

RECOMMENDATIONS GUIDEBOOK

FINAL

October 2015

Submitted for: City of Stamford, CT 🐌

Submitted by: Fitzgerald & Halliday, Inc. in

In association with: Ninigret Partners 🔀



ACKNOWLEDGEMENTS

Project staff for the Stamford West Side Transportation Plan gratefully acknowledge the contributions of time and insight provided by members of the West Side community that were integral to the development of this Plan. The team also greatly benefited from the guidance and feedback received from the Steering Committee that was formed for this project. If this plan proves a success, it is a testament to the community's collective contributions across an extended series of meetings, presentations, workshops, and discussions.

TABLE OF CONTENTS

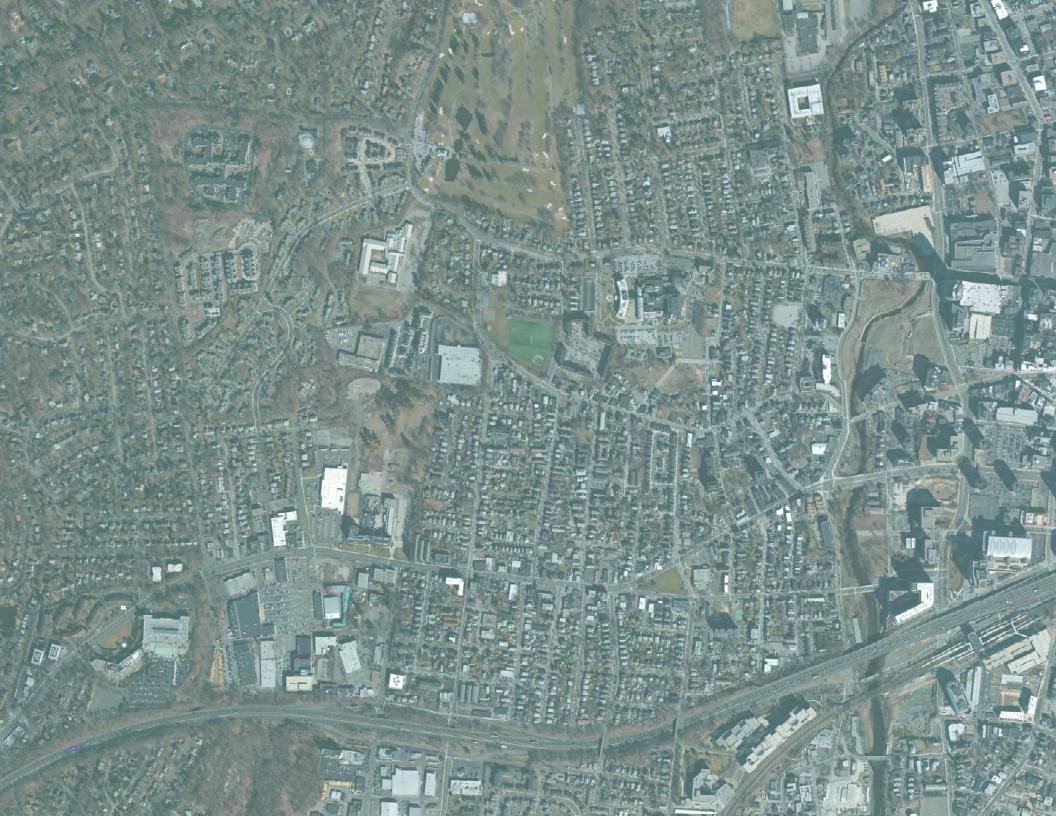
1. Introduction

- A. Vision
- B. Market
- C. Transportation

2. Blueprint for Placemaking

- A. Approach (3-tiered)
- B. Safety Recommendations
- C. Accessibility Recommendations
- D. Marketing Recommendations

3. Summary



INTRODUCTION

This is not the first time a plan has been prepared for the West Side neighborhood in Stamford, CT. In fact, many terrific plans have preceded this and given the neighborhood's recent development successes, many more are sure to follow. This plan does not attempt to reinvent those prior efforts. Instead, it aims to build upon that work and add a layer of detail and focus to areas only previously addressed in general.

The catalyst for the planning effort is the expansion of the Stamford Hospital and associated redevelopment activities by Charter Oak Communities along the Stillwater Avenue corridor. The resource was a U.S. Department of Housing and Urban Development (HUD) grant obtained by the City of Stamford.

What follows in this report is a summary of key findings from the study effort and a 'Blueprint for Placemaking' detailing actions to be undertaken by the City of Stamford that both complement and augment the current development program along Stillwater Avenue.

FarmJam Public Outreach Event



April 1, 2015 Public Meeting Series



April 1, 2015 Public Meeting Series



FarmJam Public Outreach Event

VISION

The elements of a neighborhood vision were born from a series of prior planning efforts, including:

- City of Stamford Zoning Regulations
- Stamford Master Plan 2002
- Stamford Master Plan 2002 Citywide Policies Report (October 2002)
- City of Stamford Streetscape Guidelines (May 2003)
- Stillwater Avenue Corridor Study: Implementation Strategy (2010)
- Stamford Transportation Center Plan 2010
- Stamford Master Plan 2002: Sustainability Amendment (December 2010)
- US Route 1: Greenwich/ Stamford Operational Improvements Study; Volume 1: Existing Conditions Report (October 2010)
- US Route 1: Greenwich/ Stamford Operational Improvements Study; Volume 2: Public Involvement (May 2011)
- US Route 1: Greenwich/ Stamford Operational Improvements Study; Volume 3: Future Conditions and Implementation Plan (October 2011)
- Stamford Neighborhood Traffic Calming Report (2012)
- Stamford West Side Neighborhood Plan (January 2012)
- Bicycle-Pedestrian Safety Corridors Study (June 2012)
- Traffic Evaluation: Park Square West; 2012 Redevelopment Plan (July 2012)
- Vita Health & Wellness District Report (2013)
- Stamford Master Plan 2015- 2025

A set of guiding principles was derived from these plans and additional public outreach was performed to confirm and crystallize a concise vision for the neighborhood.

The guiding principles are as follows:

- 1. Improve intra-city mobility for all modes: vehicles, transit, pedestrians and bicyclists. Make safety highest priority.
- Improve connectivity between Downtown, the South End, the Stamford Transportation Center and the West Side
- Streetscape improvements and signage should invite people to walk and ride bikes as part of their daily routine. Foot traffic that will facilitate success for retailers should be encouraged in commercial areas
- 4. Improve north-south connections including Mill River Greenway

The Vision statement for the West Side neighborhood is



"The West Side will be a compact & well-connected neighborhood that will offer the ability to safely and efficiently walk, bike, drive or take transit to and from the neighborhood's abundant quality housing, jobs, shopping, dining, recreation, and health-related services."

While this plan addresses the entire West Side neighborhood in general, the Project Steering Committee (SC) determined that special emphasis and focus be placed on the Stillwater Avenue corridor.

The following statement was compiled from the multitude of resources that were studied in the early phases of the project:



"The Stillwater Avenue Corridor will strengthen its role as a vital contributor to the civic and economic life of the City. It will keep its rich identity that grows from its multicultural population. The Corridor should also become an excellent location for a variety of professional medical services and related offices and businesses that can take advantage of adjacency to the Stamford Hospital campus and enjoy the advantages of an accessible and attractive urban setting. This could include facilities that support fitness, wellness and community health needs."

Given the considerable investment being made along Stillwater Avenue, it is prudent that the City of Stamford coordinate a transportation strategy that serves the new development while also improving the way people currently move around the neighborhood. This plan will provide guidance on how best to do that, taking into consideration financial and practical limitations. This report details the recommendations made by the Study Team and approved by the Steering Committee. The plans provided herein do not represent final engineered designs, but rather a conceptual blueprint informed by the guiding principles listed above and compatible with the neighborhood Vision.



Stillwater Ave, traveling east and between Virgil St & Liberty St



Stillwater Avenue, traveling east and approaching Finney Lane



Recent development and streetscape improvements on Stillwater Avenue, across the street from Fairgate Farm



An example from "Vita Health & Wellness District 2013 Report" of the Stamford Hospital's \$450 million expansion with construction expected to be complete in 2016 (Image credited to WHR Architects)

MARKET

Prior economic research suggests that the West Side neighborhood can support an additional 500,000 square feet of residential, 17,000 square feet of office and 59,000 square feet of retail space. The anticipated development would require an additional 229 parking spaces.

These estimates were adopted as an assumed growth scenario for the purposes of this planning effort. A fundamental question to be addressed is:

How much of this potential development can current market conditions support?

Stillwater Avenue Corridor Building Program: Floor Area (Gross Square Feet)

	Residential			Commercial/ Other				
	Apartments	Townhouses	Total	Retail	Office/ Other Commercial	Institution	Total	Totals
Total existing building area *, **	396,000	223,000	619,000	124,000	175,000	56,000	355,000	974,000
Approximate building area to remain	258,000	145,000	403,000	21,000	139,000	56,000	216,000	619,000
Estimated prospective new uses	358,000	358,000	716,000	163,000	54,000	0	217,000	933,000
Total estimated new building area	615,000	503,000	1,118,000	184,000	193,000	56,000	433,000	1,551,000
Net estimated future new building area	220,000	280,000	500,000	59,000	17,000	0	76,000	576,000

^{*}Information from City of Stamford G.I.S. database and The Cecil Group analysis

Off-street parking program*

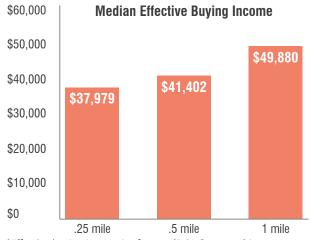
Estimated New Residential Parking**	Parking Spaces			
Apartments	229			
Townhouses	229			
* Projects are predominately mixed use and allow shared parking options				

^{*} Projects are predominately mixed use and allow shared parking options Residential parking proposed at 1 per unit

^{**}Existing floor areas rounded to the nearest 1,000 GSF

^{***}Net Futures New Building Area takes into account the replacement of existing building area with new structures

An analysis of current market characteristics was undertaken to gain perspective on the proposed development agenda. Using a focus area for the new development along Stillwater Avenue near the Stamford Hospital, it is estimated that effective buying income within easy walking distance (about ¼ mile) of the focus area is relatively low. However, the median effective buying income increases significantly at greater distances.



*Effective buying income is after tax (FICA & Income) income NOTE: this is income before housing costs

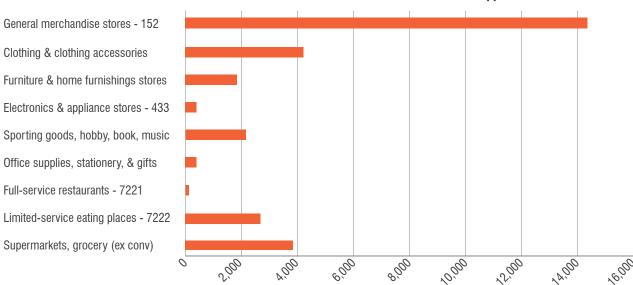
An estimate of unmet sales demand within ¼ mile of the focus area suggests that the neighborhood could potentially support approximately 30,000 square feet of additional retail development.

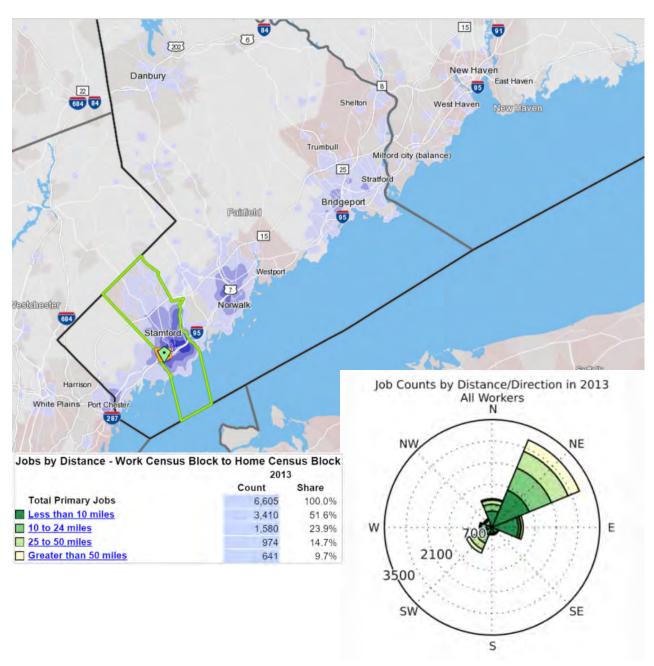
Because the development program envisioned for the Stillwater corridor anticipates 59,000 square feet of retail, the additional 29,000 square feet would require approximately \$9 million in additional spending power. At current income levels in the neighborhood, this additional spending power requires around 330 to 350 additional households and/or a greater capture rate of pass-by traffic, including cars, pedestrians, and bicyclists.



An example from "Vita Health & Wellness District 2013 Report" of a potential multi-use building on Stillwater Avenue that could house the new Vita Health Sciences Institute.

Unmet Demand 1/4 Mile - Translation to Supportable Retail





Work Trip Distribution

TRANSPORTATION

Another way to think about the question of potential development is how much is supportable based on available transportation capacity and accessibility? To begin to answer this question, travel characteristics of the neighborhood should be understood.

Approximately 6,600 work trips are destined to the West Side neighborhood each day. The Stamford Hospital is a large employer, which imports much of its labor force from beyond the neighborhood. According to the US Census Bureau, roughly ½ of all the work trips travel from places under 10 miles from the neighborhood. Another ¼ of all work trips originate from locations from Norwalk to Bridgeport, and the remaining ¼ are longer distance trips from central CT and beyond.

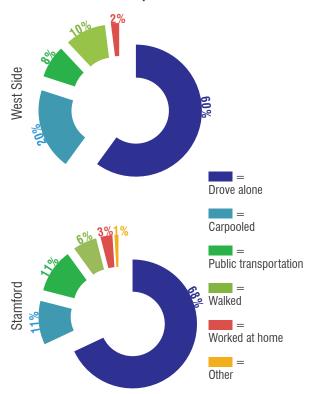
Most of the work trips into the West Side are made by car or public transit. The West Side enjoys close proximity to the Stamford Transportation Center, and is a 15-minute walk into the neighborhood. Connecting bus service from the STC is also available, although service is relatively slow and infrequent.

For the roughly 4,000 work trips that originate from the West Side and travel to jobs outside of the neighborhood, travel modes are much more nuanced. For instance, walking accounts for 10% of work trips, compared to about 6% for the City of Stamford as a whole. Carpooling is also more prevalent in the neighborhood, with about 20% of work trips via car carrying more than a single occupant; this compares to 11% city-wide. Public transit, on the other hand, is lower for work trips from the neighborhood than for the city as a whole, with 8% of work trips by transit versus 11%.

Travel characteristics inform our understanding of how people choose to get around, which is critical to planning transportation systems for the future.

In Stamford's West Side, streets accommodate the vehicular traffic reasonably well for much of the day. Traffic analysis indicates that during the busiest times of day, such as around 5:00 PM, streets such as West Avenue, segments of Stillwater Avenue, West Broad Street, and West Main Street all experience traffic congestion. Vehicular traffic moves across the Mill River freely enough, but certain intersections within the neighborhood routinely contribute to traveler delay during busy times of the day. This is relevant because future development pressure will contribute additional travel demand, and how this demand is accommodated is the basis for this planning effort.

Mode Share for Work Trips



If the desired development baseline previously described becomes reality, and assuming a large percentage of new trips are made by car, then traffic conditions in the neighborhood will continue to degrade causing increased driver frustration and potentially discouraging new customers from coming to the West Side. Just as existing socioeconomic conditions threaten the viability of the development plan, so does the prospect of poor access to the transportation system.

Designing streets to simply move more cars is not an appropriate solution to the problem. There are many reasons for this including:

- Limited room to expand streets and intersections
- High pedestrian activity
- Incompatibility with neighborhood context
- Limited parking supply

In fact, traffic analysis indicates that if all new trips into the neighborhood are made by car, traffic congestion will result in undesirable delay for motorists, and potentially render some of the recommended improvements in the plan unworkable. In particular, the intersections of Stillwater Avenue at Smith Street and at West Street will be unable to process the forecasted traffic volumes. It has been determined that at least 15% of all new trips generated must be made by either walking, biking, or public transit.

Encouraging more walking and bicycling in Stamford's West Side will require thoughtful design and supportive policy. The plan must prioritize safety for all people first, and improve accessibility to key destinations within the neighborhood. Only such an approach will lead to long-term sustainable outcomes for development growth, transportation efficiency, and neighborhood livability.



Eastbound on Stillwater Ave, between West Ave & Merrell Ave



Mill River St, traveling south & approaching Smith St



Stillwater Ave, northern sidewalk between Spruce St & Alden St



Potential Shopping Shoppers Buyers Opportunities Customer Pool

City of Stamford can influence by:

- Accessibility · Traffic flow
- Aesthetics
- Programming
- Safety
- Housing Policy
- Zoning & Parking
- Property Taxes
- Recruitment
- Visibility

In the hands of the retailer

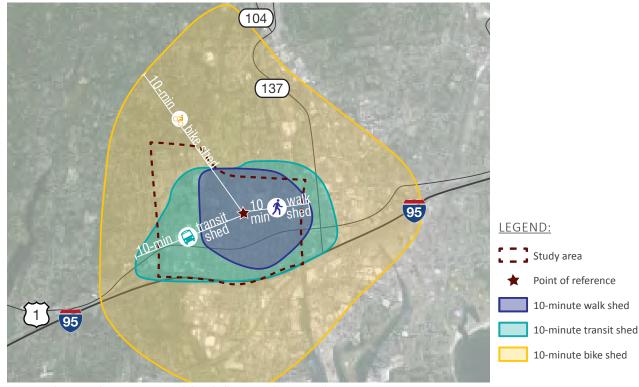


Diagram depicting the existing accessibility challenges in the West Side

Ultimately, success for the retail component of the development program requires access to a customer pool. Potential customers shop, and some become buyers, which is the final step in the retail sales generation chain. While there is little the City of Stamford can do to influence people to shop at West Side retail establishments and buy their products (that is up to the retailer), they can help increase the potential pool of customers and provide opportunities that encourage people to shop.

It is generally believed that customers within a 10 minute travel distance are most likely to be influenced. From a point at the focus area of Stillwater Avenue, a 10 minute walk or bus trip barely gets a person to the edges of the neighborhood. This is important because the median effective buying income increases significantly at distances of ½ mile to 1 mile. Capturing those potential customers is one way to support additional retail development. Bicycling can reach such distances, and certainly automobile traffic as well; however, walking and busing are not realistic options for covering those distances for most people.

The transportation solution for the West Side neighborhood must improve accessibility to all people and modes of transportation. A few fundamental principles should guide the specific solutions:



Walk: Needs to be safe and comfortable



Bike: Needs to provide parking and street space



Transit: Needs to be frequent & fast, with walk connections



Drive: Needs to provide parking & good walk connections

The bottom line is all trip types require some degree of travel by foot, so improving the pedestrian experience is the keystone of the plan. This all begins with safety.

The Stamford Street Smart Initiative, launched in September 2014, is a citywide public safety and awareness campaign in the City of Stamford. The initiative is focused on the three key areas of enforcement, engineering and education. The initiative is being led by Mayor Martin, in collaboration with the Police Department, Operations Department, Stamford Public Schools, and community organizations.

This plan's role in the Street Smart initiative is to influence engineering. With pedestrian-friendly design, and by lowering the speed of vehicular traffic, the West Side neighborhood can become a safer and more inviting place to walk. For this reason, safety was designated as the highest priority for transportation changes in the neighborhood.



Proposal set forth by Vita Health & Wellness District of view looking north on new Finney Lane



PUBLIC SAFETY & AWARENESS CAMPAIGN

STAMFORDCT.GOV/STREETSMART

Stamford Street Smart Initiative Logo and Campaign



BLUEPRINT FOR PLACEMAKING

At its core, this plan is about Placemaking. It provides a blueprint for transportation projects that can influence market conditions, support developmentopportunities, and improve quality of life for the neighborhood's residents, employees and visitors. It accomplishes this by making travel options safer and more convenient, and enhancing the overall experience of the neighborhood.



APPROACH

The plan developed for the West Side is based on a 3-tiered implementation model derived from the Vision and the market and transportation needs assessment.

The foundational tier is all about safety. Pedestrian and bicyclist safety must be made the highest priority in order to foster a comfortable and appealing place for both residents and visitors.

Following safety, accessibility is the key to unlocking the development potential of the neighborhood. All transportation modes must work together to offer a balanced system that will accommodate future growth in travel demand.

Finally, marketing is essential to increasing the visibility of the neighborhood and attracting home and business owners, as well as a more robust customer pool.

Each recommendation included in this Blueprint for Placemaking contain plan implementation elements such as order-of-magnitude cost estimates, expected timeline, and resource documents. Please note that the order-of-magnitude cost estimates are based on planning-level analysis and reflect year 2015 dollars. More detailed engineering may result in different project costs.

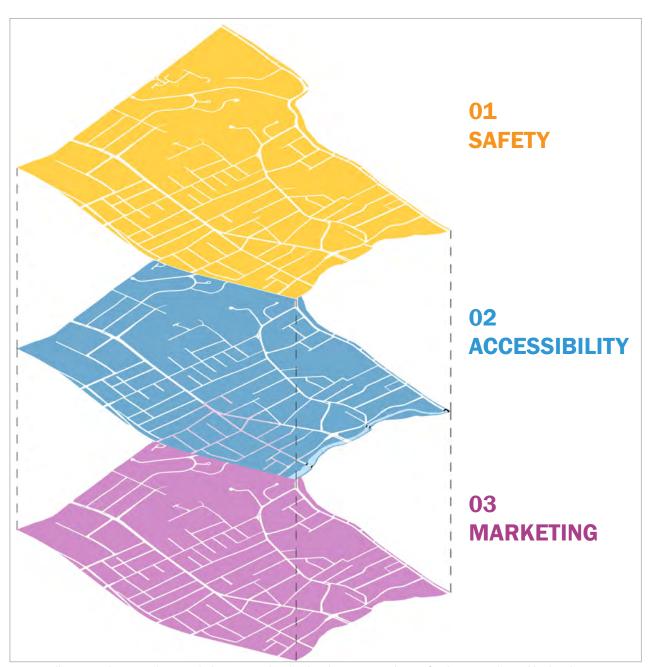


Diagram illustrating the 3-tiered approach that was used to develop the recommendations for the West Side neighborhood



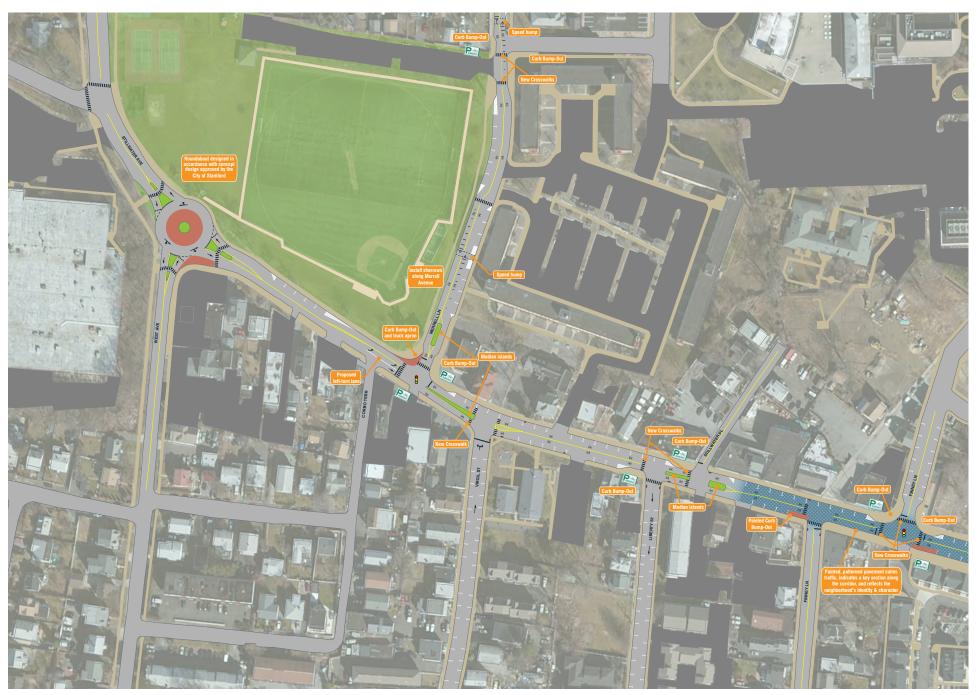




SAFETY RECOMMENDATIONS

Safety is at the core of a neighborhood revitalization strategy. Designing around pedestrian mobility is an essential first step toward achieving the vision, and making streets safe and comfortable for people of all ages and abilities must be prioritized. Cleanliness and security must be maintained to attract visitors from outside of the neighborhood.

Safety Recommendations along Stillwater Avenue









1.1 Daylighting intersections and installing curb extensions along Stillwater Avenue will enhance multi-modal safety by...

- Increasing pedestrian visibility
- Increasing sight lines for vehicles at cross streets and driveways
- Shortening pedestrian crossing distances
- Protecting parked cars
- Slowing traffic by narrowing the street

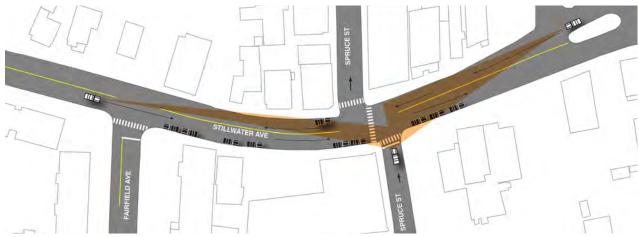
The Challenge

Stillwater Avenue is a mostly straight 2-lane street with approximately 40' between each curb. The street, in general, has between a 2% and 3% grade, and Smith Street at the eastern end of the corridor is closer to a 41/2% grade. On-street parking is permitted on both sides of the street; however, some motorists' park too close to the intersection, inhibiting sight lines and contributing to a potentially unsafe condition. While regulations prohibiting parking at intersections do exist, they aren't strongly enforced.

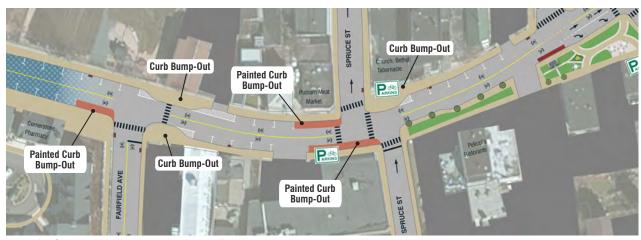




Despite signage, cars park right up to stop line on Stillwater Avenue



Sight line triangles for vehicle departing from side street



Example of proposed curb extensions along Stillwater Avenue



The Solution

Utilize the parking lane to extend curbs out to meet the travel lanes at select intersections. Construct corner bump-outs so that parking is prevented at least 75' from intersection. Install new pedestrian curb ramps and stripe cross-walks. Where catch basins exist at corners, corner bump-outs may be painted to avoid relocation of drainage infrastructure.



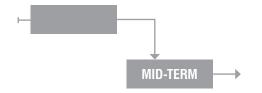




Costs



Timeline



Resources



- CTDOT Highway Design Manual: http://www.ct.gov/dot/lib/dot/ documents/dpublications/highway/ cover.pdf
- NACTO Urban Streets Design Guide: http://nacto.org/publication/urbanstreet-design-guide/



1.2 Installing traffic calming features along Merrell Avenue will...

Control speeding along the street

- Make bicycling along the street safer
- Increase pedestrian safety and access to the park

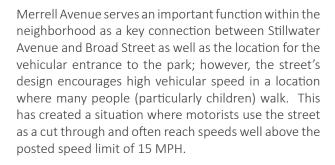
The Challenge



Merrell Avenue, looking north



Merrell Avenue at entry to park, looking south



There is no distinct signage to identify the entrance the park, making it hard to find and missing an opportunity to celebrate the park as an asset within the neighborhood.



Vehicular entrance to Lione Park from Merrell Avenue



The Solution

Modify street width, vertical deflection, and centerline deflection to discourage speeding. This is to be done via a combination of median islands, curb bump-outs, speed humps, and offset on-street parking to vary centerline. Install signage to designate bicycle route and identify park entrance.

- Speed hump installation
- Alternating on-street parking to create a 'chicane'
- Attractive wayfinding signage for the park and bicycle route

JAMES HUNTER

Example of signage at James Hunter Park in Arlington, VA



Example of parabolic speed hump in Redmond, WA

Timeline

Costs

SHORT-TERM

\$16,000

Resources



- FHWA Manual on Uniform Traffic Control Devices (MUTCD)- 2009 ed. with revisions 1 & 2 incorporated, dated May 2012: http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/ pdf index.htm
- Stamford Neighborhood Traffic Calming Final Report: http://www.stamfordct. gov/sites/stamfordct/files/file/file/final report formatted.pdf



Proposed traffic calming concept plan for Merrell Avenue



1.3 Improving the safety of Stillwater Avenue adjacent to the park through innovative intersection design aims at...

- Reducing the number and severity of vehicular conflicts
- Slowing traffic speed, which improves safety for all modes
- Increasing traffic capacity to accommodate expected rise in traffic demand due to nearby planned development
- Providing the opportunity for landscaping features, which serve as visual cues to encourage motorists to slow down and an attractive gateway to the west Side neighborhood

The Challenge

Currently the geometry of the West Avenue and Merrell Avenue intersections with Stillwater Avenue provide excessively large corner radii which encourage vehicular speeding and potentially unsafe conditions for pedestrians. As both Stillwater and Merrell flank the park on its south and east sides, the presence of pedestrian activity warrants the prioritization of safety measures aimed at slowing vehicular traffic and increasing pedestrian visibility.



Lione Park

Benefits of Roundabouts



Reduce frequency and severity of crashes

Up to 80% reduction in injury crashes and 40% reduction in all crashes when intersections are converted to roundabouts. i



Reduce Traffic Delays, Increase Traffic Capacity

Roundabouts can result in approximately 90% reduction in traffic delays. ii



Reduce excessive traffic speeds while maintaining traffic flow

Designed properly, a roundabout reduces speeds and can be implemented as part of a broader traffic calming scheme. The low-speed environment also enhances the intersection for non-motorized users.



Provide an attractive gateway feature to the neighborhood

Roundabouts provide opportunities for landscape and aesthetic improvements that can enhance and define corridors, cities, and tourism.



More environmentally-friendly due to less vehicle emissions, fuel use and noise

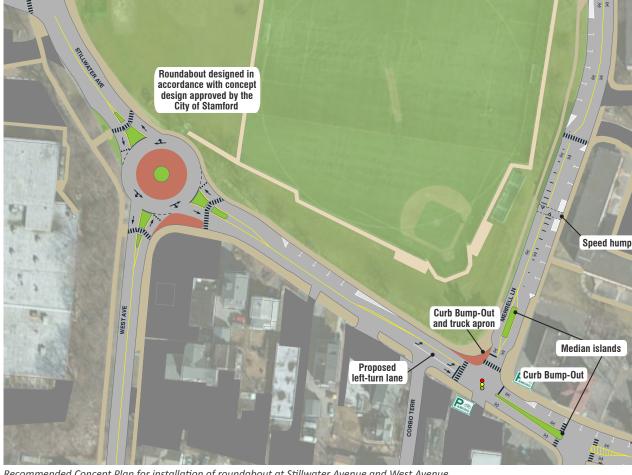
Roundabouts have been found to result in reductions between 30-40% in harmful emissions and fuel savings of up to 30%. iii

The Solution

A roundabout at Stillwater Avenue and West Avenue, coupled with an eastbound left turn pocket at Merrell Avenue, provide sufficient capacity along this segment of Stillwater Avenue while also improving safety by managing vehicular speed and turn conflicts. Curb bump-outs at Merrell Avenue, in concert with traffic calming measures along Merrell Avenue, serve to slow turning vehicles and reduce pedestrian crossing distance at the intersection.



Rendering of the proposed Stillwater Ave & West Ave roundabout



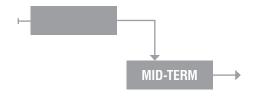
Recommended Concept Plan for installation of roundabout at Stillwater Avenue and West Avenue

Costs



- Estimate includes installation of a left-turn lane onto Merrell and new signal face
- Roundabout cost has been provided by the city as this is a future city project

Timeline



Resources



• NCHRP Program Report 672 -Roundabouts: An Informational Guide Second Edition, FHWA: http:// onlinepubs.trb.org/onlinepubs/nchrp/ nchrp rpt 672.pdf



1.4 Reconfiguring Boxer Square will reduce motorists' confusion at the intersection, increase safety for all modes, and improve neighborhood aesthetics by...

- Realigning traffic lanes to provide a more direct and natural travel pathway
- Extending the curb to create a public plaza that celebrates the boxer statue currently located in the middle of the island
- Providing a designated space for buses to stop reducing congestion & providing enhanced transit amenities
- Installing a right-turn only pocket from Stillwater turning south onto Stillwater to maintain flow of traffic

The Challenge

The intersection of Stillwater Avenue and Smith Street is one of the focal points along the corridor. An assortment of commercial activity lines the intersection. and the westbound one-way configuration of Smith focuses traffic along a 'dog-leg' continuing along West Main Street. This is an area of numerous traffic and pedestrian conflict points, as well as frequent congestion.

Community members continually identified this intersection as one that needs to be improved, commonly referring to the safety issues that result from its current geometry. We heard many people stress how confusing the intersection is for drivers. pedestrians, and bicyclists alike due to the lack of signage and unnatural travel pathways. Three main travel movements result in the majority of the issues:

- Motorists turning right to remain on Stillwater look left to see oncoming traffic and do not see pedestrians crossing
- Motorists going east onto Smith Street are forced to follow an unusual travel pathway
- Motorists going west onto Stillwater can easily speed



Boxer Square, approaching from northeast



Boxer Square, Existing Aerial

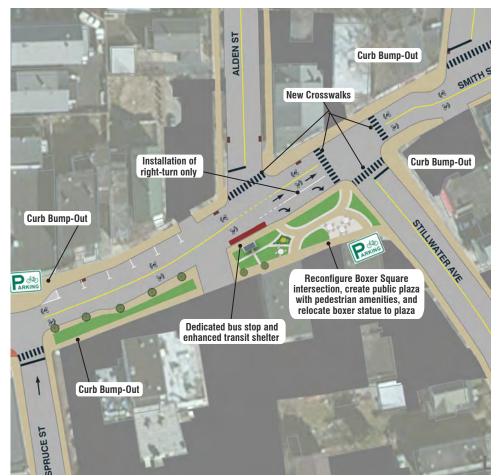
The Solution

The City of Stamford has recognized the problems associated with this intersection and have developed a concept plan to resolve the issues. We endorse the City's plan and have incorporated into it our recommendations concept plan along with additional elements that are described below and in the illustrations to the right.

Realigning the eastbound approach to the intersection to form a more conventional T-intersection will reduce the overall footprint of the intersection, slow traffic. and reduce driver confusion. To accommodate this change, the existing oblong island needs to be removed, resulting in reclaimed public space at the southwest corner of the intersection. This offers the opportunity for an inviting public space that can actually be used. It is recommended that a public process be followed to gain input on the design of the space and the optimal relocation of the boxer statue. This space should also accommodate public transit in a much more visible way, and allow for existing and new businesses to take advantage of outdoor dining and recreational activities.

In the short-term, the design should be implemented using temporary and cost-effective installations to prove the intersection will work well and to gain support with the public. The next phase of the project would involve the installation of the permanent infrastructure that will require a more significant financial commitment.

The Solution (continued)



Recommended concept plan for the realignment of Stillwater Avenue at Boxer Square



Conceptual Rendering, Boxer Square Public Plaza



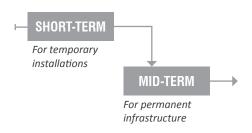
Conceptual Rendering, Boxer Square Public Plaza

Costs



• This estimate assumes that an interim public plaza would be implemented for a period of 3-5 years before construction were to begin on permanent infrastructure

Timeline



Resources



• NACTO Urban Street Design Guide: Interim Public Plazas (http://nacto.org/ publication/urban-street-design-guide/ interim-design-strategies/interimpublic-plazas/)



1.5 Applying a Road Diet on Broad Street between Stillwater Avenue and Merrell Avenue will reduce the number of lanes from 4 to 3 and increase safety by...

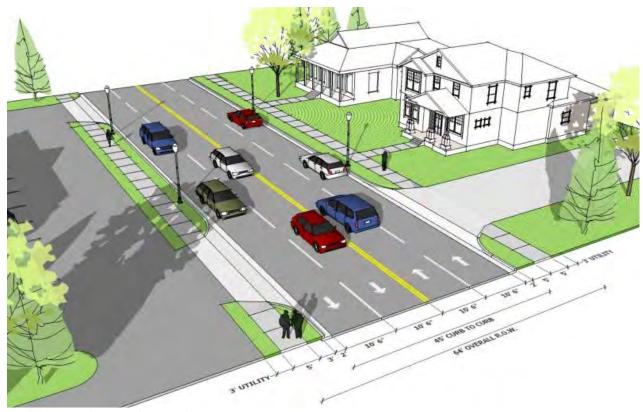
- Providing a center turn lane so that left turns are simpler and safer
- Providing an opportunity to repurpose street space for other uses such as bicycle or pedestrian infrastructure

Reducing the crossing distance for pedestrians

The Challenge

The current 4-lane cross section of West Broad Street between Merrell Ave and Stillwater Ave is not compatible with the residential context of the area, nor is it necessary for the relatively low traffic volume along this segment. Given its high-speed design, this section

of West Broad Street invites cut-through traffic from Stillwater Avenue via Merrell Avenue. Additionally. there is a conspicuous gap in the sidewalk network on the north side of west Broad along this segment.



Rendering: Typical section 4-lane corridor section

Benefits of Road Diet



Reduces frequency of crashes

Crashes can be reduced by approximately 20% - 50% (depending on how heavily traveled the corridor is.) This is a result of:

- Improved sight lines
- Eliminating the need to change lanes
- Removing stopped vehicles attempting to turn left from the through lane iv



Calms traffic and reduces the instances of speeding

Road diets have been shown to slow vehicle speeds by 3 - 5 MPH and decrease the frequency of people driving more than 5 MPH over the speed limit by 70%. This reduces the instances of serious crashes. V



Increases bicyclist's safety

Road diets create the opportunity to install separated bike lanes with the space that had previously been used for a 4th traffic lane.



Creates a safer pedestrian environment

Pedestrians have one less lane to cross when using crosswalks and there is an increased buffer between lanes and sidewalk.



Improves neighborhood aesthetics

There may be opportunities along the roadway where landscaped medians or other such treatments can now be installed.

The Solution

A road diet along this section of West Broad Street would reduce the number of travel lanes from 4 to 3. This involves reducing a cross section of road that has four (4) vehicular travel lanes to two (2) vehicular lanes and a single center Two-Way Left Turn Lane (TWLTL).



W Broad Street between Stillwater Avenue & Merrell Avenue



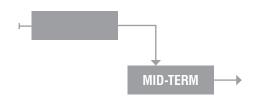
Proposed 3-lane section (Road Diet)

Costs



- Estimate assumes relocation of 3 manholes or hydrants and 1 catch basin
- Estimate assumes the installation of 700' of concrete sidewalk plus curb on one side of roadway and 700' of bike lanes with signage on both sides of roadway

Timeline



Resources



• FHWA Safety Program: Road Diet Informational Guide: http://www.safety. fhwa.dot.gov/road_diets/info_guide/ rdig.pdf



1.6 Reconfiguring Smith St & Mill River St intersection and calming Mill River St will increase safety and strengthen the neighborhood's connection to the park by...

- Slowing traffic along Mill River Street
- Prioritizing pedestrians above all other modes at the intersection
- Strengthening the natural pathways that pedestrians follow
- Creating a strong gateway between Downtown and the West Side neighborhood

The Challenge



Aerial of existing intersection between Mill River Street, Smith Street and Greenwood Hill Street

As Mill River Park continues to transform the boundary between Downtown Stamford and the West Side. it is increasingly evident that this asset will play an important role in the future development of the neighborhood. The West Side must capitalize on the park's energy and provide a compelling link to the Stillwater corridor. This connection must be safe and comfortable to the pedestrian and accessible to the bicyclist. Vehicular speed must be managed to protect the safety of all users. A strong gateway between neighborhoods is essential at this location.



Existing intersection between Mill River Street, Smith Street and Greenwood Hill Street, looking northwest



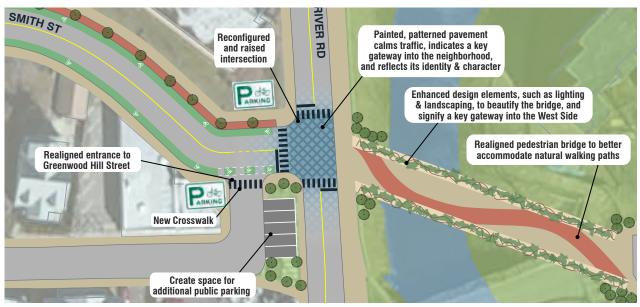
Mill River Park Concept Plan; Graphic credit: The Olin Studio



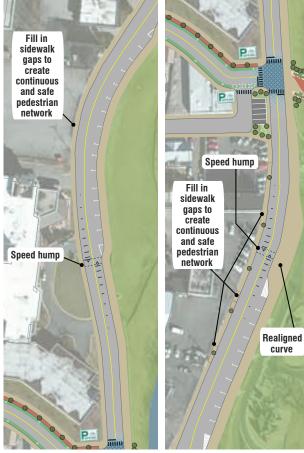
The Solution

As the preferred pedestrian pathway from Downtown, the intersection of Mill River Street and Smith Street is a primary focal point of any street improvement. The intersection requires distinctive texture and color, and ideally raised flush with the curb, to prioritize pedestrian movement and slow vehicular traffic. Additional traffic calming measures, such as speed humps and signage, must be installed a couple hundred feet north and south of the intersection along Mill River Street.

Minor adjustments to the street centerline, along with additional streetscaping, will encourage motorists to stay alert to pedestrians. A realignment of Smith Street to form a perpendicular intersection with Mill River Street will require vehicles to come to a complete stop at the intersection. Ideally, the reconstruction of the Rippowam River pedestrian bridge should be realigned to form a more natural approach to the intersection and an inviting gateway to the neighborhood.



Proposed intersection realignment at Smith Street and Mill River Street



Proposed traffic calming & pedestrian safety concept plan for Mill River St; (Left: Mill River St north of Smith St; Right: Mill River south of Smith

Costs



Costs not included in this estimate are as follows:

- New Crosswalk costs included in Rec. 2.1
- Gateway signage costs included in Rec. 3.1
- Painted, patterned pavement costs represented in Rec. 3.3

Timeline



Resources



- Stamford Neighborhood Traffic Calming Final Report: http://www.stamfordct. gov/sites/stamfordct/files/file/final report formatted.pdf
- StreetPrint Training Guide: https:// s3.amazonaws.com/ipcinstaller/system/ content files/files/520/original StreetPrint Training Kit Guide May 28 2012.pdf?1339778607



1.7 Treat key intersections along West Main Street to improve safety for pedestrians by...

- Installing curb bump-outs to slow traffic and shorten crossing distance
- Installing high visibility cross walks
- Realigning streets to form perpendicular intersections

The Challenge & The Solution

West Main Street (also US 1) through Stamford's West Side is primarily a commercial corridor that serves vehicular mobility into and through the neighborhood while also providing access to the many businesses along its length. Intersections and driveways along West Main Street are frequent and often are offset from those on the opposite side of the street, creating numerous conflict points for vehicles and pedestrians.

Public engagement highlighted the challenges that pedestrians have crossing West Main Street and a safety analysis confirmed numerous crashes at a couple intersections.



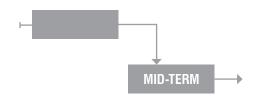
Graphic credit: US Route 1 Greenwich/ Stamford Operational Improvements Study; Volume 2: Public Involvement May 2011 for the South Western Regional Planning Agency (SWRPA)

Costs



• Recommendation and cost estimate attributed to US Route 1 Greenwich/ Stamford **Operational Improvements** Study; Volume 2: Public Involvement (May 2011)

Timeline



Resources



• US Route 1: Greenwich/Stamford Operational Improvements Study: http://www.swrpa.org/default. aspx?Transport=199

The Challenge & The Solution

In 2011, the Western Connecticut Council of Governments (formerly SWRPA), completed a study of the Route 1 corridor through Greenwich and Stamford. A concept was developed to realign Richmond Hill Avenue to form a perpendicular intersection with US 1 and install traffic calming measures such as distinctive coloring/texturing of intersections with high pedestrian traffic. This concept should be advanced as this is an area of high activity.

Additionally, the intersections of US 1 at Virgil Street and Diaz Street have been identified as locations with high crash occurrences. Traffic should be calmed at this location and curb bump-outs installed to increase pedestrian visibility and shorten the crossing distance. This is a modification that can be replicated at other locations as needed.



Intersections along West Main Street identified for recommended safety improvements

Install bumpouts at western corner of Virgil Street and eastern corner of Diaz Street. Install midblock crosswalk between bumpouts. Shift bus stop on north side of roadway to east of Virgil Street, shift bus stop on south side of roadway to west of Diaz Street. West Main Street (Rt. 1) **Bus Stop**

Recommended improvements to intersection between Virgil Street, Diaz Street, and West Main Street

Costs



• Estimate represents improvements to intersection between Virgil Street, Diaz Street, and West Main Street

Costs not included in this estimate

- New Crosswalk costs included in Rec. 2.1
- Enhanced bus shelter costs included in Rec. 2.7

Timeline



Resources



• Stamford Neighborhood Traffic Calming Final Report: http://www.stamfordct. gov/sites/stamfordct/files/file/ final report formatted.pdf



1.8 An important neighborhood gateway, the intersection of West Broad Street and Mill River Street requires a safety retrofit that includes...

- Modification of the traffic signal system to provide a traffic light for the Dunkin' Donuts driveway
- Gateway treatments such as signage

- Distinctly colored & textured pavement at the intersection to signify a transition into the West Side neighborhood
- High-visibility cross walks at the intersection

The Challenge

The West Broad Street and Mill River Street intersection has been identified as a location with high vehicular crash occurrences. It is located at the northern end of Mill River Park, and proximate to the University of Connecticut Stamford branch, numerous residential

properties, and retail and dining establishments; the intersection thus receives significant pedestrian activity. The unsignalized driveway at the Dunkin' Donuts contributes to driver confusion at an already conflict-prone area.



Approaching Mill River Street intersection from east along W Broad St

Modify the traffic signal at the intersection of Mill Street and West Broad Street to include a signal head facing the driveway to the Dunkin Donuts. The traffic signal should control the exiting traffic from the restaurant to avoid the turning vehicle conflicts at the intersection. The intersection is also an important gateway into the West Side neighborhood, and it is recommended that pedestrians receive preferential treatment by installing colored/textured crosswalks and pedestrian countdown timers. Gateway signage should be announce the transition into the neighborhood.





View approaching intersection between W Broad St and Mill River Street from Dunkin' Donuts parking lot

Costs



• Estimate includes installation of new signal head

Costs not included in this estimate are as follows:

- Gateway signage costs included in Rec. 3.1
- Painted, patterned pavement costs represented in Rec. 3.2

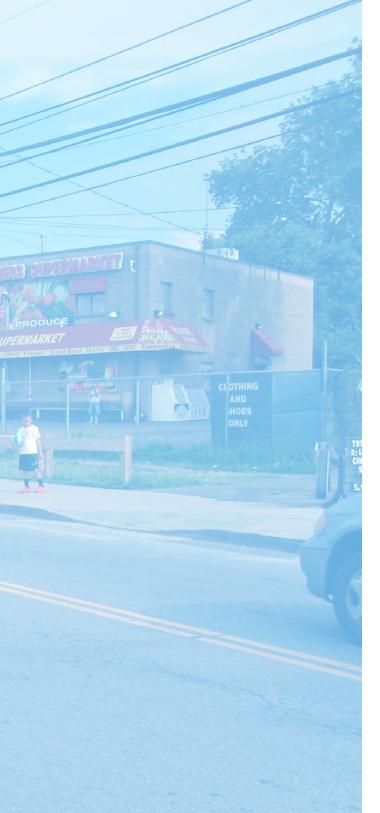
Timeline





- StreetPrint Training Guide: https:// s3.amazonaws.com/ipcinstaller/ system/content_files/files/520/ original StreetPrint Training Kit Guide May 28 2012.pdf?1339778607
- 2009 MUTCD with Revisions 1 and 2, May 2012: Part 4 Highway Traffic Signals: http://mutcd.fhwa.dot.gov/ pdfs/2009r1r2/part4.pdf



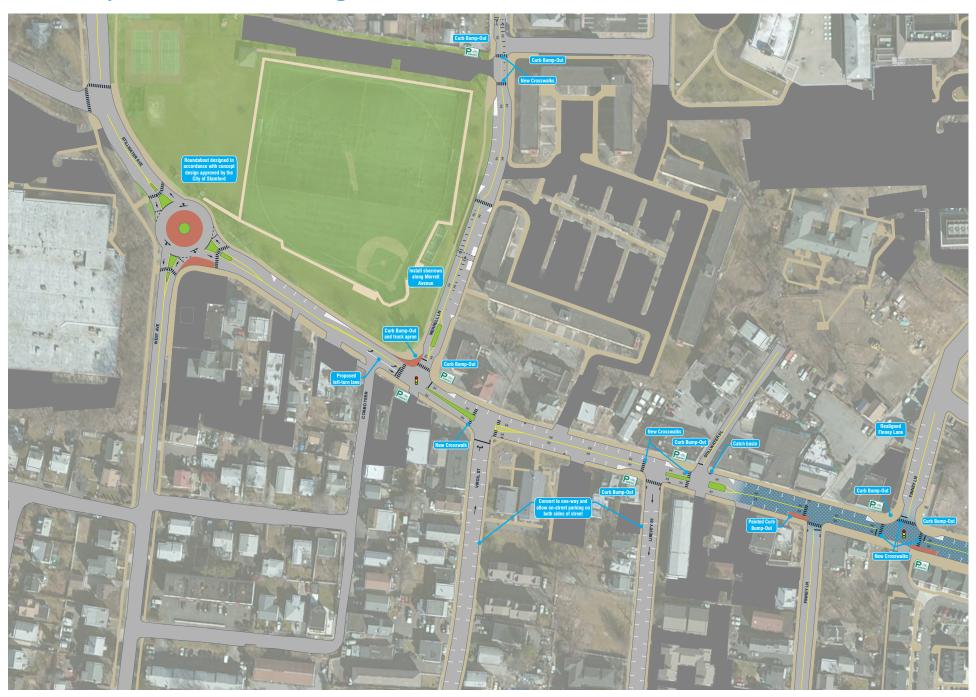




ACCESSIBILITY RECOMMENDATIONS

Accessibility to/from the West Side neighborhood is the key to unlocking a healthy and vibrant community. Beyond simple mobility, accessibility promotes sustainable economic growth by making travel to destinations convenient for people of all types and for all travel modes. It is the essence of Complete Streets and is the ultimate goal of urban transport.

Accessibility Recommendations along Stillwater Avenue









2.1 Create a comfortable, consistent, and connected pedestrian network by...

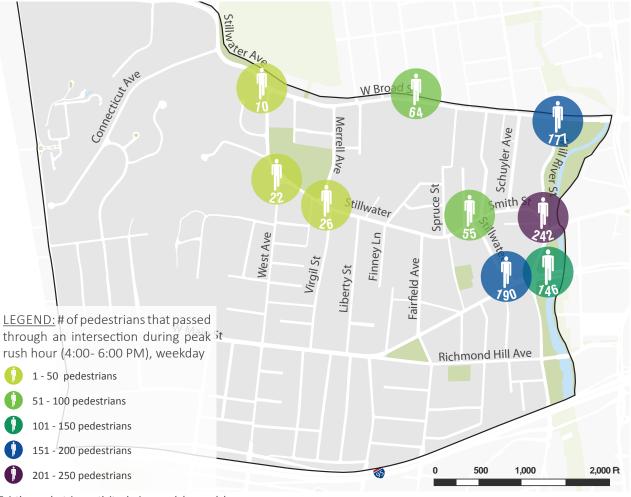
- Providing human-scale wayfinding signage to key destinations
- Maintaining a clean pedestrian environment with amenities such as benches, trash receptacles, lighting, and landscaping.
- · Completing gaps in the sidewalk network
- Maintaining high quality crosswalks at intersections
- Installing push button count-down timers at key intersections

The Challenge

Walking plays a significant transportation role in the West Side. With an automobile ownership rate that is lower than the rest of the city, many people rely on the extensive network of sidewalks and cross walks to get around. Furthermore, future development aspirations for Stillwater Avenue seek to capitalize on a healthy living theme and the incremental demand for travel must be met, in some part, by walking. Current street design in much of the West End treats pedestrians as an afterthought to auto-mobility and that must be reversed if the neighborhood is to achieve the kind of transformation offered by the Study Vision.



Pedestrian jaywalking across Stillwater Ave



Existing pedestrian activity during weekday peak hours

The locations where pedestrian enhancements, such as crosswalks and signalized crossings, have are recommended have been identified in the map to the right. Each intersection's level of expected multimodal traffic should determine the type of crosswalk that should be implemented: either traditional white

painted crossings, crossings that utilize color to draw attention to pedestrians, or crossings that clearly mark the entire intersection using white stripes. Another element that should be implemented these



intersections is signalized crossings which more formally regulate the interactions between the pedestrian and the motorist. At signalized intersections, install pedestrian countdown timers and audible signals to enhance safety and reduce jaywalking.

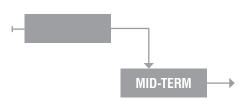
The pedestrian network should provide its users with continuous pathways by which to conveniently and safely connect to various key destinations. The repetition of these elements along the network allow for a uniform appearance that will help to establish this area as a pedestrian friendly environment. There is also an opportunity to uniquely design these repeating facilities in a way that imbues the surrounding area's character and creates a sense of place.

Costs \$228,000



Proposed Pedestrian Improvements

Timeline





- Modern Design Manual for Living Streets: http:// www.modelstreetdesignmanual.com/index.html
- 2009 Connecticut Statewide Bicycle and Pedestrian Transportation Plan: http://www. ct.gov/dot/cwp/view.asp?a=1390&q=259656
- People Friendly Stamford: http://www. peoplestamford.org/about
- Stamford Street Smart Initiative: http://www. stamfordct.gov/stamford-street-smart



2.2 Provide safer bicycling conditions along routes to key destinations within the neighborhood and support the network with bike-friendly infrastructure by...

- Painting Sharrows along Stillwater, Merrell, & Fairfield Avenues
- Striping 5' bike lanes along Smith Street
- Installing bike racks at key destinations in the neighborhood
- Installing bike route and 'Share the Road' signs along the bike routes
- Repurposing a few on-street parking spaces for a bike coral

The Challenge

Bicyclists in the West Side neighborhood are common sight. In fact, the use of bicycles as a mode of transportation is rising in the City of Stamford and across the nation. Millennials seem to have a strong preference for walkable & bikable neighborhoods, and cities that embrace bicycle culture will become more and more desirable places to live as time goes on.

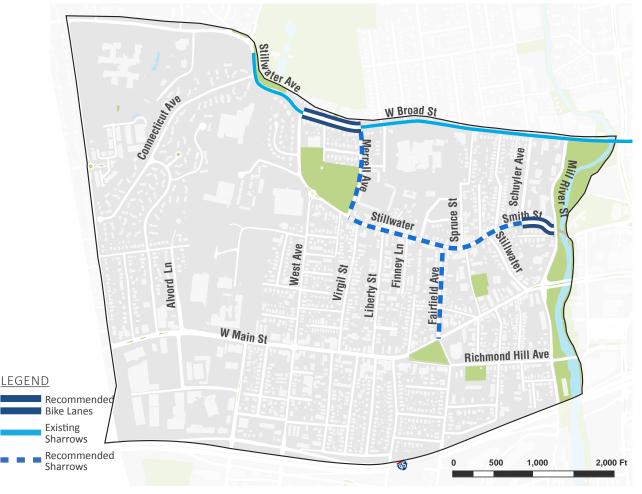
The City of Stamford has recently painted sharrows along West Broad Street, and should continue to develop more as systems of bicycle routes, via sharrows and ideally bike lanes, to connect all of the neighborhood parks and key destinations.



Bicvclist walking on north sidewalk on Stillwater near Fairgate Farm



Bicyclist riding on north sidewalk adjacent to park



Proposed Bike Network

Develop a bicycle route network that connects the West Side to adjacent neighborhoods and to the series of parks and recreational spaces within the neighborhood. This is to be accomplished with bicycle lanes where street space permits, and with shared lanes (with painted 'sharrows' and traffic calming measures) where lanes are unfeasible. Bicvcle lanes are to be installed on Smith Street from Mill River Street to Schuyler Avenue. Although the continuation of bicycle lanes is possible along the remainder of Smith Street, and most of Stillwater Avenue, members of this study's Steering Committee decided that removal of on-street parking on one side of Stillwater Avenue would be met with resistance from the community and sharrows were chosen over bike lanes.

In addition to the Smith/Stillwater corridor, bike lanes are recommended for Broad Street between Merrell Avenue and Stillwater Avenue. Sharrows are recommended along Merrell Avenue and Fairfield Avenue.



Rendering: proposed sharrows along Stillwater Avenue



Rendering: proposed bike lane along Smith Street

Costs



- Cost includes sharrows Stillwater, Fairfield, and Merrell
- · Cost includes bike parking and signage at key locations

Timeline



Precedents: Rec. 1.5 Road Diet



- NACTO Urban Bikeway Design Guide: http://nacto. org/publication/urban-bikeway-design-guide/
- 2009 Connecticut Statewide Bicycle and Pedestrian Transportation Plan: http://www.ct.gov/dot/cwp/ view.asp?a=1390&q=259656
- People Friendly Stamford: http://www. peoplestamford.org/about
- Stamford Street Smart Initiative: http://www. stamfordct.gov/stamford-street-smart



2.3 Convert Smith Street to a two-way street to enhance connections in the West Side by...

- Improving access to existing and future land uses adjacent to the Mill River Park
- Providing greater network connectivity and capacity
- Reducing unnecessary circulation throughout the neighborhood
- Providing greater predictability and safety for all

The Challenge

Smith Street is currently a one-way street in the westbound direction, with an overall width of 30' to 32' curb to curb.

- The travel lane is wide, with unmarked on-street parking permitted on both sides of the street.
- As Smith Street approaches Mill River Street, the grade of the street is approximately 4.5% downhill.
- The skewed intersection with Mill River Street encourages vehicular speeding which is incompatible with the pedestrian focus of the park.

- The one-way configuration of Smith Street restricts vehicular movement to Mill River Street from the west.
- One-way configuration requires traffic to continue along Stillwater Avenue to West Main Street, or travel north up one of the residential neighborhoods (such as Schuyler) to get to West Broad Street.





Top: Smith Street, looking west; Bottom: Smith Street, looking east

Benefits of Two-Way Streets vi



Enhance Pedestrian/ Bicyclist Environment

Vehicles stop more on two-way streets, creating a safer environment for bicyclists and pedestrians



Navigation

One-way street networks are confusing for drivers, which leads to more vehicle-miles traveled; they also make it tough for bus riders to locate stops for a return trip.



Safety

Speeds tend to be higher on one-way streets, and some studies suggest drivers pay less attention on them because there's no conflicting traffic flow.



Economics

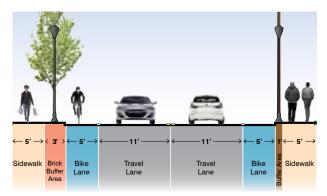
Two-way streets often increase visibility for local businesses, thereby increasing their profits. Additionally, the surge in foot traffic that results from two-way streets adds to a local business' potential customer base.



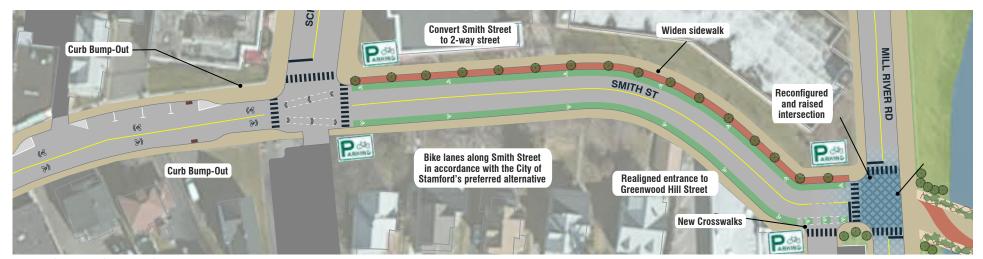
Improved traffic flow

Flow is high on one-way streets because there's little reason for cars to slow down. But flow doesn't take into account the fact that traveling through one-way street systems often means taking a circuitous route, which adds distance to every trip.

Smith Street should be converted to two-way operations which will unlock the full development potential of the land adjacent to Smith Street and Mill River Park by providing full accessibility and reducing unnecessary circulation. A two-way street would also provide some relief to the often congested Stillwater Avenue intersection with West Main Street, which also happens to be a challenging spot for pedestrians. An ideal cross section for Smith Street would include two 11' lanes and two 5' bicycle lanes. On-street parking would need to be eliminated and replaced by small surface lots.



Proposed cross section for Smith Street



Proposed concept plan at Smith Street

Costs



Costs not included in this estimate are as follows:

• Installation of bike lanes included in Rec. 2.2

Timeline

SHORT-TERM

Rec 1.6: Reconfigure Intersection; Rec 2.2 Bike Network

Precedents:

Resources



• FHWA Manual on Uniform Traffic Control Devices (MUTCD)- 2009 edition with revisions 1 and 2 incorporated, dated May 2012 http://mutcd.fhwa. dot.gov/pdfs/2009r1r2/pdf index.htm



2.4 Replacing and realigning the pedestrian bridge will enhance the connection between the West Side & surrounding neighborhoods by...

- Designing a pathway that is responsive to pedestrians' natural walking routes
- Strengthening the connection between Stillwater Avenue and Mill River Park
- Establishing the pedestrian bridge as a key gateway into the neighborhood
- Incorporating unique landscaping, lighting, and other elements into the bridge's design

The Challenge



Existing aerial of pedestrian bridge doesn't allow pedestrians to follow a natural pathway to Smith Street

The current bridge over the Rippowam River is structurally deficient and in need of repair. It is currently safe for pedestrian use, but the City of Stamford has received funding to reuse the existing truss elements and replace the substructure. This offers a rare opportunity to rethink the orientation of the bridge. The bridge should ideally take pedestrians to the intersection of Smith Street and Mill River Street, where they can make a safe crossing of the intersection (once Mill River Street is calmed) and into the West Side neighborhood. Agreements with private property owner may be required.



Replace existing pedestrian bridge and realign its orientation to take people to the intersection of Mill River Street and Smith Street. Highlight the bridge and walkway with attractive landscaping and illumination to emphasize a strong gateway between the West Side and Downtown neighborhoods. Provide wayfinding signage depicting walk times to key destinations.





Landscaping along pedestrian bridges enhance the aesthetics and further connect the bridge with the surrounding park area



Bridge lighting can greatly increase both perceived & actual safety, while enhancing the overall aesthetics of a pedestrian bridge

IVER RD Reconfigured and raised intersection Painted, patterned pavement calms traffic, indicates a key gateway into the neighborhood, and reflects its identity & character PARKING. Enhanced design elements, such as lighting & landscaping, to beautify the bridge, and signify a key gateway into the West Side New Crosswalk P de ARKING Realigned entrance to Greenwood Hill Street Create space for additional public parking Realigned pedestrian bridge to better accommodate natural walking paths

Recommended realignment of pedestrian bridge

Costs



• This is a future city project with funding from a grant.

Timeline



Precedents:

Rec 1.6:

Reconfigure

Intersection;

Rec 2.1 Ped

Improvements

Resources



• Mill River Park & Greenway Master Plan: http://www.millriverpark.org/ masterplan/



2.5 A well-managed parking system can stimulate area businesses by...

- Increasing accessibility to the neighborhood
- Potentially generating revenue to help pay for streetscape enhancements
- Encouraging turnover of on-street premium spaces

- Minimizing parking lots that could be used for other purposes
- Reducing short car trips by fostering a 'park once' environment

The Challenge

Available parking in the West Side, as with most urban neighborhoods, includes a combination of on-street spaces, off-street lots and garages. Another similarity to other urban neighborhoods is that it appears to be in short-supply. This perception is largely driven by the fact that many of the free on-street spaces are highly utilized for most of the day. Typically, when parking demand is actually measured, it is revealed that supply is sufficient but inefficiently used. Through parking management best practices, the West Side can maximize the use of its on-street spaces, and potentially increase its overall parking capacity through shared parking arrangements and valet services.



Example of Residential Parking Permit sticker

The Solution

Prior to the implementation of any parking management plan, a parking analysis should be performed to assess the true need in the neighborhood. The reconfiguration of Stillwater Avenue to prioritize safety may result in the reduction of on-street spaces; however, since these spaces are not marked it is uncertain as to how many. Stillwater Avenue should include parking striping and the parking should be regulated either by a nominal charge or through a time limit. On-street parking is considered premium space for retail businesses and as such should turn over at a frequent rate and discourage employees and residents from using it.



Example of parking meters being utilized to manage on-street parking



Recommended area for Residential Parking Permit Program

The Solution (continued)

To avoid spillover parking into the neighborhoods, a residential permit program should be considered. This will allow residents who rely on on-street parking to have priority over others by registering and purchasing an annual sticker that allows them to park free of charge where so designated.

To replace the parking lost along Stillwater Avenue, a potential option is to make Liberty Street 1-way southbound and Virgil Street one-way northbound, which would allow on-street parking on both sides of the street and prevent residents from using spaces along Stillwater.

The Stamford Hospital expansion envisions a future parking garage constructed along the realigned Finney Lane. Since hospital parking needs are primarily in the daytime, a shared parking arrangement can be useful for satisfying other parking needs in the evening hours. The garage could also be overbuilt to lease public spaces back to the City.

Similar shared parking arrangements should be explored for other commercial lots and garages along the Stillwater Ave/Smith St/Mill River corridors. Although off-street lots might not be as convenient as on-street spaces in front of businesses, programs such as valet parking could be used to remotely park vehicles during high-demand situations.

General location for Potential future parking garage shared parking included in Stamford arrangement with Hospital expansion The Hampton Inn & Suites W Broad St hmond Hill Ave LEGEND Parking lots with potential to be utilized by people convert to 1-way to allow visiting Stillwater Avenue through a public/private for on-street parking on both sides of road partnership or other agreement All parking lots in the 2.000 Ft West Side

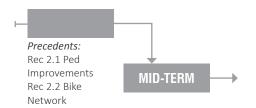
Available public on-street parking lots in the West Side neighborhood

Costs



- Estimate of \$100,000 for Parking Analysis Study
- No cost included for implementation of residential parking permit program

Timeline





- Parking Solutions to Support Livable Communities: http://pipta.org/ wp-content/uploads/2014/04/ Parking-Strategies-to-Support-Livable-Communities-CMAP.pdf
- Norwalk Parking Masterplan: http:// norwalkct.org/DocumentCenter/Home/ View/3928



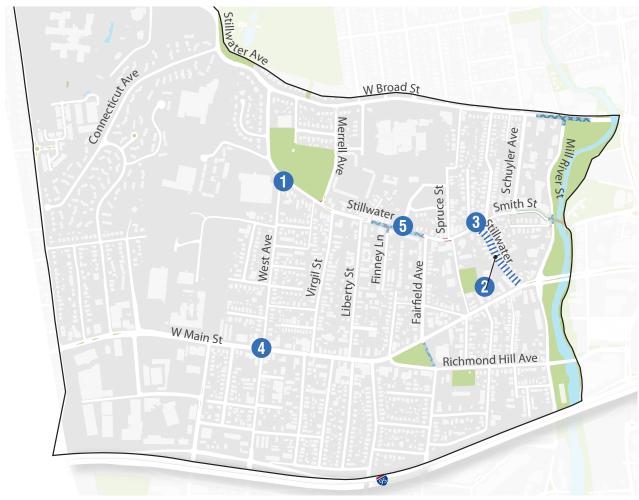
2.6 Address traffic bottlenecks to improve vehicular accessibility throughout the neighborhood by...

- Identifying problematic intersections that are vulnerable to periodic congestion
- Developing traffic management strategies to reduce congestion and improve traffic flow

The Challenge

The West Side is a true multi-modal neighborhood with many ways to get around; however, vehicular travel still accounts for a majority of trips. At several locations, traffic congestion is present during peak travel hours. As new development takes root along Stillwater Avenue, this traffic congestion can potentially discourage customers from coming to the neighborhood to shop or dine.

The Solution



Locations targeted for traffic management strategies



Locations targeted for traffic management strategies intended to reduce periodic congestion:

- Intersection of West Avenue and Stillwater Avenue – Installation of a modern roundabout and eastbound left turn lane at Merrell should improve traffic flow at safe speeds. Refer to pages 24 - 25 for details.
- Road segment of Stillwater Avenue between Smith Street and West Main Street – This stretch of road could experience reduced congestion with the two-way street conversion of Smith Street, by allowing some traffic to reroute to Mill River Street.
- **Boxer Square** This unconventional intersection can be improved by removing the center island and forming a more conventional T-intersection with a free flow right turn lane in the eastbound direction. Refer to pages 26 - 27 for details.
- West Avenue & West Main Street This busy intersection is scheduled to be reconstructed by the City of Stamford and will include left turn lanes at all approaches, resulting in greatly improved intersection capacity.
- West Broad Street The realignment of Finney Lane as a driveway to the back of the Stamford Hospital will distribute traffic along Stillwater Avenue and west Broad Street more evenly.



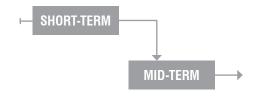
Recommended Concept Plan developed by the City of Stamford

Costs



- The solutions and associated costs for locations 1, 2, 3, and 5 are referenced in other recommendations
- Cost for improvements to West Ave & West Main Street has been provided by the city as this is a future city project

Timeline



Resources



• US Route 1 Greenwich/ Stamford Operational Improvements Study: http://www.ct.gov/dot/lib/dot/ documents/dpolicy/rt1grnwchstmfd/ us1 greenwich-stamford study final report v2.pdf



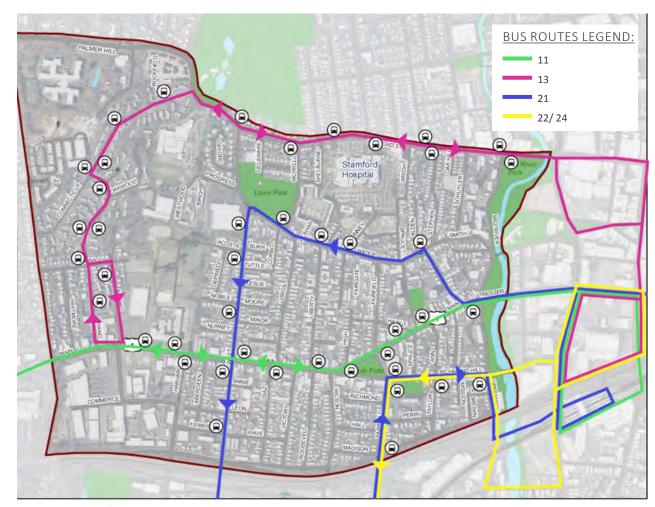
2.7 Increase bus transit ridership in the neighborhood by...

- Reducing stop frequency
- Providing enhanced shelters at high boarding stops
- Providing real time bus information to passengers
- Offering bi-directional service along Stillwater Avenue

The Challenge

Existing bus service operated by CTTransit serves the West Side with four routes designed to cover the majority of the neighborhood. Peak service frequencies are 20-30 minutes and 30-60 minutes at off-peak times. Service operates from 5 AM to midnight. Two service characteristics have been identified as potentially undesirable from a rider's perspective, and are as follows:

- The 21 route runs westbound only along Stillwater Avenue, requiring a significant walk to West Main Street to catch the 11 route for a return trip to Downtown
- Stops are too frequent resulting in a very slow trip



Existing Bus Network

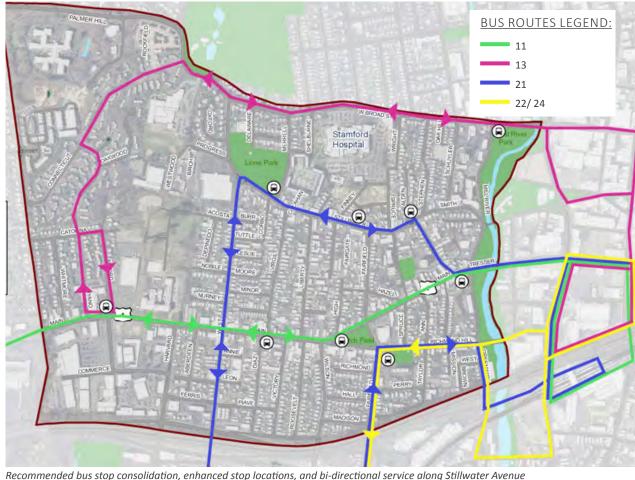


The City of Stamford is embarking on a comprehensive city-wide bus and shuttle study, and it is recommended that service improvements that address the one-way operation of the 21 route and the frequent stops be addressed. Furthermore, this plan recommends that stops with high passenger boardings be formalized with enhanced shelters and passenger amenities such as benches, trash receptacles, and passenger information. As CTTransit incorporates GPS into their bus fleet, the City should develop real time information systems to assist passengers in planning their trips and to increase ridership.





Enhanced bus stop in London

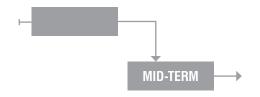


Costs



- Estimate includes the cost of 9 enhanced bus shelters
- Current "Bus & Shuttle Transportation Study" for the City of Stamford is focused on the other solutions described in this recommendation.

Timeline



Resources



• Stamford Bus & Shuttle Study Project Website: http://stamfordbusandshuttle. com/index.php



2.8 Increase connectivity to western half of neighborhood by..

- Building a new connection from Progress Drive to **Myano Court**
- Building a new connection from Catoona Lane to **Acosta Street**

The Challenge

Currently, east-west connectivity from neighborhoods along the Stamford-Greenwich town line are limited to using Route 1 or Palmer Hill Road to access Stillwater Avenue and Downtown Stamford. Finding future opportunities to open up access to these communities would be beneficial to the West Side's redevelopment prospects.



Myano Court



Progress Drive

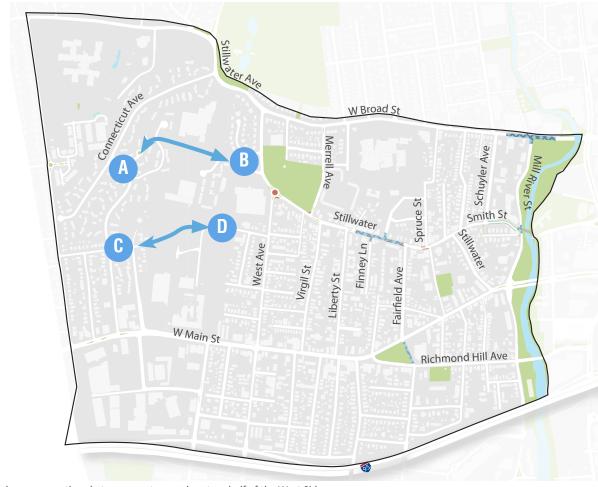


Catoona Lane



Acosta Street

Engage property owners to explore opportunities for new street connections to improve overall neighborhood connectivity. Ideally, streets should be designed to accommodate all modes of transportation, but if vehicular traffic cannot be accommodated then bicycle and pedestrian paths should be developed at a minimum. This is a longer-term recommendation that holds the potential for increasing the accessibility to a potential customer pool living in western Stamford and Greenwich.



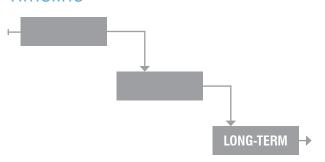
Potential new connections between western and eastern half of the West Side

Costs



• This recommendation represents a concept for consideration and is not advanced enough to warrant a reasonable cost estimate.

Timeline





- Street Connectivity: http://www.state. nj.us/transportation/works/studies/ rt57/pdf/StreetConnectivity..pdf
- NACTO Urban Streets Design Guide: http://nacto.org/publication/urbanstreet-design-guide/



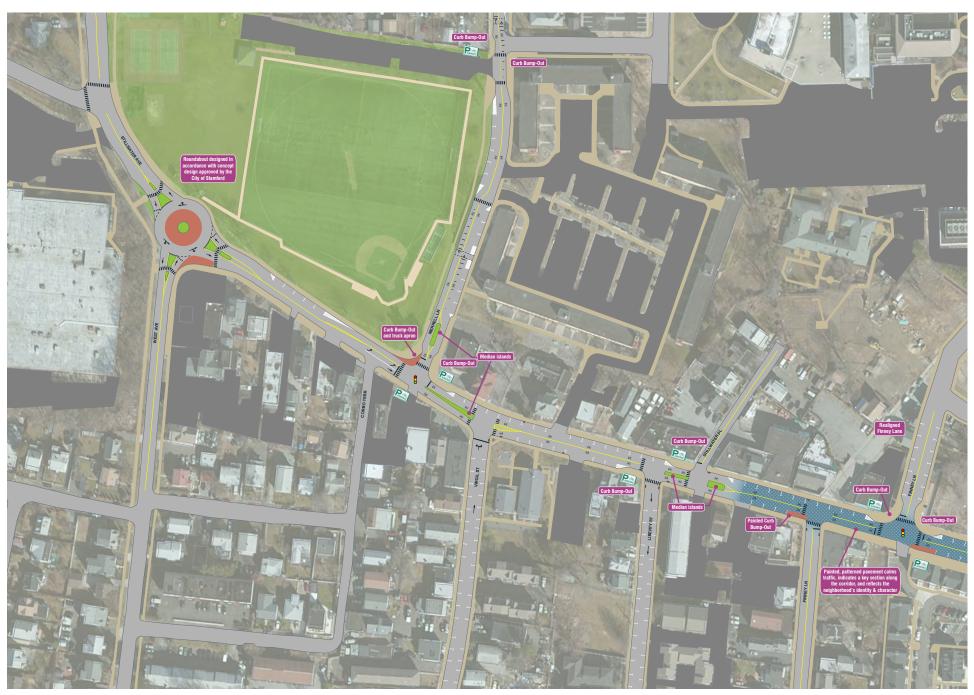




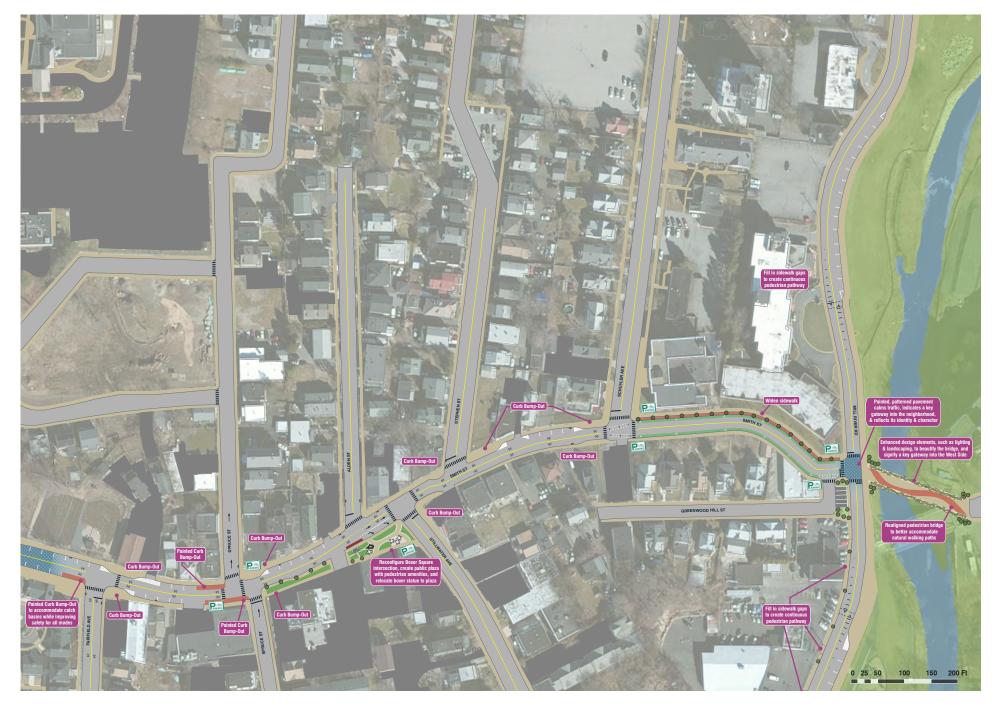
MARKETING RECOMMENDATIONS

Marketing involves programming strategies to position the Stillwater corridor as a diverse, ethnic retail destination with a healthy living twist. The "brand" will need to come alive by walkability, bikeability, and runability designs - and a partnership model to develop some of the economic infrastructure like restaurants to fully capture the potential opportunities.

Marketing Recommendations along Stillwater Avenue









3.1 Install design elements at key gateways into the neighborhood to indicate entryway into the neighborhood and establish the community's identity by...

- Collaborating with the public throughout the design process
- Enhancing accessibility with clear, well-maintained wayfinding signage

- Incorporating native landscaping features whenever possible
- Celebrating the community with local public art installations and utilizing local resources

The Potential

Neighborhood gateways provide an excellent opportunity to create a strong first impression and immediately establish a community's visual identity. However, there is currently little to no indication at the key entryways to the West Side that residents and visitors are about to enter the neighborhood. This reflects a missed opportunity to design the public realm in a way that reflects the character and community that define the West Side. The lack of clear gateways also often creates confusion regarding the neighborhood's boundaries and causes people to fail to consciously recognize the area as an identifiable place with no clear orientation to its numerous assets.



Austin, Texas



New Orleans, Louisiana



Columbus, Ohio



Morgantown, West Virginia

The Recommendation

Seven locations have been identified as key gateways into the neighborhood where the implementation of unique design elements will help to promote a sense of place and identity:

- W Main Street & Commerce Road
- W Main Street & West Avenue
- W Broad Street & Stillwater Avenue
- W Broad Street & Mill River Street
- Smith Street & Mill River Street
- Greenwich Avenue & W Main Street
- Greenwich Avenue & Richmond Hill Avenue

To ensure the gateways truly reflect the community's identity, the design process should be transparent with significant opportunities to involve and collaborate with the public. The following should be considered when determining appropriate design features:

- Enhance accessibility by incorporating clear, wellmaintained wayfinding signage that directs people to key destinations and amenities.
- Incorporate native landscaping features to encourage a sustainable design that reflects the area's natural environment and minimizes maintenance costs.
- Celebrate the community by incorporating local public art installations and utilize local resources for construction and maintenance.

W Broad St Merrell Ave Schuyler Ave Stillwater West Ave Finney Ln Alvord Ln Virgil St Fairfield Ave Liberty St W Main St Richmond Hill Ave 1,000 2,000 Ft

Locations of key gateways into the neighborhood

Costs



• This estimate includes the cost to install 7 gateway signs and 1 gateway structure

Timeline

SHORT-TERM

Precedents:

Rec 1.6

Reconfigure Mill River & Smith St

Rec 1.8

Reconfigure W

Broad St & Mill

River St



- Example- Paso Robles Gateway Plan: Design Standards: http:// www.prcity.com/government/ departments/commdev/pdf/gateway/ GatewayDesignStandards.pdf
- Example- Gateway Corridor District Design Guideline, City of La Vista, Nebrasksa: http://cityoflavista.org/ DocumentCenter/View/79



3.2 Implement a bike education program to provide people with the skills and knowledge to ride safely and confidently by...

- Assisting in the establishment of a robust Bike Education Program that offers free classes, organizes group rides and events, and provides bike safety material
- Getting involved in Bike Walk CT to learn about successful programs in other CT cities and other state-wide initiatives

The Potential







The installation of bicycle infrastructure, such as sharrows and bike lanes, is key to creating a bicyclefriendly environment; however both bicyclist and motorist need to be educated on how to respectfully share the streets with each other and obey traffic laws.

A bike education program can provide motorists and bicyclists the skills and knowledge they need to safely share the road so people can bike confidently. Through information, advocacy, and promotion, these programs have been shown to be the most cost effective tool available to help mitigate any fear people may have and increase levels of bicyclist ridership over time.

The programs should offer something for bicyclists of all experience levels and all ages. An added benefit is that these bike education programs allow for new connections within a community and strengthening the neighborhood overall.



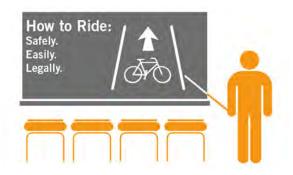
The Recommendation

The City of Stamford should build upon the recent launch of the Stamford Street Smart Initiative, a public safety and awareness campaign focused on enforcement, engineering, and education. In addition, the City should get involved with Bike Walk CT, a statewide group that advocates on behalf of bicyclists and pedestrians and which handles the bicycle education program originally established by the Capitol Region Council of Governments, Connecticut, (CRCOG).

The City should assist in the creation of a robust bike education program that is championed and run by a local advocacy organization. Though by no means allinclusive, the following is a list of elements to include:

- Free bike education classes that focus on topics such as Bicycling Basics, Street Skills Biking, Bike Maintenance 101, Bike Commuting, Winter Biking 101, and more
- School-based programs
- Bike safety presentations and videos
- Organize group rides
- Organize bicycle events
- Incorporate bike education into driver's education
- Encourage the purchase of safety gear, including helmets, taillights, horn/bell, and reflectors







Costs



 The estimate for this solution cannot be determined as there are multiple unknown factors and because it is an ongoing initiative.

Timeline

ONGOING



- Bike Walk CT: http://www.bikewalkct. org/
- The League of American Bicyclists: http://bikeleague.org/



3.3 The implementation of special paving features along key areas of the neighborhood's roadways could introduce a new sense of vibrancy by...

- Applying a highly visible and consistent design element that strengthens ties within and to the West Side
- Collaborating with the community to choose paving features that feel authentic to the neighborhood's identity and spirit

The Potential

Incorporating special paving features along key areas of the neighborhood's roadways allows for an opportunity to introduce a new sense of vibrancy to that area that reinforces the community's identity. The application of such a highly visible and consistent design element throughout the neighborhood strengthens existing linkages within the community as well as those to surrounding areas, like Downtown and the Train Station.



As part of the Bank Street Parklet project, this paving installation was intended to spark community interactions, welcome people to the area, and unify the neighborhood through design



Christian Street, Philadelphia, PA: The "Street Lagoon" project by Philadelphia Water Department (PWD) and Mural Arts Program is meant to interpret the story of urban stormwater.



Geometric street paintings in France



Chicago, IL: The "Color Jam" installation at an intersection in the Loop in downtown infused a playful and imaginative realm into an area of the city with a heavy concentration of office buildings

The Recommendation

The three recommended locations to install special paving features are as follows:

- Stillwater Ave, between Liberty St & Fairfield Ave
- Intersection of Mill River St & Smith St and partial segment of roads leading up to the intersection in both directions
- Intersection of Mill River St & W Broad St and partial segment of roads leading up to the intersection in both directions

The design shown in the concept plan is only one example illustrating how this paving feature could dramatically create a sense of place that is unique and vibrant. The City should work with the community to choose paving features that feel authentic to the neighborhood and reflect its spirit and character.

StreetPrint, also known as Stamped Asphalt or Patterned Paving, is the most commonly used product for the implementation of decorative asphalt. It has the strength to withstand up to 25,000 vehicles per day and has been durability tested in more than 30 countries. The product allows for creative design solutions that require little maintenance at cost-effective prices, with significant advantages to bricks or pavers.



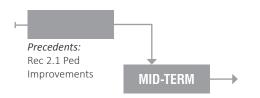
Recommended areas for installation of patterned, colored paving material

Costs



• This estimate assumes a rate of \$10/square foot for the installation of one design that uses one color for a relatively small total area

Timeline





- FHWA Manual on Uniform Traffic Control Devices (MUTCD)- 2009 edition with revisions 1 and 2 incorporated, dated May 2012
- http://mutcd.fhwa.dot.gov/ pdfs/2009r1r2/pdf index.htm



3.4 Improve streetscapes to help create a place that is not only memorable but distinctly emblematic of the community's vision for the West Side by...

- Developing a Streetscape Design Manual to guide design, construction, & maintenance of sidewalk improvements
- Including language in the City's Zoning Code specific to buildings along main corridors to ensure first-floor facades positively contribute to the streetscape design

The Potential

Cleanliness is important to creating a positive pedestrian experience. The perception of safety and security is often affected by the quality of the environment. The existence of garbage on the ground, unwashed sidewalks, and poorly maintained vegetation contributes to long-term disinvestment in properties and discourages potential customers.



Recommended curb extensions provide enough space for benches or other pedestrian amenities



Example of lighting fixtures dedicated to pedestrian realm

Improvements to the streetscape can lead to significant benefits for the surrounding area that improve the overall quality and livability of the neighborhood. A streetscape that is clean, inviting. and aesthetically pleasing coupled with safety enhancements encourages walkability and leads to increased community interactions. A vibrant, active streetscape often encourages the business community to make sure storefronts look as good and inviting as the street.

Below is a sampling of the scale of economic benefits that often result from streetscape improvements:

- Average monthly increase of 2.59 percent in private reinvestment
- An increase in rental rates by anywhere from \$1 to \$1.50 per square foot
- An increase in building price from \$70,000 in 2004 to \$170,000 in 2009

An improved streetscape will not only engender a sense of community and economic vitality, but it will also provide residents and visitors with health benefits. Numerous studies have found a strong link between streetscape improvement and an increase in physical activity within a community, which is very much in line with the vision for the neighborhood as the Vita Health & Wellness District.

The Recommendation

Improvements to streetscape design should focus on the following roadways:

- West Avenue
- W Main Street
- Richmond Hill Avenue
- Mill River Street
- Smith Street
- Stillwater Avenue

The City should develop a Streetscape Design Manual to guide the design, construction and maintenance of sidewalk improvements on the West Side's key corridors. The manual should include specifications for paving, trees, landscape treatments, lighting, and street furniture, and ensure that the application of these elements results in improvements that are not only aesthetically pleasing, but also functional and sustainable. Language should also be included within the City's Zoning Code to ensure buildings developed along these corridors include a high level of transparency, also known as "the degree to which people can see or perceive what lies beyond the edge of a street and what human activity is contained there." Specifically, consideration should be given to the proportion of first-floor facades to windows and the proportion of active uses at the street level.

W Broad St Merrell Ave Schuyler Ave St Stillwater smith St West Ave Finney Lr Virgil St Fairfield Ave Liberty St W Main St Richmond Hill Ave

Recommended corridors along which to enhance streetscape design

Costs



• This estimate assumes pedestrian amenities such as benches and trash receptacles will be placed every 400' along each side of these corridors, and well maintained.

Timeline



Rec 2.1 Ped Improvements

Resources



• America Walks: Adopt Accessible & Attractive Streetscape Design Guidelines: http://americawalks.org/ adopt-accessible-attractive-streetscapedesign-guidelines/



3.5 Sidewalk Cafe Permitting will encourage a sense of vibrancy along the corridors where it occurs by...

- Increasing foot traffic
- Supporting local businesses

- Providing an opportunity for social interactions
- Enhancing the pedestrian environment

The Potential



The Maya Restaurant on Stillwater Avenue



San Francisco, California



Westover Pizzeria on Stillwater Avenue



Louisville, Kentucky

There are currently a few, notable restaurants along Stillwater Avenue that allow for outdoor seating, including Pellicci's Italian restaurant, the Maya Restaurant, and Westover Pizzeria. The corridor would greatly benefit if this practice became more prevalent and if businesses were encouraged to design their cafes to have a stronger connection with the adjacent sidewalk. Sidewalk cafes contribute to a vibrant atmosphere along key corridors and allows streets to be more dynamic places where people can not only drive, bike and walk, but also eat, drink, and socialize. Their presence aids in the transformation of a street from just something to travel along to a destination in its own right.

Studies have shown that the introduction of outdoor seating has a direct impact on a street's walkability and economic development. In New York City, the City's Department of Transportation found conversion of a curb lane into outdoor seating increased pedestrian numbers by more than 75 percent and sales at bordering businesses by 14 percent.



The Recommendation

The City should consider reducing the application fee for sidewalk cafés on Stillwater Avenue for a set number of years in order to incentivize business establishments. In addition, the creation of Sidewalk Café Design Guidelines that describe how to create sidewalk cafes that are both safe and attractive without inhibiting pedestrian traffic can help ensure that sidewalk cafes in the neighborhood are developed in a way that is consistent with the community's vision for the area. The Guidelines should include the following:

- Acceptable dimensions for café access and for public right-of-ways
- Sidewalk café barriers
- Layout of outdoor service areas
- Suggested outdoor furnishings and materials that are durable and high-quality
- Illustrated examples of sidewalk café designs and layouts
- Photographs to emphasize acceptable and unacceptable furnishings



For more information, the City should refer to the City of Richmond's Sidewalk Café Design Guidelines published in November 2012.

W Broad St Merrell Ave Schuyler Ave Mill River St St Spruce smith S West Ave Finney Virgil St Fairfield Ave Liberty St W Main St Richmond Hill Ave

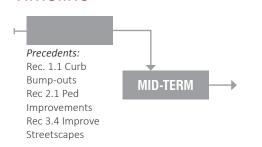
Recommended corridors along which to enhance streetscape design

Costs



• The cost for this estimate will vary depending on multiple factors, including the amount of the reduction in application fee and whether the guidelines are developed internally or otherwise.

Timeline



Resources



• City of Richmond Sidewalk Café Guidelines: http://www.richmondgov. com/PlanningAndDevelopmentReview/ documents/Sidewalk Cafe Guidelines RVA1.7.14.pdf



3.6 The temporary installation of Parklets along Stillwater Avenue and Richmond Hill Avenue will establish these corridors as key destinations by...

- Enhancing the pedestrian environment & vibrant streetscape
- Creating opportunities for social interaction on the corridors
- Minimizing cost & maintenance with temporary installations
- Supporting local businesses and attracting more people to the corridors

The Potential



Columbia, Missouri



Minneapolis, Minnesota



Bellingham, Washington



Oakland, California

There are few existing opportunities along the West Side's main corridor where members of the community can interact with one another. Parklets are a low cost and temporary way that the City could encourage this type of social interaction. They are temporary installations within the parking lane that allow for an extension of the sidewalk and space for additional pedestrian amenities, such as comfortable seating areas, unique landscaping, or other creative design installations. Parklets have been found to lead to the following benefits:

- Provides the opportunity for enhancements like seating, landscaping, bike parking, and art by extending the sidewalk
- Empowers the community to participate in the beautification of the public realm
- Supports local business communities by activating community corridors
- Fosters community interaction and social engagement
- Improves walkability
- Allows for temporary installations that can easily be removed if parking demand increases



In order to further enhance the area's walkability and further establish Stillwater Avenue as a corridor that is also a destination, permitting should be put in place to allow underutilized on-street parking spaces to be transformed into public spaces for the community. A Parklet Permitting Program is an innovative and cost effective way to add public gathering space to public streets and reinvigorate underutilized spaces.

Cities with an established Parklet Program typically stipulate that parklets are only allowed on streets that are commercial corridors and have traffic speeds of 30 MPH or less, making Stillwater Avenue and Richmond Hill Avenue ideal locations.

For guidance on the implementation of a Parklet Program, the City of Stamford should refer to San Francisco's Parklet Program and Minneapolis' Parklet Application Manual as two successful examples.



Rendering of potential parklet location along Stillwater Avenue

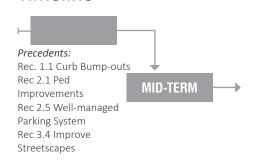


Costs



- There are no direct costs to the City for the implementation of this solution because parklet costs should be covered by Parklet Permit Holder
- · Cost of permit, design, and construction for 1 parklet typically vary between \$2,000 and \$15,000

Timeline



Resources



• San Francisco Parklet Manual V.2 (http:// pavementtoparks.sfplanning.org/docs/ SF P2P Parklet Manual 2.2 FULL.pdf)



3.7 Special Events will further establish the West Side's identity and reinforce Stillwater Avenue's status as both a corridor and a destination by...

- Reflecting the community's character and spirit through the chosen theme and activities
- Providing an opportunity for community gatherings & interaction
- Attracting more and new people to the neighborhood
- Helping local businesses gain a boost in sales and exposure
- Creating a sense of place

The Potential



NuLu Festival in Louisville, Kentucky



Street Painting Festival in West Palm Beach, Florida

Streets make up the largest amount of public space within any community, and on certain occasions streets within the central areas of a neighborhood should be designed to be flexible enough to allow for street festivals that can cultivate neighborhood pride, attract non-local visitors, and provide a significant boost to the local economy. Activities such as street fairs and cultural festivals can enhance the local economy and contribute to the diversity of activities that can happen in public space.

Types of Street Fairs:

- Block parties
- Concerts
- Food Festivals
- Holiday Markets
- Farmer's Markets
- Street Painting Festivals
- Neighborhood-specific Themed Festivals

"The positive economic impact, favorable reviews by attendees, number of return visitors, and variety of attractions that festivalgoers selected indicated that this event is both a successful economic stimulus and an effective community development tool."

~ Rachael D. Carter and Jeannie W. Zieren. "Measuring the Economic Impact of Special Events" National Main Street Center vii

Impacts of Street Fairs:

- Significant return on investment
 - » The village Chamber of Commerce brings in double what it spends on two annual street fairs it funds in Yellow Springs, Ohio for a profit of \$65,000.
 - » The majority comes from vendor fees. Additionally, 20% of revenue is the result of sponsoring organization and another 20% is from direct sales. viii

• Help local merchants:

- » At the annual Market Street Festival in Columbus, 34,000 festival attendees spent an estimated \$7.32 million with local merchants on various goods and services (non-local expenditures: \$3.66 million)
- » Many businesses are able to double their sales on a street fair or festival day, and this in turn helps keep year-round prices down for the locals. ix

Attract non-local visitors

» The Peter Anderson Arts Festival attracts 100,000 people annually to downtown Ocean Springs, Miss. (a community of just over 18,000 residents) x



The areas of Stillwater Avenue from Merrell Avenue to Boxer Square and on Fairfield Avenue between W Main Street and Richmond Hill Avenue provide two ideal locations to host street festivals in the neighborhood. The City should engage local stakeholders to determine the festival's theme and type, making sure to choose a theme that will draw a sizable crowd from both inside and outside the neighborhood and that will reflect the neighborhood's character and spirit.

Additionally, the City and the neighborhood's key stakeholders should determine a designated champion for the festival, whether that be a department within the City, a grassroots organization, or a non-profit. The designated champion should lead the initiative, including the development of a Marketing Plan to help promote the event.



Rendering of Street Festival on Stillwater Avenue between Finney Lane and Spruce Street



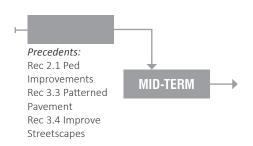
Recommended corridor locations to host street festivals

Costs



• The cost for this estimate will vary depending on whether the City of Stamford decides to fund these street festivals or seek funding elsewhere

Timeline



Resources



 International Festivals Events Association: http://www.ifea.com/



3.8 A distinctive shuttle service during select times would further reinforce Stillwater Avenue's status as both a corridor and a destination by.....

- Providing people with an option to easily and affordably access the area, especially millennials who tend to prefer transit options
- Providing an opportunity to brand the shuttle van or trolley in accordance with a neighborhood branding program





New interactive map for the Trolley Hop!





First Friday Trolley Hop in Louisville, KY







Harbor Point Trolley in Stamford, CT

The Potential

A distinctive shuttle service that provides free service on a regular basis can be a very effective way to bring more people to a certain neighborhood. Some examples of where this has been or is already being done are as follows:

- First Friday Trolley in downtown Binghamton, NY
- First Friday Trolley in Fredericksburg, VA
- First Friday Trolley Hop in Louisville, KY
- Target First Saturdays Shuttle in Brooklyn, NY

In Stamford, the Harbor Point Trolley connects Stamford Downtown and Harbor Point and while it runs on a daily basis, it still highlights that this kind of shuttle service is already being implemented within the City to attract people to various neighborhoods.

The Stillwater Avenue Shuttle could operate on the loop illustrated in the map to the right during the following times:

- Special events, such as those described in Recommendation 3.7
- Specific weekend nights, such as the first Friday of every month

The opportunity to brand the shuttle so that it reflects the neighborhood's identity will create additional awareness and excitement about the area. And providing quick, safe, and efficient access to the neighborhood will help to increase connectivity within the City overall.



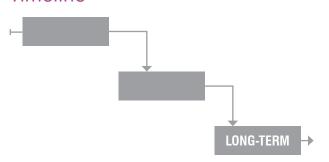
Diagram depicting how to create & market a positive Neighborhood brand; Graphic credit: NeighborWorks America

Costs



• Service will need to be designed prior to cost estimation

Timeline



Resources



• Website for First Friday Trolley Hop in Louisville, KY: http://www.firstfridayhop.com/



3.9 The West Side can develop a neighborhood brand that attracts non-locals to the neighborhood and reflects the community's character and spirit by...

• Designing the built environment to support neighborhood's identity



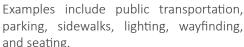
The Potential

Consciously establishing a distinctive brand that reflects a neighborhood's authentic character is simultaneously one of the most important and difficult things a community can do because it involves defining that which is often undefinable: a feeling, a connection, and a sense of place.

One effective method for doing so is through the design of the neighborhood's built environment. A well designed and contextually appropriate public realm can rejuvenate and unite a community while reinforcing the neighborhood's brand.

The physical characteristics of the neighborhood should reinforce the place's character and evoke a sense of pride amongst the community members. They should raise awareness of the neighborhood and attract others who want to take part in the experience of the area.





Key elements of a neighborhood experience are: xi



Ambience

Examples include a good impression upon arrival, cleanliness, landscaping, interesting architecture, and public art.



Attraction

Examples include cultural places, historic places, safe parks, public entertainment, and gathering places.



People

Examples include locally owned stores and restaurants, convenient shopping for groceries/ basics, acceptance, tolerance, and individuality.



Housing

Examples include affordability, selection, kid-friendly options, construction codes, and curb appeal.











Examples of brandina design elements: Street banners, Kiosk



Examples of unique neighborhood brands



Stillwater Avenue was designated the "Vital Health & Wellness District" in 2010 with an overall goal of improving health in the neighborhood. This brand should be expanded to include the entirety of the West Side and Stillwater Avenue should be designed to signify its status as the "heart" of the district. There should be extensive outreach to ensure that the design elements of both the corridor and the neighborhood truly reflect the community and its character. As such, organized neighborhood leadership should be identified to assist in marketing and branding discussions. Potential marketing strategies include:

- Develop partnerships with other neighborhoods
- Seek out sponsorships
- Social Media Campaign
- Neighborhood Website and/ or Blog
- "Why I Live In..." champions/ brochure
- Engage real estate agents
- Create iconic branding and logos
- Consistently use branding material
- Develop neighborhood lifestyle stories
- Develop neighborhood beautification team to focus on public realm
- Offer free home beautification workshops

CARE, GROW, ASPIRE









Vita Health & Wellness District Branding



Diagram depicting how to create & market a positive Neighborhood brand; Graphic credit: NeighborWorks America

Costs



- This estimate includes the cost of signage
- The majority of this estimate cannot be determined as there are multiple unknown factors and because it is an ongoing initiative.

Timeline

ONGOING

Resources



- NeighborWorks America
- Urban Wayfinding Planning and Implementation Manual (Signage Foundation, Inc.)

















SUMMARY

The recommendations presented in this plan are intended to compliment current and future land development opportunities along Stillwater Avenue and within the West Side neighborhood, by focusing on improvements to safety and accessibility for all people and modes of transportation. The table on the following pages provides a summary of these recommendations, their anticipated costs, implementation timeframe, and relationship to the goals established during community outreach events and at meetings with the study Steering Committee.

It should be noted that the recommendations are organized thematically and not necessarily geographically. Therefore, the total cost for improving a particular location could be reflected in a number of different recommendations. For instance, the recommendation to improve the intersection of Mill River Street and West Broad Street could include the following three components:

- 1.8 Intersection improvements (new signal head)
- 3.1 Install gateway signage
- 3.3 Special paving features

In this example, several complimentary recommendations are grouped to offer the greatest safety benefit at this intersection. Within the pages of this plan, attempts have been made to reference these complimentary strategies as well as implementation precedents.

Finally, cost estimates are based on the conceptual level of detail reflected in the plan. As such, they are meant to convey the relative differences between recommendations, and actual project costs could be different depending on more detailed engineering, changes to construction cost items, year of construction, property and/or environmental impact, and other unforeseen risks. Detailed itemized costs and assumptions are available in a technical appendix, and it is recommended that these estimates be reviewed prior to seeking funding for implementation.

SUMMARY OF RECOMMENDATIONS

	RECOMMENDATION Number and Description	COST	TIMELINE		SAFETY		AC	CESSIBIL	ITY	MARKETING		
PLAN GOALS		Refer to Cost Estimate Appendix for details	Short-term: Mid-term: Long-term:	Calms traffic	Reduces conflicts	Improves pedestrian visibility	Improves circulation & access to land	Prioritizes bicycle accessibility	Improves connections to other neighborhoods	Improves neighborhood aesthetics	Sparks Economic Development	Establishes an identity for Stillwater
. تــ	1.1 Daylight intersections	\$373,000	\longrightarrow			Ø				Ø		
transi	1.3 Install roundabout at West Ave & Stillwater Ave	\$750,000	\rightarrow	Ø	Ø	Ø	Ø			Ø		Ø
icles, nest p	1.3 Install left turn lane only along Stillwater Ave onto Merrell Ave	\$2,000			Ø		Ø					
L 1. : vehi y higt	1.4 Modify Boxer Square	\$163,000	\Rightarrow							Ø		
GOAI nodes safet	1.5 Road diet: W Broad St between Stillwater Ave & Merrell Ave	\$507,000	\rightarrow	Ø	Ø	Ø	Ø			Ø		
TION r all π Make	2.1 Fill in gaps in sidewalk along W Broad St	See 1.5	\rightarrow			②			②	Ø		
INSPORTAI mobility foi icyclists. T	2.2 Install bike lanes on W Broad St between Stillwater & Merrell Ave	Road Diet	\rightarrow		Ø			Ø	②			
	2.1 Enhanced crosswalks & ped facilities: key intersections	\$199,000	\rightarrow	Ø	Ø	Ø				Ø		
TRA 1-city and b	2.2 Install sharrows & bike parking: Stillwater Ave	\$20,000	>					Ø	Ø			Ø
TRANSPORTATION GOAL 1. Improve intra-city mobility for all modes: vehicles, transit, pedestrians and bicyclists. Make safety highest priority.	2.2 Install bike signage throughout neighborhood	\$36,000	>		Ø			Ø				Ø
	2.5 Parking Management System	\$134,000	\rightarrow				Ø				Ø	
트	3.4 Streetscape improvements: Stillwater Ave	\$53,000	>			Ø				Ø	Ø	Ø
. Sc	1.2 Install traffic calming features: Merrell Ave	\$16,000	>	Ø	Ø	Ø	Ø			Ø		
TRANSPORTATION GOAL 2. Improve north-south connections.	1.6 Install traffic calming features & fill in sidewalk gaps: Mill River St	\$73,000	>	Ø	Ø	Ø	Ø			Ø		
N GO	2.2 Install sharrows & bike parking: Fairfield Ave	\$7,000	>					Ø	Ø			
ratio south	2.2 Sharrows along Merrell Ave	\$5,400	>					Ø	Ø			
SPOR north	2.6 Realign Finney Lane as driveway to back of Stamford Hospital	N/A	\rightarrow				Ø			Ø	Ø	Ø
RANS	3.4 Streetscape improvements: West Ave	\$53,000	>			Ø				Ø	Ø	Ø
	3.4 Streetscape improvements: Mill River St	\$45,000	>			Ø				Ø	Ø	Ø
een d, on	1.6 Reconfigure intersection: Smith St, Greenwood Hill St & Mill River St	\$179,000	>	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø
GOAL 3. betweer uth End, oortation st Side.	1.7 Intersection improvements: Diaz St. & Route 1	\$39,000	\rightarrow	Ø	Ø	Ø						
TRANSPORTATION GOAL 3. Improve connectivity between Downtown, the South End, the Stamford Transportation Center and the West Side.	1.7 Realign Richmond Hill Ave & enhance Jackie Robinson	\$4,000,000	\rightarrow	Ø	Ø	Ø				Ø	Ø	Ø
	3.4 Streetscape improvements: Richmond Hill Avenue	\$62,000	>			Ø				Ø	Ø	
	1.8 Intersection improvements: W Broad St & Mill River St	\$10,000	>	Ø	Ø	Ø	Ø		Ø	Ø		
	2.2 Install bike lanes & bike parking: Smith St	\$34,000	>		Ø			Ø	Ø		Ø	Ø

	RECOMMENDATION Number and Description	COST	TIMELINE	SAFETY			AC	CESSIBIL	ITY	MARKETING		
PLAN GOALS		Refer to Cost Estimate Appendix for details	Short-term: Mid-term: Long-term:	Calms traffic	Reduces conflicts	Improves pedestrian visibility	Improves circulation & access to land	Prioritizes bicycle accessibility	Improves connections to other neighborhoods	Improves neighborhood aesthetics	Sparks Economic Development	Establishes an identity for Stillwater
GOAL 3. connectivity the South nsportation st Side.	2.3 Convert Smith St to 2-way traffic	\$27,000	>	Ø		Ø	Ø		②		Ø	
	3.4 Streetscape improvements along Smith St	\$18,000	>			Ø				Ø	Ø	Ø
N GO e coni m, the fransp Vest \$	2.6 Intersection modifications at West Ave & Route 1	\$2,500,000			②	Ø	Ø		Ø			
TRANSPORTATION GOAL 3. (continued) Improve connectivity between Downfrown, the South End, the Stamford Transportation Center and the West Side.	2.7 Enhanced Transit Stops	\$156,000	\rightarrow			Ø			Ø	Ø	Ø	Ø
	2.8 Increase connectivity to western half of neighborhood	N/A					Ø		Ø			
	3.4 Streetscape improvements: W Main St	\$98,000	>			Ø				Ø		
	3.8 Provide distinctive shuttle service during select times to West Side	N/A					Ø		Ø	Ø	Ø	Ø
	2.4 Realign pedestrian bridge	\$4,000,000			Ø	Ø	Ø		Ø	Ø	Ø	Ø
	3.1 Install gateway signage: Boxer Square	\$450	=	②						Ø	Ø	Ø
sseo	3.1 Install gateway signage: West Main & West Ave	\$450	>	Ø					Ø	Ø	Ø	
le to walk a cilitate suc rreas.	3.1 Install gateway signage: W Main St	\$450	>	Ø					Ø	Ø	Ø	
	3.1 Install gateway signage: Greenwich Ave & Richmond Hill Ave	\$450	>	Ø					Ø	Ø	Ø	
peop will fa rcial a	3.1 Install gateway signage: Main St & Mill River St	\$450	>	Ø					Ø	Ø	Ø	
.4. invite that	3.1 Install gateway signage: W Broad St & Mill River St	\$450	>	Ø					Ø	Ø	Ø	
GOAL nould in traffic 1 in cor	3.1 Install gateway signage at Stillwater Ave & W Broad	\$450	>	Ø					Ø	Ø	Ø	Ø
rion age sk Foot iragec	3.1 Install gateway structure at Smith St & Mill River St	\$34,000	>	Ø						Ø	Ø	Ø
ORTATI 1 signag putine. F encoura	3.2 Initiate Bike Education Program	N/A	Ongoing		Ø			Ø				Ø
ANSPC its and faily ro ald be e	3.3 Special paving features: Smith St & Mill River St	\$38,000	\rightarrow	Ø	Ø	Ø			Ø	Ø		Ø
TRA sment seir da shoul	3.3 Special paving features: W Broad St & Mill River St	\$35,000	\rightarrow	Ø	②	Ø			Ø	Ø		Ø
TRANSPORTATION GOAL 4. Streetscape improvements and signage should invite people to walk and ride bikes as part of their daily routine. Foot traffic that will facilitate success for retailers should be encouraged in commercial areas.	3.3 Special paving features: Stillwater Ave between Liberty St & Fairfield Ave	\$257,000	\rightarrow	②	②	Ø				Ø	Ø	Ø
	3.5 Creation of Sidewalk Café Design Guidelines	N/A	\rightarrow	Ø						Ø	Ø	Ø
	3.6 Parklet Permitting Program	N/A	\longrightarrow	Ø		Ø				Ø	Ø	Ø
	3.7 Establish Street Festival Guidelines & incentives	N/A	→			Ø				Ø	Ø	Ø
	3.9 Design and install street banners that reflect neighborhood branding	\$4,000	\longrightarrow	Ø					Ø	②	Ø	Ø
	3.9 Develop Neighborhood Branding Initiative	N/A	Ongoing						Ø	Ø	Ø	Ø

WORKS CITED

- Roundabout Benefits," Traveler Info and Maps. Nevada Department of Transportation. Web. August 03 2015 Accessed. https://nevadadot.com/safety/roundabout/benefits.aspx
- ii Roundabout Benefits," Traveler Info and Maps. Nevada Department of Transportation. Web. August 03 2015 Accessed. https://nevadadot.com/safety/roundabout/benefits.aspx
- iii Roundabout Benefits," Traveler Info and Maps. Nevada Department of Transportation. Web. August 03 2015 Accessed. https://nevadadot.com/safety/roundabout/benefits.aspx
- iv "Road Diets: Availability Fact Sheet," AARP Livable Communities & Walkable and Livable Communities Institute. Web. August 03 2015 Accessed. http://www.aarp.org/content/dam/aarp/livable-communities/documents-2014/Livability%20Fact%20Sheets/Road-Diets-Fact-Sheet.pdf
- v "Road Diets: Availability Fact Sheet," AARP Livable Communities & Walkable and Livable Communities Institute. Web. August 03 2015 Accessed. http://www.aarp.org/content/dam/aarp/livable-communities/documents-2014/Livability%20Fact%20Sheets/Road-Diets-Fact-Sheet.pdf
- vi Jaffe, Eric. "The Case Against One-Way Streets" CityLab. The Atlantic, January 31 2013. Web. August 03 2015 Accessed. http://www.citylab.com/commute/2013/01/case-against-one-way-streets/4549/
- vii Carter, Rachael D. and Jeannie W. Zieren "Measuring the Economic Impact of Special Events." National Main Street Center. National Trust for Historic Preservation, June 27 2012. Web. August 03 2015 Accessed. http://www.preservationnation.org/main-street/main-street-news/story-of-the-week/2012/120627festivals/measuring-the-economic-impact.html
- viii Wallace, Lewis. "What is the Economic Impact of Street Fairs? WYSO Curious Hits the Pavement." 91.3 WYSO. June 27 2014. Web. August 03 2015 Accessed. http://wyso.org/post/what-economic-impact-street-fairs-wyso-curious-hits-pavement#stream/0
- ix Carter, Rachael D. and Jeannie W. Zieren "Measuring the Economic Impact of Special Events." National Main Street Center. National Trust for Historic Preservation, June 27 2012. Web. August 03 2015 Accessed. http://www.preservationnation.org/main-street/main-street-news/story-of-the-week/2012/120627festivals/measuring-the-economic-impact.html
- × Carter, Rachael D. and Jeannie W. Zieren "Measuring the Economic Impact of Special Events." National Main Street Center. National Trust for Historic Preservation,
 - June 27 2012. Web. August 03 2015 Accessed.
 - http://www.preservationnation.org/main-street/main-street-news/story-of-the-week/2012/120627festivals/measuring-the-economic-impact.html
- xi "Neighborhood Branding." Stable Communities.org. December 12 2012. PowerPoint Presentation. August 03 2015. http://www.stablecommunities.org/sites/all/files/documents/Branding%20and%20Marketing%20Presentation%20CS%20Forum%2012 11 12.pdf

