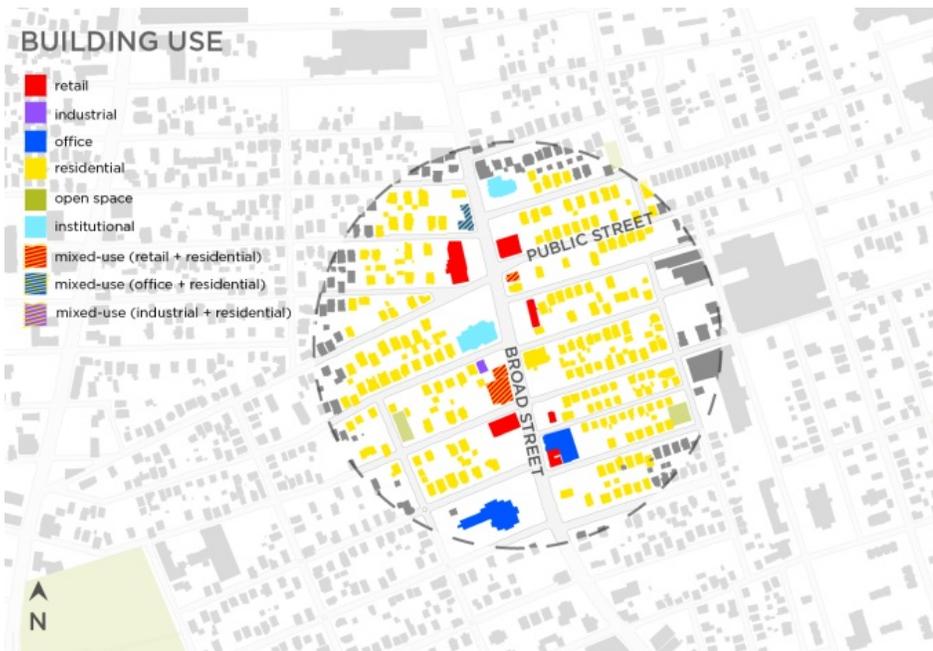
Land area and density calculations are based on net acreage and do not include streets, parks or other right-of-ways. Housing and transportation costs were calculated using the Center for Neighborhood Technology’s Housing and Transportation (H+T*) Affordability Index. Age, race, and ethnicity calculations are based on the 2010 U.S. Census. Employment information was calculated using the Rhode Island Economic Development Corporation’s 2010 employment database. Housing and building use information are based on data collected from the City of Providence Tax Assessor’s Database.

Building + Land Use

Building uses along Public Street are primarily residential with minimal office, institutional, retail, and industrial space. Despite the majority of residential use buildings, this area contains some of the City’s most significant historical structures including the Synagogue at the northeast corner of Public and Broad streets and Calvary Baptist Church.

Housing

There are currently 1,266 residents within the Public Street Hub residing in 358 housing units. Nearly all of the existing housing within the area is market-rate housing, leaving only 15 percent of the housing stock as affordable. Of the affordable housing, 13 percent is for family housing and 2 percent is for special needs housing.



Employment

Identifying businesses by sector and size creates a snapshot of current employment patterns in the Public Street hub. Just over 300 people work within this area, 17 percent of which are employed in the health care and social assistance sector; another 9 percent work in the retail sector.

Race, Ethnicity + Age

Similar to the rest of the corridor, the Public Street hub population is extremely diverse. It is predominantly Hispanic (70 percent) with Black (18 percent), White (7 percent), and Asian (2 percent) populations all represented. While most of the hub's residents are adults, over one-third of the population is below the age of 20 and 6 percent are considered senior citizens.



Housing +

Transportation

Affordability

Despite a fairly low median yearly income of \$22,000, average housing and transportation costs of 39% of household income

fall well below the 60 percent affordability threshold.

Interim Uses

Given the success of pop-up events like Community MusicWorks' concerts in Trinity Square, various temporary uses could potentially occupy some of the hub's vacant storefronts and parcels.

Opportunity Sites

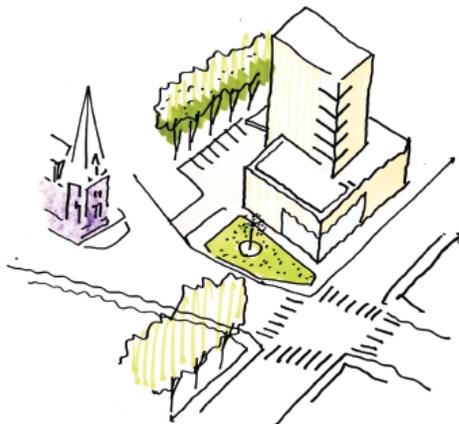
Together with the consultant team (Gamble Associates, Paul Cote, and Site Creative), the City identified various opportunity sites for future development within the hub by using a three-dimensional build-out analysis of transit-supportive densities. A total of seven opportunity sites were identified within the Public Street hub. Future development scenarios for these sites were carefully evaluated against both the desires of the community and current zoning regulations; where conflicts with current zoning exist, adjustments of the ordinance are being implemented.

Key Redevelopment Goals and Opportunities

Incorporate open space to foster placemaking. Dedicating some open space on a site need not diminish its overall development potential. Reserving strategic areas for pocket parks on one portion of a site should provide an impetus to relax height limitations in other areas to compensate for the loss of building footprint. Open space setbacks, plazas and pedestrian easements within a property can significantly reinforce a sense of place and foster connectivity to adjacent community assets. Such design interventions should be encouraged and incentivized.



OPPORTUNITY SITE	a	b	c	d	e	f	g
ACREAGE	0.6	0.2	0.4	0.1	0.7	0.2	0.6
TOTAL ACREAGE	2.8 acres						



into a signature redevelopment project, complete with a corner park to serve the neighborhood.

Make places at primary neighborhood intersections by capitalizing upon the area’s historic resources.

The Public/Broad intersection warrants a placemaking endeavor.

The intersection has high visibility and the density of the corridor in this hub would benefit from some relief. Situated across from the Baptist Church and the Synagogue, site A is an ideal candidate to transform an existing suburban style building



There are many existing assets, such as the Temple Beth-El shown here, from which to build a cohesive urban design framework. Uncovering and connecting these assets is key to creating authentic places.

Public Street Hub Land Use Analysis Recommendations

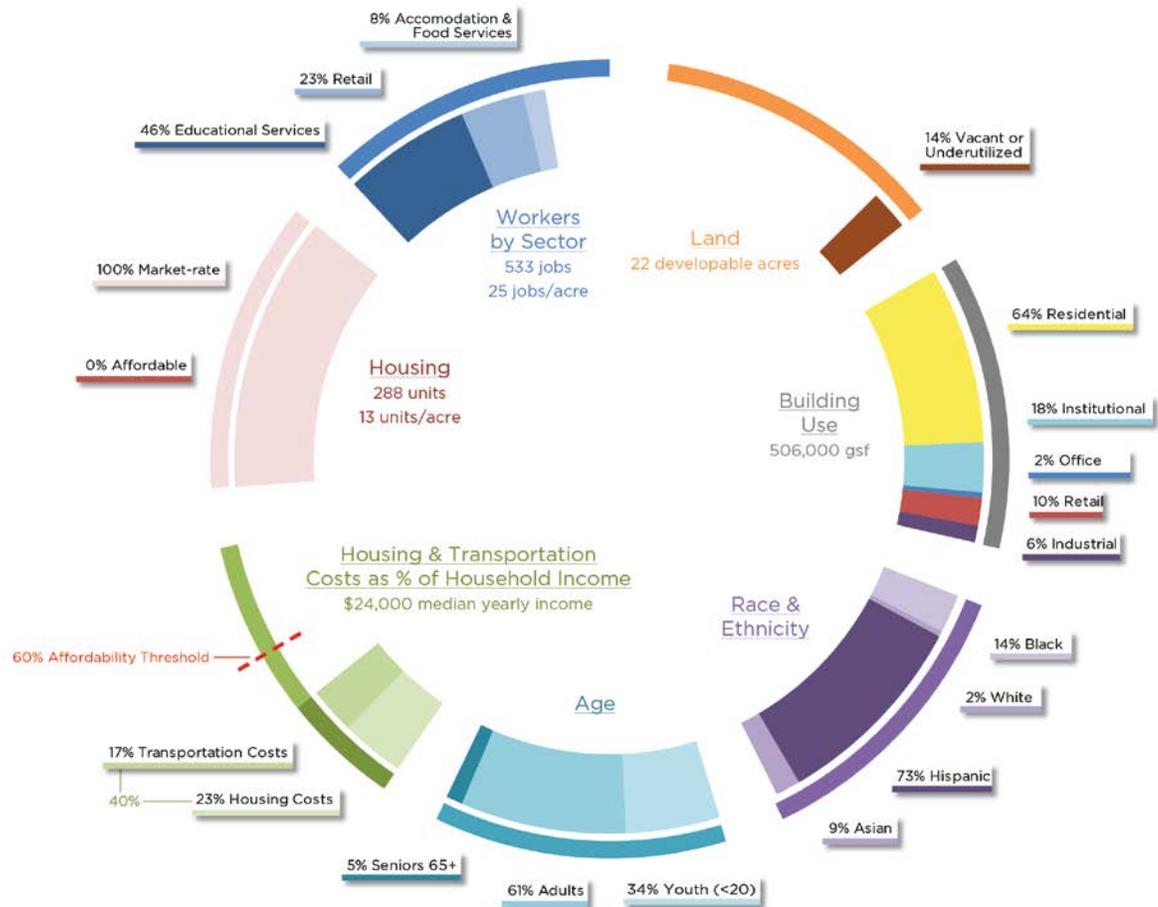
- Adjust zoning to include an open space requirement for new large-scale development and develop pocket parks or pedestrian easements in available space.
- Incentivize development of critical parcels that will build off of the strength of existing historical structures.

BOMES THEATER HUB

The Bomes Theater hub stretches from Adelaide Avenue in the north until Sackett Street in the south and includes portions of Lower South Providence and Elmwood neighborhoods. As is the case with most of the transportation corridors radiating from downtown, this hub is an example of both neighborhood deterioration and real estate opportunity. The historic building fabric within this area provides insight into the economy that existed in more robust times and can easily be integrated into a new transit-oriented future. Some of the most significant property owners along this corridor include SCGL Realty LLC, the Providence Redevelopment Agency, SWAP Inc., Jorge Pacheco and Associates, and Providence New City Associates LLP.



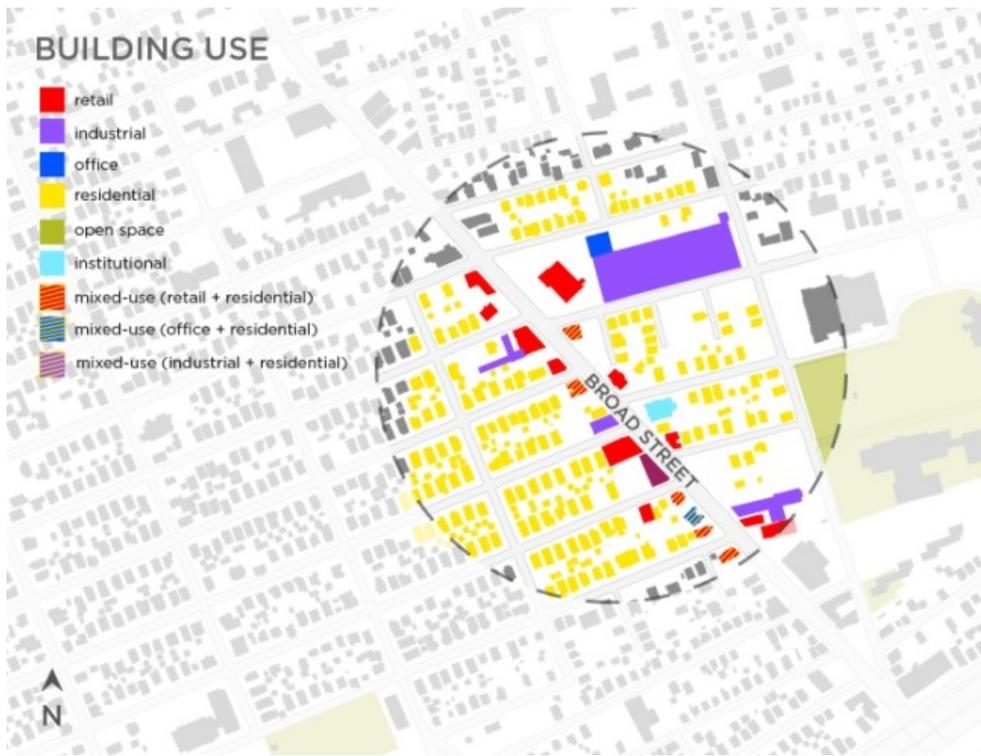
Bomes Theater Hub at a Glance



Land area and density calculations are based on net acreage and do not include streets, parks or other right-of-ways. Housing and transportation costs were calculated using the Center for Neighborhood Technology’s Housing and Transportation (H+T*) Affordability Index. Age, race, and ethnicity calculations are based on the 2010 U.S. Census. Employment information was calculated using the Rhode Island Economic Development Corporation’s 2010 employment database. Housing and building use information are based on data collected from the City of Providence Tax Assessor’s Database.

Building + Land Use

While almost two-thirds of the buildings within this hub are residential, a significant portion of them are of institutional use. Some of the hub’s significant historical structures include the Bomes Theater, constructed in 1921, and the Holy Cross Church of God, which is located directly opposite the Bomes Theater. After closing in 1975, the Bomes Theater was used by numerous small businesses; however, it now remains vacant due to significant disrepair. The building was recently secured and a community meeting was held in November 2013 to establish the next steps for the PRA-owned property. At the meeting, community members and city officials concluded that a committee would be created to examine potential development possibilities for the theater, including partial or total demolition.

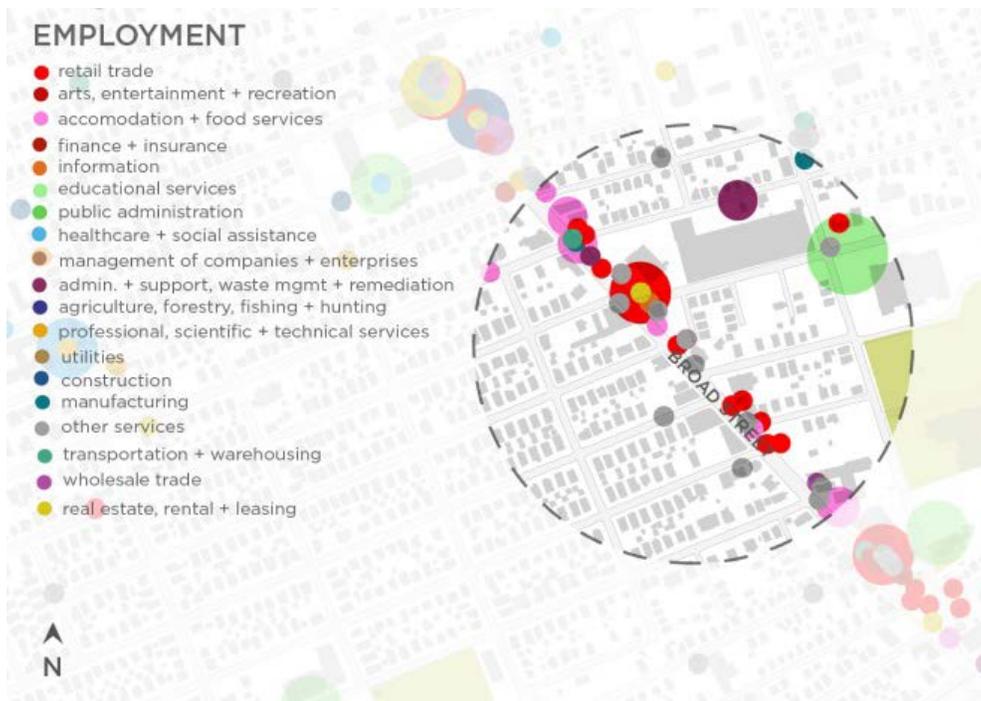


Housing

There are currently 844 residents within the Bomes Theater Hub residing in 288 housing units, all of which are market-rate housing. This translates into a density of 13 units per acre.

Employment

Identifying businesses by sector and size creates a snapshot of current employment patterns in the Bomes Theater hub. Approximately 533 people work within this area, almost half of which are employed in educational services and almost one-quarter of which are employed in the retail sector.



Race, Ethnicity + Age

Similar to the rest of the corridor, the Bomes Theater Hub is very diverse. This Hub has the highest percentages of Hispanic and Asian populations of all three Hubs (73 percent and 9 percent, respectively). While most of the hub's residents are adults, approximately one-third of the population is below the age of 20 and 5 percent are considered senior citizens.

Housing + Transportation Affordability

Despite a fairly low median yearly income, average housing and transportation costs fall well below the 60 percent affordability threshold.

Interim Uses

Temporary uses, such as pop-up shops, parks, or galleries, could potentially occupy some of the hub's numerous vacant storefronts and parcels.

Opportunity Sites

Together with the consultant team, Gamble Associates, Paul Cote, and Site Creative, the City identified various opportunity sites for future development within the hub. These sites were determined using a three-dimensional build-out analysis of transit-supportive densities and a total of six opportunity sites were identified within the Bomes Theater hub. Future development scenarios for these sites were carefully evaluated against both the desires of the community and current zoning regulations; where conflicts with current zoning exist, adjustments of the ordinance are being implemented.

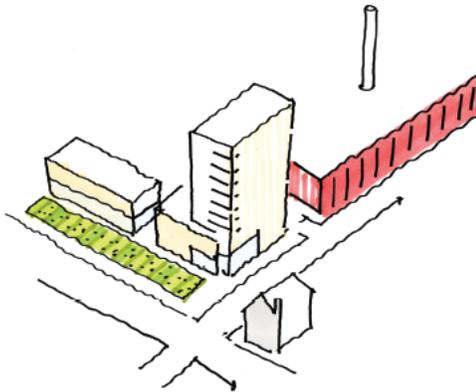


OPPORTUNITY SITE	a	b	c	d	e	f
ACREAGE	0.2	1.2	0.7	0.1	0.3	0.5

TOTAL ACREAGE **3.0 acres**

Key Redevelopment Goals and Opportunities

Augment new development with the rehabilitation of existing industrial areas and buildings. Urban regeneration means more than simply building anew. Providence has a rich legacy of existing buildings that are a testament to its strong industrial heritage. Opportunities should be sought to activate existing buildings as much as develop on vacant or underutilized properties. There are many hubs that have a large inventory of buildings that have outlived their original purpose and may be functionally obsolete.



Like Lower Manton, Broad Street has many substantial historic buildings that can be better integrated together with new construction. The activation of the existing inventory will provide Providence with a competitive advantage over other cities that lacks such an inventory of late 19th and early 20th century buildings.

Site B is a primary commercial node along Broad Street. It currently has a large suburban development separated from the street by a surface parking lot. New growth should increase density on the property and look to make better connections to the large industrial building on the block adjacent.

Encourage the development of open space to better connect individual sites. While the redevelopment of individual sites along the corridors is important, open space configurations and connections between sites are equally important in fostering a sense of place. Streetscape enhancements along Thurbers Avenue, for example, can add value to the private properties along Broad Street and connect local institutions to one another. While the site studies register development capacity on individual sites, in order for the hubs to be grounded into the local context, open spaces and streetscapes need to be developed in tandem with private investment.



The Bomes Theater, one of Broad Street's many historic landmarks, is in need of significant repair.

New infill development should focus on enhancing the pedestrian experience. Beyond site B, the other development sites in the Bomes Theater Hub are small sites of less than ½ acre. Most are nested between existing commercial uses. The form of new development should address the street edge and reinforce pedestrian movement to the transit stop. When parking is incorporated, it should be located to the rear of the site.

Bomes Theatre Hub Land Use Analysis Recommendations

- Encourage the rehabilitation of existing industrial buildings to promote new development and activate spaces by adjusting zoning to allow for new uses in existing inventory and increasing site density.
- Adjust zoning to include an open space requirement for new large-scale development and develop pocket parks or pedestrian easements in available space.
- Ensure that new development improves the pedestrian realm by adjusting zoning setbacks and FAR regulations to reflect the desired development.

Broad Street Arts + Cultural Opportunities Analysis

In order to better integrate art, culture, and heritage into Providence's transportation, land use and economic development planning, cultural planners worked closely with the City of Providence Department of Art, Culture + Tourism and the Department of Planning and Development to identify local cultural resources, engage neighborhood stakeholders in defining distinct attributes of each corridor, and develop strategies to apply cultural solutions that help define places, animate neighborhood hubs, mitigate problems, and inspire creative economic development.

CULTURAL RESOURCES INVENTORY

The City has catalogued existing cultural resources within a quarter mile of the Broad Street corridor. This cultural asset catalogue of Broad Street inventories the full spectrum of opportunities for cultural participation along the corridor including: the location of nonprofit arts and cultural organizations, performing and visual arts spaces, informal arts programming, public art installations, sites of historical and/or community significance, creative industries, artist housing, and public spaces.

To compile the cultural resource inventory, researchers searched directories, databases, and event calendars to identify and map cultural resources. Directories, databases, and event calendars from the Rhode Island Economic Development Corporation, New England Foundation for the Arts, Rhode Island State Council on the Arts, and the City of Providence Department of Arts Culture and Tourism have been combed in order to identify and map cultural resources along the corridor. An online survey and interviews with stakeholders, focus groups, community leaders, and experts from various fields have also informed the process.¹

Cultural and creative institutions and sites enhance a shared sense that a place is special. Identifying cultural resources was the first step toward identifying a distinctive theme for the corridor and ultimately developing creative placemaking strategies that have the potential to help define transportation gateways and revitalize critical hubs. Important cultural references have been noted on wayfinding maps and cultural content located on wayfinding totems at high volume bus stops along the corridor.



¹ The cultural and creative sectors have been broadly defined using standard definitions developed by the New England Foundation for the Arts. These include resources ranging from arts and cultural organizations, public art, historic buildings and sites, creative industries, artists, parks, cemeteries, schools, local restaurants and food markets, community gardens, schools, religious institutions, and service organizations. Inventory categories were also determined by standardized NAICS (North American Industry Classification System) and NTEE (National Taxonomy of Exempt Entities) core codes.

Since the Broad Street and Elmwood Avenue corridors overlap at Trinity Square, the two corridors’ inventories were combined.

The cultural inventory for the two combined corridors includes 667 cultural resources. The area, best known for its international restaurants, markets, and festivals, includes 36 local restaurants (mostly international in flavor) and 23 local food markets. Each evening, many food trucks also gather along Broad Street. While there are just five live entertainment venues, Broad Street is known for its night life. The annual Dominican Festival and Puerto Rican Parade are important celebrations of the community’s international heritage. There is also a significant cluster of 24 jewelry manufacturers and stores along the two corridors. Twenty-nine schools and 30 religious organizations serve the communities along the corridor and a small, but important youth arts cluster of cultural institutions exists near Trinity Square. Forty health, human service, and cultural service organizations also operate along the two corridors.



The annual Dominican Festival includes a parade along Broad Street and a festival in Roger Williams Park. Source: <http://www.danf-usa.org/>

Important cultural attractions that were identified include:

- Trinity Square
- Southside Cultural Center
- Grace Church Cemetery
- Algonquin House
- City Arts! and Highlander School
- The William B. Cooley, Sr. High School
- The Providence Academy of International Studies @ The Juanita Sanchez Complex
- The Met School
- Classical High School
- Central High School
- Providence Career & Technical Academy
- Broad Street Synagogue
- Bomes Theatre
- Roger Williams Park
- Sales Park
- Amos Earley Park
- Historic districts



Cultural references have been noted on wayfinding maps and cultural content located on wayfinding totems at high volume bus stops along the corridor. This totem at Trinity Square highlights famed opera singer Sissieretta Jones who is buried in the nearby cemetery.

CORRIDOR THEME

Dreeszen & Associates’ cultural planning team worked closely with the City’s Department of Planning and Development, Department of Art, Culture + Tourism, and five stakeholder committees to develop interpretive themes for each of the five study corridors— North Main Street, Broad Street, Elmwood Avenue, Chalkstone Avenue, and Manton Avenue. The interpretive themes have a placemaking objective; they will contribute to a cohesive visual identity for each of the corridors, connecting people and places along the street in a meaningful way.

BROAD STREET: EXPERIENCING WORLD CULTURES

Broad Street is most notable for its international character, especially its distinctive concentration of international markets, world foods (restaurants, food trucks, and bodegas), and festivals. Artists and designers will interpret the diverse ethnic character of Broad Street, drawing inspiration from the vibrant commercial center with active street life and sidewalks, filled with entertainment, food, social life, colorful murals, and small businesses operated by local, mostly Latino and Asian entrepreneurs. Broad Street's visual and human dynamism provide artists ample opportunities to be part of and contribute to an already lively environment.

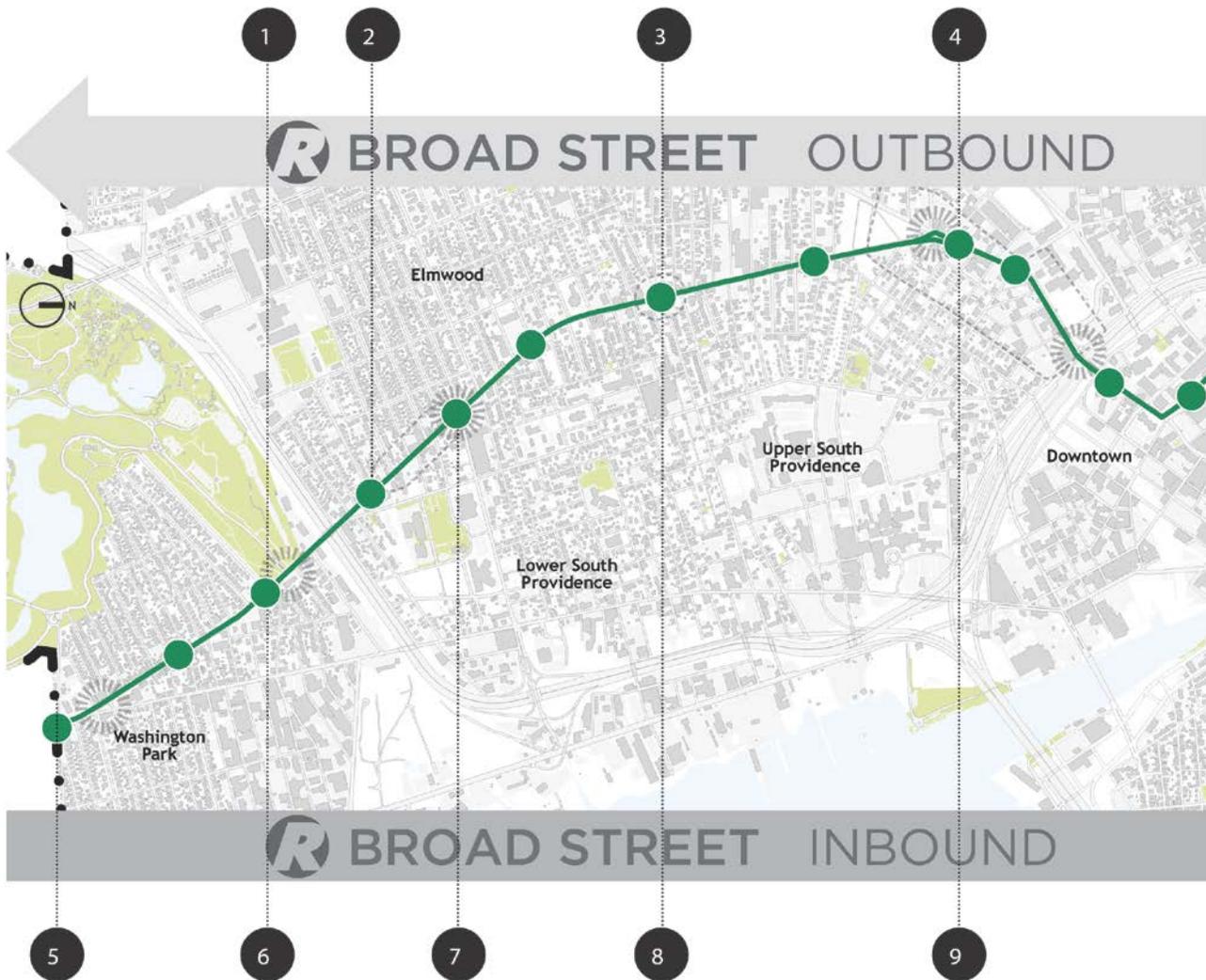
This theme helped to inform local artists as they worked to integrate art into bus shelters along the corridor. The artistic interpretations of the theme reflect and reinforce Broad Street's design and unique cultural heritage and provide a sense of orientation that connects people and places along the street in a meaningful way. Please note that the above theme is a much-condensed abstract. Artists will be encouraged to study the full report of interpretive themes with detailed explanations of each corridor's interpretive theme.

The themes for each corridor are the result of a broad public participation process that included input from community members at a series of public meetings, online surveys, interviews with local experts, numerous meetings with stakeholder committees for each corridor, a citywide project advisory committee, various focus groups, and City staff members. In addition, the themes are informed by the *Providence Tomorrow* neighborhood plans, corridor exploration, and a review of the cultural resource inventory that was completed for each corridor as part of this project.

Opportunities for artistic intervention at key bus stops along the corridor were identified and developed in conjunction with bus shelters either as a component of a prefabricated bus shelter (side panel, back panel, or column) or as a free standing seating element. The artistic interventions have replaced specific manufactured components of the shelter to seamlessly blend public art with new infrastructure. Artists were required to incorporate and adhere to several criteria including the theme that was established for Broad Street. As both an art object and a transit amenity, the shelters encourage the use of the public transit system and celebrate the unique identity of these important commercial, cultural and historic neighborhoods. In addition to the shelter locations, several areas have been identified along Broad Street as important community gateways. These significant wayfinding and transition points present opportunities for special treatments that highlight their symbolic importance, improve the pedestrian environment, and reinforce each neighborhood's unique identity. The following gateway sites have been recommended for additional stand-alone pieces of art that will help contribute to the overall identity of the corridor and reflect the interpretive theme:

- Washington Park Square Gateway
- Roger Williams Park Gateway
- Grace Church Cemetery Gateway
- 500 Broad Street Gateway
- Trinity Square Gateway
- Interstate-95 Gateway

The City will work to identify possible funding sources to hire artists to design and install stand-alone pieces of art at the recommended gateway sites.



1 ROGER WLMS. PARK Outbound
Freestanding Screen

2 EARLY ST. Outbound
Freestanding Screen

3 PUBLIC ST. Outbound
Seating

4 TRINITY SQ. Outbound
Back Panel + Seating

5 MONTGOMERY ST. Inbound
Back & Side Panels

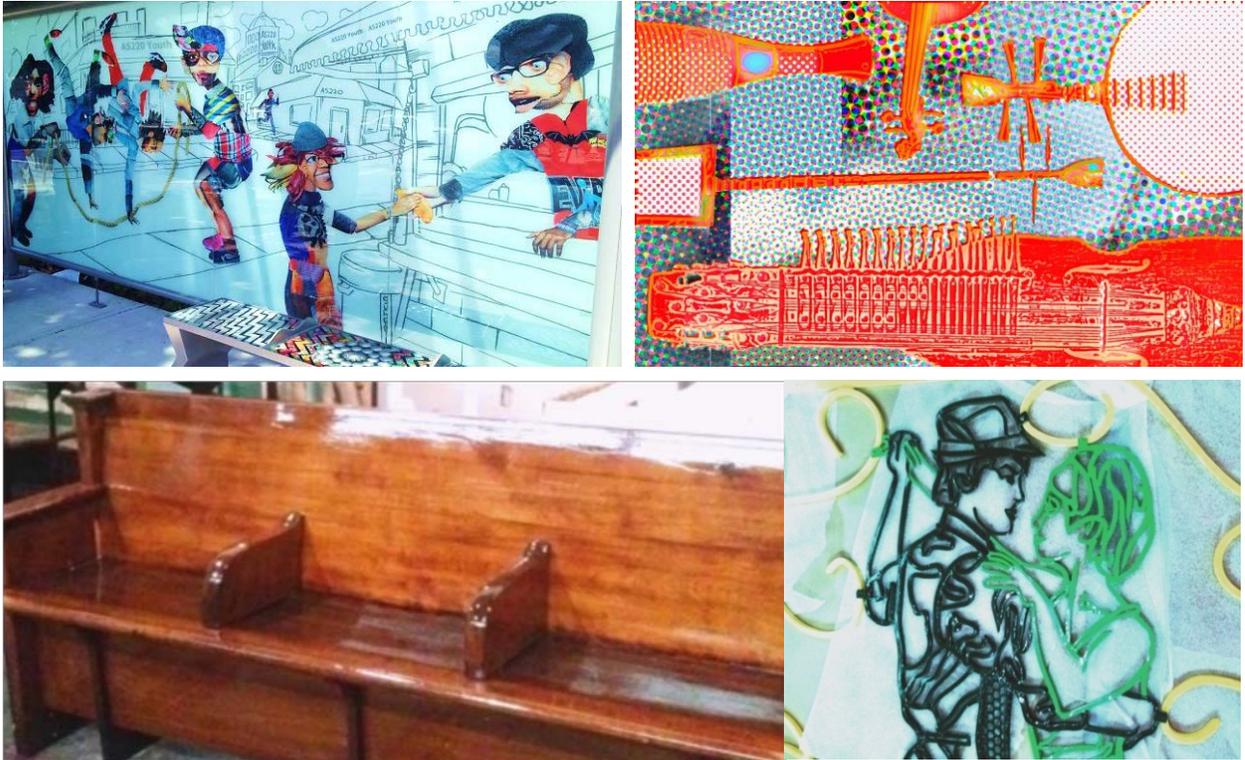
6 ROGER WLMS. PARK Inbound
Back & Side Panels

7 THURBERS AVE. Inbound
Back Panel

8 PUBLIC ST. Inbound
Back Panel

9 TRINITY SQ. Inbound
Back Panel + Seating

Installed bus stop artwork along Broad Street



Artwork installed at bus stops along Broad Street reinforces the corridor's theme of "Experiencing World Cultures."

ARTS + CULTURAL PLANNING RECOMMENDATIONS

Dreeszen & Associates' cultural planning team met with City of Providence Art Culture + Tourism and Planning and Development staff, project advisors, and stakeholder committees to develop strategies to employ arts, culture, and heritage to improve livability, prosperity, and public access to arts and entertainment along the five corridors. Recommendations also build upon *Creative Providence: A Cultural Plan for the Creative Sector*, *Providence Tomorrow* neighborhood plans; and other plans including RIPTA's *Metropolitan Transit Enhancement Study*, and specific district plans. Recommendations are based on assets identified in inventories of cultural resources and the interpretive themes and artist guidelines for each corridor.

Broad Street Corridor Arts & Cultural Opportunities Analysis Recommendations

- Brand and market food trucks and encourage them to locate at community hubs.
- Commission iconic public art for the Roger Williams Park entrance on Broad Street.
- Map, promote, and protect murals to encourage community pride and attract cultural tourists; build upon the success of past mural projects that have already led to much recognition. *Examples from other cities include: Philadelphia, PA: Mural Arts Program (<http://muralarts.org/>)*
- Install additional wayfinding signage to direct visitors to Roger Williams Park; build upon the Downtown Wayfinding Signage system.

In addition to the above corridor-wide recommendations, the cultural planning team has identified existing conditions, emerging opportunities, and potential scenarios for increased cultural participation at three neighborhood-based community hubs along Broad Street— Trinity Square, Public Street, and Bomes Theatre. These three locations have been identified and evaluated as areas along Broad Street where increased building height and density could be accommodated, in order to encourage life and vitality, while also allowing for compatible transitions to surrounding areas. Directing investment to these hubs is critical in order to ensure the success of the transit investment in those areas and to create catalytic change along the entire corridor. The following arts and cultural strategies were tailored specifically to meet the project objectives of integrating transit, housing, economic development, and arts and cultural activities at the two identified hub locations.

For more information on the land use analysis of the community hubs please refer to the "Broad Street Land Use Analysis" section of this report.

Trinity Square Hub Arts & Cultural Opportunities Analysis Recommendations

- Encourage implementation of the Southside Cultural Center’s plans to establish new programs and increase their capacity.
- Encourage Community Music Works to create a pop-up concert series in the vacant storefront at 500 Broad Street.
- Encourage Community Music Works to create a pop-up concert series at Grace Church Cemetery.
- Encourage the Southside Cultural Center to have a distinct presence on the street with street-visible programs and promotions.
- Work with Grace Church Cemetery to create a pedestrian walkway through the cemetery, connecting Broad Street to Elmwood Avenue, in order to activate the area.
- Encourage retail businesses that will complement existing cultural resources such as the Southside Cultural Center to locate near Trinity Square (similar to development that was catalyzed by New Urban Arts and AS220 in other areas of the city).
- Encourage the Southside Cultural Center to partner with nearby schools, including Classical High School, Central High School, Hanley Technical School, and Community Prep, and with nearby New Urban Arts and CityArts as part of a youth-oriented arts cluster.
- Encourage the Southside Cultural Center to partner with Firehouse 13 on targeted cultural programming opportunities.
- Encourage cultural organizations around Trinity Square to collaborate to promote the visibility of the area.
- Use wayfinding signage to direct RIPTA riders and pedestrians to the Southside Cultural Center.
- Prioritize the area surrounding Grace Church Cemetery for wayfinding and interpretive signage to help RIPTA riders and residents appreciate and understand the cemetery’s history.

- Use City and State marketing tools to promote Trinity Square and the Southside Cultural Center to regional cultural tourists.
- Commission a permanent public art installation within Trinity Square to enhance it as an important gateway location.
- Encourage members of the Grace Episcopal Church to fulfill their land stewardship and community responsibilities to repair fences and maintain the grounds of the Grace Church Cemetery to preserve it as an important cultural and historic site; in the short-term, engage artists to temporarily enhance the fence surrounding the cemetery.
- Foster connections between Trinity Square and other Broad Street community hub locations by creating temporary cultural programming such as pop-up galleries and studio space.

Bomes Theatre Hub Arts & Cultural Opportunities Analysis Recommendations

- Plan and implement facade improvements to the Bomes Theatre; in the short-term, commission artists to improve the building through light installations.

Examples of similar lighting project include:

- *Seattle, WA: South Park Lights by Franklin Joyce* (<http://www.publicartarchive.org/work/south-park-lights>)
 - *Pasadena, CA: digital media projections by various artists* (<http://www.publicartarchive.org/work/projections>)
 - *Tottori, Japan: Ueda Shoji Museum of Photography installation by Sean Capone* (<http://seancapone.com/#Shoji-Museum-Japan-6.1.b>)
 - *Providence, RI: Refresh HouseART mural at 1005 Broad Street*
- Continue to encourage the Dominican Festival and Puerto Rican Parade to help animate the neighborhood and encourage additional events such as the Cyclovia event that took place September 2012.
 - Implement streetscape improvements including repairing or replacing damaged tree guards and trash cans in order to ensure a safe environment for pedestrians.
 - Identify long-term uses for the Bomes Theatre building and adjacent 1005 Broad Street building; explore the feasibility of locating a folk art market at 1005 Broad Street.
 - Encourage Quisqueya in Action's plans to relocate to the Bomes Theatre hub.
 - Encourage the efforts of the cleanup team organized by the Broad Street Merchants Association.

Public Street Hub Arts & Cultural Opportunities Analysis Recommendations

- Encourage and support the rehabilitation of the Broad Street Synagogue and its operation as a cultural center, community museum, exhibition space, and performance venue.

- Encourage Calvary Baptist Church to partner with the emerging rehabilitated Broad Street Synagogue across the street to bring cultural activities and outdoor markets to further animate the street and to serve as gathering places for neighbors.
- Leverage proximity to schools to animate the hub.
- Foster the development of small, arts-oriented businesses.

ELMWOOD AVENUE

Elmwood Avenue Introduction

Elmwood Avenue connects key destinations in Warwick and Cranston, such as the Warwick Intermodal Center at T.F. Green Airport, with downtown Providence. Elmwood Avenue has several well developed retail areas, but neighborhood residents have expressed a desire for a better quality of development and the creation of walkable mixed-use nodes along the corridor. Roger Williams Park— the largest urban park in the State of Rhode Island— is an important destination along Elmwood Avenue.

Elmwood Avenue dates back to the system of colonial highways that linked Providence with outlying rural areas and was developed primarily between 1845 and 1930, caused by tremendous industrial and commercial expansion in Providence and by the expansion of public transit. In 1843, Joseph J. Cooke purchased farm land in the area and named the estate Elmwood with the hope of creating a model suburban community with wide streets and shade-giving elm trees. From the 1850s to the 1930s public transit accelerated the development of the area as Elmwood became a thriving suburb of Downtown. After streetcar service was eliminated in the late 1930s, Elmwood Avenue was widened significantly and the elm trees that Joseph J. Cooke planted in the 1840s were removed. As the automobile increased in popularity, businesses in the form of car dealerships, garages, and service stations proliferated along Elmwood Avenue. By the 1950s, the demand for parking reduced many of the yards in the area to surface parking.

The *Elmwood Avenue Transit Analysis* section of this report provides an overview of the current conditions of transit along the corridor and outlines measures to be taken to provide frequent, reliable transit service, improving the rider experience along this important transportation corridor. The *Elmwood Avenue Land Use Analysis* section of this report contains an analysis of existing conditions, vacant and underutilized land within key nodes along the project corridor, and potential build out scenarios for each key node. This analysis furthers the City's goals of managing growth and change, encouraging development and neighborhood revitalization, fostering a stronger sense of place, and building upon the placemaking role of RIPTA's transit enhancements. The *Elmwood Avenue Arts and Cultural Opportunities Analysis* section of this report summarizes the public art enhancements that have been recommended, the inventory of arts and cultural resources that was completed, and the creative placemaking strategies that were developed to employ arts, culture, and heritage to improve livability, prosperity, and public access to arts and entertainment along the corridor.

What do previous plans say about Elmwood Avenue?

Previous plans, including the *Providence Tomorrow Neighborhood Plan* for Upper South Providence, Lower South Providence and Elmwood (2009), the *Providence Tomorrow Neighborhood Plan* for Washington Park and South Elmwood (2009), the *Providence Tomorrow Neighborhood Plan* for the West End, Federal Hill and Reservoir (2009), and *A Vision for Revitalization: the Trinity Gateway Project at Grace Church Cemetery* (2003) were evaluated in order to ensure that key elements of those plans were integrated into this planning effort.

The following elements of those plans have been incorporated into the goals for the transportation, land use, and cultural planning elements of this project:

- ➔ Create commercial node areas (Mawney to Redwing streets, Lexington to Adelaide avenues) to allow a mix of commercial, office and residential uses (in areas where mixed-use is present today), with traditional neighborhood design standards.
- ➔ Create a mixed-use commercial node at Trinity Square from the Broad Street/Elmwood Avenue intersection to the Service Road to serve as transition to downtown, with taller buildings closer to the highway and with traditional neighborhood design standards.
- ➔ Target the areas with high concentrations of blight/nuisance properties for revitalization as a catalyst for improving the surrounding neighborhood.
- ➔ Support existing and future merchant groups along the corridor.
- ➔ Improve neighborhood access to Roger Williams Park.
- ➔ Provide additional trash containers for stores along the corridor
- ➔ Create an orchard at the Locust Grove Cemetery and work with Parks and Recreation departments and neighborhood groups to develop ways to improve safety.
- ➔ Enhance bus stops along the corridor with shelters, improved lighting, signs, seating, and trash cans
- ➔ Identify need for landscape buffers for commercial/industrial along major streets such as Elmwood Avenue.
- ➔ Enhance underpass along Elmwood Avenue as a gateway to the park.

Elmwood Avenue Transit Analysis

Public transit along Elmwood Avenue is defined by Route 20, a RIPTA-operated bus route. Serving as one of the top ten highest use bus routes in Providence, Route 20 provides service between the T.F. Green Airport and Kennedy Plaza in downtown Providence, primarily on Elmwood Avenue. Select trips on weekdays operate between Cranston City Hall (at Auburn Street and Park Avenue) and Kennedy Plaza instead of serving T.F. Green Airport.

EXISTING RIDERSHIP DATA

Route 20 has strong ridership, especially on its inner end, while its outer end has excess capacity. Route 20 averages 2,464 riders per weekday, 586 riders per Saturday, and 392 riders per Sunday. In terms of weekday ridership, it is RIPTA's fifth highest ridership route. The route travels through portions of Providence, Cranston, and Warwick with Kennedy Plaza, the RIPTA Garage, and T.F. Green Airport serving as the three transit stations. Some of the main activity centers along the route include T.F. Green Airport, Downtown Providence, Trinity Square, Columbus Square, Roger Williams Park and Zoo, Cranston City Hall, the New England Institute of Technology, and Pastore Center.

On weekdays, ridership is highest during midday, when the average is more than 30 riders per trip. On the weekend, ridership is also relatively strong, averaging 24.5 and 17.4 riders per trip on Saturday and Sunday, respectively. Inbound ridership per trip is relatively even throughout the day (except during evenings after 6:00 PM), but outbound ridership is more concentrated during the morning and afternoon peak periods and during the midday, with lower ridership during the early morning and the evening periods. Overall, however, ridership is so much stronger in the outbound direction during the middle of the day that overall daily ridership per trip is much higher in the outbound direction than the inbound direction. Ridership in both directions begins to taper off around 6:00 PM, and on trips departing after 10:00 PM ridership is generally fewer than 10 passengers per trip.

STOP INVENTORY ANALYSIS

Within Providence, there are currently 48 bus stops (23 inbound and 25 outbound) along Elmwood Avenue. With approximately 9.6 bus stops per mile, Route 20 stop frequency is significantly higher than the system average of 5.6 stops per mile. Most of



Route map of RIPTA's Route 20 service

the stops along Elmwood Avenue face similar challenges such as lack of shade, tight sidewalk clearances, and visual clutter. Only six of the 48 stops currently have bus shelters (four inbound stops and two outbound stops). Despite these issues, there have been several public realm investments near stops, such as landscape buffers; however, these efforts have not occurred throughout the entire corridor.

EXISTING CONDITIONS ANALYSIS

During RIPTA's analysis of Elmwood Avenue, the following issues were identified:

The portion of the route north of Route 10 is overcrowded. Overcrowding is a significant issue for the portion of the route north of Route 10, where 80 percent of all ridership occurs. To address the crowding and reflect the stronger level of ridership within this portion of the route, a mix of alternating short and long trips could be provided. For example, there could be one trip every 15 minutes on the northern end of the route and every 30 minutes on the southern end of the route. This pattern could more closely reflect the actual demand for service, reduce crowding on the northern half of the route, provide better service where demand is highest and less service where demand is lowest, and establish easier to remember clock face headways for service to and from T.F. Green Airport.

There are numerous underutilized variants along the route. There are several variants along Route 20 with extremely low ridership which should be eliminated. Cranston City Hall, which serves only 11 riders per day, reduces service available to more productive portions of the route. New England Institute of Technology, which serves only three passengers per weekday, and Pastore Center, which does not serve any passengers, should also be discontinued.

Weekend service is underutilized after 10:00 PM. Ridership after 10:00 PM is relatively low and the last trips of the day serve fewer than 10 passengers each. Service should be discontinued at approximately 10:00 PM to improve route productivity.

Saturday service is underutilized before 6:00 AM. Saturday service carries relatively strong ridership compared with the level of service provided, but service during early trips prior to 6:00 AM and late trips after 10:00 PM carry low ridership and could be eliminated to increase productivity.

RECOMMENDATIONS

Bus Stop Location Improvements

Bus stops play an important role in the identity of the street and are therefore an important urban design element. The siting of bus stops and their components should enhance the transit corridor and strengthen the character of the street. By removing and relocating bus stops on Elmwood Avenue, RIPTA will be able to provide service that is more efficient, accessible, and reliable, and will be able to ensure that stops are in ideal locations for passengers, local businesses and residents.

Through a thorough analysis of Elmwood Avenue, RIPTA has identified stops that are spaced too closely together, unsafe, or underutilized. In Providence, RIPTA has recommended that five inbound stops and one outbound stop on Elmwood Avenue be relocated. RIPTA has also recommended that five inbound stops and 10 outbound stops on Elmwood Avenue in Providence be removed entirely in order to improve bus service. All recommendations for removal or relocation have been thoroughly reviewed with the public and local stakeholders. Comments and concerns gathered from the public have been incorporated into the final bus stop placement. The placement of each stop was also analyzed through its impact on traffic and pedestrian sightlines and activity, as well as relationships to landmarks, landscaped spaces, and surrounding buildings. The removal and relocation of these stops will improve schedule adherence for buses, the accessibility of RIPTA services for all patrons, and travel times for passengers. Improved bus stop spacing will shorten travel times and minimize

'stop and go' travel along the length of the corridor. Additionally, RIPTA will benefit from reduced maintenance and fuel costs directly related to these changes.

Stops along Elmwood Avenue in Providence Recommended for Removal:

Stop	Direction
Elmwood @ Thurston	Inbound
Elmwood @ HWY 10 Overpass	Inbound
Elmwood @ Whitmarsh	Inbound
Elmwood @ Cromwell	Inbound
Elmwood @ Wilson	Inbound
Elmwood @ Wilson	Outbound
Elmwood @ Sprague	Outbound
Elmwood @ Whitmarsh	Outbound
Elmwood @ Burnett	Outbound
Elmwood @ Carter	Outbound
Elmwood @ Gallatin	Outbound
Elmwood @ Roger Williams Ave	Outbound
Elmwood @ Carlisle	Outbound
Elmwood @ Thurston	Outbound
Elmwood @ Bissell	Outbound

Stops along Elmwood Avenue in Providence Recommended for Relocation:

Stop	Direction
Elmwood @ Spooner	Inbound
Elmwood @ McKinley	Inbound
Elmwood @ Cadillac	Inbound
Elmwood @ Redwing	Inbound
Elmwood @ Bellevue	Inbound
Elmwood Far Side Potters	Outbound



Proposed bus stop changes along Elmwood Avenue



Other Service Improvements

Striping and signage improvements, as part of RIDOT’s improvements to Elmwood Avenue, will be implemented for the following intersections along the corridor:

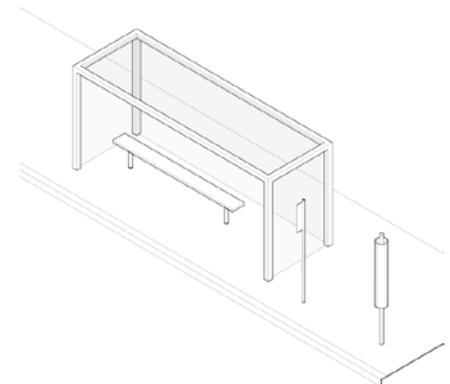
- Roger Williams Court & Cadillac Drive
- Hempstead Street
- Beldon Street
- Longfellow Street
- Russell Street
- Thackery Street
- Sackett Street
- Warrington Street
- Gallatin Street
- Lenox Avenue
- Adelaide Avenue
- Atlantic Avenue
- Lexington Avenue
- Reservoir Avenue
- Ontario Street
- Congress Avenue
- Earl Street
- Rutland Street
- Redwing Street
- Carter Street
- Hawthorne Street
- Potters Avenue
- Greenwich Street
- Standwood Street & Public Street
- Burnett Street
- Mawney Street
- Daboll Street
- Moore Street
- Princeton Avenue
- Whitmarsh Street
- Peace Street
- Bellevue Avenue & Plenty Street
- Hanover Street
- Woodman Street
- Dartmouth Avenue
- Cromwell Street
- Parkis Avenue
- Sprague Street
- Westfield Street
- West Friendship Street
- Warren Street
- Wilson Street
- Arch Street
- Central Street
- Bridgham Street

“No parking” signs and diagonal pavement striping will be installed at all bus stop locations along Elmwood Avenue. Parking violations at bus stop locations will be enforced by the City of Providence Parking Enforcement.

Pedestrian Amenity Improvements

Enhanced passenger amenities will improve the passenger experience for those travelling along Elmwood Avenue. It is recommended that RIPTA work with the City of Providence to procure funding for the implementation of new bus shelters, benches, trash receptacles, and bicycle racks along Elmwood Avenue. These new, standardized bus stop components should include:

- New three-sided bus shelters;
- Freestanding screens that will screen parking lots, provide passengers with a buffer from the wind and provide a surface for local art;
- Freestanding transit totems that will include schedule and map information for RIPTA services, real-time arrival information and additional wayfinding information;
- Enhanced transit signs that will provide schedule and map information for RIPTA services; and,
- New post-mounted transit signs that will replace existing RIPTA bus stop signs where enhanced transit signs are not appropriate.



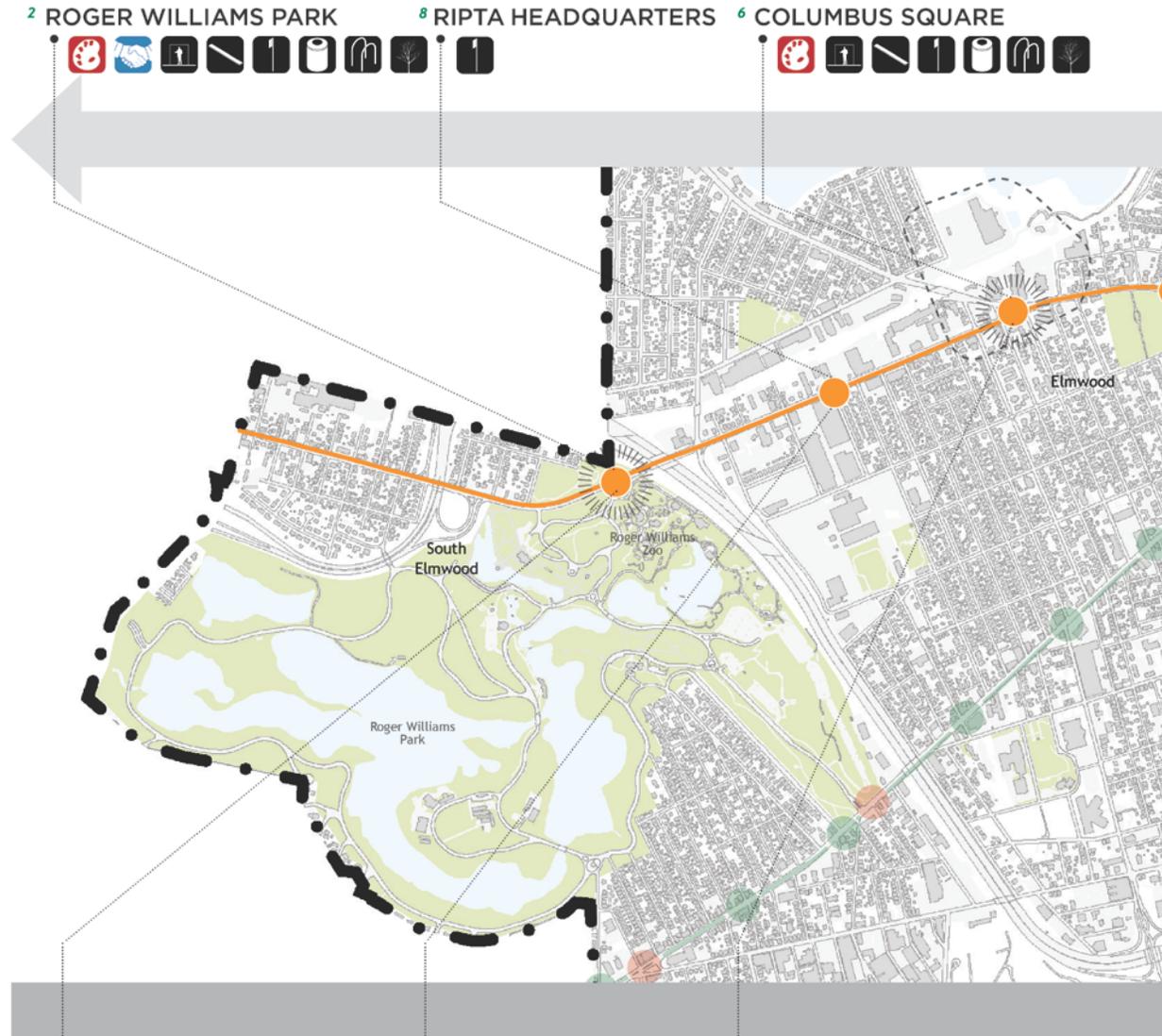
Shown from left to right: New bus stop amenities that are proposed for Elmwood Avenue include new bus shelters, new bus stop signs, and enhanced transit signs.

The following stops along Elmwood Avenue have been recommended for various improvements:

Stop	Direction	Details
Elmwood @ Bellevue	Inbound	Column and beam shelter, free-standing bench, enhanced transit sign, free-standing trash can, free-standing bike rack, and landscape components
Elmwood @ Bellevue	Outbound	Post-mounted transit sign
Elmwood @ Moore	Inbound	Enhanced transit sign and landscape components
Elmwood Far Side Princeton	Outbound	Bus stop art opportunities, column and beam shelter, free-standing bench, post-mounted transit sign, free-standing trash can, free-standing bike rack, and landscape components
Elmwood Opposite Hawthorne	Inbound	Bus stop art opportunities, free-standing screen, enhanced transit sign, and landscape components
Elmwood Far Side Potters	Outbound	Post-mounted transit sign and landscape components
Elmwood Near Side Ontario	Inbound	Bus stop art opportunities, column and beam shelter, free-standing bench, enhanced transit sign, free-standing trash can, free-standing bike rack, and landscape components
Elmwood Near Side Atlantic	Outbound	Bus stop art opportunities, column and beam shelter, free-standing bench, post-mounted transit sign, free-standing trash can, free-standing bike rack, and landscape components
Elmwood Opposite RIPTA HQ	Inbound	Enhanced transit sign and modified components
Elmwood Opposite Thackery	Outbound	Post-mounted transit sign
Elmwood @ Roger Williams Park	Outbound	Bus stop art opportunities, column and beam shelter, free-standing bench, enhanced transit sign, free-standing trash can, and free-standing bike rack
Elmwood Opposite Carlisle	Inbound	Bus stop art opportunities, column and beam shelter, free-standing bench, post-mounted transit sign, free-standing trash can, free-standing bike rack, and landscape components

Local art will be incorporated into select bus stops along the corridor in order to celebrate the unique identity of Elmwood Avenue and provide a sense of orientation that connects people and places along the street in a meaningful way. The City and RIPTA will work closely with local artists to integrate art into the bus shelters. A theme of “Gateway to Opportunity” has been established to highlight Elmwood Avenue’s distinctive character and guide the artwork that is developed.

For more information on the theme and artwork that will be developed for Elmwood Avenue, please refer to the “Elmwood Avenue Arts & Cultural Opportunities Analysis” section of this report.



2 ROGER WILLIAMS PARK

8 RIPTA HEADQUARTERS

6 COLUMBUS SQUARE

ROGER WILLIAMS PARK ¹⁰

RIPTA HEADQUARTERS ¹⁸

COLUMBUS SQUARE ¹⁵⁹

KEY

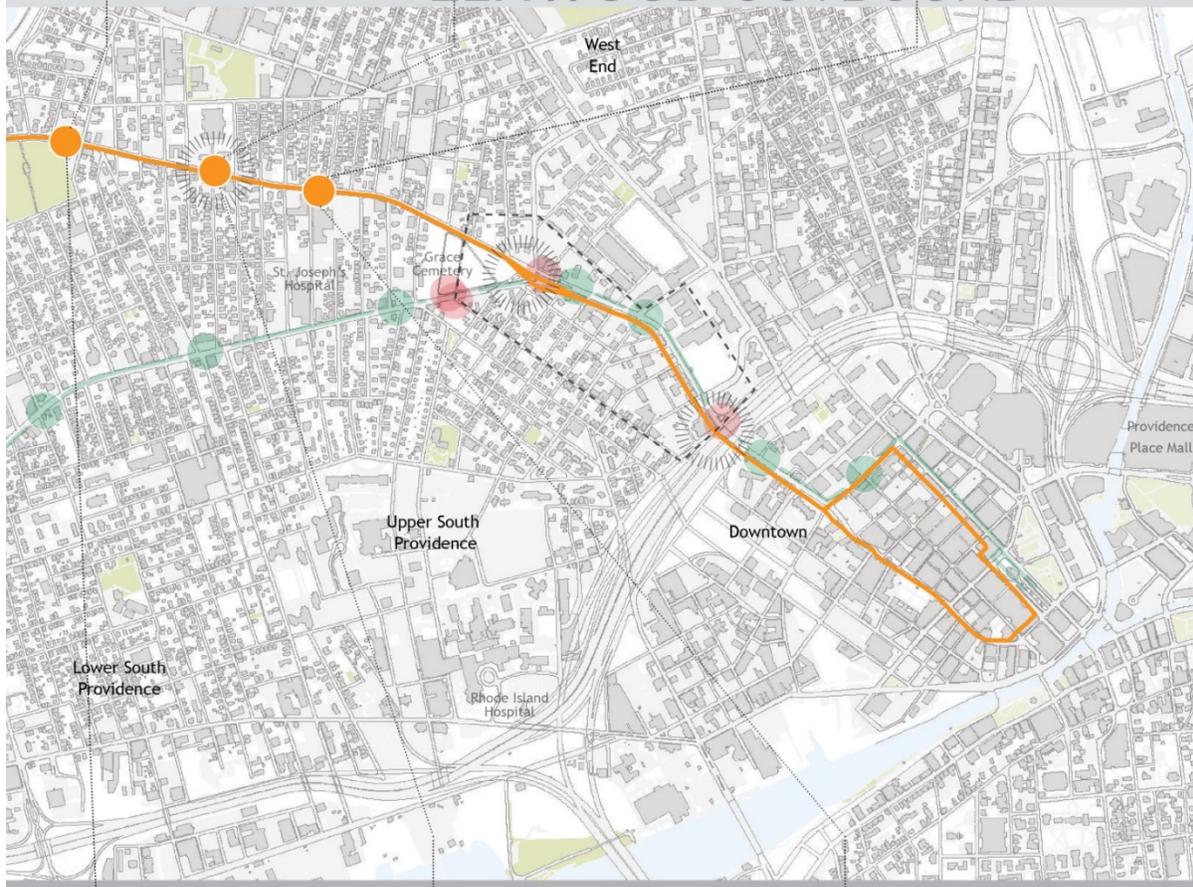
- community hubs
- community gateways
- proposed enhanced bus stop
- # approx. current boardings/day
- public/private partnerships
- bus stop art opportunities
- column & beam shelter
- free-standing bench
- post-mounted transit sign
- free-standing trash can
- free-standing bike rack
- free-standing screen
- enhanced transit sign
- landscape components
- modified components



Proposed bus stop improvements along Elmwood Avenue

- 21 ELMWOOD @ POTTERS
- 22 KNIGHT MEMORIAL LIBRARY
- 27 ELMWOOD @ BELLEVUE

ELMWOOD OUTBOUND



ELMWOOD INBOUND

- ELMWOOD @ POTTERS 55
- KNIGHT MEMORIAL LIBRARY 46
- ELMWOOD @ BELLEVUE 102

Landscape Improvements

Opportunities for landscape improvements at bus stop locations should be encouraged through partnerships with private property owners in order to improve the pedestrian realm surrounding the stops.

Street trees have been recommended in areas where there is space within the right-of-way and a need for enforcement of the street tree canopy. In some instances, the recommendations call for the replanting of trees that have been removed or the replacement of trees that are in poor condition. The following bus stop locations along Manton Avenue have been identified for possible landscape improvements:

Bus Stop	Street Trees Recommended
Elmwood @ Bellevue - inbound	2
Elmwood @ Bellevue - outbound	--
Knight Memorial Library - inbound	2
Knight Memorial Library -outbound	2
Elmwood @ Potters - inbound	2
Elmwood @ Potters - outbound	2
Columbus Square - inbound	2
Columbus Square - outbound	2
RIPTA Headquarters - inbound	--
RIPTA Headquarters - outbound	--
Roger Williams Park - inbound	2
Roger Williams Park - outbound	2
TOTAL	18

POTENTIAL SAVINGS

Operational savings on Route 20 will primarily be realized through transit signal prioritization (TSP) and bus stop consolidation. While Route 20 is not the primary implementation corridor for TSP, it does overlap with the R-Line from Trinity Square to Kennedy Plaza. Therefore, the most congested part of Route 20 will find improved operations. Bus stop consolidation will address the number of redundant bus stops, as Route 20’s inner section currently has stops that are spaced approximately a tenth of a mile apart. Bus stops will be reduced to the RIPTA standard of 6 stops per mile. This will encourage passengers to congregate at one stop rather than spreading over many stops. This alone will decrease running times, reduce braking, and speed up the bus through the corridor.

ELMWOOD AVENUE TRANSIT ANALYSIS RECOMMENDATIONS

- Alternate short and long trips to address overcrowding; Increase frequency on the inner end of the route to every 15 min and every 30 min for the end of the of the route.
- Eliminate service to Cranston City Hall, the New England Institute of Technology, and Pastore Center.
- Discontinue weekend service after 10:00 PM and Saturday service before 6:00 AM.

Elmwood Avenue Land Use Analysis

In addition to being one of the highest use bus routes in Providence, Elmwood Avenue was also selected as one of the five corridors to be evaluated as part of this project because of the availability of land to be redeveloped to create hubs of activity near transit stops. The redevelopment of vacant or underutilized parcels along Elmwood Avenue will aid in the creation of mixed-use community hubs that are directly served by transit. Linking development directly to transit will connect residents to jobs and employment centers and create jobs and investment in areas that are most in need.

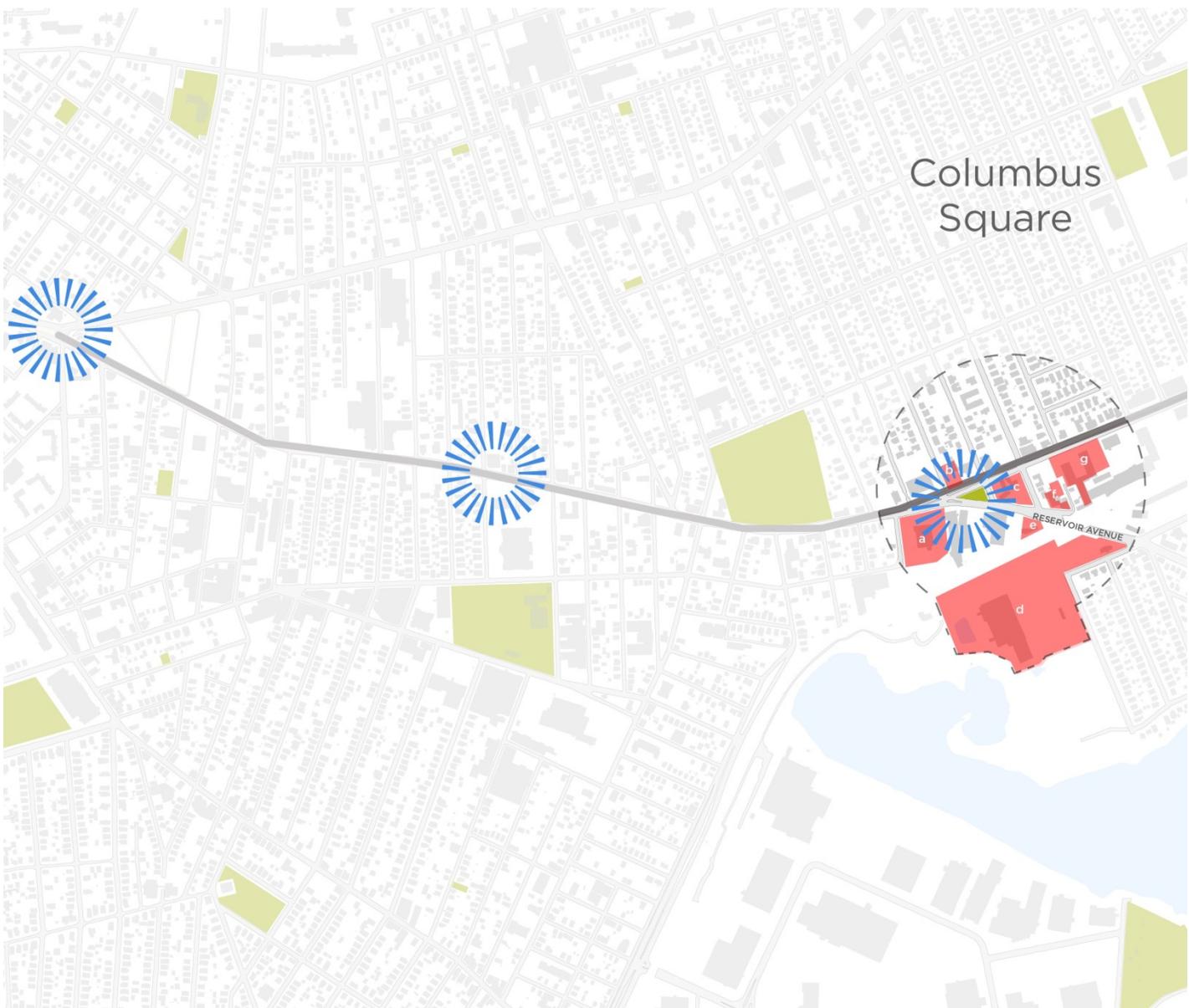
Community hubs have been identified and evaluated as areas along Elmwood Avenue where increased building height and density could be accommodated in order to encourage life and vitality, while also allowing for compatible transitions to surrounding areas. Directing investment to these hubs is critical in order to ensure the success of the transit investment in those areas and to create catalytic change along the entire corridor. Two community hub locations have been selected for Elmwood Avenue— Trinity Square and Columbus Square— and potential build out scenarios have been developed for opportunity sites within each. Future development scenarios have been evaluated against both the desires of the community and current zoning regulations; where conflicts with current zoning exist, adjustments of the ordinance are being implemented. The build out scenarios are meant to guide future development in the area by providing a framework based on best practices as well as the needs and desires of the community. In addition to longer term build out scenarios, interim uses have also been evaluated for opportunity sites within the hub locations in order to activate these important areas in the short-term. By studying possible build out scenarios on a site by site basis, the specific opportunities and limitations for each property as-of-right or under new zoning parameters can be analyzed. In most cases, the biggest barrier to redevelopment is incorporating the related surface parking demand on site based on the currently required ratios for various land uses. Looking at the community hub as a whole allows more thought to be given regarding where opportunities for parking and open space exist on a district-wide scale.

Several locations have also been identified along Elmwood Avenue as important community gateways. These wayfinding and transition points present opportunities for special treatments such as improved landscaping, special paving, signage, and public art in order highlight their symbolic importance, improve the pedestrian environment, and reinforce each neighborhood's unique identity.

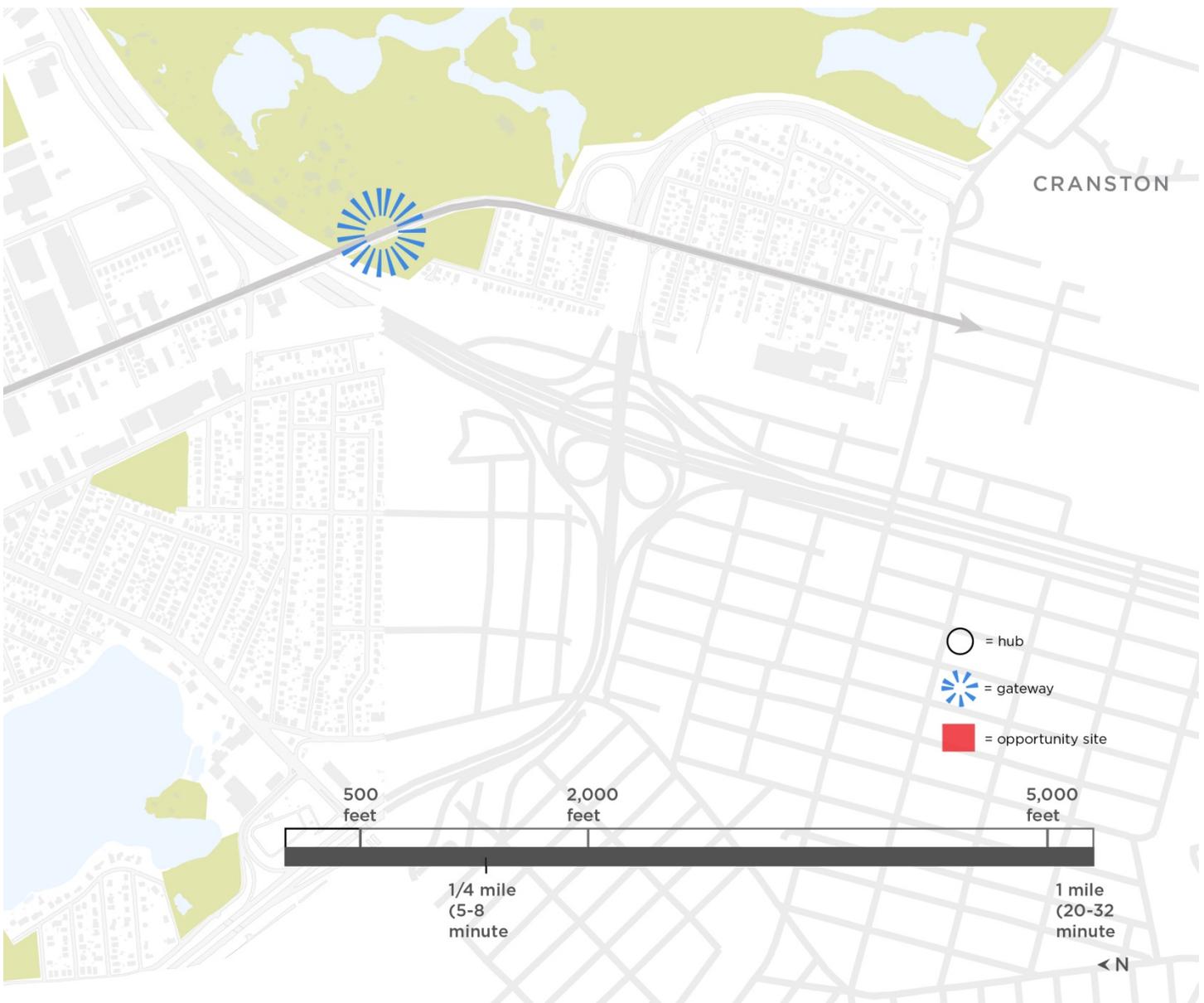
While each community hub has specific site conditions and characteristics that differentiate it from other areas, there are general urban design principles that will inform redevelopment and help to shape their physical form. The following overarching design principles were established in order to guide the potential build out scenarios for each community hub:

- ➔ **AGGREGATION:** Consider small or oddly shaped adjoining properties for aggregation into larger development parcels.
- ➔ **SUBDIVISION:** Consider exceptionally large blocks for subdivision through the introduction of new streets, open spaces, or pedestrian right-of-ways.
- ➔ **CONNECTIVITY:** Enhance visual and physical connections to existing open spaces that can link isolated sites together.

- ➔ **DENSITY:** Increase density and building height on properties where new landscape setbacks, right-of-ways or open spaces have been incorporated.
- ➔ **GATEWAYS:** Strengthen gateways that fall within community hub locations and identify existing architectural, social or historical community assets that can be better integrated into hub locations.
- ➔ **IDENTITY:** Reinforce individual corridor identities.
- ➔ **NATURAL SYSTEMS:** Leverage the presence of existing rivers or waterways to reinforce a sense of place and resolve with stormwater issues.
- ➔ **PLACEMAKING:** Seek opportunities to foster a stronger sense of place at the confluence of street grids by helping to define squares and plazas.
- ➔ **STREETSCAPE:** Extend streetscape and public realm enhancements into the neighborhoods from the hubs with street trees and improved sidewalks.
- ➔ **BUFFERS:** Provide visual buffers to surface parking lots that are not feasible sites for complete redevelopment.



Hubs, gateways, and opportunity sites along Elmwood Avenue



TRINITY SQUARE HUB

Since the Broad Street and Elmwood Avenue corridors overlap at Trinity Square, the analysis of Trinity Square has been completed as part of the Broad Street analysis. Please refer to the “Broad Street Land Use Analysis” section of this report for more information on the Trinity Square Hub.

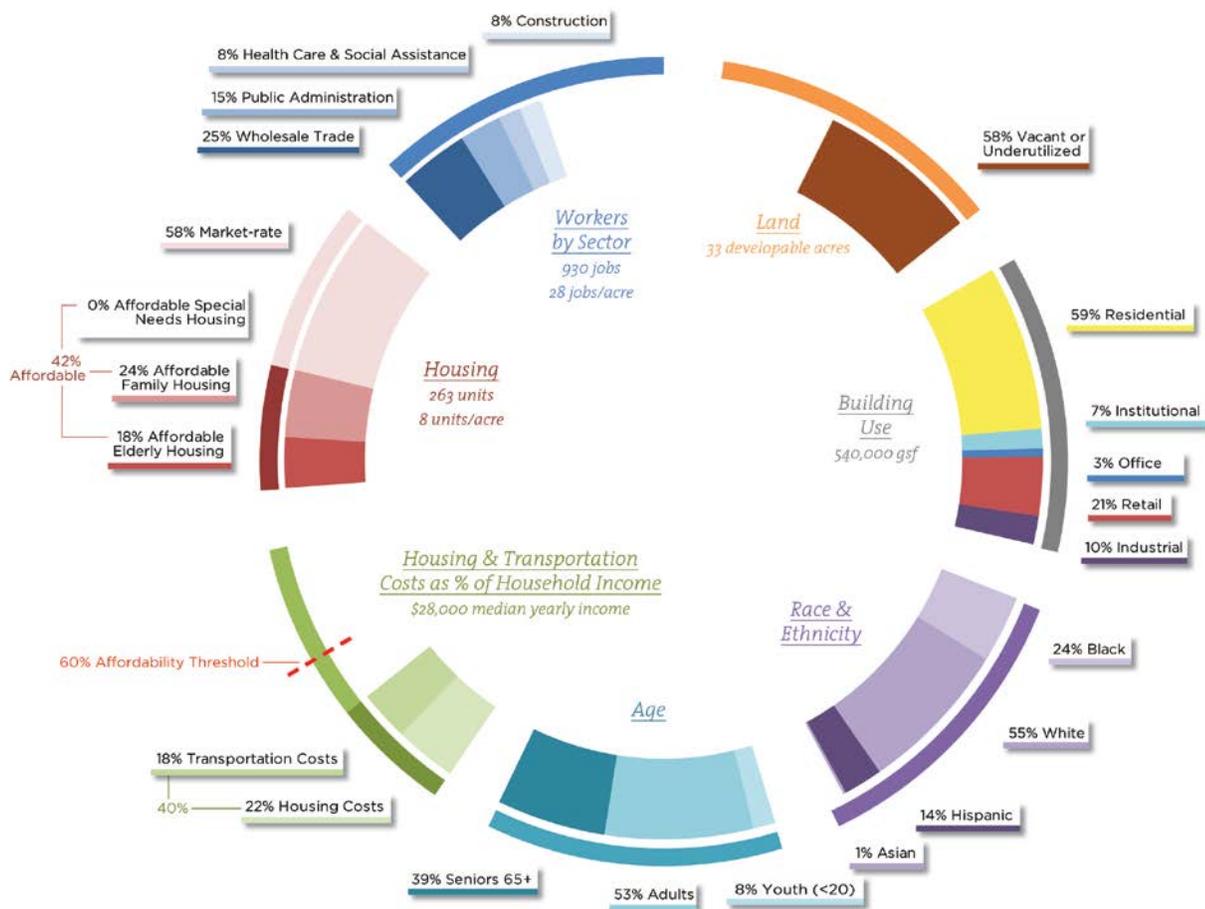
COLUMBUS SQUARE HUB

Located at the intersection of the Elmwood and Reservoir neighborhoods, the Columbus Square hub stretches from Earl Street in the north to just beyond the intersection of Reservoir Avenue and Elmwood Avenue to the south. A central feature of the hub is the triangular Columbus Square plaza and statue of Christopher Columbus.

Columbus Square has all the right ingredients for a great place. There are vibrant retailers, schools, an existing historic plaza, a wide boulevard, a large waterbody and the beginnings of an open space system. All of these pieces are surrounded by beautiful homes and a legible street grid that stems from its origins as a streetcar suburb. Enhanced transit service in the future will increase access to this hub, making it more desirable for living, working and recreation; however, the area lacks strong connections between these amenities and surface parking lots, suburban building types and auto-dependent uses diminish the character of place. While some historic fragments remain, the general erosion of the building fabric exacerbates the distance between the area’s many site amenities. Encouraging infill development to fill in the gaps and developing a more cohesive circulation network would enhance what is already there.



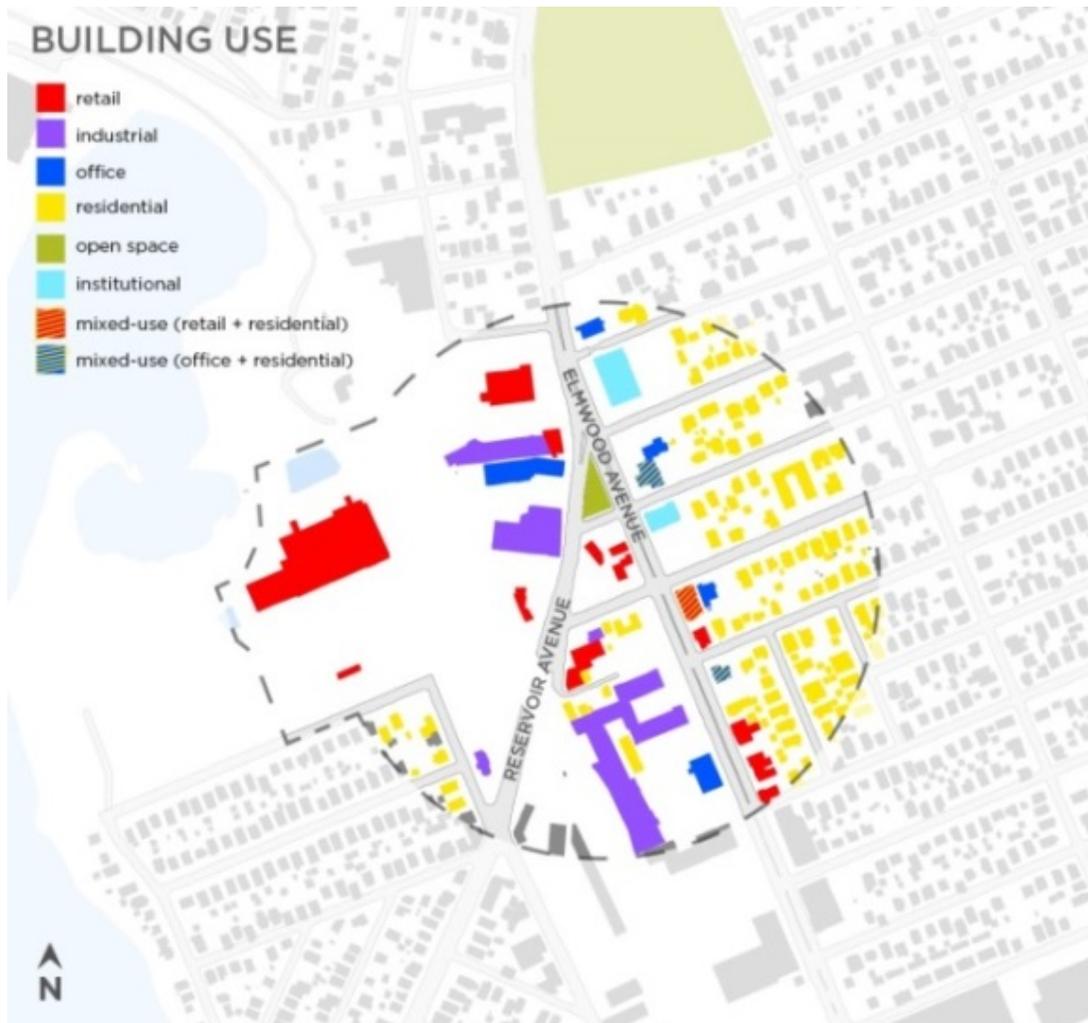
Columbus Square Hub at a Glance



Land area and density calculations are based on net acreage and do not include streets, parks or other right-of-ways. Housing and transportation costs were calculated using the Center for Neighborhood Technology’s Housing and Transportation (H+T*) Affordability Index. Age, race, and ethnicity calculations are based on the 2010 U.S. Census. Employment information was calculated using the Rhode Island Economic Development Corporation’s 2010 employment database. Housing and building use information are based on data collected from the City of Providence Tax Assessor’s Database.

Building + Land Use

Within the Columbus Square hub, residential, retail, and industrial uses dominate the corridor’s old and new building stock in different concentrations. As expected, the older building stock has a strong street presence with minimal street setback and the newer building stock has surface parking fronting the street edge. The northern end of the corridor is characterized primarily by one-story commercial buildings while the southern end contains a suburban-style strip mall and old manufacturing buildings along the rail lines. Some of the hub’s significant property owners include Quahog Realty Associates LLC, Providece Public Building Authority, Teen Challenge New England Inc., Paolino Properties LLC, Mashpaug Associates LLC, and Adelaide Realty LLC.



Housing

There are currently 637 residents within the Columbus Square Hub residing in 263 housing units. Over half of the existing housing within the area is market-rate. Of the affordable housing within the hub, 24 percent is family housing and 18 percent is elderly housing.

Employment

Identifying businesses by sector and size creates a snapshot of current employment patterns in the Columbus Square hub. Approximately 930 people work within this area, one-quarter of which are employed in wholesale trade; another 15 percent work in public administration.

Race, Ethnicity + Age

The majority of the Columbus Square Hub is White (55 percent) with Black (24 percent), Hispanic (14 percent), and Asian (1 percent) populations all represented. While most of the hub's residents are adults, approximately 39 percent of the population is above the age of 64 and 8 percent is below the age of 20.



Housing + Transportation Affordability

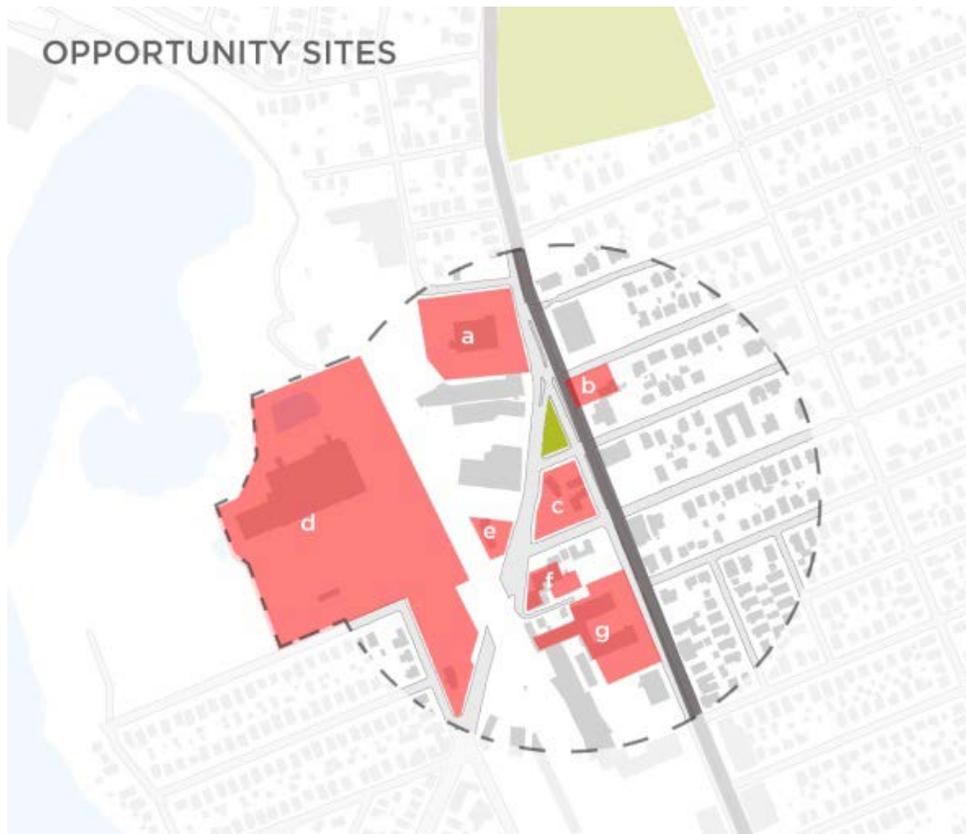
Both housing and transportation costs are considered affordable for households within this hub. Despite this fairly low median yearly income, average housing and transportation costs fall below the 60 percent affordability threshold.

Interim Uses

Given the plaza’s central location and monumental statue, it could serve well as a temporary site for special events, markets, and art installations.

Opportunity Sites

Together with the consultant team (Gamble Associates, Paul Cote, and Site Creative), the City identified various opportunity sites for future development within the hub by using a three-dimensional build-out analysis of transit-supportive densities. A total of seven opportunity sites were identified within the Columbus Square hub. Future development scenarios for these sites were carefully evaluated against both the desires of the community and current zoning regulations; where conflicts with current zoning exist, adjustments of the ordinance are being implemented.



OPPORTUNITY SITE	a	b	c	d	e	f	g
ACREAGE	2.1	0.4	0.8	13.1	0.3	0.4	1.8

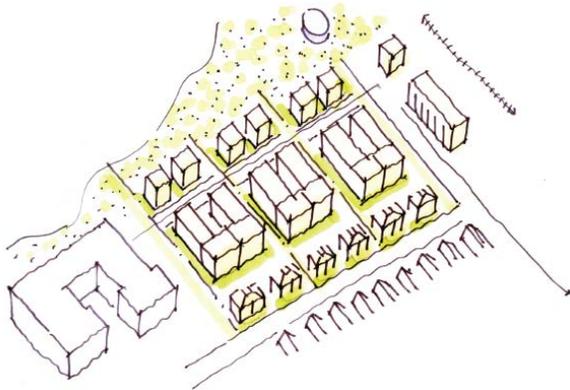
TOTAL ACREAGE **18.9 acres**

Key Redevelopment Goals and Opportunities

Develop mixed-use infill for outdated strip malls. Strip malls are great prospects for redevelopment. The very attributes that made them attractive candidates for retail centers a generation ago make them viable sites for investment today. They are typically large sites and owned by a single entity. They often have good access and visibility from the street, with a great deal of open space which was dedicated for parking. Combined with the fact that most suburban building types were built with construction methods whose life span was seldom longer than 40 years, properties such as these can remain vacant for long periods, drawing down adjacent property values.

The Elmwood corridor was once a tree-lined, affluent trolley boulevard. It can once again become a vibrant center for mixed use activity by transforming properties that are underutilized. New development on the Mashapaug Commons site should capitalize on connections to the pond and the natural landscape. Parking for new growth should be dispersed on the site along townhouse-like development pads that foster movement between the site and the Dr. Jorge Alvarez High School.

Develop new housing concentrations to enhance connections to the school and pond. There are many opportunities for new housing development in and around Columbus Square. A great deal of density can be accommodated on the opportunity sites which range in size from ½ acre to thirteen acres; however, increasing

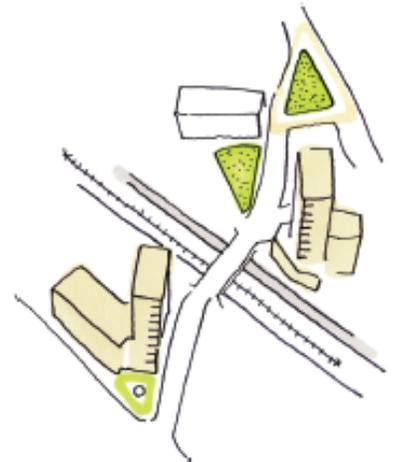


Sites A and D have large, one story retail footprints set back from the street by surface parking lots. New development should be more porous to allow for greater movement between buildings.

the density need not come at the expense of the Elmwood's traditional character. New multifamily housing could easily phased as the market demands, and as absorption rates allow. The nearby high school provides an educational amenity within walking distance to the new neighborhood development. More commercial or office uses are best located around Columbus Square itself to reinforce existing businesses. The wetlands surrounding the pond should be expanded into an environmental, educational park for the entire area.

Increase density at the bridge overpass. The term gateway is often used to describe specific moments in cities that

represent a change in character and delineate entry. The intersection of Reservoir and Elmwood avenues creates a special gateway moment in the city, heightened by the experience of crossing over the rail line leading into Columbus Square. As Elmwood passes the Columbus statue en route to Trinity Square, the density of the city changes and becomes more urban. Gateways such as this provide opportunities for place-making with buildings and spaces. Both sides of Reservoir Avenue contain lower-scaled buildings that could have greater density and height associated with the street's role as a gateway. Increased building heights could align on either side of Site's D and F.



Given the historic buildings that line the plaza and the site's geometry, Columbus Square has significant development potential. However, the scale and type of uses on sites B, C and E limit the possibilities of the place. Parking requirements should be relaxed and on-street parking opportunities increased in order to allow for more infill development on the other sides of the plaza. The proliferation of surface parking lots diminishes the potential of the Square and creates a fragmented node. Infrastructure and streetscape investments in the square itself, combined with pedestrian enhancements associated with the transit, could build on the legacy of the neighborhood and create a true city gateway.

Columbus Square Hub Land Use Analysis Recommendations

- Encourage the redevelopment of Mashapaug Commons with mixed-use infill by adjusting zoning to reflect and facilitate desired development.
- Explore funding opportunities for additional infrastructure and streetscape investments for Columbus Square itself to help build on the legacy of the neighborhood and create a true city gateway.
- Increase access to Mashapaug Pond.

Elmwood Avenue Arts + Cultural Opportunities Analysis

In order to better integrate art, culture, and heritage into Providence's transportation, land use and economic development planning, cultural planners worked closely with the City of Providence Department of Art, Culture + Tourism and the Department of Planning and Development to identify local cultural resources, engage neighborhood stakeholders in defining distinct attributes of each corridor, and develop strategies to apply cultural solutions that help define places, animate neighborhood hubs, mitigate problems, and inspire creative economic development.

CULTURAL RESOURCES INVENTORY

The City has catalogued existing cultural resources within a quarter mile of the Elmwood Avenue corridor. This cultural asset catalogue of Elmwood Avenue inventories the full spectrum of opportunities for cultural participation along the corridor including: the location of nonprofit arts and cultural organizations, performing and visual arts spaces, informal arts programming, public art installations, sites of historical and/or community significance, creative industries, artist housing, and public spaces.

To compile the cultural resource inventory, researchers searched directories, databases, and event calendars to identify and map cultural resources. Directories, databases, and event calendars from the Rhode Island Economic Development Corporation, New England Foundation for the Arts, Rhode Island State Council on the Arts, and the City of Providence Department of Arts Culture and Tourism have been combed in order to identify and map cultural resources along the corridor. An online survey and interviews with stakeholders, focus groups, community leaders, and experts from various fields also informed the process.¹

Cultural and creative institutions and sites enhance a shared sense that a place is special. Identifying cultural resources was the first step toward identifying a distinctive theme for the corridor and ultimately developing creative placemaking strategies that have the potential to help define transportation gateways and revitalize critical hubs. Since the Broad Street and Elmwood Avenue corridors overlap at Trinity Square, the two corridors' inventories were combined. The cultural inventory for the two combined corridors includes 667 cultural resources, 344 of which are historic buildings. Elmwood Avenue is well known for its international foods and diverse population, however, it's history as an elm-lined trolley suburb suggested its theme of "Gateway to Opportunity."



Significant cultural resources along Elmwood Avenue include the Christopher Columbus statue in Columbus Square and various historic homes.

¹ The cultural and creative sectors have been broadly defined using standard definitions developed by the New England Foundation for the Arts. These include resources ranging from arts and cultural organizations, public art, historic buildings and sites, creative industries, artists, parks, cemeteries, schools, local restaurants and food markets, community gardens, schools, religious institutions, and service organizations. Inventory categories were also determined by standardized NAICS (North American Industry Classification System) and NTEE (National Taxonomy of Exempt Entities) core codes.



Roger Williams Park and Mashapaug Pond are two of the City’s best preserved natural resources. *Source: Flickr.com*

The two corridors include a significant cluster of jewelry manufacturers and numerous local restaurants and food markets. Additionally, they both serve as the main routes to Roger Williams Park, the City’s major cultural attraction with open spaces, performances, public art, a zoo, botanical gardens, and a historic museum.

The corridors also include a fairly high number of schools, religious organizations, and health/human service organizations. There are 29 schools, including a youth arts cluster of cultural institutions near Trinity Square and along Elmwood Avenue, and a total of 30 religious organizations and 40 health/human service organizations.

Important cultural attractions that should be identified through wayfinding signage include:

- Trinity Square
- Southside Cultural Center
- Columbus Square
- Knight Memorial Library
- Roger Williams Park
- Bucklin Park
- Ardoene Park
- Peace & Plenty Park
- Mashapaug Pond
- Locust Grove Cemetery
- Grace Church Cemetery
- Historic districts

CORRIDOR THEME

Dreeszen & Associates’ cultural planning team worked closely with the City’s Department of Planning and Development, Department of Art, Culture + Tourism, and five stakeholder committees to develop interpretive themes for each of the five study corridors— North Main Street, Broad Street, Elmwood Avenue, Chalkstone Avenue, and Manton Avenue. The interpretive themes have a placemaking objective; they will contribute to a cohesive visual identity for each of the corridors, connecting people and places along the street in a meaningful way.

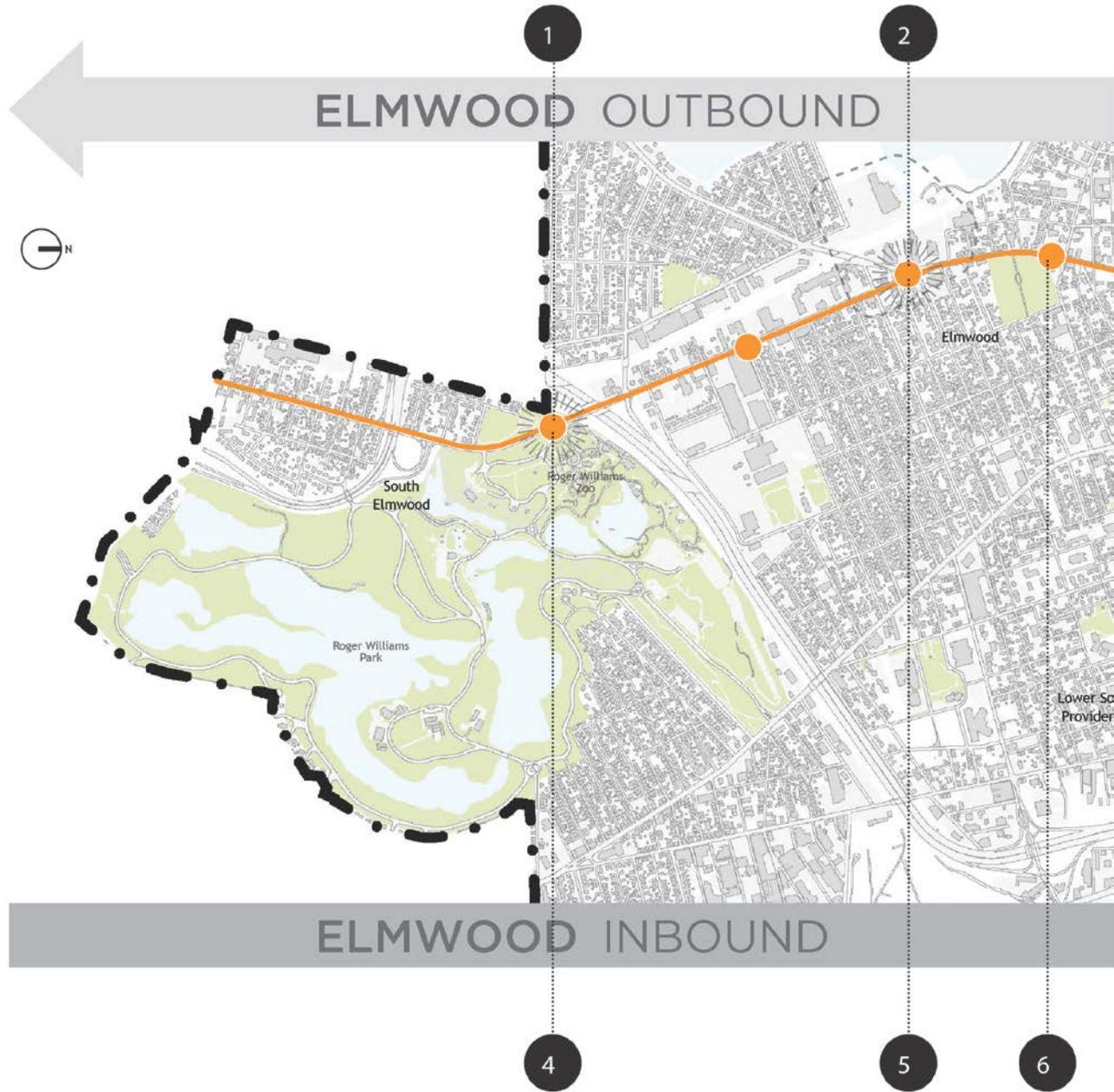
ELMWOOD AVENUE: GATEWAY TO OPPORTUNITY

Elmwood Avenue’s most distinctive features are its origins as an elm tree-lined trolley suburb and its contemporary pathway to the “American Dream” for many new immigrants. The challenge for artists and designers is to visualize Elmwood Avenue’s role in people’s aspirations for a better life— rooted in its history as the City’s first suburb and its role today as a welcome gateway for new citizens. Artists may find opportunities to recognize the role of public transit, and increased mobility, in the founding of the neighborhood and as a path to opportunity.

In the coming years, this theme will help inform local artists as they work to integrate art into bus shelters and other key locations along the corridor. The artistic interpretations of the theme will reflect and reinforce Elmwood Avenue's design and unique cultural heritage and provide a sense of orientation that connects people and places along the street in a meaningful way. Please note that the above theme is a much-condensed abstract. Artists will be encouraged to study the full report of interpretive themes with detailed explanations of each corridor's interpretive theme. The themes for each corridor are the result of a broad public participation process that included input from community members at a series of public meetings, online surveys, interviews with local experts, numerous meetings with stakeholder committees for each corridor, a citywide project advisory committee, various focus groups, and City staff members. In addition, the themes are informed by the *Providence Tomorrow* neighborhood plans, corridor exploration, and a review of the cultural resource inventory that was completed for each corridor as part of this project.

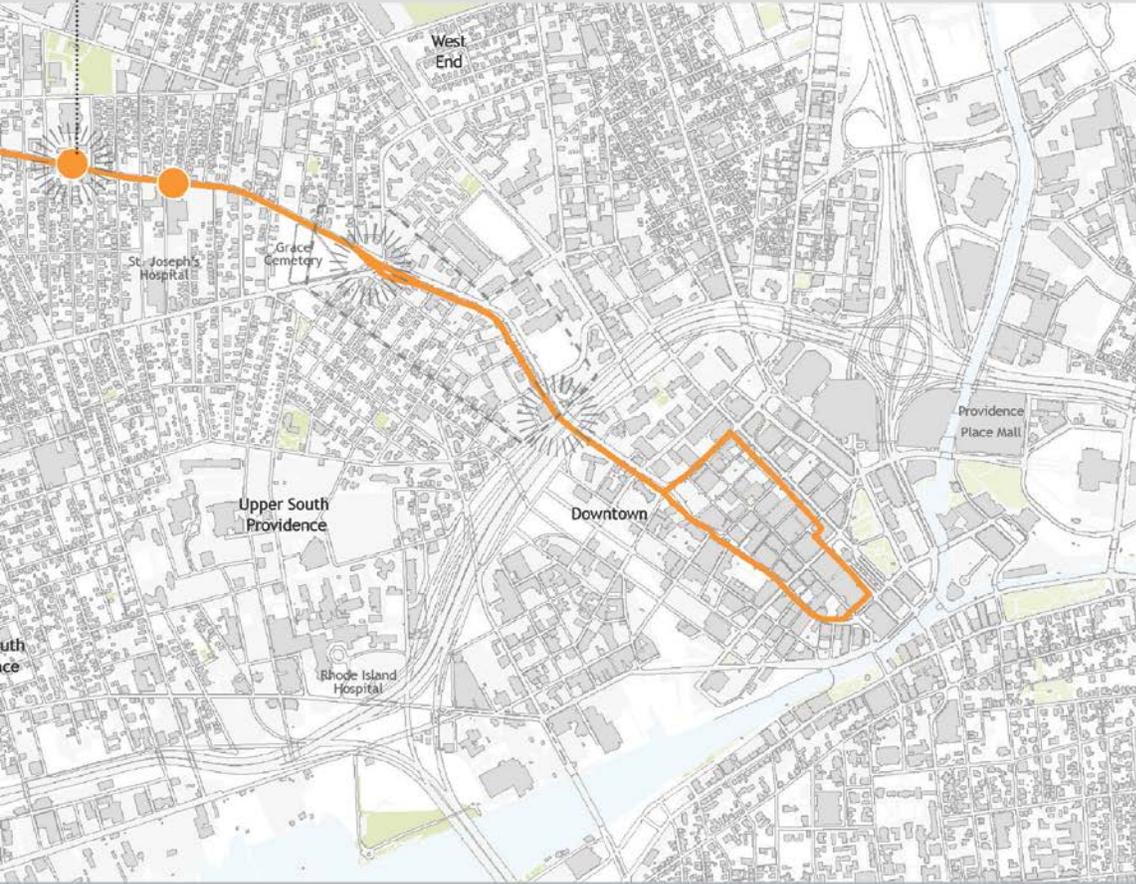
Opportunities for artistic intervention at key bus stops along the corridors have been identified and will be developed in conjunction with bus shelters either as a component of a prefabricated bus shelter (side panel, back panel, or column) or as a free standing seating element. The artistic interventions will replace specific manufactured components of the shelter to seamlessly blend public art with new infrastructure. Artists will be required to incorporate and adhere to several criteria including the themes that have been established for Elmwood Avenue. As both an art object and a transit amenity, the shelters will encourage the use of the public transit system and celebrate the unique identity of these important commercial, cultural and historic neighborhoods.

In addition to the shelter locations, several areas have been identified along Elmwood Avenue as important community gateways. These significant wayfinding and transition points present opportunities for special treatments that highlight their symbolic importance, improve the pedestrian environment, and reinforce each neighborhood's unique identity. The Knight Memorial Library, Roger Williams Park, and Columbus Square gateway sites have been recommended for additional stand-alone pieces of art that will help contribute to the overall identity of the corridor and reflect the interpretive theme. The City will work to identify possible funding sources to hire artists to design and install stand-alone pieces of art at the recommended gateway sites.



Proposed sites for artwork along Elmwood Avenue

3



1 ROGER WILLIAMS PARK Outbound
Back Panel

2 COLUMBUS SQ. Outbound
Back Panel

3 KNIGHT MEM. LIBRARY Outbound
Back & Side Panels + Column

4 ROGER WILLIAMS PARK Inbound
Seating

5 COLUMBUS SQ. Inbound
Back Panel

6 ELMWOOD @ POTTERS Inbound
Freestanding Screen

ARTS +
CULTURAL

PLANNING RECOMMENDATIONS

Dreeszen & Associates’ cultural planning team met with City of Providence Art Culture + Tourism and Planning and Development staff, project advisors, and stakeholder committees to develop strategies to employ arts, culture, and heritage to improve livability, prosperity, and public access to arts and entertainment along the five corridors. Recommendations also build upon *Creative Providence: A Cultural Plan for the Creative Sector*, *Providence Tomorrow* neighborhood plans; and other plans including RIPTA’s *Metropolitan Transit Enhancement Study*, and specific district plans. Recommendations are based on assets identified in inventories of cultural resources and the interpretive themes and artist guidelines for each corridor.

Elmwood Avenue Corridor Arts & Cultural Opportunities Analysis Recommendations

- Commission iconic public art for the Roger Williams Park entrance on Elmwood Avenue.
- Map, promote, and protect murals to encourage community pride and attract cultural tourists; build upon the success of past mural projects that have already led to much recognition.

Example: Philadelphia, PA: Mural Arts Program (<http://muralarts.org/>)

- Install additional wayfinding signage to direct visitors to Roger Williams Park; build upon the Downtown Wayfinding Signage system.

In addition to the above corridor-wide recommendations, the cultural planning team has identified existing conditions, emerging opportunities, and potential scenarios for increased cultural participation at two neighborhood-based community hubs along Elmwood Avenue— Trinity Square and Columbus Square. These two locations have been identified and evaluated as areas along Elmwood Avenue where increased building height and density could be accommodated, in order to encourage life and vitality, while also allowing for compatible transitions to surrounding areas. Directing investment to these hubs is critical in order to ensure the success of the transit investment in those areas and to create catalytic change along the entire corridor. The following arts and cultural strategies were tailored specifically to meet the project objectives of integrating transit, housing, economic development, and arts and cultural activities at the two identified hub locations.

For more information on the land use analysis of the community hubs please refer to the “Elmwood Avenue Land Use Analysis” section of this report.

Trinity Square Hub Arts & Cultural Opportunities Analysis Recommendations

Since the Broad Street and Elmwood Avenue corridors overlap at Trinity Square, the analysis of Trinity Square has been completed as part of the Broad Street analysis. Please refer to the “Broad Street Arts & Cultural Opportunities Analysis” section of this report for more information on the Trinity Square Hub.

Columbus Square Hub Arts & Cultural Opportunities Analysis Recommendations

- Commission a temporary public art or lighting project to focus attention on Columbus Square and the historic statue located within the Square.

Examples include:

- *New York NY: "Discovering Columbus" by Tatzu Nishi (<http://www.nytimes.com/2012/09/20/garden/a-living-room-suspended-over-columbus-circle.html>)*
 - *Providence, RI: "Firefly Grove" light installation at John Brown House by China Blue (<http://www.rihs.org/events/?p=1462>), (<http://chinablueart.com>)*
- Enhance Columbus Square with benches, game tables for checkers, and other amenities that would outfit the Square as a local gathering spot.
 - Work with the Parks Department, Elmwood Neighborhood Association, and local merchants to develop a plan for maintenance and regular clean up of Columbus Square.
 - Pursue opportunities to recreate the historic landscape of Elmwood Avenue.
 - Promote the Urban Pond Procession's environmental awareness work around Mashapaug Pond as a model for artist-led projects that engage communities and effectively address social issues.

CHALKSTONE AVENUE

Chalkstone Avenue Introduction

Chalkstone Avenue stretches from Smith Hill near the northwestern end of Downtown west through the Elmhurst and Mount Pleasant neighborhoods and converges with Manton Avenue on the west. Chalkstone Avenue has the largest concentration of retail establishments in the Elmhurst and Mount Pleasant neighborhoods, but lacks a cohesive identity in terms of scale and massing, architectural consistency, street orientation, and use patterns. While some businesses are relatively pedestrian-friendly, many are distinctly auto-oriented. A compact commercial core is characterized by gathering places and local services such as markets, bakeries, restaurants, churches, the Castle Theatre and other community services in a ten-block stretch west of Academy Avenue.

As one of the last sections of the city to be developed, the availability of large tracts of undeveloped land attracted various large educational institutions to the area. Rhode Island College, Mount Pleasant High School, and LaSalle Academy are all located along Chalkstone Avenue. Roger Williams Medical Center, the VA Medical Center, Triggs Memorial Golf Courses and historic Davis Park— part of the City's greenway system and an important recreation facility— also anchor the Chalkstone Avenue corridor.

The *Chalkstone Avenue Transit Analysis* section of this report provides an overview of the current conditions of transit along the corridor and outlines measures to be taken to provide frequent, reliable transit service, improving the rider experience along this important transportation corridor. The *Chalkstone Avenue Land Use Analysis* section of this report contains an analysis of existing conditions, vacant and underutilized land within key nodes along the project corridor, and potential build out scenarios for each key node. This analysis furthers the City's goals of managing growth and change, encouraging development and neighborhood revitalization, fostering a stronger sense of place, and building upon the placemaking role of RIPTA's transit enhancements. The *Chalkstone Arts and Cultural Opportunities Analysis* section of this report summarizes the public art enhancements that have been recommended, the inventory of arts and cultural resources that was completed, and the creative placemaking strategies that were developed to employ arts, culture, and heritage to improve livability, prosperity, and public access to arts and entertainment along the corridor.

What do previous plans say about Chalkstone Avenue?

Previous plans, including the Providence Tomorrow Neighborhood Plan for Olneyville, Smith Hill, and Valley (2009) and the Providence Tomorrow Neighborhood Plan for Elmhurst and Mt. Pleasant (2009) were evaluated in order to ensure that key elements of those plans were integrated into this planning effort.

The following elements of those plans have been incorporated into the goals for the transportation, land use, and cultural planning elements of this project:

- ➔ Create a commercial node on Chalkstone Avenue between Rosebank and Academy Avenues and promote a merchant group for the corridor.
- ➔ Encourage rehabilitation of commercial buildings.
- ➔ Promote the redevelopment or re-use of the Castle Theater
- ➔ Ensure buffers between commercial and residential uses along the corridor.
- ➔ Create a campus environment around Roger Williams Hospital, Veteran's Medical Center, Davis Park, and Nathanael Greene Middle School.
- ➔ Improve the edge of Veteran's Medical Center facing Chalkstone Avenue through landscaping and lighting upgrades.
- ➔ Promote opportunities for new parks, open spaces, and community gardens on corner sites.
- ➔ Increase tree canopy by focusing resources for street tree planting on streets with gaps in the canopy.
- ➔ Work to create a neighborhood gateway at the intersection of Smith and Chalkstone and preserve the views of the state capitol from this intersection.
- ➔ Work with RIPTA to increase the frequency of service on Chalkstone Avenue.

Chalkstone Avenue Transit Analysis

Public transit along Chalkstone Avenue is defined by Route 56, a RIPTA-operated bus route. Serving as one of the top ten highest use bus routes in Providence, Route 56 provides service between the Manton Stop and Shop and Kennedy Plaza in downtown Providence, primarily along Chalkstone Avenue and Smith Street. The route serves a unique service market, provides direct and relatively consistent service, and connects high-density residential communities and commercial and institutional locations along its alignment.

EXISTING RIDERSHIP DATA

Route 56 averages approximately 2,670 riders per weekday, 1,274 riders per Saturday, and 729 riders per Sunday. In terms of overall weekday ridership and ridership per revenue vehicle hour, it is RIPTA's fourth highest ridership route. The route travels through portions of Manton, Mount Pleasant and Downtown Providence with Providence Station and Kennedy Plaza serving as the two transit stations. Some of the main activity centers along the route include Manton Stop and Shop plaza, Roger Williams Medical Center, the VA Medical Center, the Rhode Island State House, Providence Place, and Downtown Providence.

On weekdays, ridership is highest during the morning and afternoon peaks, when the average is between 29 and 30 riders per trip. Ridership is also very strong during the midday, with trips averaging more than 27 riders per trip during these periods. On the weekend, ridership is also relatively strong, averaging more than 21 riders per trip.



Route map of RIPTA's Route 56 service

STOP INVENTORY ANALYSIS

Along the route, there are currently 69 bus stops (36 inbound and 33 outbound), 45 of which are located along Chalkstone Avenue. This translates to approximately 8.7 bus stops per mile, which is significantly higher than the system average of 5.6 stops per mile. Given the high frequency of stops, buses along this route operate at approximately 17-minute headways during peak weekday hours, making it the sixth slowest route in the RIPTA system. Stops on Route 56 are spaced approximately every 600 feet, or less than a two minute walk apart.

Most of the stops along Chalkstone Avenue face similar challenges such as lack of shade and shelter, narrow sidewalks, and excessive signage. Only two of the 45 stops along the corridor currently have bus shelters (two inbound stops). The inbound stops along the corridor with the highest number of boardings are Chalkstone Avenue at Academy Avenue, serving as a transfer point with Route 27, and Chalkstone Avenue at Harold Street, with approximately 164 and 144 boardings, respectively. In terms of alightments, Kennedy Plaza has the highest number with a total of 805 passengers.

EXISTING CONDITIONS ANALYSIS

Route 56 performs extremely well in nearly all respects. It carries 62 percent more riders per revenue vehicle hour and almost triple the number of riders per revenue mile than the system average. Subsequently, its operating cost per passenger is roughly half the system average. However, partly due to its very frequent stops, Route 56 is the sixth slowest route in the RIPTA system.

During RIPTA's analysis of Chalkstone Avenue, the following issues were identified:

Headways are inconsistent. On weekdays and Saturdays, service operates with inconsistent headways that are difficult for riders to use without relying on a schedule. On weekdays, headways vary widely even within the same time period and on Saturdays, service operates more consistently, but less regularly than desirable. Route 56's one-way running times are 27 minutes, which means that the route could be run with a 60-minute cycle time. Using this cycle time, service could be rescheduled to operate with consistent service intervals of 15 minutes during weekday peak periods, 20 minutes during the midday, and 30 minutes at night and on Saturdays.

Service is limited on Saturdays. Saturday service currently ends at 11:00 PM, and the last trip carries 20 passengers. This indicates that there is demand for service to be extended until 11:30 PM or midnight.

Front-door service to the VA Medical Center is underutilized. The VA Medical Center does not generate sufficiently high ridership to warrant front-door service. This variant could be discontinued to provide faster service to other riders and make schedules more consistent.

Through-routing with Route 31 causes service disruptions. Route 56 and Route 31 both carry very high ridership and delays on both routes result in service disruptions to the other route's service. The discontinuation of the through-routing would improve reliability, and provide the required schedule flexibility to make the schedule improvements described above.

RECOMMENDATIONS

Bus Stop Location Improvements

Bus stops play an important role in the identity of the street and are therefore an important urban design element. The siting of bus stops and their components should enhance the transit corridor and strengthen the character of the street. By removing and relocating some bus stops on Chalkstone Avenue, RIPTA will be able to provide service that is more efficient, accessible, and reliable, and will be able to ensure that stops are in ideal locations for passengers, local businesses and residents.

Improved bus stop spacing will shorten travel times and minimize ‘stop and go’ travel along the length of the corridor. Through a thorough analysis of Chalkstone Avenue, RIPTA has identified stops that are spaced too closely together, unsafe, or underutilized. The removal and relocation of these stops will improve schedule adherence for buses, the accessibility of RIPTA services for all patrons, and travel times for passengers. Additionally, RIPTA will benefit from reduced maintenance and fuel costs directly related to these changes.

In Providence, RIPTA has recommended that one inbound stop and one outbound stop on Chalkstone Avenue, be relocated. RIPTA has also recommended that eight inbound stops and eight outbound stops along this corridor be removed entirely in order to improve bus service. All recommendations for removal or relocation have been thoroughly reviewed with the public and local stakeholders. Comments and concerns gathered from the public have been incorporated into the final bus stop placement. The placement of each stop was also analyzed through its impact on traffic and pedestrian sightlines and activity, as well as relationships to landmarks, landscaped spaces, and surrounding buildings.

Stops along Chalkstone Avenue Recommended for Removal:

Stop	Direction
Chalkstone @ 1610 Chalkstone	Inbound
Chalkstone @ Ortolena	Inbound
Chalkstone @ Gray	Inbound
Chalkstone @ Academy	Inbound
Chalkstone @ Berlin	Inbound
Chalkstone @ Lisbon	Inbound
Chalkstone @ Raymond	Inbound
Chalkstone @ Zone	Inbound
Chalkstone @ Lisbon	Outbound
Chalkstone @ Grosvenor	Outbound
Chalkstone @ Berlin	Outbound
Chalkstone @ Lawn	Outbound
Chalkstone @ Winthrop	Outbound
Chalkstone @ Standish	Outbound
Chalkstone @ Sisson	Outbound
Chalkstone @ Herbert	Outbound

Stops along Chalkstone Avenue Recommended for Relocation:

Stop	Direction
Chalkstone @ Mt. Pleasant	Inbound
Chalkstone @ River	Outbound



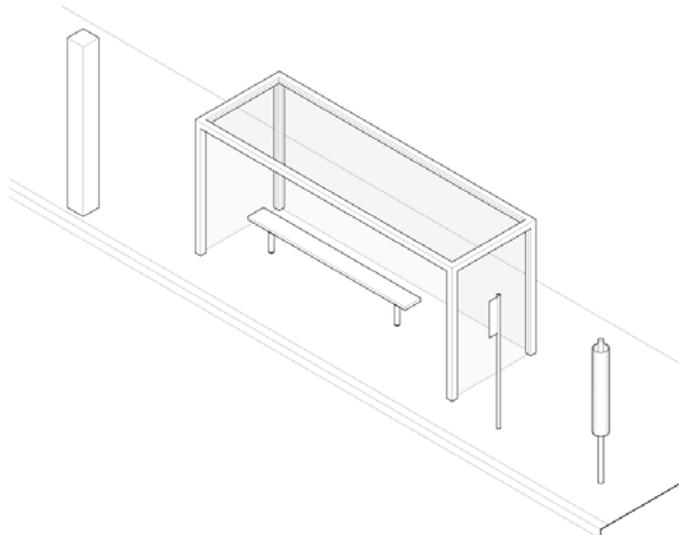
Proposed bus stop changes along Chalkstone Avenue



Pedestrian Amenity Improvements

Enhanced passenger amenities will improve the passenger experience for those travelling along Chalkstone Avenue. It is recommended that RIPTA work with the City of Providence to procure funding for the implementation of new bus shelters, benches, trash receptacles, and bicycle racks along the corridor. These new, standardized bus stop components include:

- Three new shelter types including typical three-sided shelters, cantilevered shelters that will be installed where sidewalk clearances prohibit installation of the typical three-sided shelter, and larger shelters that allow extra space for waiting passengers and space for ticket vending machines to be installed in the future;
- Freestanding screens that screen parking lots, provide passengers with a buffer from the wind and provide a surface for local art;
- Freestanding transit totems that include schedule and map information for RIPTA services, real-time arrival information and additional wayfinding information;
- Enhanced transit signs that provide schedule and map information for RIPTA services; and,
- New post-mounted transit signs that will replace existing RIPTA bus stop signs where transit totems or enhanced transit signs are not appropriate.



Shown from left to right: New bus stop amenities will include transit totems, new bus shelters, new bus stop signs, and enhanced transit signs. The specific design of these elements is currently being developed.

The following stops along the corridor have been recommended for various improvements:

Stop	Direction	Detail
Chalkstone Opposite Roger Williams Hospital	Inbound	Bus stop art opportunities, cantilevered shelter, free-standing bench, enhanced transit sign, and free-standing trash can
Chalkstone Near Side Academy	Inbound	Bus stop art opportunities, cantilevered shelter, free-standing bench, enhanced transit sign, free-standing trash can, and landscape components
Chalkstone Near Side Mt. Pleasant	Inbound	Bus stop art opportunities, modified components, cantilevered shelter, free-standing bench, enhanced transit sign, and free-standing trash can

Local art will be incorporated into select bus shelters along the corridor in order to celebrate the unique identity of Chalkstone Avenue and provide a sense of orientation that connects people and places along the street in a meaningful way. The City and RIPTA will work closely with local artists to integrate art into the bus shelters. A theme of “Honoring Providence’s Workers” has been established to highlight Chalkstone Avenue’s distinctive character and guide the artwork that is developed.

For more information on the theme and artwork that will be developed for Chalkstone Avenue, please refer to the “Chalkstone Avenue Arts & Cultural Opportunities Analysis” section of this report.

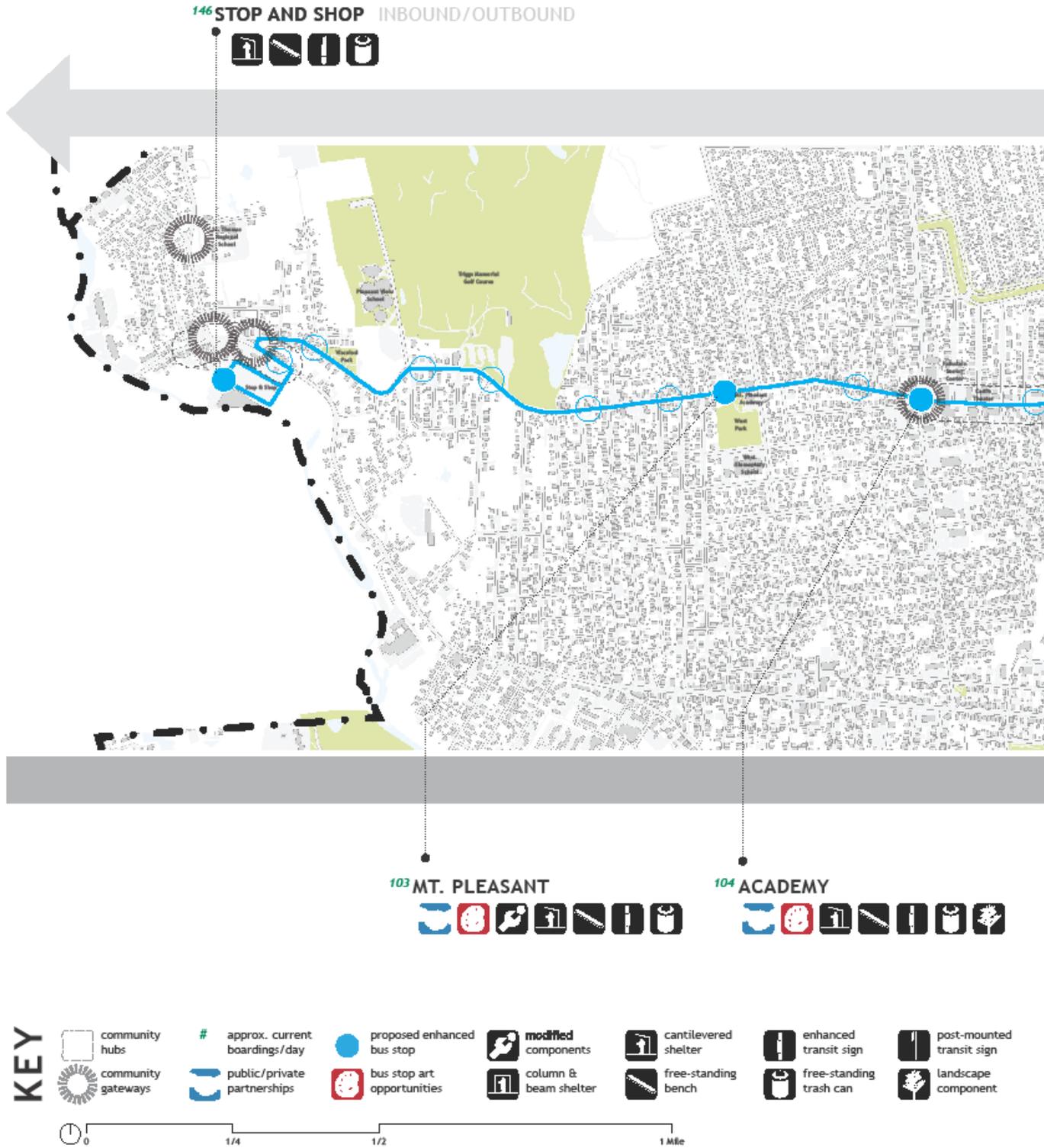
Landscape Improvements

Opportunities for landscape improvements at bus stop locations should be encouraged through partnerships with private property owners in order to improve the pedestrian realm surrounding the stops.

Street trees have been recommended in areas where there is space within the right-of-way and a need for enforcement of the street tree canopy. In some instances, the recommendations call for the replanting of trees that have been removed or the replacement of trees that are in poor condition.

Pocket Parks have been recommended in areas with existing “interstitial spaces” (such as underutilized open spaces on adjacent private property) that could support the bus shelter program and the surrounding neighborhood. The following bus stop locations along Broad Street have been identified for possible landscape improvements:

<u>Bus Stop</u>	<u>Street Trees Recommended</u>	<u>Pocket Park Opportunity</u>
Manton Ave Stop and Shop (inbound/outbound)	--	--
Chalkstone @ Mt. Pleasant (inbound)	--	--
Chalkston Near Side Academy (inbound)	2	✓
Chalkstone Opposite Roger Williams Hospital (inbound)	--	--
Providence Place Mall (inbound)	--	--
Francis Far Side Finance Way (outbound)	--	--
TOTAL	2	✓

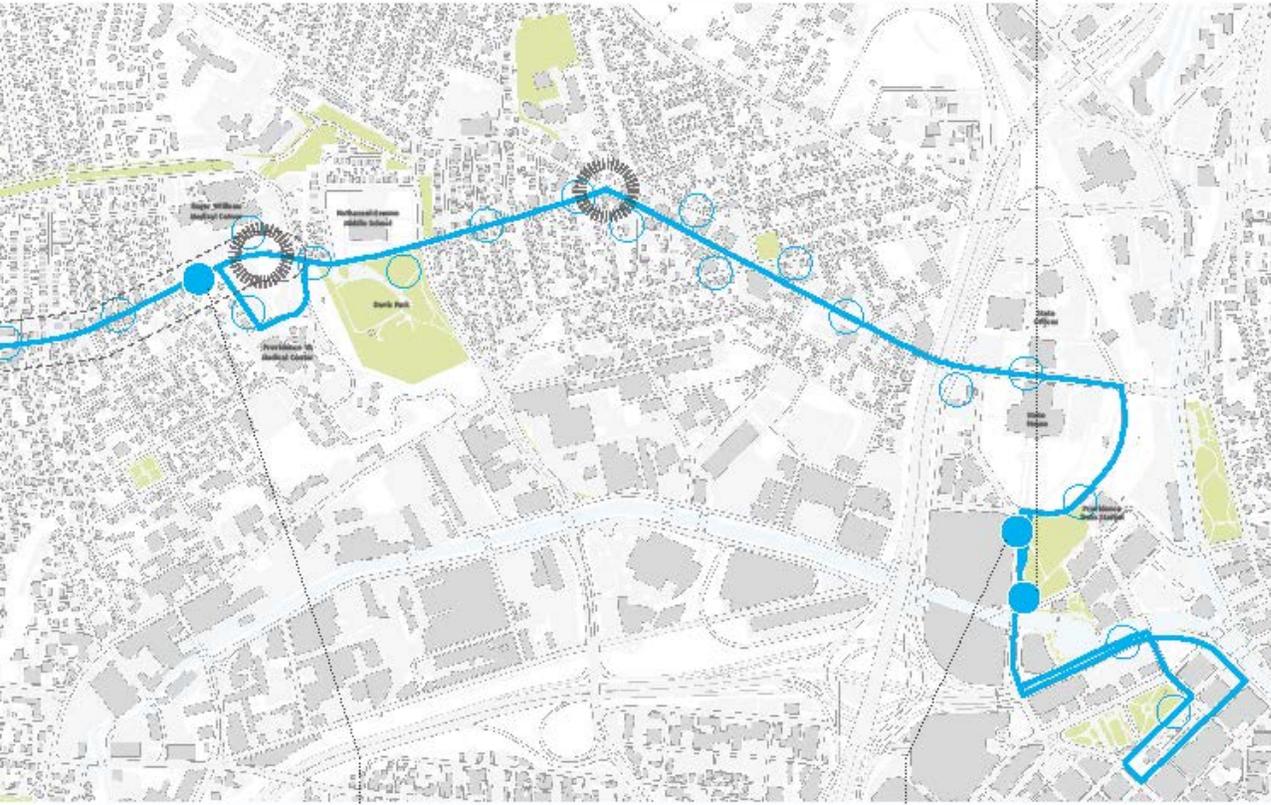


Proposed bus stop improvements along Chalkstone Avenue

254 30 FRANCIS



CHALKSTONE OUTBOUND



CHALKSTONE INBOUND

110 ROGER WILLIAMS HOSPITAL



137 PROVIDENCE PLACE MALL



POTENTIAL SAVINGS

Savings on Route 56 will primarily be realized through the reduction in the number of redundant bus stops. Bus stops will be reduced to the RIPTA standard of 6 stops per mile, which will encourage passengers to congregate at one stop rather than spreading over many stops. This alone will decrease running times, reduce braking, and speed up the bus through the corridor.

CHALKSTONE AVENUE TRANSIT ANALYSIS RECOMMENDATIONS

- Make headways consistent by increasing the frequency to 15-minute intervals during peak periods during the week and, 20-minute intervals during midday, and 30-minute intervals at night and on Saturdays.
- Meet weekend service demand by extending Saturday service until 11:30 PM or midnight.
- Eliminate front-door service to VA Medical Center.
- Improve schedule efficiency by eliminating the through-routing of Route 56 and Route 31.

Chalkstone Avenue Land Use Analysis

In addition to being one of the highest use bus routes in Providence, Chalkstone Avenue was also selected as one of the five corridors to be evaluated as part of this project because of the potential for higher density infill to create hubs of activity near transit stops. The redevelopment of underutilized parcels along Chalkstone Avenue, combined with improvements in public infrastructure at key intersections, will aid in the creation of mixed-use community hubs that are directly served by transit. Linking development directly to transit will connect residents to jobs and employment centers and create jobs and investment in areas that are most in need.

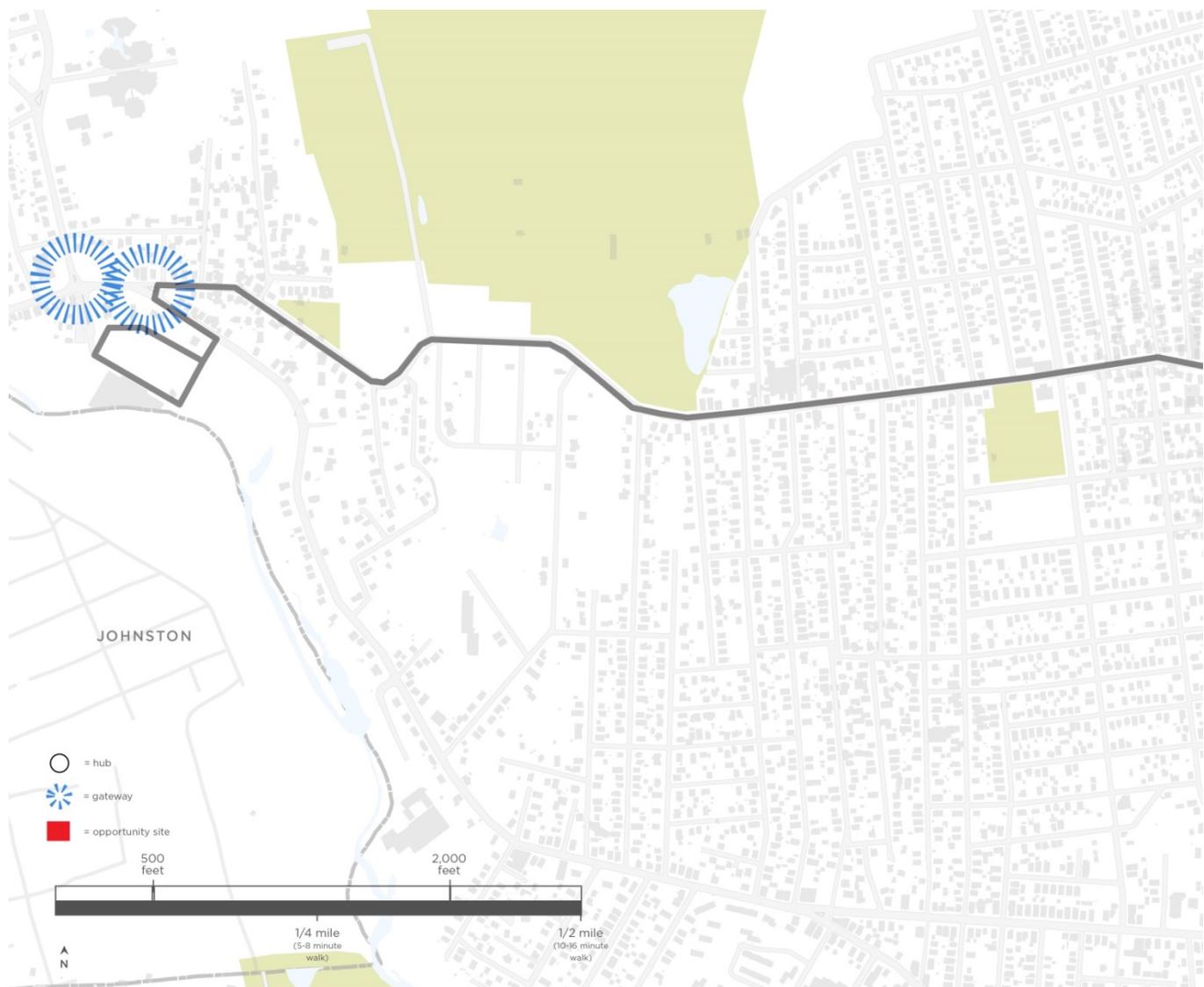
Community hubs have been identified and evaluated as areas along Chalkstone Avenue where increased building height and density could be accommodated in order to encourage life and vitality, while also allowing for compatible transitions to surrounding areas. Directing investment to these hubs is critical in order to ensure the success of the transit investment in those areas and to create catalytic change along the entire corridor. One community hub location has been selected for Chalkstone Avenue — Chalkstone Avenue Hub — and potential build out scenarios have been developed for opportunity sites within this hub. Future development scenarios have been evaluated against both the desires of the community and current zoning regulations; where conflicts with current zoning exist, adjustments of the ordinance are being implemented. The build out scenarios are meant to guide future development in the area by providing a framework based on best practices as well as the needs and desires of the community. In addition to longer term build out scenarios, interim uses have also been evaluated for opportunity sites within the hub locations in order to activate these important areas in the short-term. By studying possible build out scenarios on a site by site basis, the specific opportunities and limitations for each property as-of-right or under new zoning parameters can be analyzed. In most cases, the biggest barrier to redevelopment is incorporating the related surface parking demand on site based on the currently required ratios for various land uses. Looking at the community hub as a whole allows more thought to be given regarding where opportunities for parking and open space exist on a district-wide scale.

Several locations have also been identified along Chalkstone Avenue as important community gateways. These wayfinding and transition points present opportunities for special treatments such as improved landscaping, special paving, signage, and public art in order highlight their symbolic importance, improve the pedestrian environment, and reinforce each neighborhood's unique identity.

While each community hub has specific site conditions and characteristics that differentiate it from other areas, there are general urban design principles that will inform redevelopment and help to shape their physical form. The following overarching design principles were established in order to guide the potential build out scenarios for each community hub:

- ➔ **AGGREGATION:** Consider small or oddly shaped adjoining properties for aggregation into larger development parcels.
- ➔ **SUBDIVISION:** Consider exceptionally large blocks for subdivision through the introduction of new streets, open spaces, or pedestrian right-of-ways.

- ➔ **CONNECTIVITY:** Enhance visual and physical connections to existing open spaces that can link isolated sites together.
- ➔ **DENSITY:** Increase density and building height on properties where new landscape setbacks, right-of-ways or open spaces have been incorporated.
- ➔ **GATEWAYS:** Strengthen gateways that fall within community hub locations and identify existing architectural, social or historical community assets that can be better integrated into hub locations.



- ➔ **IDENTITY:** Reinforce individual corridor identities.
- ➔ **NATURAL SYSTEMS:** Leverage the presence of existing rivers or waterways to reinforce a sense of place and resolve with stormwater issues.
- ➔ **PLACEMAKING:** Seek opportunities to foster a stronger sense of place at the confluence of street grids by helping to define squares and plazas.
- ➔ **STREETSCAPE:** Extend streetscape and public realm enhancements into the neighborhoods from the hubs with street trees and improved sidewalks.
- ➔ **BUFFERS:** Provide visual buffers to surface parking lots that are not feasible sites for complete redevelopment.



Community hubs, gateways, and opportunity sites along Chalkstone Avenue

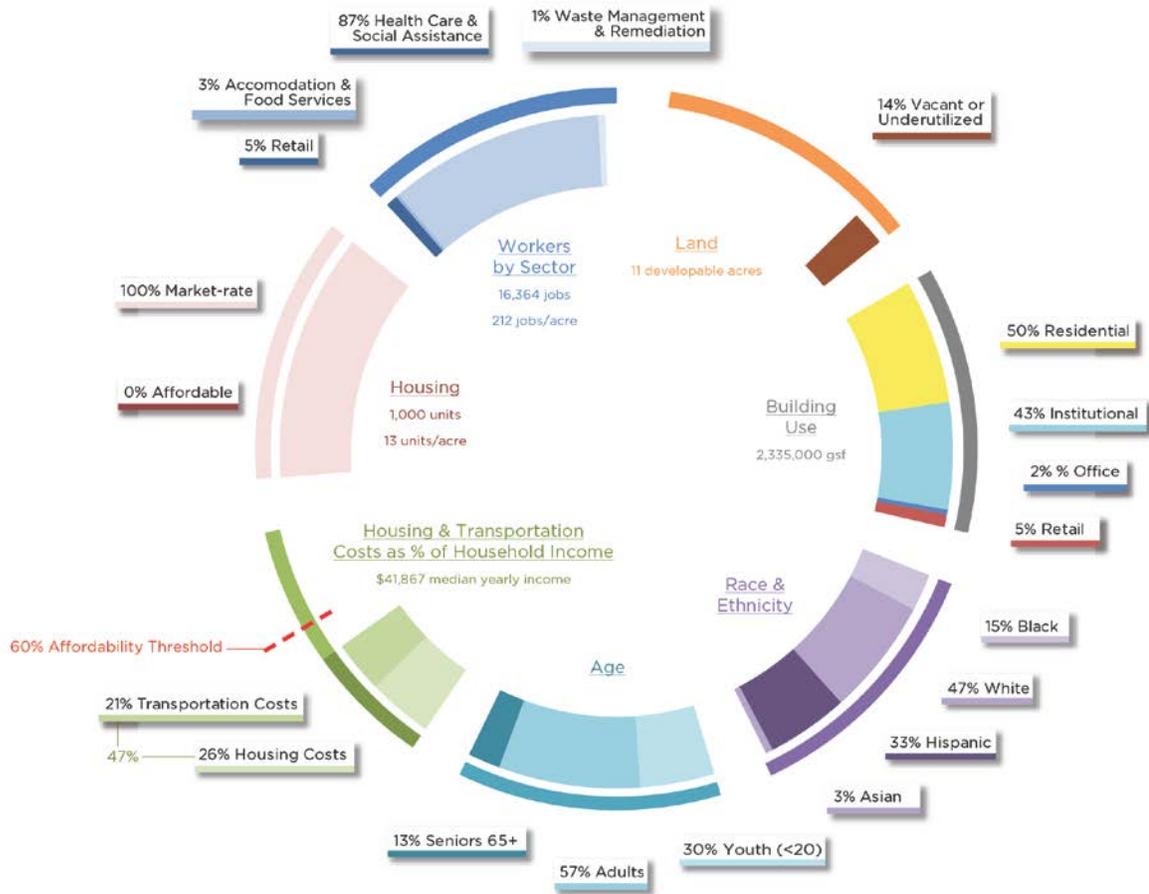
CHALKSTONE AVENUE HUB

Located at the intersection of the Elmhurst and Valley neighborhoods, the Chalkstone Avenue hub begins at the Providence VA Medical Center and the Roger Williams Medical Center and extends west to the intersection of Chalkstone Avenue and Academy Avenue. The hub intersects a wide variety of urban conditions, including areas defined by large, anchor institutions and areas defined by small, local businesses. Some of the hub's significant property owners include the Roger Williams General Hospital, the U.S. Federal Government, Rosebank Corporation, Operation Stand Down Rhode Island, Harbor Holdings LLC, and Walgreen Eastern Co. Inc.

Future development in this area should accommodate institutional expansion by creating a new relationship to the corridor and drawing an alignment between the VA Medical Center and the Roger Williams Medical Center. Further to the west, the fine grain scale of the existing commercial context should be reinforced by focusing public investment at key intersections that have the most character from which to build.



Chalkstone Avenue Hub at a Glance



Land area and density calculations are based on net acreage and do not include streets, parks or other right-of-ways. Housing and transportation costs were calculated using the Center for Neighborhood Technology's Housing and Transportation (H+T) Affordability Index. Age, race, and ethnicity calculations are based on the 2010 U.S. Census. Employment information was calculated using the Rhode Island Economic Development Corporation's 2010 employment database. Housing and building use information are based on data collected from the City of Providence Tax Assessor's Database.

Building + Land Use

Given the prominent medical facilities, building uses along Chalkstone Avenue are primarily institutional and residential with a few office and retail buildings. Two of the City's largest employers – the Roger Williams Medical Center and VA Medical Center – are located at the hub's eastern edge, while various retail establishments dominate the area to the west. The middle portion of the hub is a primarily residential area with significantly smaller lot sizes.



Housing

There are currently 2,457 residents within the Chalkstone Avenue hub residing in 1,000 housing units, all of which are market-rate housing. This translates into a density of 13 units per acre.

Employment

Identifying businesses by sector and size creates a snapshot of current employment patterns in the Chalkstone Avenue hub. Approximately 16,364 people work within this area, 87 percent of which are employed in the health care and social assistance sector; another 5 percent work in the retail sector.



Race, Ethnicity + Age

The corridor’s diverse population is primarily White (47 percent), with Hispanic (33 percent) Black (15 percent), and Asian (3 percent) populations all represented. While most of the hub’s residents are adults, approximately one-third of the population is below the age of 20 and 13 percent are considered senior citizens.

Housing + Transportation Affordability

Both housing and transportation costs are considered affordable for households in this area. These costs fall below the 60 percent affordability threshold, averaging out around 47 percent of total household income.

Opportunity Sites

Together with the consultant team (Gamble Associates, Paul Cote, and Site Creative), the City identified various opportunity sites for future development within the hub by using a three-dimensional build-out analysis of transit-supportive densities. A total of twelve opportunity sites were identified within the Chalkstone Avenue hub. Future development scenarios for these sites were carefully evaluated against both the desires of the community and current zoning regulations; where conflicts with current zoning exist, adjustments of the ordinance are being implemented.



OPPORTUNITY SITE	a	b	c	d	e	f	g	h	i	j	k	l
ACREAGE	0.1	1.1	0.4	0.7	0.2	0.4	0.3	0.1	2.1	2.4	1.0	3.9

TOTAL ACREAGE **12.7 acres**

Key Redevelopment Goals and Opportunities

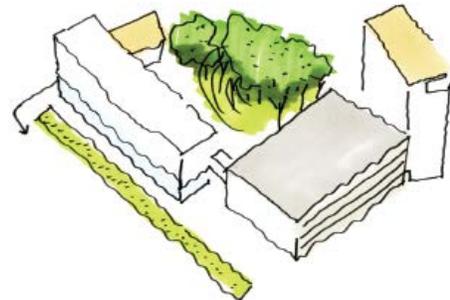
Reinforce the institutional presence. Located directly across the street from one another, the Providence VA Medical Center and the Roger Williams Medical Center form a vital employment cluster within the city. They are major health care institutions who serve different demographics but share a similar vision of providing first-class health care for their respective populations. In looking at future growth for the Chalkstone corridor, the TOD plan seeks to repair the divide of the busy street and reinforce an orientation to the avenue that is commensurate with each institution’s strong community outreach program.



Roger Williams Medical Center’s existing parking lot fronting Chalkstone Avenue.

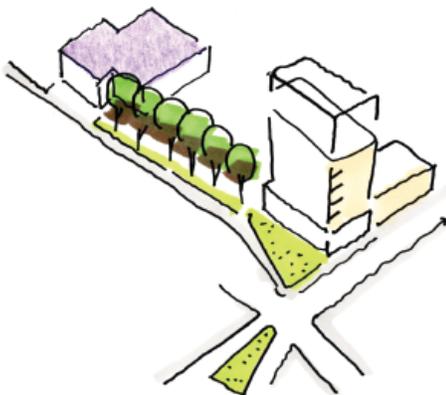
Better connect Roger Williams Medical Center with the corridor. The Roger Williams Medical Center main building has been compromised over time with ad hoc additions, and its frontage to Chalkstone Avenue is separated by surface parking. If that parking were absorbed into a strategically located structured facility, a new relationship with the corridor could be formed. Future development should be focused around a central green, restoring the historic hospital’s frontage to Chalkstone and creating new addresses for future growth around the lawn.

Preserve the existing tree stand. Substantial grade change and an existing grove stand on Site L begin to suggest a pattern for development around the VA Medical Center. To the extent possible along the corridors, healthy existing tree canopies should be preserved in growth plans.



Healthy existing tree canopies should be preserved in growth plans.

Focus public infrastructure improvements at the intersection of Chalkstone Avenue and Canton Avenue. As the Chalkstone corridor gets closer to Academy Avenue, the size of the individual parcels decreases from the large, institutional scale of the medical campuses to small commercial and residential lots. In most cases, site aggregation should be considered in order to create more attractive development opportunities. With the exception of Sites B and D, nearly all of the parcels are less than 1/2 acre, and most are less than 1/4 an acre. New investment in sidewalks and street trees— in association with improved transit stops and transit service— could create a more attractive environment for the neighborhood. All four corners of Canton and Chalkstone are worthy of rehabilitation.

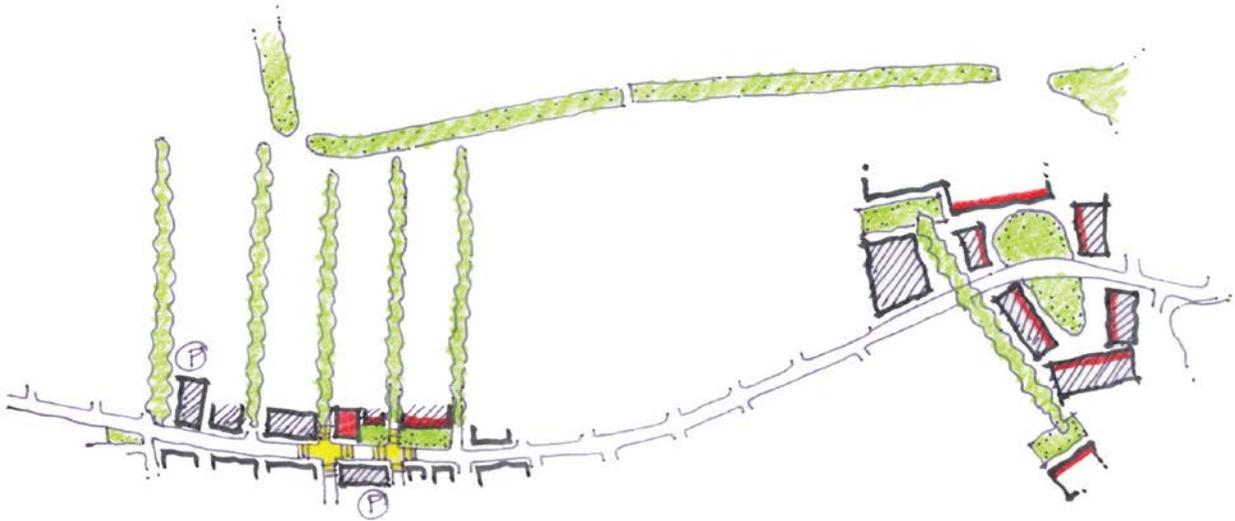


Strengthen connections between community assets. The Chalkstone and Academy intersection is blessed with a pocket park, a Community Library, the Lillian Feinstein Senior Center and Mount Pleasant Baptist Church. These existing community resource centers are recognized as places of congregation and their presence along Chalkstone should be strengthened by infrastructure investments.

The right-of-way for Chalkstone Avenue can be tight in many locations. The current site of the Walgreens at Chalkstone and Academy Avenue is large enough to warrant greater density. A taller development project at Site B should be complimented with an open space setback that links the intersection with the Public Library.

Create centralized parking lot. Accommodating parking on a site by site basis is not likely to create the type of high quality urban environment that the hub needs. A centralized, shared parking lot would allow more development on individual sites.

Invest in a more robust streetscape. Pedestrian-scaled lights, enhanced signage, wider sidewalks and safer street design would not only help to alleviate congestion and vehicular/pedestrian conflicts, it would also provide a welcome option for those seeking exercise and access.



Chalkstone Avenue Land Use Analysis Recommendations

- Encourage a stronger connection between Roger Williams Medical Center and Chalkstone Avenue.
- Research funding opportunities for street tree plantings and sidewalk paving improvements at the Chalkstone/Canton intersection.
- Adjust city parking requirements in order to promote centralized parking.
- Identify strategic locations for streetscape improvements and research potential funding options.

Chalkstone Avenue Arts + Cultural Opportunities Analysis

In order to better integrate art, culture, and heritage into Providence's transportation, land use and economic development planning, cultural planners worked closely with the City of Providence Department of Art, Culture + Tourism and the Department of Planning and Development to identify local cultural resources, engage neighborhood stakeholders in defining distinct attributes of each corridor, and develop strategies to apply cultural solutions that help define places, animate neighborhood hubs, mitigate problems, and inspire creative economic development.

CULTURAL RESOURCES INVENTORY

The City has catalogued existing cultural resources within a quarter mile of the Chalkstone Avenue corridor. This cultural asset catalogue of Chalkstone Avenue inventories the full spectrum of opportunities for cultural participation along the corridor including: the location of nonprofit arts and cultural organizations, performing and visual arts spaces, informal arts programming, public art installations, sites of historical and/or community significance, creative industries, artist housing, and public spaces.

To compile the cultural resource inventory, researchers searched directories, databases, and event calendars to identify and map cultural resources. Directories, databases, and event calendars from the Rhode Island Economic Development Corporation, New England Foundation for the Arts, Rhode Island State Council on the Arts, and the City of Providence Department of Arts Culture and Tourism have been combed in order to identify and map cultural resources along the corridor. An online survey and interviews with stakeholders, focus groups, community leaders, and experts from various fields have also informed the process.¹



Significant cultural resources along Chalkstone Avenue include the Cesar Chavez statue in Davis Park, the Providence VA Medical Center, and portions of the housing stock.

Cultural and creative institutions and sites enhance a shared sense that a place is special. Identifying cultural resources was the first step toward identifying a distinctive theme for the corridor and ultimately developing creative placemaking strategies that have the potential to help define transportation gateways and revitalize critical hubs.

Along Chalkstone Avenue, there are 145 cultural resources, which include 27 local restaurants, 11 local markets, 24 historic buildings, and 18 churches. The two hospitals, the Providence VA Medical Center and Roger Williams Medical Center, serve as a dominant contemporary features for the corridor. The

¹ The cultural and creative sectors have been broadly defined using standard definitions developed by the New England Foundation for the Arts. These include resources ranging from arts and cultural organizations, public art, historic buildings and sites, creative industries, artists, parks, cemeteries, schools, local restaurants and food markets, community gardens, schools, religious institutions, and service organizations. Inventory categories were also determined by standardized NAICS (North American Industry Classification System) and NTEE (National Taxonomy of Exempt Entities) core codes.

corridor also contains 12 significant open spaces including Davis Park, Triggs Memorial Golf Course, and the Pleasant Valley Parkway, while the western end of the corridor abuts the Woonasquatucket River. However, Chalkstone Avenue's most significant cultural resource may be its population, the City's historical and contemporary workforce. The corridor was originally established to house workers for the City's 19th century factories and mills and the neighborhood remains predominantly working class.

Important cultural attractions that should be identified through wayfinding signage include:

- Parks: Davis Park, George West Water Park
- Pleasant Valley Parkway
- Nathanael Green Middle School
- Regional Library
- Roger Williams Medical Center
- Providence VA Medical Center
- Castle Theater (vacant)
- Triggs Memorial Golf Course
- Fruit Hill and Smith Hill neighborhoods
- St. Patrick's Parade along Smith St, Pat's Pub



TOP: Named as one of New England's top municipal golf courses, the Triggs Memorial Golf Course serves as one of Chalkstone's primary attractions. *Source:* <http://www.newenglandgolf.com/>

BOTTOM: Constructed in 1929, the Nathanael Greene Middle School is located at the eastern edge of Chalkstone Avenue. *Source:* Providenceschools.org

CORRIDOR THEME

Dreeszen & Associates' cultural planning team worked closely with the City's Department of Planning and Development, Department of Art, Culture + Tourism, and five stakeholder committees to develop interpretive themes for each of the five study corridors— North Main Street, Broad Street, Elmwood Avenue, Chalkstone Avenue, and Manton Avenue. The interpretive themes have a placemaking objective; they will contribute to a cohesive visual identity for each of the corridors, connecting people and places along the street in a meaningful way.

CHALKSTONE AVENUE: HONORING PROVIDENCE'S WORKERS

Chalkstone Avenue is distinguished by its working people, founded with worker's housing and a trolley to accommodate the workforce for Providence's 19th century factories and mills. The corridor's theme may inspire oral histories, portraits, and public art that recognize the neighborhood's workers, veterans, heroes and the families of Chalkstone Avenue. Artist-led projects that involve and connect neighbors may inspire a stronger sense of community cohesion bringing people together to exchange new ideas and fostering vitality.

In the coming months and years, this theme will help inform local artists as they work to integrate art into bus shelters and other key locations along the corridor. The artistic interpretations of the theme will reflect and reinforce Chalkstone Avenue's unique design and historic and contemporary workers and provide a sense of orientation that connects people and places along the street in a meaningful way. Please note that the above theme is a much-condensed abstract. Artists will be encouraged to study the full report of interpretive themes with detailed explanations of each corridor's interpretive theme.

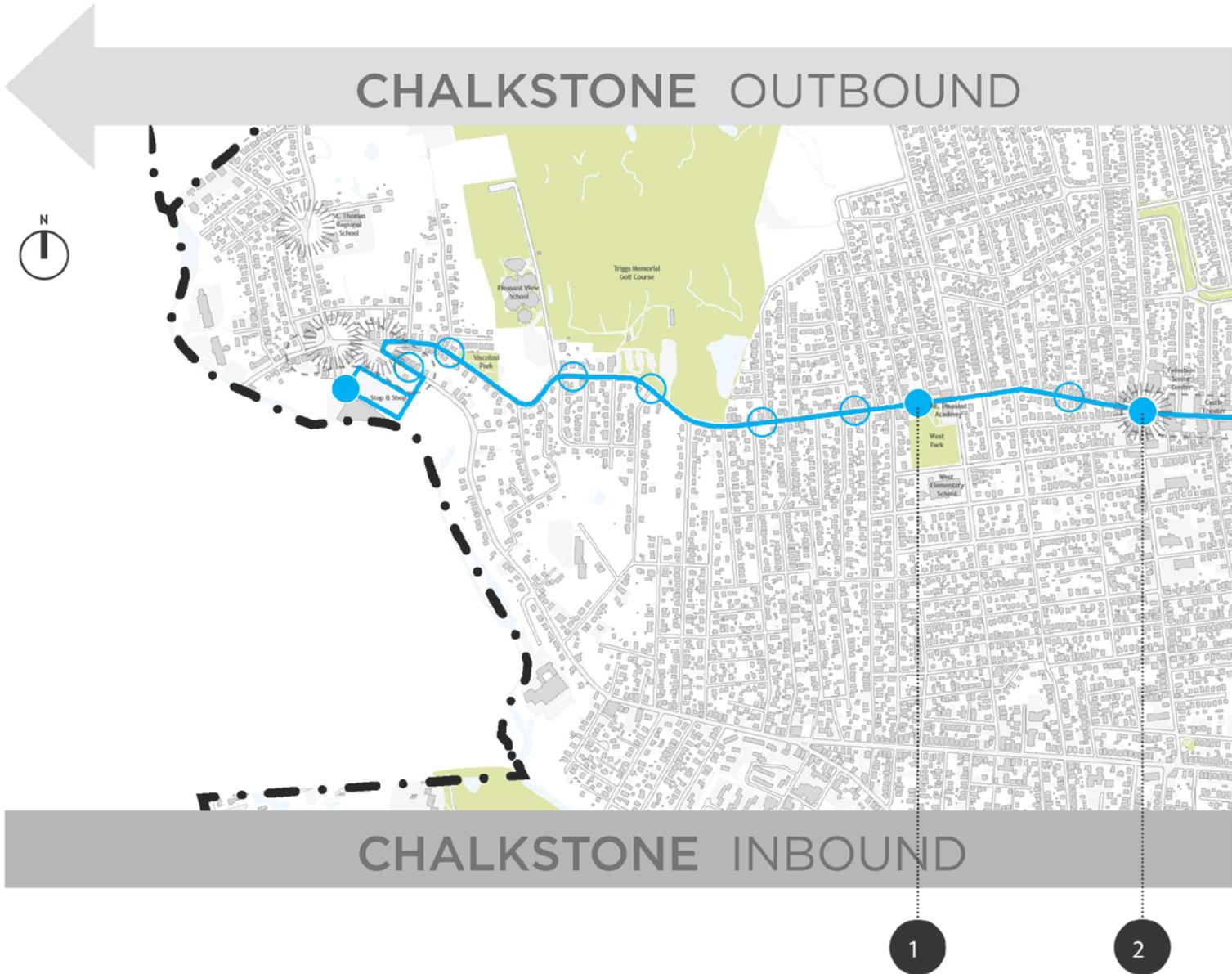
The themes for each corridor are the result of a broad public participation process that included input from community members at a series of public meetings, online surveys, interviews with local experts, numerous meetings with stakeholder committees for each corridor, a citywide project advisory committee, various focus groups, and City staff members. In addition, the themes are informed by the *Providence Tomorrow* neighborhood plans, corridor exploration, and a review of the cultural resource inventory that was completed for each corridor as part of this project.

Opportunities for artistic intervention at key bus stops along the corridors have been identified and will be developed in conjunction with bus shelters either as a component of a prefabricated bus shelter (side panel, back panel, or column) or as a free standing seating element. The artistic interventions will replace specific manufactured components of the shelter to seamlessly blend public art with new infrastructure. Artists will be required to incorporate and adhere to several criteria including the themes that have been established for each corridor. As both an art object and a transit amenity, the shelters will encourage the use of the public transit system and celebrate the unique identity of these important commercial, cultural and historic neighborhoods.

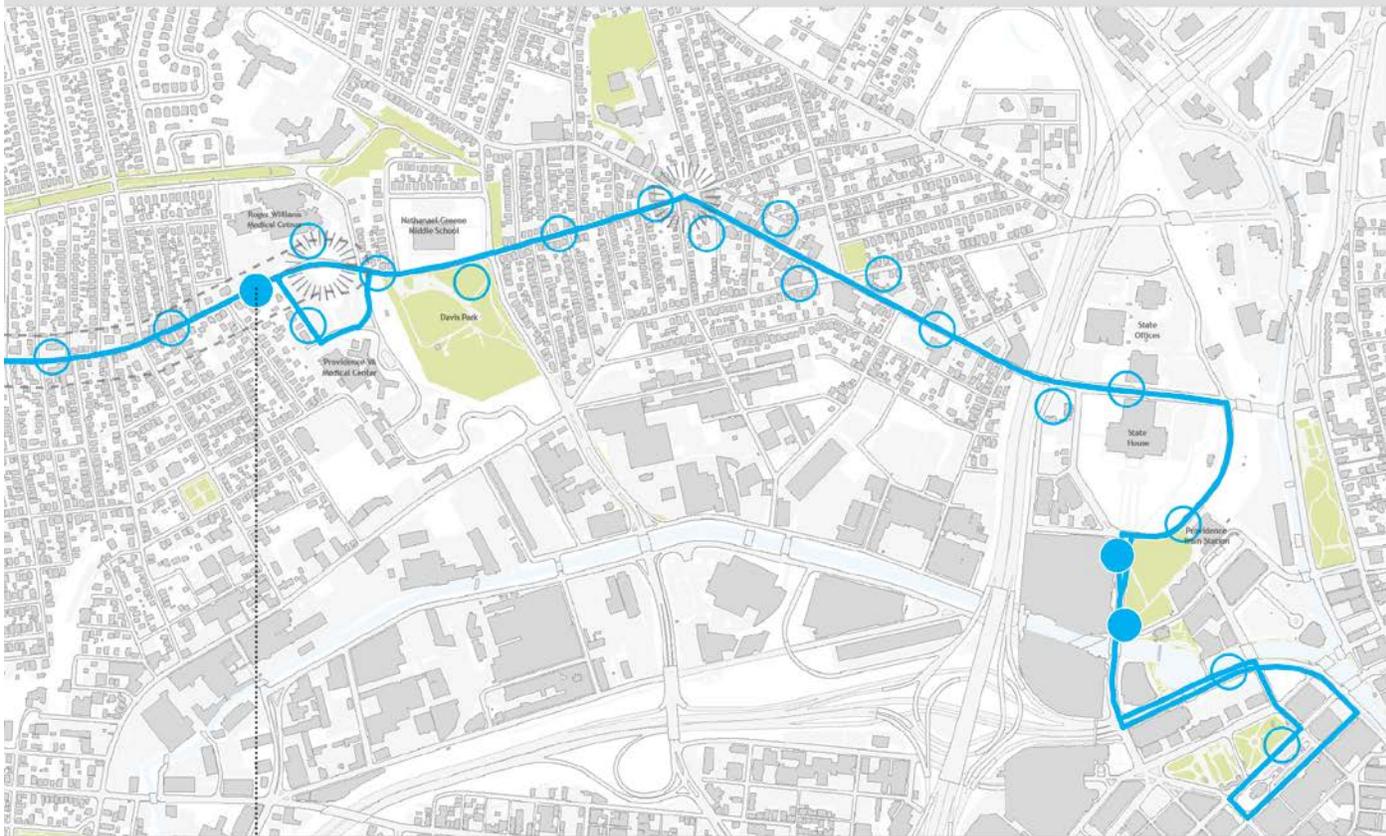
In addition to the shelter locations, several areas have been identified along Chalkstone Avenue as important community gateways. These significant wayfinding and transition points present opportunities for special treatments that highlight their symbolic importance, improve the pedestrian environment, and reinforce each neighborhood's unique identity. The following gateway sites have been recommended for additional stand-alone pieces of art that will help contribute to the overall identity of the corridor and reflect the interpretive theme:

- Roger Williams Medical Center and the Providence VA Medical Center Gateway
- Stop and Shop Gateway

The City will work to identify possible funding sources to hire artists to design and install stand-alone pieces of art at the recommended gateway sites.



Proposed sites for art work along Chalkstone Avenue



3

1 MT. PLEASANT Inbound
Back & Side Panels + Column

2 ACADEMY Inbound
Back Panel

3 ROGER WILLIAMS HOSPITAL Inbound
Back Panel

ARTS + CULTURAL PLANNING RECOMMENDATIONS

Dreeszen & Associates' cultural planning team met with City of Providence Art Culture + Tourism and Planning and Development staff, project advisors, and stakeholder committees to develop strategies to employ arts, culture, and heritage to improve livability, prosperity, and public access to arts and entertainment along the five corridors. Recommendations also build upon *Creative Providence: A Cultural Plan for the Creative Sector*, *Providence Tomorrow* neighborhood plans; and other plans including RIPTA's *Metropolitan Transit Enhancement Study*, and specific district plans. Recommendations are based on assets identified in inventories of cultural resources and the interpretive themes and artist guidelines for each corridor.

Chalkstone Avenue Corridor Arts & Cultural Opportunities Analysis Recommendations

- Encourage Chalkstone residents to organize business and/or neighborhood associations
- Identify underutilized spaces such as surface parking or other available space along the core business district as a neighborhood gathering place; add benches and other furnishings to encourage social activity; locate voluntary association to take on stewardship.
- Encourage artists to use photo documentation of local heroes, which have been very successful public art projects in other communities. This is more simple, feasible, and inclusive than monumental statues.
- Encourage youth development programs as these would be much valued by corridor stakeholders. The regional library has hosted local music performers, at least one of whom is interested in offering lessons for children. One of the City's arts and youth development organizations may be persuaded to organize a satellite program at the library.
- Identify a viable re-use for the closed Castle Theater. The building was often cited and missed by stakeholders as a local cultural resource and a community gathering place. Stakeholders would value a youth center to engage and protect young people who otherwise are on the streets.
- Promote Chalkstone as a restaurant destination. Build upon the significant cluster of local restaurants.
- Develop a corridor artist-in-residency for an artist with a socially-engaged practice to lead civic arts dialogue with local residents, business owners, and civic leaders. Such a project will lead to increased cultural participation.
- Create temporary cultural programming such as pop-up galleries in vacant storefronts along Chalkstone. Explore opportunities to partner with cultural organizations to make youth programming available in these spaces.

MANTON AVENUE

Manton Avenue Introduction

Manton Avenue is the major commercial artery running from the historic commercial and industrial hub at Olneyville Square to the adjacent town of Johnston. Along the corridor, historic industrial buildings stand as vivid reminders of the region's industrial heritage; many have been repurposed for housing, artist studios, offices, restaurants, and night clubs. The underutilized Atlantic Mills is a dominant feature along the southern portion of Manton Avenue, while the northern portion of the corridor is dominated by the Stop and Shop shopping plaza and Saint Thomas Regional School.

Settlement began around Olneyville Square in the early 1700s and intensified early in the 19th century. The Woonasquatucket River, which runs parallel to Manton Avenue, made Olneyville attractive to industry, and numerous mill villages popped up along its banks. One of the most important industrial facilities in Olneyville, Atlantic Mills, was constructed in 1851 and still stands as an important landmark along the corridor. As Providence's industrial giants declined after World War II, many industries shut down, resulting in a loss of residential population in the area. In 1953, the city constructed Manton Heights, a 330 unit housing project, as part of its program to provide public housing to residents in Providence.

The Manton Avenue Streetscape Enhancement project, which includes new traffic signals, ornamental street lighting, sidewalks, and street trees, has been recently implemented along Manton Avenue after being in design for several years. The development of mixed-use nodes along the corridor would complement this effort and further enhance the vitality of this corridor.

The *Manton Avenue Transit Analysis* section of this report provides an overview of the current conditions of transit along the corridor and outlines measures to be taken to provide frequent, reliable transit service, improving the rider experience along this important transportation corridor. The *Manton Avenue Land Use Analysis* section of this report contains an analysis of existing conditions, vacant and underutilized land within key nodes along the project corridor, and potential build out scenarios for each key node. This analysis furthers the City's goals of managing growth and change, encouraging development and neighborhood revitalization, fostering a stronger sense of place, and building upon the placemaking role of RIPTA's transit enhancements. The *Manton Avenue Arts and Cultural Opportunities Analysis* section of this report summarizes the public art enhancements that have been recommended, the inventory of arts and cultural resources that was completed, and the creative placemaking strategies that were developed to employ arts, culture, and heritage to improve livability, prosperity, and public access to arts and entertainment along the corridor.

What do previous plans say about Manton Avenue?

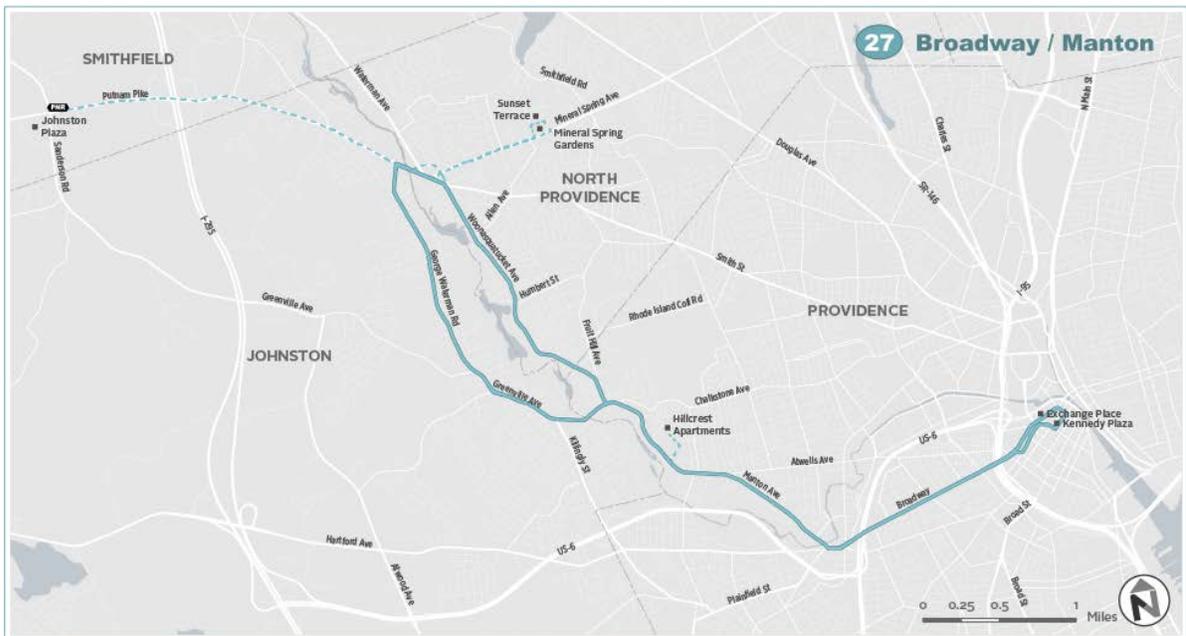
Previous plans, including the Providence Tomorrow Neighborhood Plan for Upper Olneyville, Smith Hill, and Valley (2009) and the Providence Tomorrow Neighborhood Plan for Hartford, Silver Lake, and Manton (2009), were evaluated in order to ensure that key elements of those plans were integrated into this planning effort.

The following elements of those plans have been incorporated into the goals for the transportation, land use, and cultural planning elements of this project:

- ➔ Enhance the identity of the corridor through the creation of gateways made up of distinct signage, plantings, pavement markings or other decorative elements at key neighborhood locations.
- ➔ Support the creation of an Upper Manton Avenue merchants association.
- ➔ Restore the neighborhood scale of commercial districts along the corridor
- ➔ Revitalize key areas such as the Stop & Shop Plaza
- ➔ Beautify the corridor with street furniture, plantings, banners, and other amenities.
- ➔ Increase public access to Woonasquatucket River from Upper Manton Avenue.
- ➔ Make Upper Manton Avenue more pedestrian-friendly through enhanced crosswalks, improved sidewalks, lighting and other streetscape enhancements.

Manton Avenue Transit Analysis

Public transit along Manton Avenue is defined by Route 27, a RIPTA-operated bus route. Serving as one of the top ten highest use bus routes in Providence, Route 27 provides service between Centredale Transfer Point and Kennedy Plaza in downtown Providence. The route begins at the Centredale Transfer Point and then operates along two outer branches, one along George Waterman Road and the other along Woonasquatucket Avenue. These two branches join at Manton Avenue, and the route then operates along Manton Avenue and Broadway into downtown. There are also two variant services included in the route to Smithfield Crossing off of Putnam Pike and Hillcrest Apartments off of Manton Avenue.



Route map of RIPTA's Route 27 service

EXISTING RIDERSHIP DATA

In nearly every respect, Route 27 is one of RIPTA's best performing routes. Due to the route's high ridership, its operating cost per passenger is 33 percent below average and its passengers per revenue vehicle hour is 46 percent above average. Route 27 averages 2,034 riders per weekday, 1,078 riders per Saturday, and 782 riders per Sunday. In terms of weekday ridership, it is RIPTA's ninth highest ridership route. The route travels through portions of Providence, Smithfield, Johnston, and North Providence with Olneyville Square and Kennedy Plaza serving as the two transit stations. Some of the main activity centers along the route include Rhode Island College (Sundays only), Centredale, the Manton Stop and Shop plaza, Lasalle Square, Olneyville Square, and Downtown Providence.

On weekdays, ridership is highest during the afternoon peak, when the average is more than 30 riders per trip. On the weekend, ridership is also relatively strong, averaging more than 20 and 22 riders per

trip on Saturday and Sunday, respectively. Overall, ridership is lightest at the two outer branches and heaviest at the Centredale Transfer Point and at the area between the Stop and Shop plaza and downtown Providence.

STOP INVENTORY ANALYSIS

Along the approximately 8.5-mile route, there are currently 163 bus stops (89 inbound and 74 outbound), 41 of which are located along Manton Avenue. With approximately 9.5 bus stops per mile, Route 27 stop frequency is significantly higher than the system average of 5.6 stops per mile. Most of the stops along Manton Avenue face similar challenges such as lack of shade, narrow sidewalks, and excessive signage. Only three of the 41 stops currently have bus shelters (two inbound stops and one outbound stop). Despite these issues, there have been several recent public realm investments near stops, such as roadway realignments and crosswalk striping.

EXISTING CONDITIONS ANALYSIS

During RIPTA's analysis of Manton Avenue, the following issues were identified:

Service is poorly coordinated with Route 28 Broadway/Hartford service. Currently, routes 27 and 28 operate with very similar but different service frequencies. To provide evenly spaced service along Broadway and reduce berth requirements at Kennedy Plaza, the two routes could be scheduled to operate with the same service frequencies and to alternate departures and arrivals at Kennedy Plaza.

Headways are irregular during the week. In terms of frequency, Route 27 service operates with irregular headways that vary from 2 to 80 minutes on weekdays. Service could be made much more convenient and attractive by providing service consistently every 15 minutes during the day on weekdays, and every 60 minutes at night.

Variants are underutilized. In addition to improving headway consistency, Route 27 would also benefit significantly from discontinuing service to Smithfield Commons and Hillcrest Apartments. The Smithfield Commons variant currently serves only one person and the Hillcrest Apartments variant only serves four people. With the elimination of both of these variants, service would be simplified and headways would be more consistent.

Sunday night service is limited. RIPTA's analysis also indicates that there is a demand for later service of this route on Sundays, as the last outbound Sunday trip now departs from Kennedy Plaza at 8:00 PM and carries 22 passengers. This issue could be addressed by extending Sunday service to 9:00 or 10:00 PM.

The opportunity cost of specific weekend service should be assessed. Assess the opportunity cost of weekend service to Sunset Terrace, Mineral Spring Garden Apartments, and Rhode Island College. Currently, Saturday service to Sunset Terrace and Mineral Spring Garden Apartments, and Sunday service to Rhode Island College is fairly well utilized, but comes at the expense of irregular service along the rest of the route and a lack of coordination with Route 28. This trade-off should be reassessed to determine whether these locations could be served in a manner that would not disrupt service on the rest of the route.

RECOMMENDATIONS

Bus Stop Location Improvements

Bus stops play an important role in the identity of the street and are therefore an important urban design element. The siting of bus stops and their components should enhance the transit corridor and strengthen the character of the street. By removing and relocating bus stops on Manton Avenue, RIPTA will be able to provide service that is more efficient, accessible, and reliable, and will be able to ensure that stops are in ideal locations for passengers, local businesses and residents. Improved bus stop spacing will shorten travel times and minimize ‘stop and go’ travel along the length of the corridor. Through a thorough analysis of Manton Avenue, RIPTA has identified stops that are spaced too closely together, unsafe, or underutilized. The removal or upgrading of these stops will improve schedule adherence for buses, the accessibility of RIPTA services for all patrons, and travel times for passengers. Additionally, RIPTA will benefit from reduced maintenance and fuel costs directly related to these changes.

In Providence, RIPTA has recommended that 13 inbound stops and 13 outbound stops on Manton Avenue be maintained and that 8 inbound stops and 7 outbound stops be removed entirely in order to improve bus service. All recommendations for removal or improvement have been thoroughly reviewed with the public and local stakeholders. Comments and concerns gathered from the public have been incorporated into the final bus stop placement. The placement of each stop was also analyzed through its impact on traffic and pedestrian sightlines and activity, as well as relationships to landmarks, landscaped spaces, and surrounding buildings.

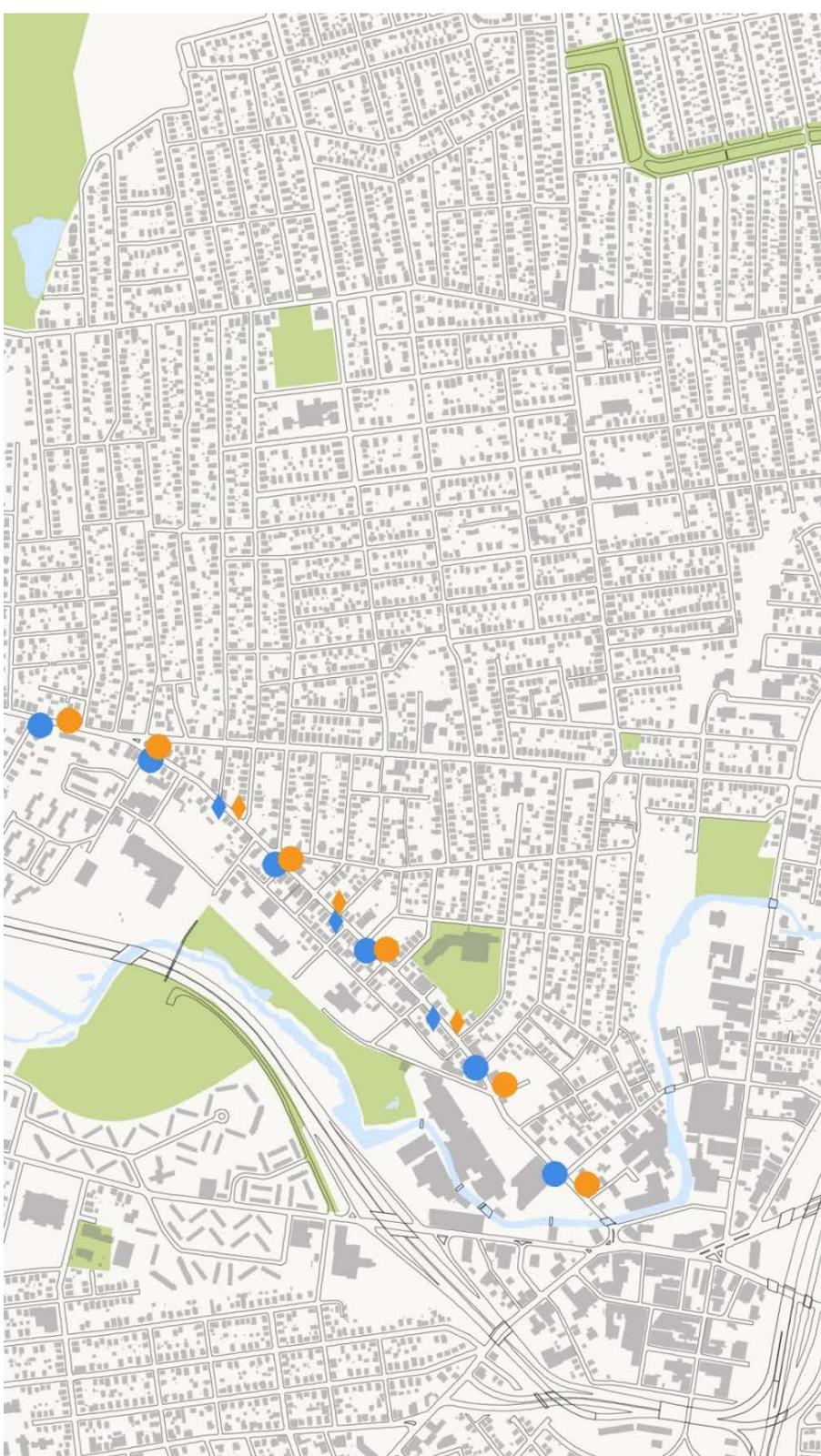
Stops along Manton Avenue in Providence Recommended for Removal:

Stop	Direction
Manton Opposite 985 Manton	Inbound
Manton @ 985 Manton	Outbound
Manton @ 835 Manton	Inbound
Manton @ Baltimore	Outbound
Manton @ 652 Manton	Inbound
Manton Opposite 652 Manton	Outbound
Manton @ 588 Manton	Inbound
Manton @ 505 Manton	Outbound
Manton @ 375 Manton	Inbound
Manton Opposite 375 Manton	Outbound
Manton Opposite Erastus	Inbound
Manton @ 283 Manton	Outbound
Manton Opposite 283 Manton	Inbound
Manton Far Side Pelham	Inbound
Manton Opposite 186 Manton	Outbound

Stops along Manton Avenue in Providence Recommended to be Maintained:

Stop	Direction
Manton @ 954 Manton	Inbound
Manton Opposite 954 Manton	Outbound
Manton Near Side Fruit Hill	Inbound
Manton Opposite 871 Manton	Inbound
Manton @ 883 Manton	Outbound
Manton @ Stop and Shop	Inbound
Manton @ Stop and Shop	Outbound
Manton @ 835 Manton	Outbound
Manton @ 770 Manton	Inbound
Manton Opposite 736 Manton	Outbound
Manton Opposite Baltimore	Inbound
Manton Opposite 600 Manton	Outbound
Manton @ 610 Manton	Inbound
Manton Near Side Glenbridge	Inbound
Manton @545 Manton	Outbound
Manton @ 470 Manton	Inbound
Manton Opposite 470 Manton	Outbound
Manton Opposite Salmon	Outbound
Manton Far Side Salmon	Inbound
Manton Far Side Panay	Outbound
Manton Near Side Pope	Outbound
Manton @ 256 Manton	Inbound
Manton Opposite Julian	Inbound
Manton Near Side Aleppo	Outbound
Manton Opposite Delaine	Inbound
Manton Near Side Delaine	Outbound





Proposed bus stop changes along Manton Avenue

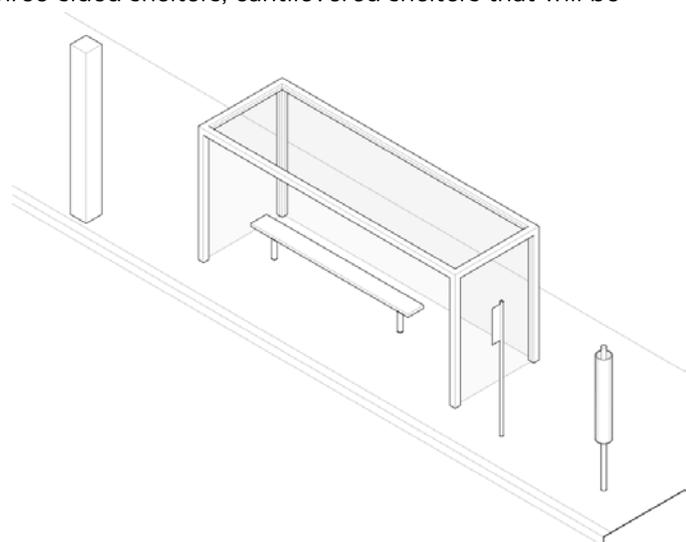
Other Service Improvements

“No parking” signs and diagonal pavement striping will be installed at all bus stop locations along Manton Avenue. Parking violations at bus stop locations will be enforced by the City of Providence Parking Enforcement.

Pedestrian Amenity Improvements

Enhanced passenger amenities will improve the passenger experience for those travelling along Manton Avenue. It is recommended that RIPTA work with the City of Providence to procure funding for the implementation of new bus shelters, benches, trash receptacles, and bicycle racks along the corridor. These new, standardized bus stop components include:

- Three new shelter types including typical three-sided shelters, cantilevered shelters that will be installed where sidewalk clearances prohibit installation of the typical three-sided shelter, and larger shelters that will allow extra space for waiting passengers and space for ticket vending machines to be installed in the future;
- Freestanding screens that will screen parking lots, provide passengers with a buffer from the wind and provide a surface for local art;
- Freestanding transit totems that will include schedule and map information for RIPTA services, real-time arrival information and additional wayfinding information;
- Enhanced transit signs that will provide schedule and map information for RIPTA services; and,
- New post-mounted transit signs that will replace existing RIPTA bus stop signs where transit totems or enhanced transit signs are not appropriate.



Shown from left to right: New bus stop amenities will include transit totems, new bus shelters, new bus stop signs, and enhanced transit signs. The specific design of these elements is currently being developed.

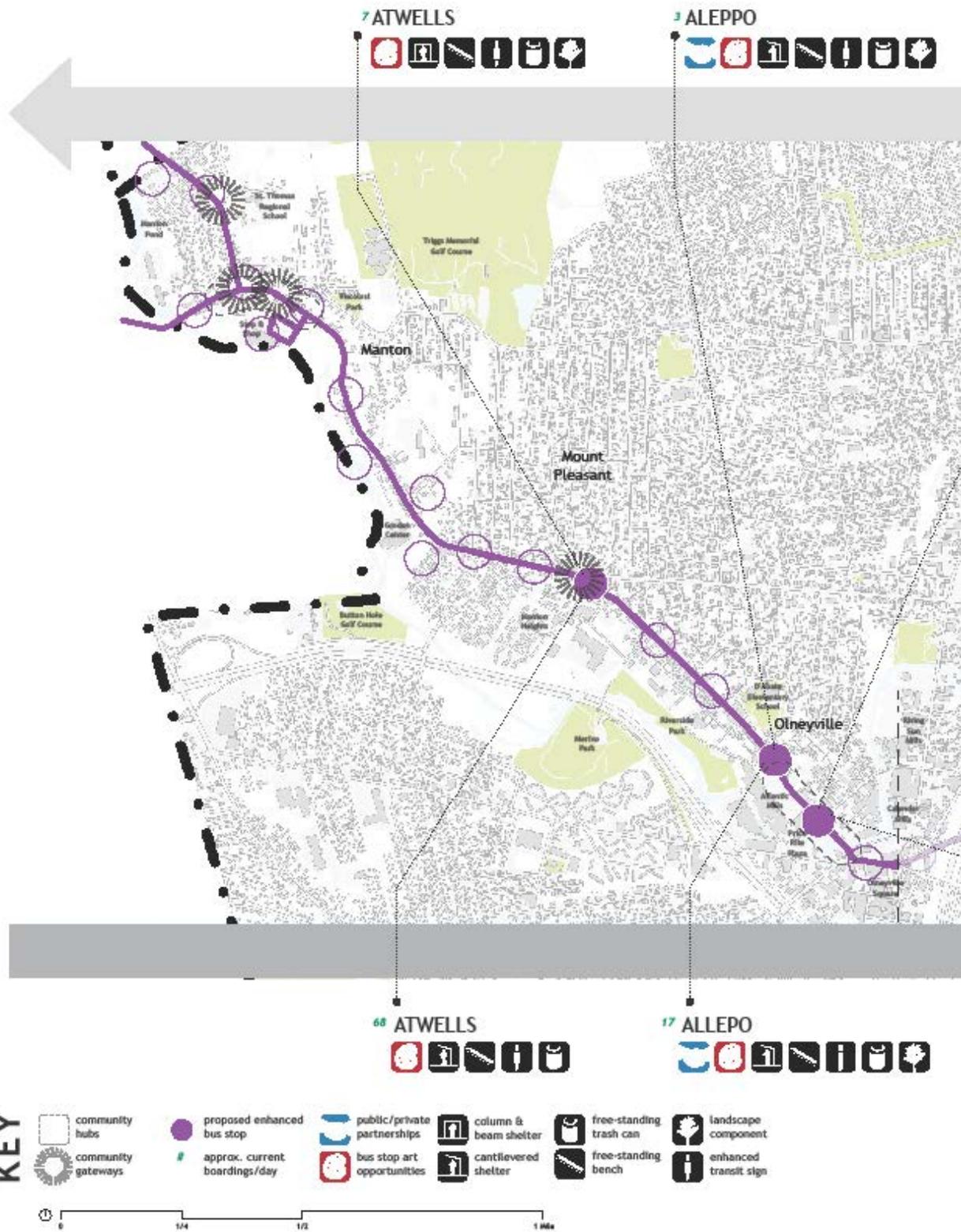
The following stops along Manton Avenue have been recommended for various improvements:

Stop	Direction	Improvement details
Manton Opposite Delaine	Inbound	Bus stop art opportunities, cantilevered shelter, free-standing bench, free-standing trash can, enhanced transit sign, and landscape component

Manton Near Side Delaine	Outbound	Bus stop art opportunities, cantilevered shelter, free-standing bench, free-standing trash can, enhanced transit sign, and landscape component
Manton Opposite Julian	Inbound	Bus stop art opportunities, cantilevered shelter, free-standing bench, free-standing trash can, enhanced transit sign, and landscape component
Manton Near Side Aleppo	Outbound	Bus stop art opportunities, cantilevered shelter, free-standing bench, free-standing trash can, enhanced transit sign, and landscape component
Manton Far Side Salmon	Inbound	Bus stop art opportunities, cantilevered shelter, free-standing bench, free-standing trash can, and enhanced transit sign
Manton Opposite Salmon	Outbound	Bus stop art opportunities, column and beam shelter, free-standing bench, free-standing trash can, enhanced transit sign, and landscape component

Local art will be incorporated into select bus stops along the corridor in order to celebrate the unique identity of Manton Avenue and provide a sense of orientation that connects people and places along the street in a meaningful way. The City and RIPTA will work closely with local artists to integrate art into the bus stops. A theme of “Creative Energy and Industrial Heritage” has been established to highlight Manton Avenue’s distinctive character and guide the artwork that is developed.

For more information on the theme and artwork that will be developed for Manton Avenue, please refer to the “Manton Avenue Arts & Cultural Opportunities Analysis” section of this report.

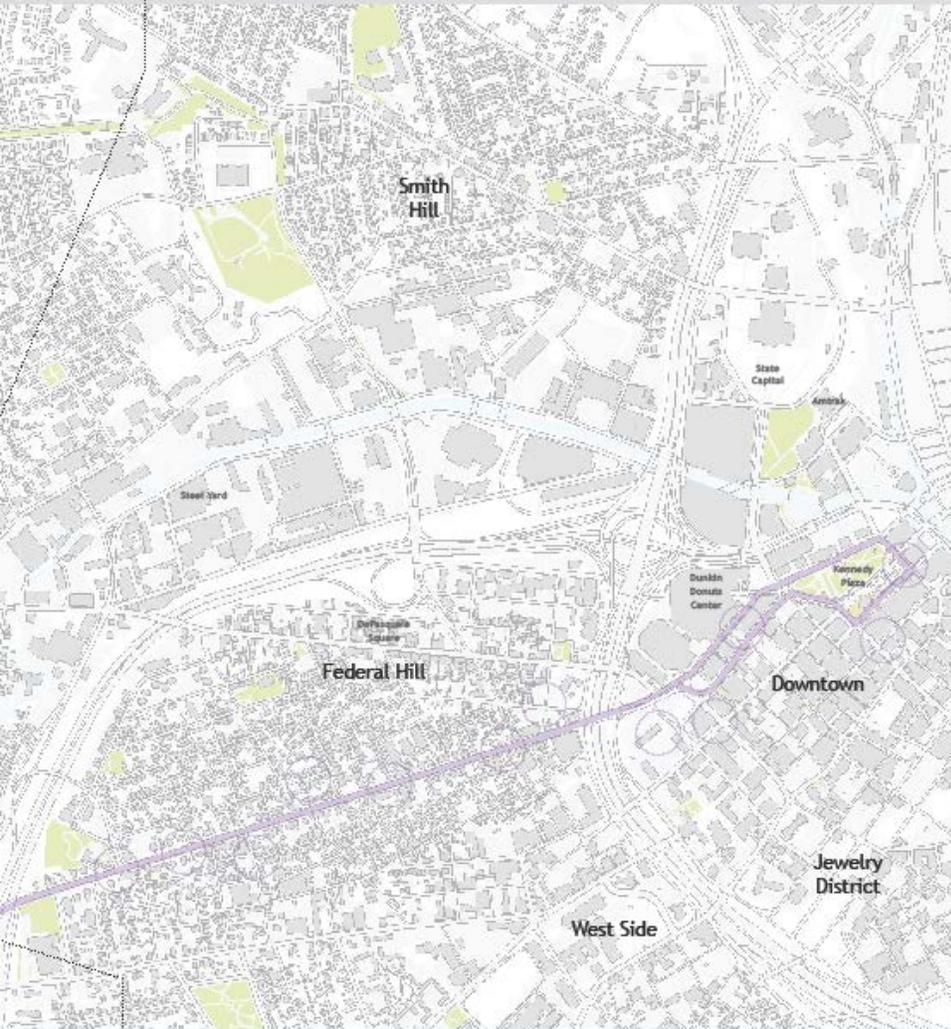


Proposed bus stop improvements along Manton Avenue

14 DELAINE



MANTON OUTBOUND



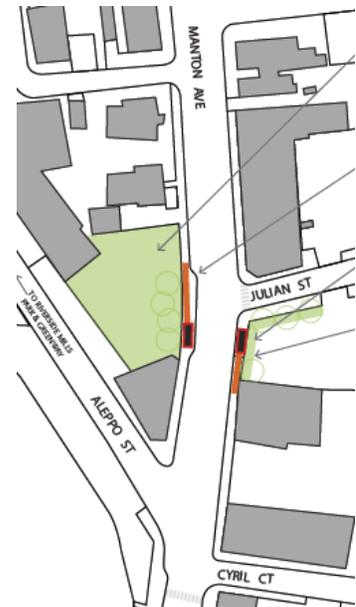
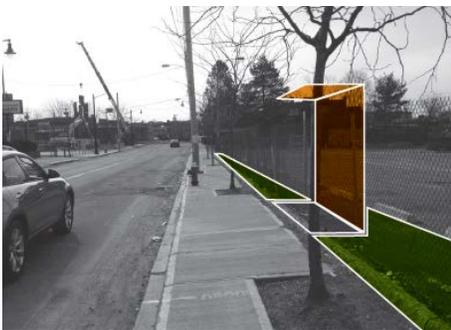
MANTON INBOUND

16 DELAINE



Landscape Improvements

Opportunities for landscape improvements at bus stop locations should be encouraged through partnerships with private property owners in order to improve the pedestrian realm surrounding the stops. **Street trees** have been recommended in areas where there is space within the right-of-way and a need for enforcement of the street tree canopy. In some instances, the recommendations call for the replanting of trees that have been removed or the replacement of trees that are in poor condition. **Landscape buffers** have been recommended in areas where there are appropriate interstitial spaces that are otherwise underutilized or where there is a need to screen views of surface parking lots or other underutilized or unsightly areas. **Pocket Parks** have been recommended in areas with existing “interstitial spaces” (such as underutilized open spaces on adjacent private property) that could support the bus shelter program and the surrounding neighborhood.



Left and Middle: Proposed landscape buffers at Manton Opposite Delaine inbound stop and Manton Near Side Aleppo outbound stop

Right: Opportunity for pocket park behind Manton Opposite Julian inbound stop as gateway to the Woonasquatucket River Greenway off-road bike path

The following bus stop locations along Manton Avenue have been identified for possible landscape improvements:

<u>Bus Stop</u>	<u>Street Trees Recommended</u>	<u>Landscape Buffer Recommended</u>	<u>Pocket Park Opportunity</u>
Manton Far Side Salmon - inbound	2	--	--
Manton Opposite Salmon - outbound	2	--	--
Manton Opposite Julian - inbound	2	--	✓
Manton Near Side Aleppo -outbound	2	✓	--
Manton Opposite Delaine - inbound	2	✓	--

Manton Near Side Delaine - outbound	2	--	--
TOTAL	12	--	--

POTENTIAL SAVINGS

Savings on Route 27 will primarily be realized through the reduction in the number of redundant bus stops. Bus stops will be reduced to the RIPTA standard of 6 stops per mile. This will encourage passengers to congregate at one stop rather than spreading over many stops. This alone will decrease running times, reduce braking, and speed up the bus through the corridor.

MANTON AVENUE TRANSIT ANALYSIS RECOMMENDATIONS

- Coordinate service frequencies with Route 28 Broadway/Hartford.
- Operate service with clockface headways, providing service consistently every 15 minutes during the day on weekdays, and every 60 minutes at night.
- Make weekend schedules more consistent.
- Eliminate underutilized variants such as the Smithfield Commons and Hillcrest Apartments to simplify service and improve headways.
- Provide later Sunday service to meet the existing demand.
- Assess Opportunity Cost of Weekend Service to Sunset Terrace, Mineral Spring Garden Apartments, and Rhode Island College.

Manton Avenue Land Use Analysis

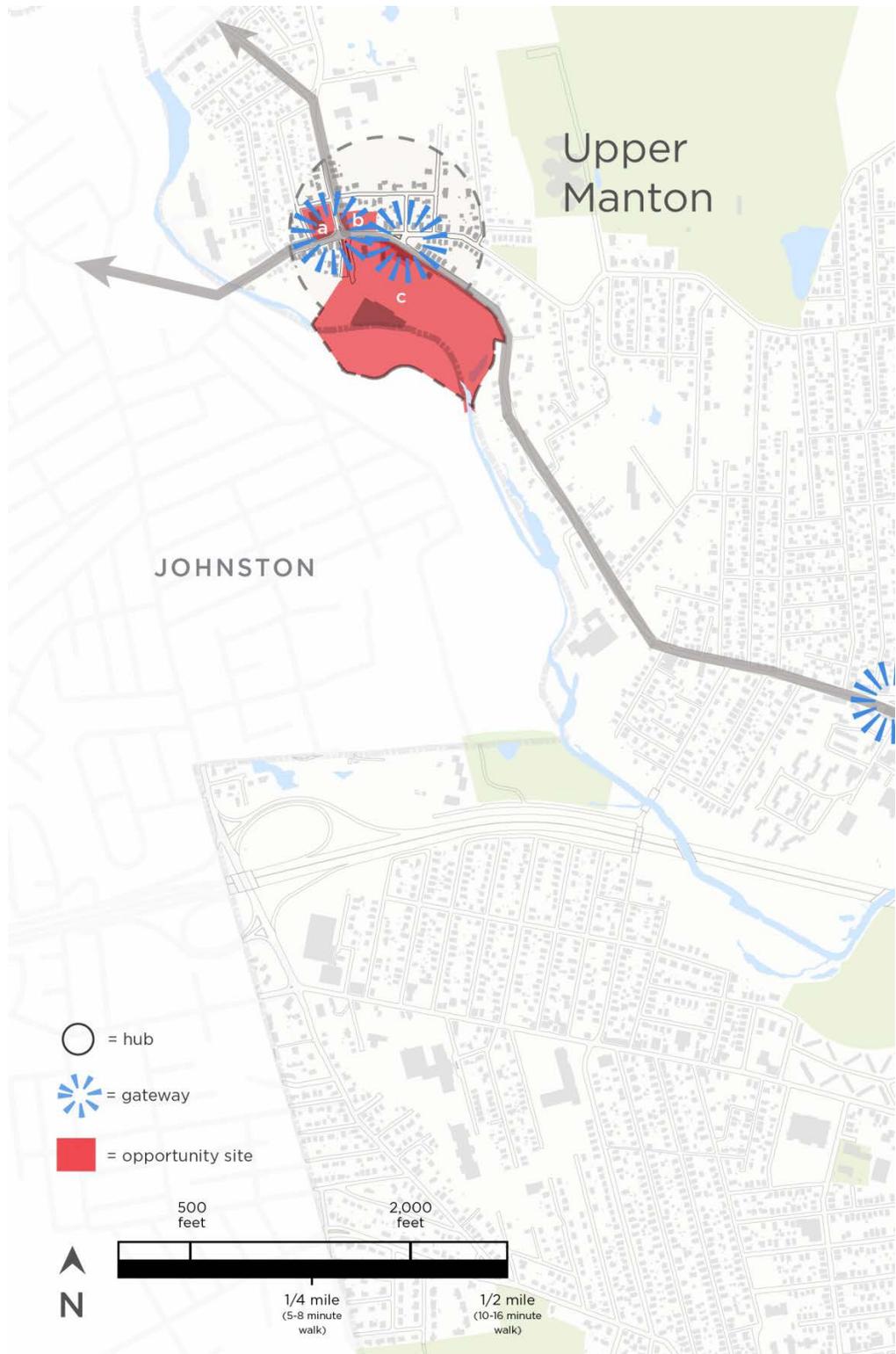
In addition to being one of the highest use bus routes in Providence, Manton Avenue was also selected as one of the five corridors to be evaluated as part of this project because of the availability of land to be redeveloped into housing and new businesses to create hubs of activity near transit stops. The redevelopment of vacant or underutilized parcels along Manton Avenue will aid in the creation of mixed-use community hubs that are directly served by transit. Linking development directly to transit will connect residents to jobs and employment centers and create jobs and investment in areas that are most in need.

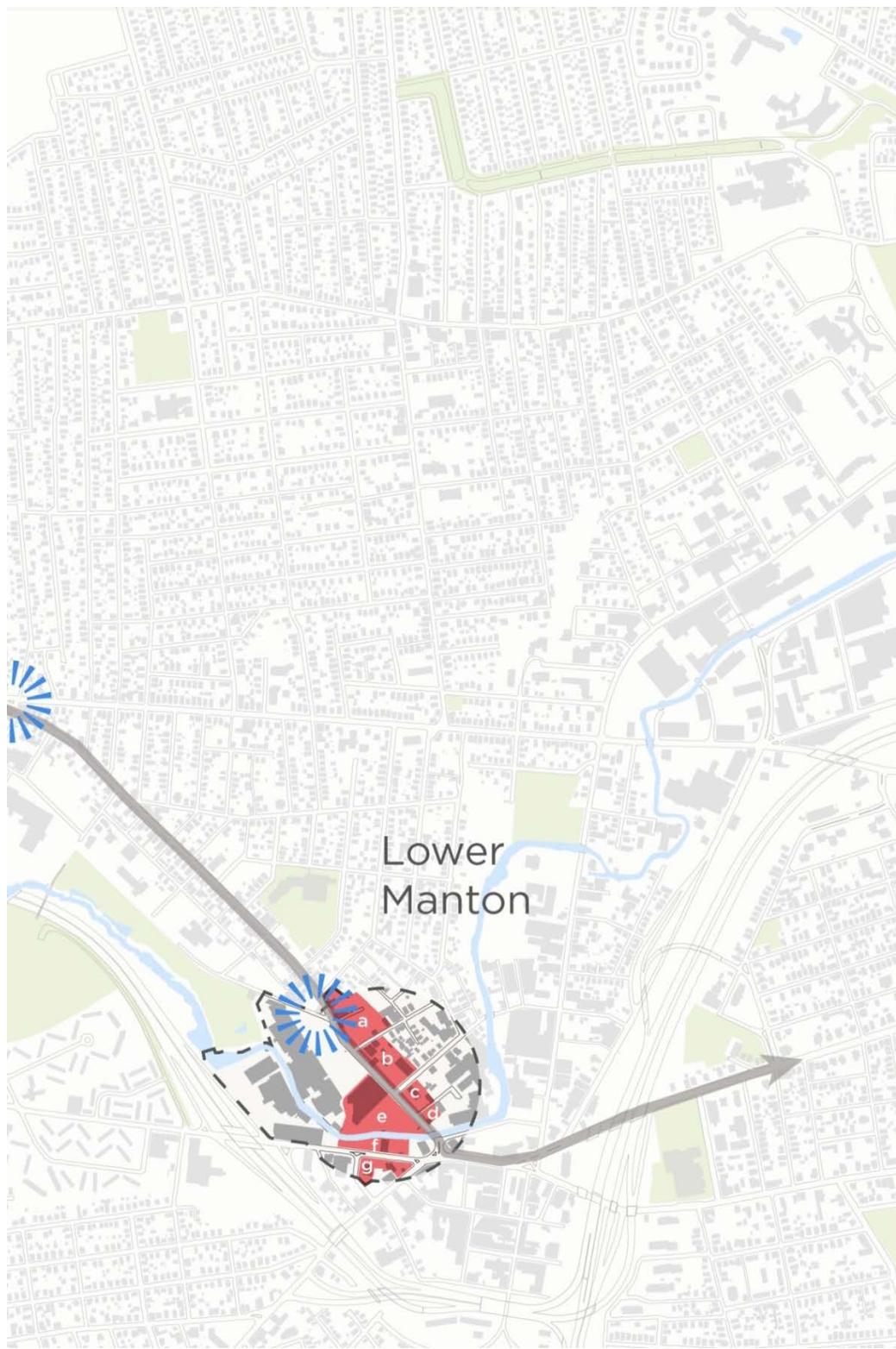
Community hubs have been identified and evaluated as areas along Manton Avenue where increased building height and density could be accommodated in order to encourage life and vitality, while also allowing for compatible transitions to surrounding areas. Directing investment to these hubs is critical in order to ensure the success of the transit investment in those areas and to create catalytic change along the entire corridor. Two community hub locations have been selected for Manton Avenue — Upper Manton Avenue Hub and Lower Manton Avenue Hub — and potential build out scenarios have been developed for opportunity sites within each. Future development scenarios have been evaluated against both the desires of the community and current zoning regulations; where conflicts with current zoning exist, adjustments of the ordinance are being implemented. The build out scenarios are meant to guide future development in the area by providing a framework based on best practices as well as the needs and desires of the community. In addition to longer term build out scenarios, interim uses have also been evaluated for opportunity sites within the hub locations in order to activate these important areas in the short-term. By studying possible build out scenarios on a site by site basis, the specific opportunities and limitations for each property as-of-right or under new zoning parameters can be analyzed. In most cases, the biggest barrier to redevelopment is incorporating the related surface parking demand on site based on the currently required ratios for various land uses. Looking at the community hub as a whole allows more thought to be given regarding where opportunities for parking and open space exist on a district-wide scale.

Several locations have also been identified along Manton Avenue as important community gateways. These wayfinding and transition points present opportunities for special treatments such as improved landscaping, special paving, signage, and public art in order to highlight their symbolic importance, improve the pedestrian environment, and reinforce each neighborhood's unique identity.

While each community hub has specific site conditions and characteristics that differentiate it from other areas, there are general urban design principles that will inform redevelopment and help to shape their physical form. The following overarching design principles were established in order to guide the potential build out scenarios for each community hub:

- ➔ **AGGREGATION:** Consider small or oddly shaped adjoining properties for aggregation into larger development parcels.
- ➔ **SUBDIVISION:** Consider exceptionally large blocks for subdivision through the introduction of new streets, open spaces, or pedestrian right-of-ways.





Community hubs, gateways, and opportunity sites along Manton Avenue

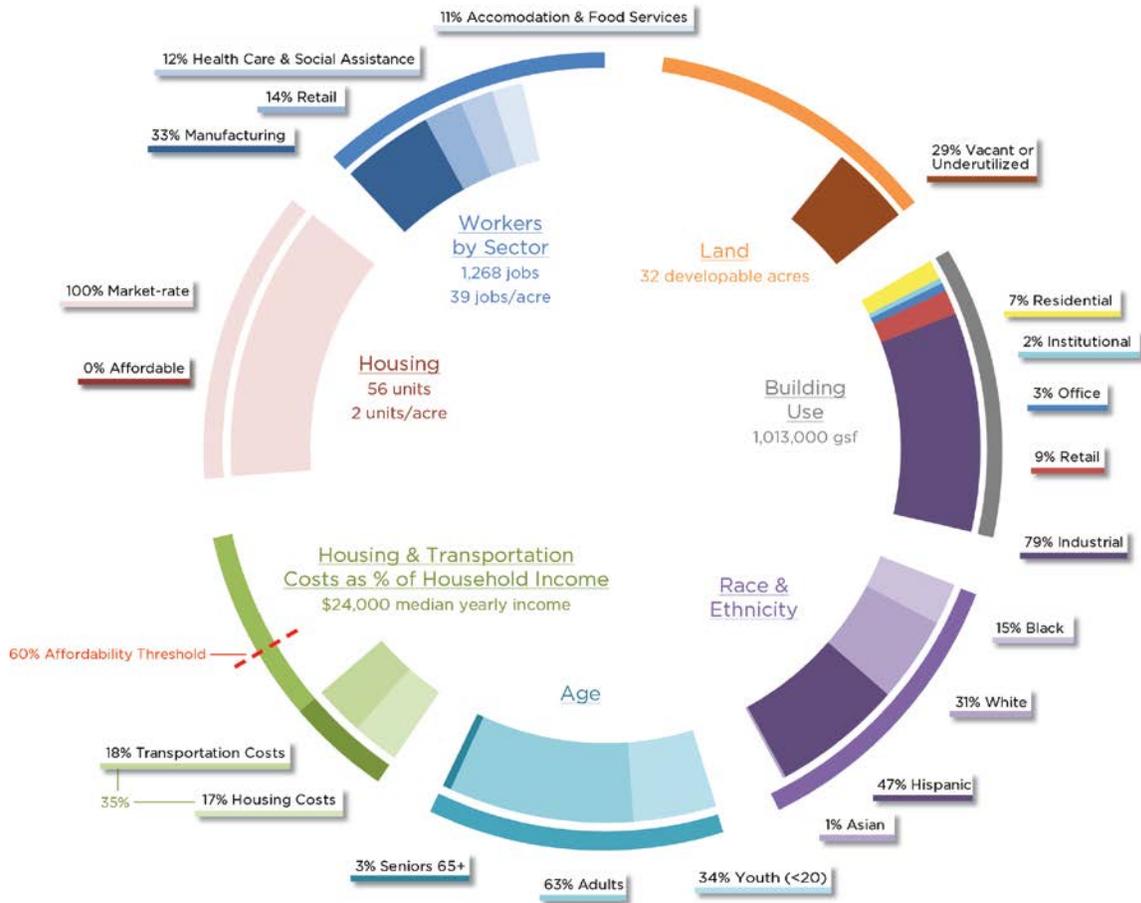
- ➔ **DENSITY:** Increase density and building height on properties where new landscape setbacks, right-of-ways or open spaces have been incorporated.
- ➔ **GATEWAYS:** Strengthen gateways that fall within community hub locations and identify existing architectural, social or historical community assets that can be better integrated into hub locations.
- ➔ **IDENTITY:** Reinforce individual corridor identities.
- ➔ **NATURAL SYSTEMS:** Leverage the presence of existing rivers or waterways to reinforce a sense of place and resolve with stormwater issues.
- ➔ **PLACEMAKING:** Seek opportunities to foster a stronger sense of place at the confluence of street grids by helping to define squares and plazas.
- ➔ **STREETScape:** Extend streetscape and public realm enhancements into the neighborhoods from the hubs with street trees and improved sidewalks.
- ➔ **BUFFERS:** Provide visual buffers to surface parking lots that are not feasible sites for complete redevelopment.

LOWER MANTON AVENUE HUB

Beginning at Olneyville Square in the south, the Lower Manton Avenue hub extends northwest to the intersection of Julian Street and Manton Avenue. Located in the Olneyville neighborhood, the hub is defined by the Woonasquatucket River, which once provided water energy for the industries that located along its banks. While many of the hub's mill buildings remain rooted in today's landscape, most of the industries that founded them no longer remain. The prevalence of contemporary retail strip development has eroded their physical presence along the corridor, and the river itself is hidden throughout much of the area. Currently, some of the significant property owners along the corridor include Grasso Management LLC, Twenty Five Manton Avenue Associates LLC, Olneyville Housing Corp, Wolfe E Myrow Inc, and Martin Braver Trustee.



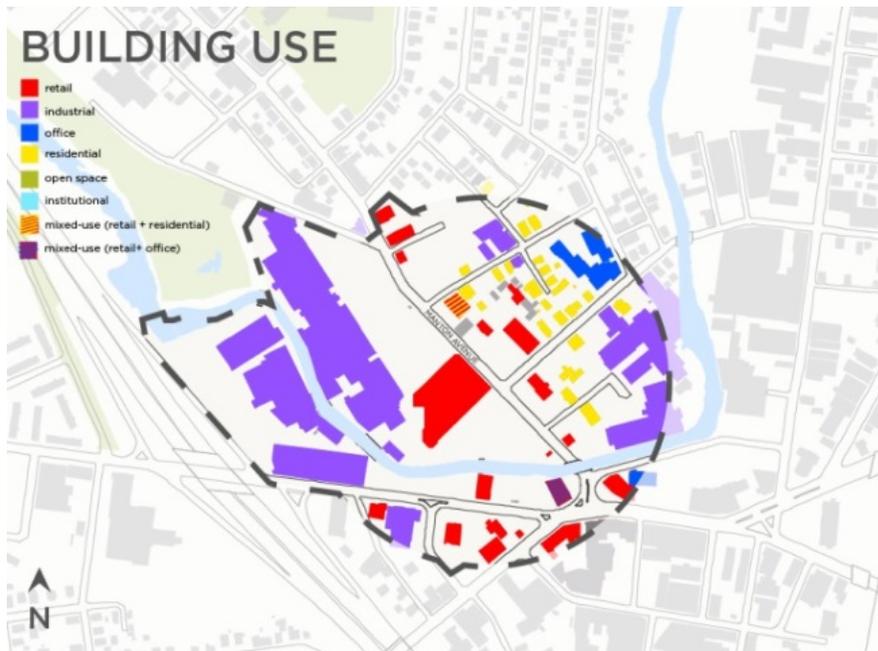
Lower Manton Avenue Hub at a Glance



Land area and density calculations are based on net acreage and do not include streets, parks or other right-of-ways. Housing and transportation costs were calculated using the Center for Neighborhood Technology's Housing and Transportation (H+T[®]) Affordability Index. Age, race, and ethnicity calculations are based on the 2010 U.S. Census. Employment information was calculated using the Rhode Island Economic Development Corporation's 2010 employment database. Housing and building use information are based on data collected from the City of Providence Tax Assessor's Database.

Building + Land Use

Building uses along Lower Manton Avenue are primarily industrial with a handful of retail buildings. One of the city's most prominent old mills, Atlantic Mills, is located on the corridor's western edge and currently serves a variety of commercial uses. The hub's eastern edge is largely characterized by one-story retail establishments with significant setbacks for surface parking.

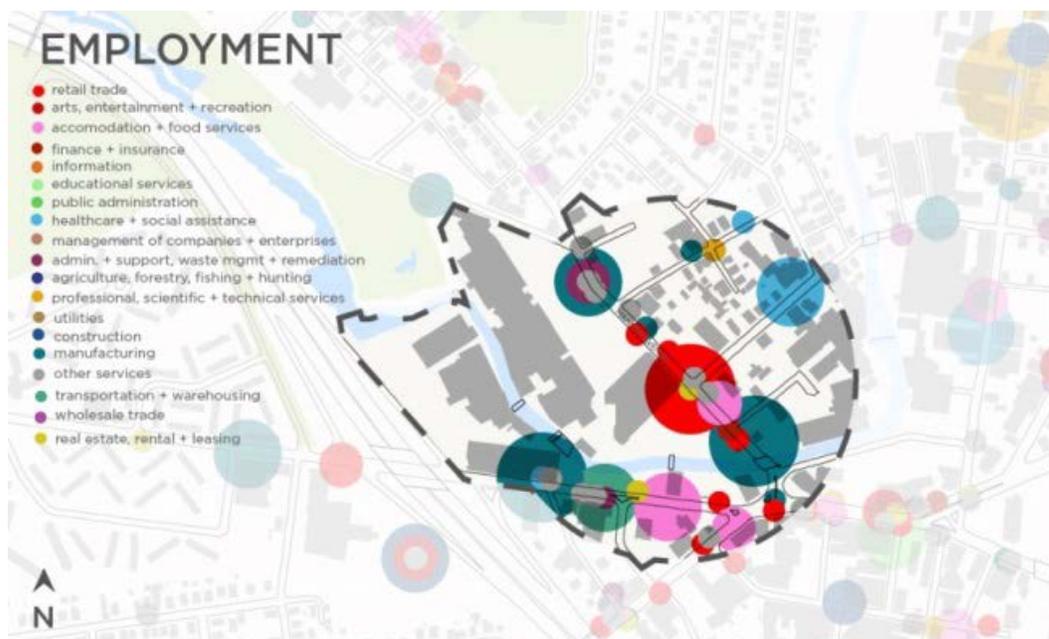


Housing

There are currently 167 residents within the Lower Manton Avenue Hub residing in 56 housing units, all of which are market-rate housing. This translates into a significantly low residential density of two units per acre.

Employment

Identifying businesses by sector and size creates a snapshot of current employment patterns in the Lower Manton Avenue hub. Approximately 1,268 people work within this area, one-third of which are employed in the manufacturing sector; another 14 percent work in the retail sector.



Race, Ethnicity + Age

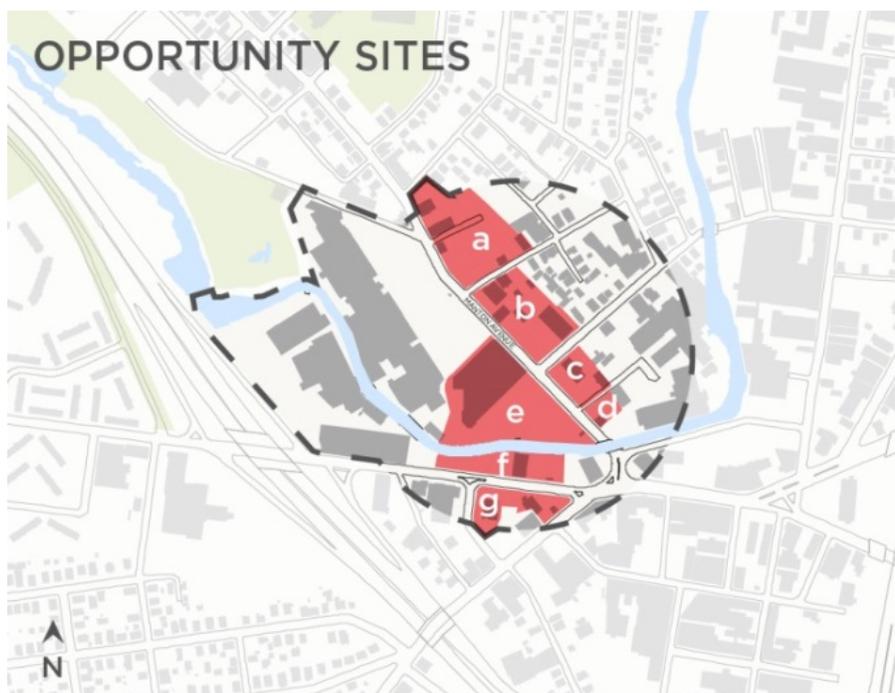
The corridor’s diverse population is primarily Hispanic (47 percent), with White (31 percent) Black (15 percent), and Asian (1 percent) populations all represented. While most of the hub’s residents are adults, approximately one-third of the population is below the age of 20 and 3 percent are considered senior citizens.

Housing + Transportation Affordability

Despite a fairly low median yearly income, average housing and transportation costs fall below the 60 percent affordability threshold.

Opportunity Sites

Together with the consultant team (Gamble Associates, Paul Cote, and Site Creative), the City identified various opportunity sites for future development within the hub by using a three-dimensional build-out analysis of transit-supportive densities .A total of seven opportunity sites were identified within the Lower Manton Avenue hub. Future development scenarios for these sites were carefully evaluated against both the desires of the community and current zoning regulations; where conflicts with current zoning exist, adjustments of the ordinance are being implemented.



OPPORTUNITY SITE	a	b	c	d	e	f	g
ACREAGE	2.2	1.6	0.7	0.2	3.1	1.6	0.8

TOTAL ACREAGE **10.2 acres**

Key Redevelopment Goals and Opportunities

Open up Atlantic Mills to the River. The lower end of Manton Avenue is dominated by the Woonasquatucket River, which once provided water energy for the industries that located along its banks. While many of these mill buildings remain rooted in today's landscape, most of the industries that founded them no longer remain. The prevalence of contemporary retail strip development has eroded their physical presence along the corridor, and the river itself is hidden throughout much of the area.

Any redevelopment in this area should seek to reveal the architectural and natural assets of the Hub by enhancing the linkages between the existing assets. An extension of Delaine Street to the west, and across the river to Hartford Avenue, would tie new development into the existing commercial corridor. The grand Atlantic Mills building could be opened up to Olneyville Square by an open space setback which would establish a new view corridor between the mill complex and the Square. Enhanced river crossings and a riverwalk would help to reorient the watershed, making it a common seam between new development footprints rather than a barrier that needs to be crossed.

Create a new development configuration for properties adjacent to the river. New roads, or extensions of existing roads could provide multiple benefits: creating new addresses for properties that lack appropriate street frontage or access points and stitching together neighborhoods whose transportation systems have been compromised over time due to one-way circulation patterns or the creation of dead ends. Public infrastructure investments would help to catalyze redevelopment and define parcels whose shape or size limit the ability for the property to be redeveloped.

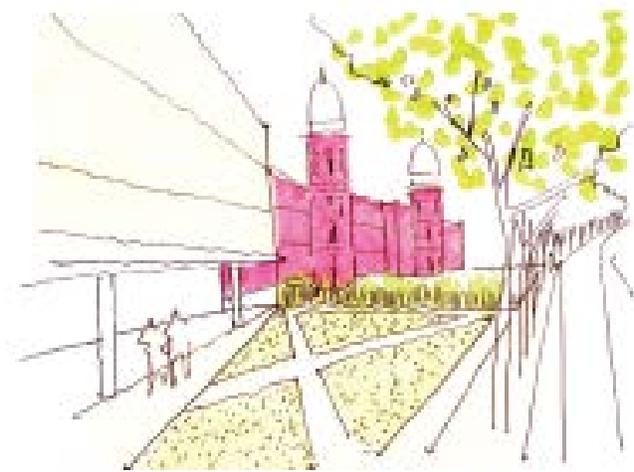
Parcel E is dominated by a large, underutilized surface parking lot and a strip mall that abuts against the river. By extending Delaine Street to the southwest, to meet up with Edna Street, the barrier between the river and the Mill site would open up new opportunities and create a series of smaller-scale development pads. By crossing the river, the street extension would establish a stronger relationship to river. Although the new parcel configurations would be smaller in scale than the current property, the overall building heights for these sites could be larger than those along the rest of Manton Avenue due to their closer proximity to the mill. Greater building height in this location would also serve to underscore the important role that Olneyville Square plays as a gateway to other districts.



Traditional suburban development has proliferated along Manton Avenue, where surface parking lots are placed in front of the buildings which results in multiple curb cuts. This building and site typology should be discouraged and the relationship between the street, parking and building inverted. Building faces should reinforce the street edge with active ground floor uses. What parking is deemed necessary for the site's redevelopment should be located to the rear of the lot. In urban settings, build-to lines are more important to preserve than building setbacks. New zoning for the corridor should reinforce the street wall.

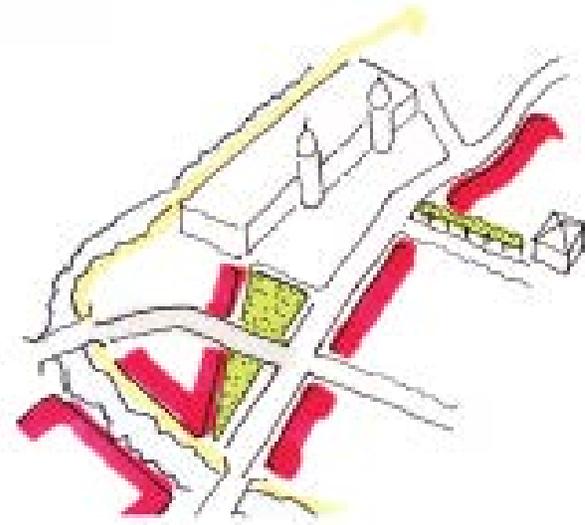
Provide a view corridor to the Atlantic Mills site.

The ability to craft and implement a successful redevelopment program for the existing mills depends as much on the desirability of Lower Manton as a business location as it does on the economics of the properties themselves. The most strategic approach is to build on the area’s assets in the development of a specific brand. The brand should be focused on a specific market niche that is most likely to benefit from the assets of Providence as a whole, and one that is not currently identified with any other area. The reuse of the mill buildings would have a significant and ongoing economic impact on the surrounding area. The mill structures, and the legacy they represent, can be the building blocks for new economic development. New development should enhance the presence of the mill buildings by making them more visible. Parcel E should have a setback that enables a view corridor to be established between Westminster Street and Atlantic Mills.

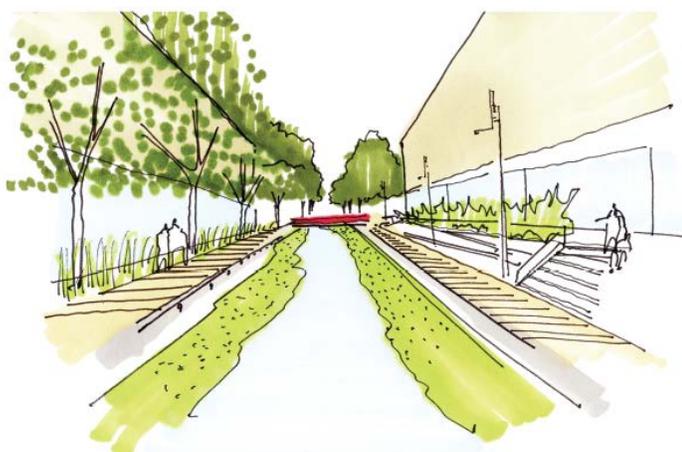


Establish a pedestrian walkway along the river that creates value.

Many towns and cities are focusing once again on waterfronts as hubs for both economic development and recreation. Many places are reinvesting in their rivers, and developing comprehensive river or waterfront promenades that connect neighborhoods to these natural resources. Lower Manton is well positioned to implement a local vision with residential neighborhoods, shops and public transit in close proximity. A well-designed riverwalk can provide for the management, protection, and restoration of local coastal habitats, as well as help guard against flooding. Manton Avenue has recently benefitted from significant



investments in public infrastructure: new pedestrian-oriented street crossings, sidewalks, tree planting and lighting have already stimulated new development and are making the dense corridor a stronger seam for the neighborhood. A continuous green corridor along the river would create a visual, cultural, social and environmental amenity that would offer a competitive advantage to the area.



A continuous Riverwalk along the Woonasquatucket River would enable greater access to the river’s edge, and connect to the area’s industrial heritage. New development with active ground floor commercial spaces can help to bolster the existing retail activity in the area

Lower Manton Avenue Land Use Analysis Recommendations

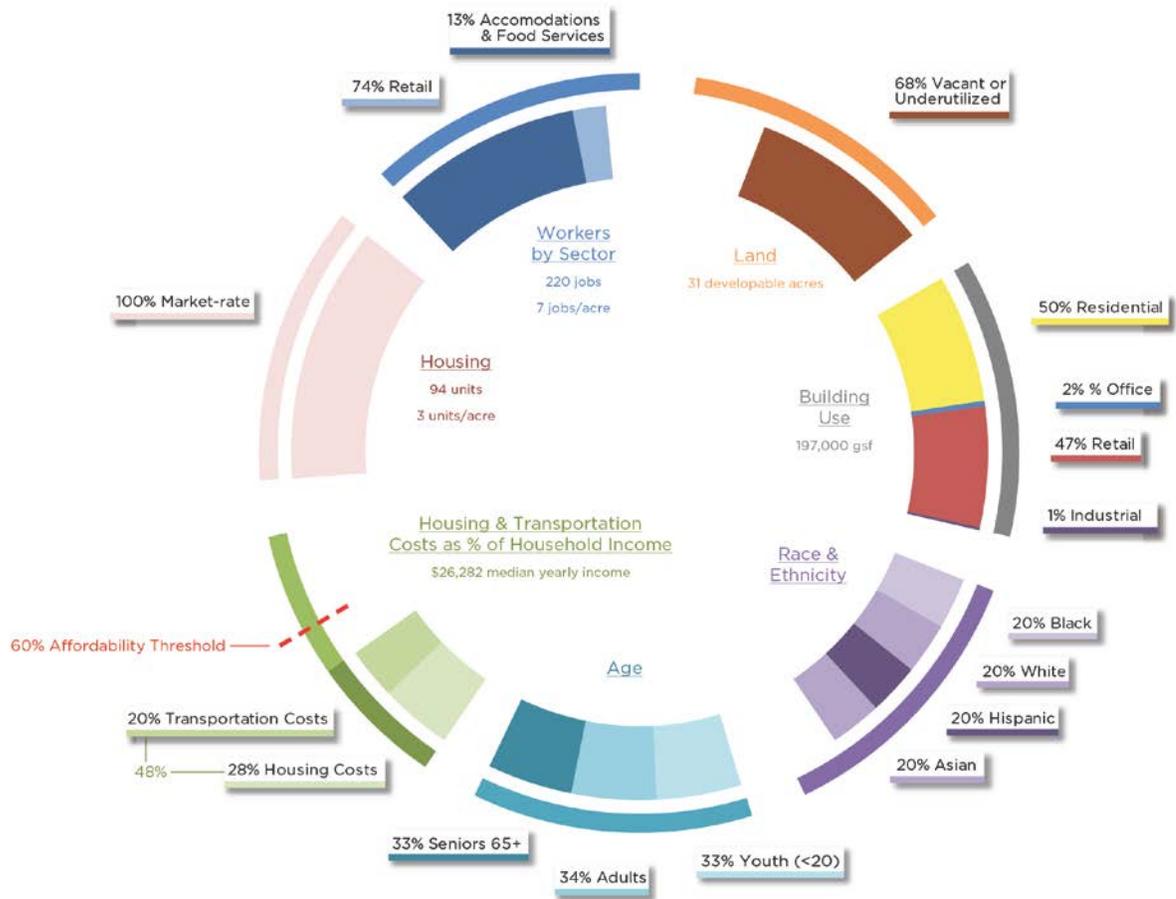
- Begin discussions with DPW and conduct a feasibility study to extend Delaine Street to the southwest to activate the river and better define smaller parcels for future development.
- Adjust the zoning ordinance to reinforce build-to lines for Manton Avenue in order to encourage new development to reinforce the corridor's street edge and encourage developers to locate parking in the rear of buildings.
- Encourage new development to preserve a view corridor to the Atlantic Mills site by adjusting the zoning ordinance to establish appropriate setbacks for parcels in the area to preserve a view corridor.
- Develop a pedestrian walkway along the river; collaborate with the Department of Parks and Recreation and research funding opportunities

UPPER MANTON AVENUE HUB

Located within the Manton neighborhood, the Upper Manton Avenue hub stretches from the southern edge of the Stop and Shop Plaza to the corridor's intersection with Fruit Hill Avenue to the north. The hub currently marks the end of one of the City's primary transit corridors and has strong potential to act as a reservoir for commuters from afar that use public transportation to reach the Downtown. Upper Manton is currently dominated by the Stop and Shop plaza and the large surface parking lot that serves it. A portion of the store serves as a way station for two bus lines - Manton and Chalkstone. As one of the larger sites contiguous along the corridor, redevelopment of the parcel should anticipate and accommodate greater density. The density however, should not come at the expense of open space. As with Lower Manton, recognition of the river can provide a resource for existing and future residents alike. The eastern part of the Stop and Shop plaza - currently a wetland but a former industrial site - offers opportunities for a second phase of growth in the long term.



Upper Manton Avenue Hub at a Glance



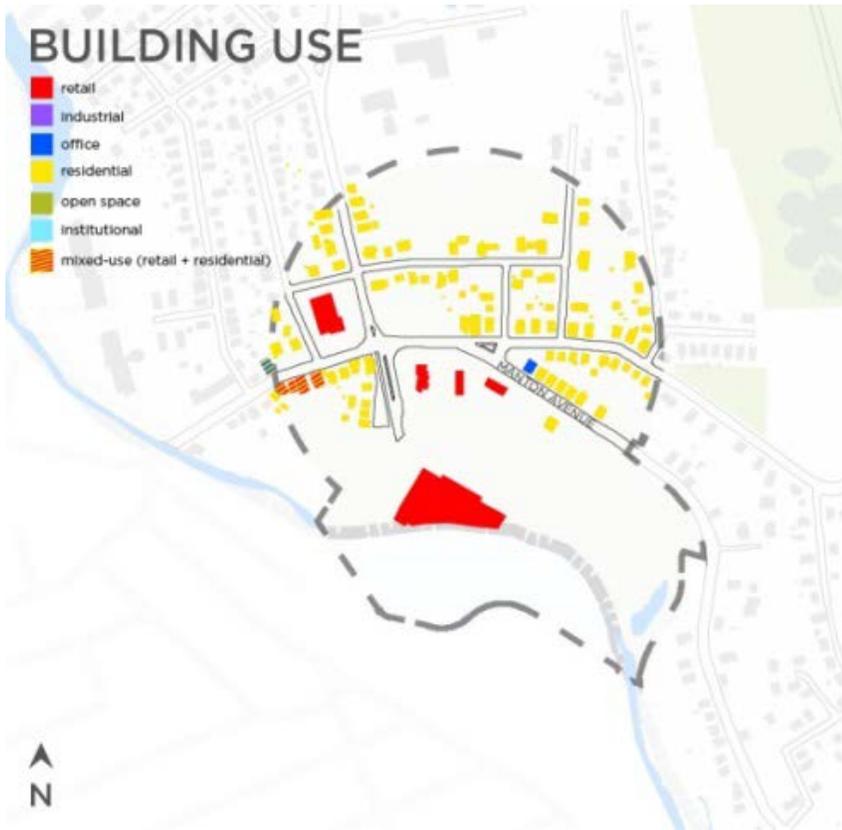
Land area and density calculations are based on net acreage and do not include streets, parks or other right-of-ways. Housing and transportation costs were calculated using the Center for Neighborhood Technology’s Housing and Transportation (H+T*) Affordability Index. Age, race, and ethnicity calculations are based on the 2010 U.S. Census. Employment information was calculated using the Rhode Island Economic Development Corporation’s 2010 employment database. Housing and building use information are based on data collected from the City of Providence Tax Assessor’s Database.

Building + Land Use

Building uses along Upper Manton Avenue are primarily retail and residential with a few office and industrial buildings. While much of the hub is occupied by the Stop and Shop plaza and the large swaths of open space that surround it, the eastern edge of the corridor consists of single-family houses and auto-oriented retail establishments. Some of the corridor’s significant property owners include Calvi Realty Company Inc., George Pesce Li LLC, Green Light Properties, and Johnstons Enterprises Inc.

Housing

There are currently 679 residents within the Upper Manton Avenue hub residing in 94 housing units, all of which are market-rate housing. This translates into a very low housing density of only 3 units per acre.



Employment

Identifying businesses by sector and size creates a snapshot of current employment patterns in the Upper Manton Avenue hub. Approximately 220 people work within this area, over three-quarters of which are employed in the retail; another 13 percent work in the accommodations and food services sector.

Race, Ethnicity + Age

The Upper Manton Avenue hub is extremely diverse in terms of race, ethnicity, and age. Black, White, Hispanic, and Asian populations each represent approximately one-fifth of the total population. Age within the hub is also very evenly distributed with senior citizens, adults, and youth each representing one-third of the total population.



Housing + Transportation Affordability

Despite a fairly low median yearly income, average housing and transportation costs fall below the 60 percent affordability threshold.

Opportunity Sites

Opportunity sites have been identified for future development within the hub by using a three-dimensional build-out analysis of transit-supportive densities. A total of three opportunity sites were identified within the Upper Manton Avenue hub. Future

development scenarios for these sites were carefully evaluated against both the desires of the community and current zoning regulations; where conflicts with current zoning exist, recommendations for adjustment of zoning will be made and will be further explored by the City.



OPPORTUNITY SITE	a	b	c
ACREAGE	0.8	0.7	19.3

TOTAL ACREAGE **20.8 acres**

Key Redevelopment Goals and Opportunities

Invert the current relationship of buildings to the street and encourage shared parking. Regulations that produce suburban building typologies are the result of a number of variables, including dimensional setbacks. When design standards require setbacks on multiple sides of a building, the resulting form that is produced distances the structure from the street. Conversely, a zoning ordinance that preferences street edges results in a more traditional building type, and one which is evident in many historic streetcar corridors throughout the city. New development should preference build-to lines as they help to activate the street.

Parking requirements for residential and mixed use developments are often greater than can be accommodated entirely on site. This is especially true on shallow, small or oddly shaped parcels. The City should reduce on-site parking requirements where practical. Restrictions on providing large quantities of parking while meeting other urban design and development goals signals the essential need to provide for shared parking that can serve multiple uses at different times of the day.

Shared parking facilities should be located on parcels that can serve multiple uses and multiple development projects such as those proposed on Upper Manton. Daytime parking is needed most for commercial uses, whereas peak residential demand tends to occur at times when not as much parking is needed for commerce. While parking is a critical component to development, it should not be the driver, especially in an environment that is striving to enhance transit service. Shared parking lots (or structures) should be created in strategic locations in order for Upper Manton to support redevelopment, be successful as a business district, and retain the continuous urban character that it needs to have as a pedestrian-oriented neighborhood center.

Specifically on Site C, when perimeter buildings are built at the street edge, the center of the site opens up to accommodate parking that can be shared among multiple development projects. Encouraging or providing incentives for construction on the perimeter of the site would both enliven the Manton Avenue edge and allow for a larger parking area that can serve multiple uses in the center. Analysis shows that if standard parking ratios are required, the vast majority of Site C, as well as many others in the study, would be cannibalized just for parking. As a general rule, enhanced transit service assumes a lower demand for cars that increases the possibility for open space or more development to emerge. Given the large size of Site C, and its role as a terminal stop for two bus lines, a parking structure should be considered as part of future redevelopment scenarios. By nesting a parking structure in the middle of the site, the overall scale would be less likely to overwhelm the finer grain, residential fabric that surrounds the site. The fact that Site C and a number of adjacent properties are owned by the same entity could open up the possibility for property aggregation, which would facilitate a larger development project.

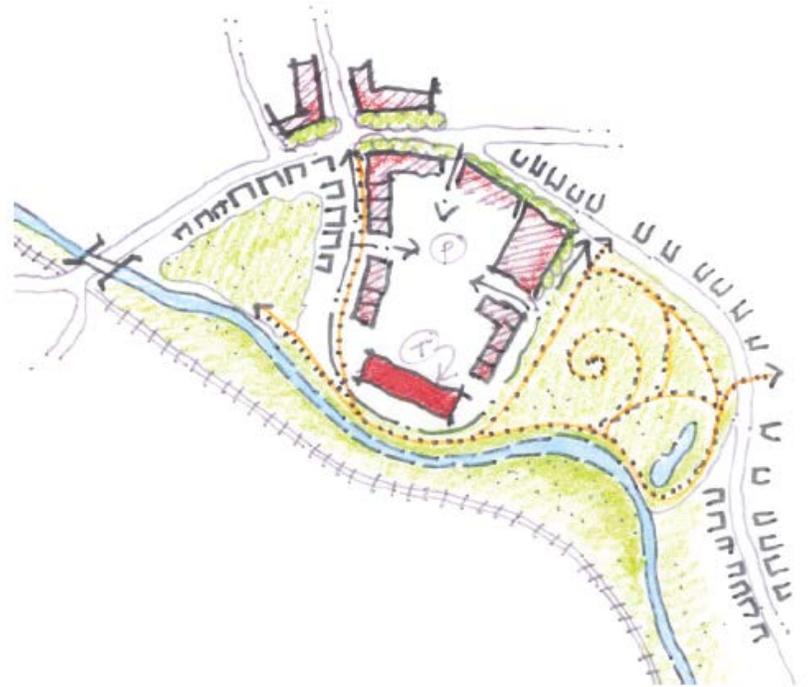


New housing typologies can take various forms, and not be restricted by existing patterns. While much of the Chalkstone and Manton building fabric is single family residential, Site C allows for greater building heights due to its size and relationship to the main corridors.

Establish a landmark campus complex. Site C of the Upper Manton hub is one of the only areas within the corridor that might be adaptable to relatively large-scale retail or commercial investment in the future. The site is also viable for a more robust residential development that could take advantage of views to the river. The confluence of the transit lines, open space and potential parking suggest that a landmark building complex could rise on Site C in the future. A mix of residential, retail and office uses could create a destination development with efficient transit as a magnet. The lower levels of the buildings could also have space for community facilities that meet the needs of transit riders. More than just a large bus shelter, ground floor space in a large development project should anticipate higher ridership counts for the transit line and be appropriately scaled.

Create a new destination park and preserve the opportunity to grow in the future. Palfrey Place is a ring road that surrounds the Stop and Shop plaza, providing multiple points of access into the parking lot and establishing a circuit for the bus turnaround. To the east of this circular drive is a large, open field, which was the site of a former mill. In the near term, an urban wild could be established for this portion of the property that would enhance community health and well-being. The open space could incorporate a river walk component (similar to Lower Manton) that is integrated into the circulation network of the broader district. Parks are catalysts for redevelopment, and they can enhance the value of adjacent properties.

The site could also be a second phase of redevelopment if market forces strengthen. Future development here should enhance views and access to the river. Proximity to the transit line, and relationship to the natural site amenities may make this portion of the site an attractive option for development should remediation on the brownfield site not be a deterrent.



Upper Manton Avenue Land Use Analysis Recommendations

- Encourage the development of a landmark building complex on the Stop and Shop plaza site to take full advantage of confluence of transit lines, open space, and parking; adjust the zoning ordinance to facilitate high density mixed-use development on this site.
- Adjust the zoning ordinance to encourage new development to preference build-to lines to activate the street edge.
- Create shared parking facilities on the Stop and Shop plaza site for future development; adjust the zoning ordinance to reduce on-site parking where practical.
- Provide developer incentives for surrounding the perimeter of the Stop and Shop plaza site.
- Develop a new destination park to the east of Palfrey Place with a riverwalk component; begin discussions with the Department of Parks and Recreation and research potential funding opportunities.
- Adjust the zoning ordinance to encourage new development along the riverfront to maintain and improve access to the river.

Manton Avenue Arts + Cultural Analysis

In order to better integrate art, culture, and heritage into Providence's transportation, land use and economic development planning, cultural planners worked closely with the City of Providence Department of Art, Culture + Tourism and the Department of Planning and Development to identify local cultural resources, engage neighborhood stakeholders in defining distinct attributes of each corridor, and develop strategies to apply cultural solutions that help define places, animate neighborhood hubs, mitigate problems, and inspire creative economic development.

CULTURAL RESOURCES INVENTORY

The City has catalogued existing cultural resources within a quarter mile of the Manton Avenue corridor. This cultural asset catalogue of Manton Avenue inventories the full spectrum of opportunities for cultural participation along the corridor including: the location of nonprofit arts and cultural organizations, performing and visual arts spaces, informal arts programming, public art installations, sites of historical and/or community significance, creative industries, artist housing, and public spaces.

To compile the cultural resource inventory, researchers searched directories, databases, and event calendars to identify and map cultural resources. Directories, databases, and event calendars from the Rhode Island Economic Development Corporation, New England Foundation for the Arts, Rhode Island State Council on the Arts, and the City of Providence Department of Arts Culture and Tourism have been combed in order to identify and map cultural resources along the corridor. An online survey and interviews with stakeholders, focus groups, community leaders, and experts from various fields have also informed the process.¹

Cultural and creative institutions and sites enhance a shared sense that a place is special. Identifying cultural resources was the first step toward identifying a distinctive theme for the corridor and ultimately developing creative placemaking strategies that have the potential to help define transportation gateways and revitalize critical hubs.

Along Manton Avenue, 170 cultural resources were identified. There is a significant contribution of creative businesses, including restaurants, jewelry manufacturers, and artists. There are 23 restaurants and 16 jewelry, glass and metals, stores, supplies, and manufacturing businesses. Additionally, there are 48 historic buildings including Atlantic Mills, several factory-to-loft conversions, and many former factory or mill buildings. The corridor is also home to 11 religious organizations including two large Haitian churches. The corridor was defined by the Woonasquatucket River and this remains a major resource as a natural feature, greenway, and bike path. The river, historic source of power and the obvious industrial heritage, generated the corridor theme, "Creative Energy and Industrial Heritage."

¹ The cultural and creative sectors have been broadly defined using standard definitions developed by the New England Foundation for the Arts. These include resources ranging from arts and cultural organizations, public art, historic buildings and sites, creative industries, artists, parks, cemeteries, schools, local restaurants and food markets, community gardens, schools, religious institutions, and service organizations. Inventory categories were also determined by standardized NAICS (North American Industry Classification System) and NTEE (National Taxonomy of Exempt Entities) core codes.



Significant cultural resources along Manton Avenue include the Atlantic Mills, St. Theresa's Cathedral, and the various murals along the Woonasquatucket River.

Important cultural attractions that should be identified through wayfinding signage include:

- Woonasquatucket River
- Olneyville Square
- Atlantic Mills
- Olneyville New York System
- Aleppo Street gateway to Riverside Park (and other greenway gateways) / bike path
- Parks: Riverside Park, Merino Park, Donigian Park
- Anthony's Drugstore
- St. Theresa's Cathedral
- Fruit Hill

CORRIDOR THEME

Dreeszen & Associates' cultural planning team worked closely with the City's Department of Planning and Development, Department of Art, Culture + Tourism, and five stakeholder committees to develop interpretive themes for each of the five study corridors— North Main Street, Broad Street, Elmwood Avenue, Chalkstone Avenue, and Manton Avenue. The interpretive themes have a placemaking objective; they will contribute to a cohesive visual identity for each of the corridors, connecting people and places along the street in a meaningful way.

In the coming months and years, this theme will help inform local artists as they work to integrate art into bus shelters and other key locations along the corridor. The artistic interpretations of the theme will reflect and reinforce Manton Avenue's unique design and industrial heritage and provide a sense of orientation that connects people and places along the street in a meaningful way. Please note that the above theme is a much-condensed abstract. Artists will be encouraged to study the full report of interpretive themes with detailed explanations of each corridor's interpretive theme.

MANTON AVENUE: CREATIVE ENERGY AND INDUSTRIAL HERITAGE

Manton Avenue was shaped by, and still follows the Woonasquatucket River, which provided water energy for the industrial-age mills on the corridor. Today, a renewed creative energy powers the Avenue's revitalization and industrial structures provide homes for them. Artists may tap ways the corridor's creative energy builds upon its industrial heritage, the river, and waves of immigrants. Its resources suggest continuity as a creative metaphor - flowing river, evolving entrepreneurs, and changing population. Artists should note that residents value both the route's industrial aesthetic and its natural environment.

The themes for each corridor are the result of a broad public participation process that included input from community members at a series of public meetings, online surveys, interviews with local experts, numerous meetings with stakeholder committees for each corridor, a citywide project advisory committee, various focus groups, and City staff members. In addition, the themes are informed by the *Providence Tomorrow* neighborhood plans, corridor exploration, and a review of the cultural resource inventory that was completed for each corridor as part of this project.



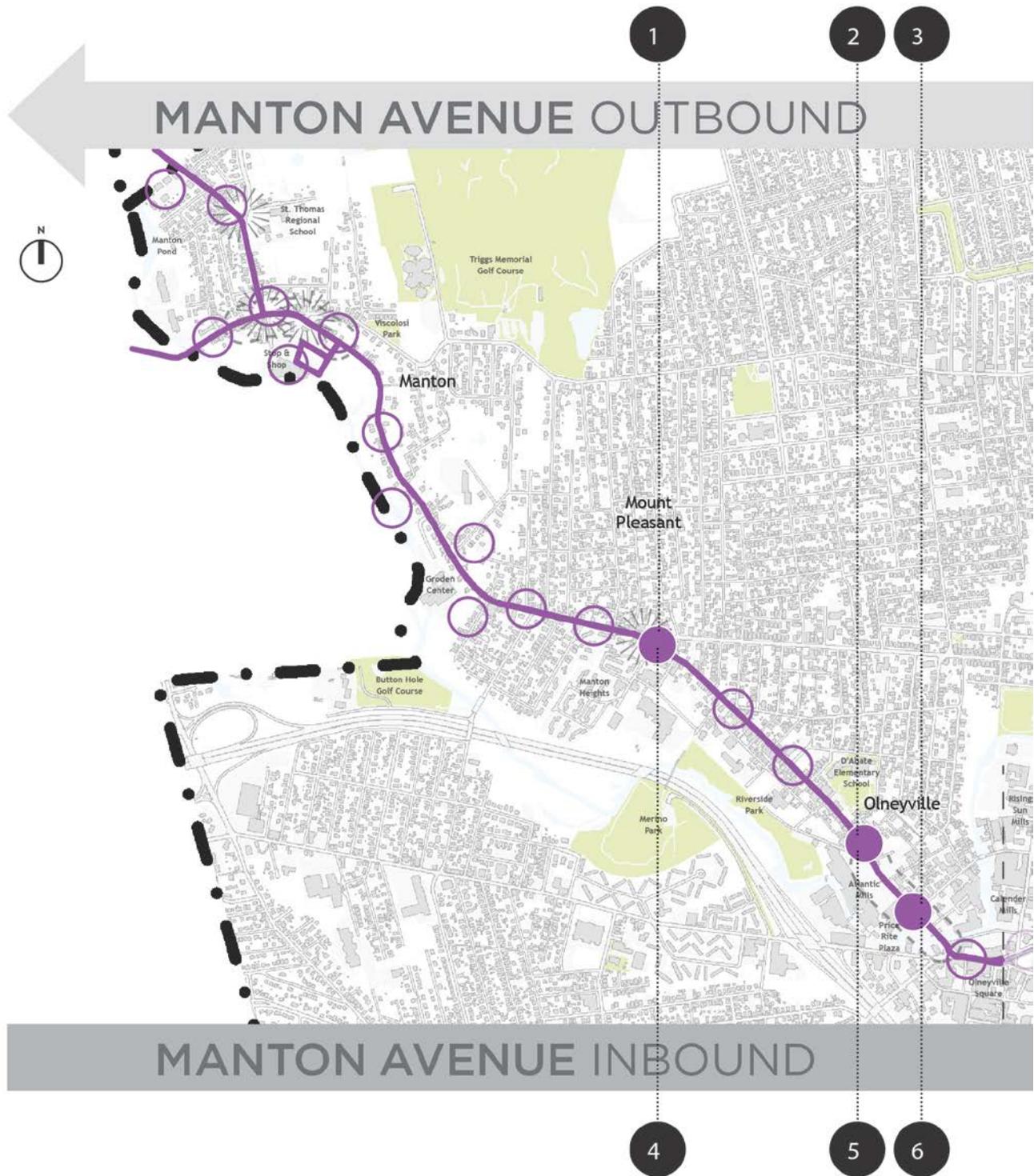
Defining Manton Avenue, the Woonasquatucket River serves as a key natural resource for the corridor.

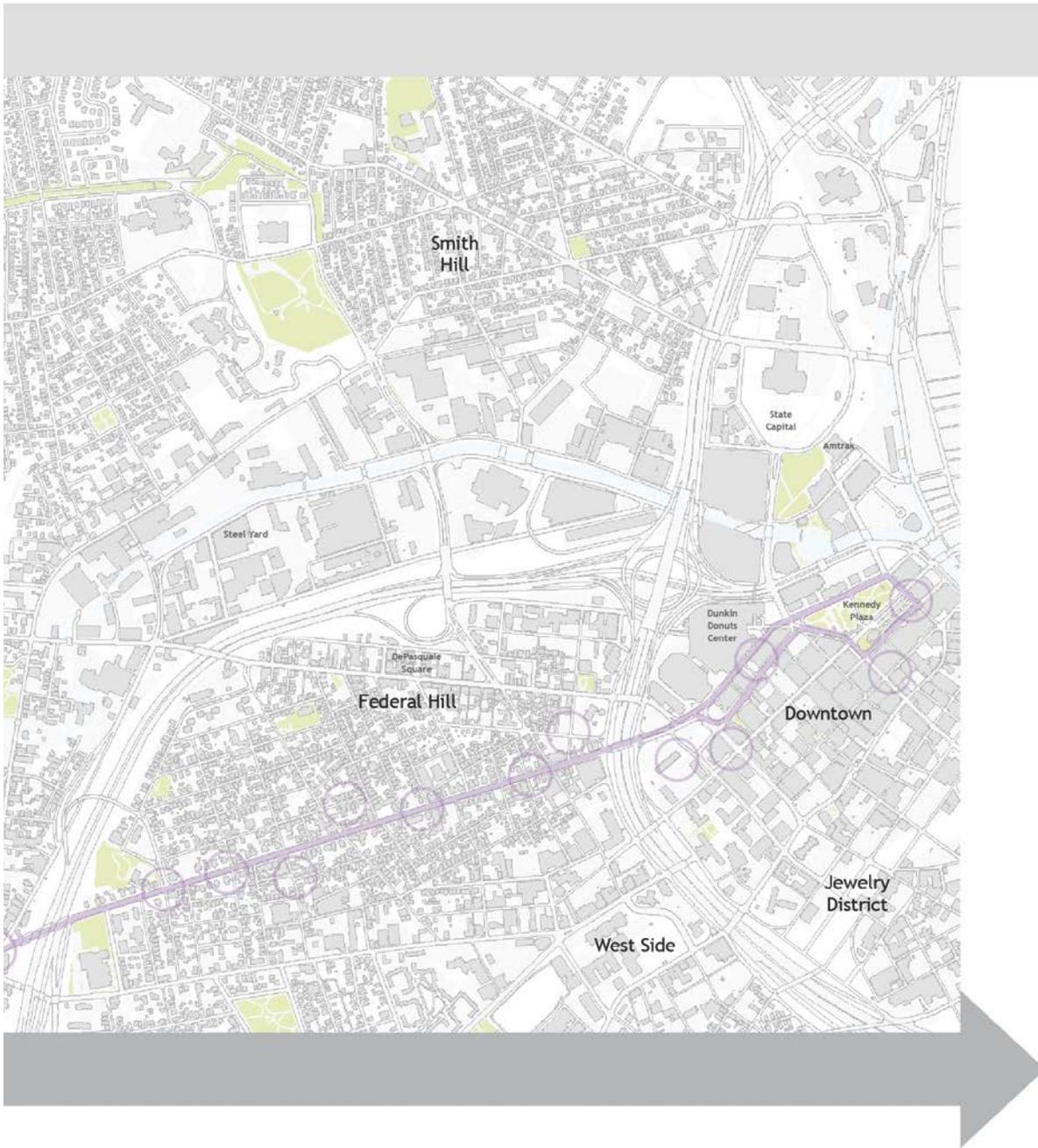
Opportunities for artistic intervention at key bus stops along the corridors have been identified and will be developed in conjunction with bus shelters either as a component of a prefabricated bus shelter (side panel, back panel, or column) or as a free standing seating element. The artistic interventions will replace specific manufactured components of the shelter to seamlessly blend public art with new infrastructure. Artists will be required to incorporate and adhere to several criteria including the themes that have been established for Manton Avenue. As both an art object and a transit amenity, the shelters will encourage the use of the public transit system and celebrate the unique identity of these important commercial, cultural and historic neighborhoods.

In addition to the shelter locations, several areas have been identified along Manton Avenue as important community gateways. These significant wayfinding and transition points present opportunities for special treatments that highlight their symbolic importance, improve the pedestrian environment, and reinforce each neighborhood’s unique identity. The following gateway sites have been recommended for additional stand-alone pieces of art that will help contribute to the overall identity of the corridor and reflect the interpretive theme:

- Aleppo St gateway
- Olneyville Square
- Woonasquatucket River

The City will work to identify possible funding sources to hire artists to design and install stand-alone pieces of art at the recommended gateway sites.





1 ATWELLS Outbound
Back Panel

2 ALEPPO Outbound
Back Panel

3 DELAINE Outbound
Back Panel

4 ATWELLS Inbound
Back Panel

5 ALEPPO Inbound
Back Panel

6 DELAINE Inbound
Back Panel

**Proposed sites for
art work along
Manton Avenue**

ARTS + CULTURAL PLANNING RECOMMENDATIONS

Dreeszen & Associates' cultural planning team met with City of Providence Art Culture + Tourism and Planning and Development staff, project advisors, and stakeholder committees to develop strategies to employ arts, culture, and heritage to improve livability, prosperity, and public access to arts and entertainment along the five corridors. Recommendations also build upon *Creative Providence: A Cultural Plan for the Creative Sector*, *Providence Tomorrow* neighborhood plans; and other plans including RIPTA's *Metropolitan Transit Enhancement Study*, and specific district plans. Recommendations are based on assets identified in inventories of cultural resources and the interpretive themes and artist guidelines for each corridor. The following arts and cultural strategies were tailored specifically to meet the project objectives of integrating transit, housing, economic development, and arts and cultural activities at the two identified hub locations.

Lower Manton Avenue Corridor Arts & Cultural Opportunities Analysis Recommendations

- Use the Creative Energy and Industrial Heritage theme in branding, banners, and wayfinding, as recommended in the 2011 ULI study.
- Use a subcommittee to research best practices for artist live/work housing with goal of creating opportunities for safe and legal live/work spaces. The cultural inventory identified relatively few artists living on the Manton Ave. corridor. Anecdotal evidence suggests there are significantly more living and/or working in the community.

Examples:

- *Emma Gifford Howard's Working Like An Artist: Providence's Industrial Arts Uses And Development Process (2008) and update recommendations as appropriate to current conditions.*
- *Recent study of artists live work spaces and their impacts on artists and on the communities around them: <http://metrisarts.com/recent/>*
- Allow upper story living or live/work space zoning in Olneyville, to protect and create jobs and allow mixed uses above storefronts and other retail-capable buildings.
- Identify opportunities for further development of creative sector incubator spaces in some of the many industrial buildings in the area.
- Support development of legally-permitted live music and entertainment venues.
- Encourage community gardens, sustainable landscaping, to advance the City's environmental goals.
 - *Example: Star Works, a creative incubator space in North Carolina focuses on new businesses addressing the creative, agricultural and alternative energy needs of its region: <http://www.starworksnc.org/>*
- Encourage cultural organizations and business associations to produce special events in under-used open spaces in the Lower Manton hub to animate under-used spaces as recommended in ULI study.

Upper Manton Avenue Corridor Arts & Cultural Opportunities Analysis Recommendations

- Encourage food service businesses along the greenway. Stakeholders believe that seasonal coffee, sandwich, and ice cream shops could succeed along the bike path. Nearby Rhode Island College students and others who use the bike path may be encouraged by such attractions to venture further along the greenway.