



HARTFORD LINE

TOD ACTION PLAN EXECUTIVE SUMMARY



2019



This report was prepared for the Connecticut Department of Transportation by:



ACKNOWLEDGEMENTS

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The staff and elected officials of the following municipalities:



The Town of Wallingford



The Town of North Haven



The Town of West Hartford



The Town of Berlin



The Town of Windsor



The Town of Newington



The Town of Enfield



The Town of Windsor Locks



The Town of East Windsor

The Policy Board at the following Councils of Governments:



The Capitol Region Council of Governments



The South Central Regional Council of Governments

Staff from the following agencies:



The Connecticut Department of Transportation



The Federal Transit Administration

The Corridor Advisory Committee

Participants in the Desire and Readiness Workshops and Other Stakeholders

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TABLE OF CONTENTS

Introduction	1
On Track for Action	5
Part One	9
Part Two	19
Conclusion	29

INTRODUCTION

Background

Hartford Line

The State of Connecticut has made substantial recent investments in its multi-modal transportation network. A critical component of this investment is a major expansion of Connecticut's passenger rail capacity along the Hartford Line corridor through the New Haven-Hartford-Springfield (NHHS) Rail Program. The Hartford Line provides enhanced passenger rail service between New Haven, CT and Springfield, MA, with connections to Amtrak and Metro-North Railroad, which serve New York City and other destinations along the Northeast Corridor.

Funded by a combination of federal and state sources, the ongoing NHHS Rail Program includes infrastructure improvements to the pre-existing rail system (such as double tracking and upgrades to existing stations, signals, and bridges) as well as the construction of new stations.

The Hartford Line is comprised of 13 stations:

- **Four pre-existing stations:** New Haven Union Station, New Haven State Street Station, Hartford, and Springfield;
- **Two replaced stations:** Meriden and Berlin;
- **Three relocated stations:** Wallingford, Windsor, and Windsor Locks; and
- **Four new stations:** North Haven, Newington, West Hartford, and Enfield

As of the official service launch in June 2018, construction of the two relocated and four new stations remain, as well as double tracking north of Windsor. Initial service includes 17 round-trip passenger trains between New Haven and Hartford, and 12 round-trip passenger trains

between Hartford and Springfield. This level of service is a significant increase from the pre-existing 6 round-trips per day. The long-term vision for the NHHS Rail Program includes an eventual 25 daily round-trips, delivering high-frequency passenger rail service through the corridor.

Transit and Economic Growth

There is an inextricable link between the strength of the transportation system and the strength of the economy. The American Public Transportation Association estimates that for every dollar invested in public transportation, four dollars are generated in economic returns. Throughout the country, transit investments have generated billions of dollars in economic value. As the Hartford Line traverses a corridor with several regional assets, municipalities along the corridor have a unique and timely opportunity to leverage the ongoing transit investment for the betterment of their communities.

In particular, municipalities have the opportunity to realize economic and community benefits through transit-oriented development (TOD). TOD is defined as compact, mixed-use development located within a short walk of a transit station. Whether it is new construction, redevelopment, or small-scale infill development, a fundamental characteristic of TOD is that its physical form responds to – and is interrelated to – transit. Whereas TOD is often considered after a new transit service has begun, the Hartford Line presents a unique opportunity for TOD planning to be coordinated with the rail service expansion.

FTA Grant

While the addition of transit service has the potential to create new markets for TOD, the presence of transit alone is not sufficient to drive economic development. TOD is contingent on several factors and full potential typically takes several years to achieve. One of the most critical factors impacting TOD success is the level of government support.

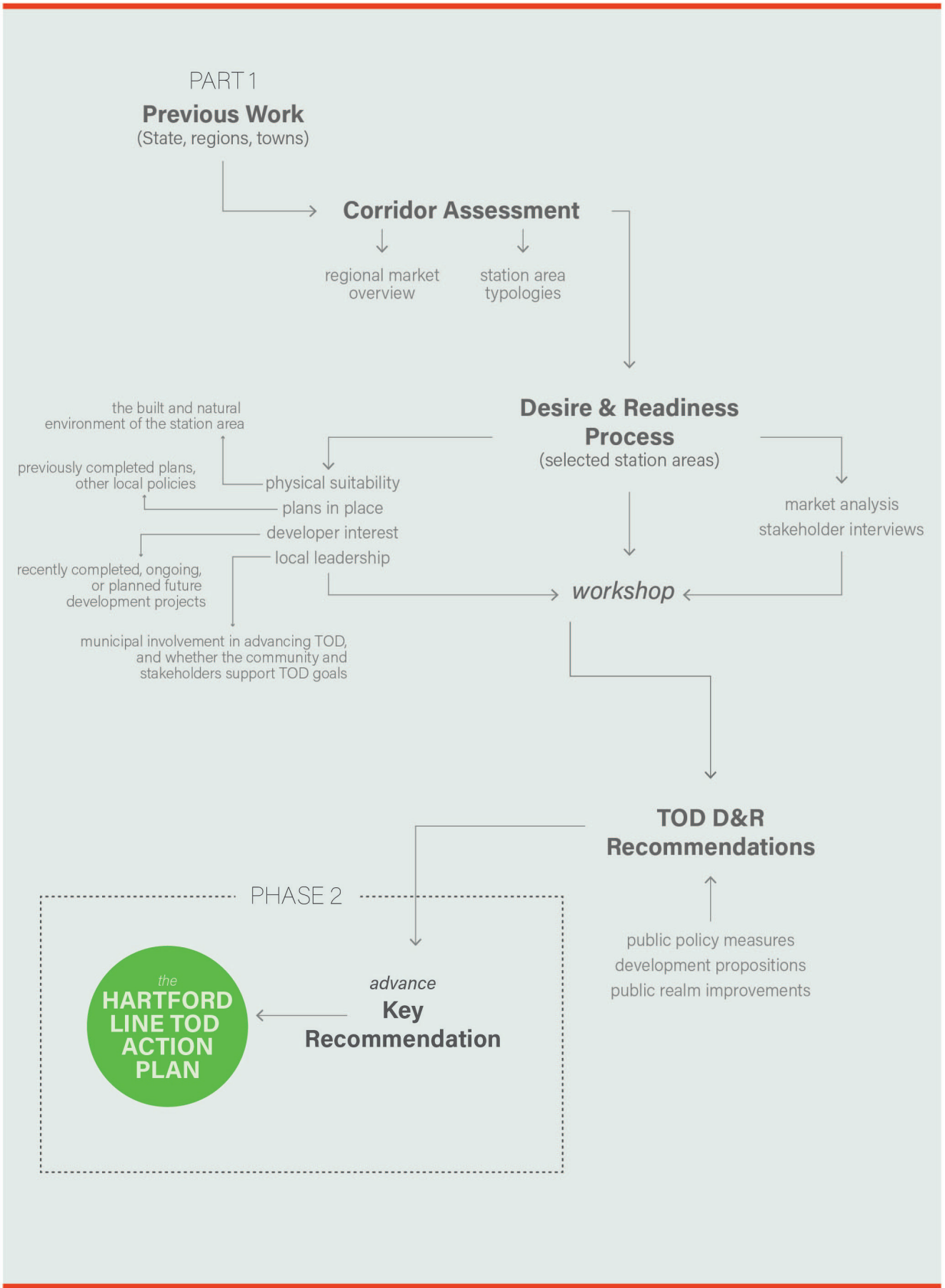
In 2014, the Federal Transit Administration (FTA) introduced the Pilot Program for TOD Planning to promote transportation planning that is integrated with land use planning. In 2015, the State of Connecticut was awarded an FTA TOD Pilot grant to conduct a study of TOD opportunities along the Hartford Line corridor. The FTA TOD Pilot grant presented a framework for the Connecticut Department of Transportation (CTDOT) to provide

targeted support and technical assistance to municipalities, particularly those with new or relocated stations.

Emphasis on Action

The purpose of the Hartford Line TOD Action Plan is to fully capitalize on TOD potential by collaborating with municipalities to address barriers in specific station areas. By fostering interjurisdictional partnerships, the Hartford Line TOD Action Plan builds on previous, current, and planned local and regional efforts to advance TOD from planning to implementation. The Hartford Line TOD Action Plan ultimately strives to be action-oriented.

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ON TRACK FOR ACTION

Part 1

To establish a point of departure, the project team (consisting of CTDOT with support from its consultant, WSP USA, Inc.) first compiled and reviewed previous plans, studies, and reports, recognizing that each station area is at a different stage of progress in TOD planning and implementation. The Hartford Line TOD Action Plan began with consideration of the entire corridor through a regional market assessment and the identification of station area typologies. While recognizing that each station area is unique, this approach considers the station areas in a way that defines the TOD potential for the corridor as a whole.

Following the corridor assessment, eight station areas were selected for further analysis. The selected station areas include a combination of replaced, relocated, and new stations:

- North Haven
- Wallingford
- Berlin
- Newington
- West Hartford
- Windsor
- Windsor Locks
- Enfield

The remaining stations (in New Haven, Meriden, Hartford, and Springfield) were not identified for additional focus in part because of the extent of TOD implementation already underway in these areas.

Defining Desire and Readiness for TOD

In each station area, the local community must express its level of desire for TOD to set the context for a station area strategy. High desire (which, in turn, may suggest a community's degree of readiness) is illustrated by a community that strongly supports denser mixed-use development in the station area and views the station as a centerpiece to development.

Not every station area is suitable for TOD. Communities define their desire for TOD based on surrounding land uses, surrounding densities, and neighborhood character. However, a lower desire only reflects current opinion and does not necessarily mean there are no opportunities for future development and other transit-supportive improvements. In station areas where desire is lower, there may still be a need to consider what public realm improvements can optimize the relationship between the station and the surrounding community that would promote use of the station, reduce automobile dependence, and facilitate economic development.

Desire for TOD is necessary to be ready to develop an action plan for implementation. Communities that desire TOD will be better prepared to coordinate opportunities with developers, implement the steps necessary to achieve capital improvements and/or development opportunity, and build consensus amongst all stakeholders on a shared pathway to achieve the established goals for the station area.

At the heart of the Part 1 effort, the project team conducted a "Desire and Readiness (D & R)" assessment for each of the eight selected station areas (with the exception of Newington) based on the following criteria. These four criteria are essential ingredients to successful implementation of TOD.

- 1. Physical Suitability:** A station area's physical context, including availability of large parcels, ownership patterns, pedestrian accessibility, land use composition, vehicular circulation, and transit connectivity, that either support or present obstacles for TOD.
- 2. Public Sector Readiness:** Having the appropriate regulatory framework, provision of incentives, and local plans in place for the station area is important for both the feasibility and timeframe for implementing TOD.
- 3. Developer Interest:** Most TOD is initiated by the private sector or through public-private partnerships.

Recently completed, ongoing, and potential future development projects can serve as indication of the level of developer interest in a station area.

- 4. Leadership in Place:** Leadership and stewardship of planning initiatives at the local and regional level, in addition to community support, is essential to successful implementation of TOD.

The D & R assessments were based on information gathered from market analyses, stakeholder interviews, and workshops. The cornerstone of the D & R evaluation process was a workshop for each selected station area with a small group of municipal officials, staff, and key stakeholders. Workshop attendees represented individuals with a range of local knowledge and expertise in all of the different functional areas of TOD. These workshops enabled the project team to work directly with each municipality to identify actionable strategies to overcome key hurdles for TOD implementation.

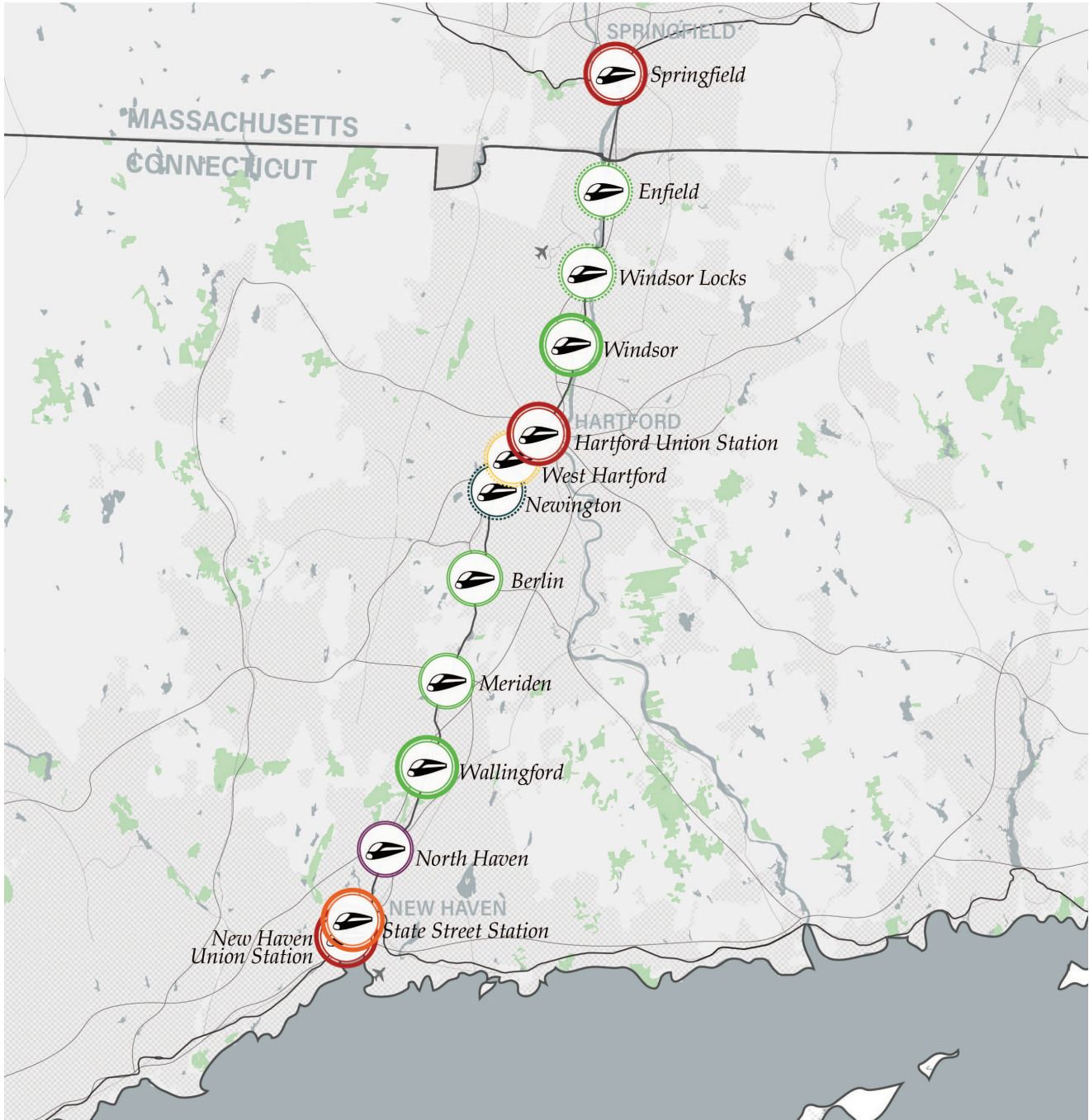
D&R Recommendations

Following a full synthesis of the stakeholder feedback and D & R workshops, the project team developed a set of recommendations for each station area tailored to address its respective hurdles to TOD implementation. The recommendations strive to integrate development opportunities, capital improvements, and public policy initiatives to help municipalities move from TOD planning to implementation.

Part 2

To continue moving from TOD planning to implementation, Part 2 of the Hartford Line TOD Action Plan enabled the project team to provide targeted technical assistance to the selected station area municipalities. In collaboration with municipal leaders, the project team advanced one "key recommendation" for each municipality identified during the Part 1 D & R process. While diverse in scope, each community's key recommendation was strategically chosen to address an overarching hurdle to TOD.

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Hartford Line Station Typologies. A map outlining station area types, and the status of each station area along the Hartford Line corridor.

PART ONE



Established



Emerging



Potential Future



Regional Center



Urban Center



Suburban Center



Transit Town Center



Transit Neighborhood



Special Use/Employment District

Corridor Context

The context for TOD along the Hartford Line includes a combination of regional and station-area specific considerations.

- The Hartford Line has the potential to leverage a significant variety of regional assets that are part of the Knowledge Corridor: a high concentration of firms representing diverse industries, several medical and educational institutions, and a highly-educated workforce.
- The New Haven - Hartford - Springfield region remains affordable relative to surrounding metropolitan areas.
- Demographic trends suggest increasing demand for denser living arrangements from two large and growing segments: empty nesters (also known as baby boomers) and millennials.
- The Great Recession created a need for flexibility and mobility, which generated a shift in household preferences and a market opportunity for rental housing.
- In areas with weaker markets, there is often a need for public assistance to offset costs and provide “gap” financing toward elements of a project that offer a public benefit.

The corridor in its entirety shows promise as a regional asset, built on a series of connected communities. Although each of the Hartford Line’s 13 station areas is unique, there are commonalities among them that underscore shared challenges and opportunities for TOD planning and implementation. While each station area has distinct housing, employment, parking, transportation, and land use qualities that warrant recognition, the categorization

of station areas into typologies can highlight potential synergies in TOD potential along the entire corridor.

The project team identified the station areas as the following “place types” defined in the Reconnecting America and Center for TOD report, *TOD 202: Station Area Planning: How to Make Great Transit-Oriented Places*.

- Regional Center
 - New Haven Union Station
 - Hartford Union Station
 - Springfield Union Station
- Urban Center
 - New Haven State Street Station
- Suburban Center
 - West Hartford
- Transit Town Center
 - Wallingford
 - Windsor
 - Meriden
 - Berlin
 - Windsor Locks
 - Enfield
- Transit Neighborhood
 - Newington
- Special Use District
 - North Haven

The place types differ in part due to their characteristics as regional or local destinations, the land use mix and density of development, and the types of planning and development challenges that often need to be overcome to advance TOD. While some station areas along the Hartford Line corridor are established, others are emerging, and others show promise to achieve the place type designation in the future.

Selected Station Area Assessments

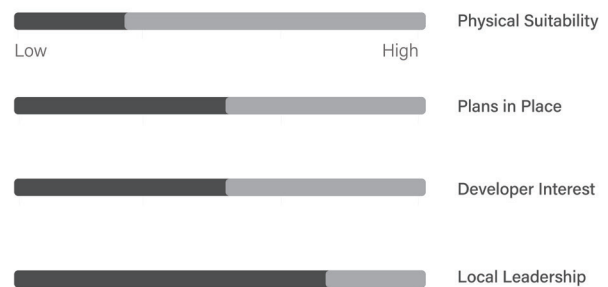
Eight station areas were selected for further assessment of TOD opportunities and hurdles. The selected station areas include a combination of replaced, relocated, and new stations. The desire and readiness assessment process garnered information from a combination of market analyses, stakeholder interviews, and workshops.

North Haven

The future North Haven station area is a burgeoning medical epicenter, home to a Yale-affiliated medical center and nearby senior housing, with complementary employment elsewhere in town. Development density is currently focused around the medical uses near the future station. However, ongoing projects such as the remediation and redevelopment of a portion of the former Pharmacia and Upjohn site could offer additional opportunities. Potential hurdles to TOD identified in North Haven were:

- Limited sense of place in the station area
- Limited accommodations for non-motorized access to the future station
- Lack of TOD-supportive zoning
- Predominance of auto-oriented land uses
- Constrained access to and from potential redevelopment sites

TOD Desire and Readiness in North Haven

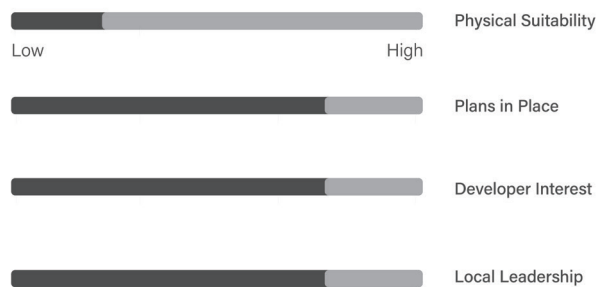


Wallingford

The Wallingford station was relocated less than a half-mile north of the existing historic station. Although Uptown Wallingford is upheld as the consistently strong retail core of the town, Downtown effectively complements the Uptown area with a mix of retail and civic uses to anchor the new station area. While the area immediately around the new station primarily contains a mix of low-density uses, the existing Parker Place apartment complex just north of the station offers a local precedent for transit-oriented, moderate-density housing. Potential hurdles to TOD identified in Wallingford were:

- Lack of stable retail presence Downtown
- Disconnect between property owners and potential developers
- Limitations of existing zoning to encourage TOD-supportive densities and building form
- Limited visibility and accessibility of public parking Downtown
- The need to secure funding for the proposed complete streets improvements to link Downtown and the new station
- Underutilization of historic station building and Railroad Green

TOD Desire and Readiness in Wallingford

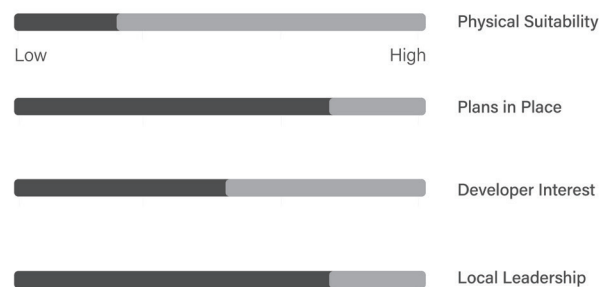


Berlin

A new Hartford Line station was constructed in the Kensington Village neighborhood, directly adjacent to the site of the historic station that was destroyed by a fire in December 2016. While there is currently no discernable activity center in the station area, the Town has invested considerable time and resources to support TOD. The Town has actively been working to advance public realm improvements and redevelopment. Potential hurdles to TOD identified in Berlin were:

- Kensington Village lacks a cohesive and active town center with a balance of commercial, residential, and civic uses
- Uncertainty regarding developer interest in the identified catalytic sites
- Currently permitted residential density within portions of the Village District Overlay Zone is not conducive to TOD
- Limited accessibility to the future station
- Inactive CONRAIL spur impedes integration of development sites and limits access to nearby neighborhoods
- Some potential development sites require environmental remediation and mitigation of offsite groundwater migration

TOD Desire and Readiness in Berlin



Newington

A future Hartford Line station is planned in the Town of Newington. At the time of the Part 1 effort, the timing and exact location of the station were still under consideration by CTDOT. The station area around the initial planned location of Newington Junction is primarily surrounded by low-density residential uses, with opportunities for mid- and long-term turnover of existing industrial uses. Potential hurdles to TOD identified in Newington were:

- Lack of community support for additional development in the Town embodied in a moratorium on higher density residential housing typical of TOD, especially in a traditionally low density neighborhood
- Limited vehicular access to the proposed station area
- Limited capacity for pedestrian and bicycle improvements to access the station
- Existing neighborhood character that is not typically TOD-supportive
- Little near- to mid-term redevelopment potential near the proposed station site, including on residual land acquired for station construction
- Low long-term build-out potential within a half-mile of the proposed station site

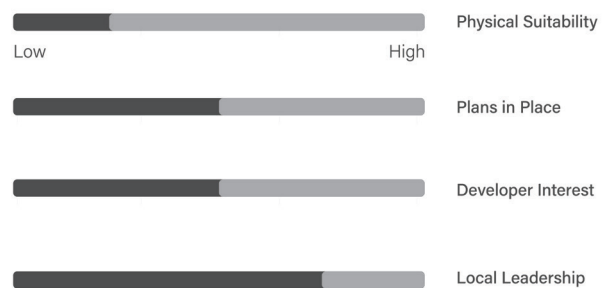
While Newington was selected as a station for further analysis, it was not included in the D&R process due to the need for further consideration of station location.

West Hartford

The future West Hartford station area crosses the jurisdictional boundary between the Town of West Hartford and the City of Hartford and has promise to emerge as a multi-modal hub with a cross-platform connection. While the existing Flatbush Avenue CTfastrak Station and the future Hartford Line station provide the foundation for a transformation within this community, the station area currently consists primarily of auto-dependent industrial and commercial developments, surrounded by single-family residential neighborhoods. Potential hurdles to TOD identified in West Hartford were:

- Lack of a unified station area vision between the Town of West Hartford and the City of Hartford
- Regulatory differences (i.e., zoning, mill rates) between the two municipalities
- Limited redevelopment opportunities in the near-term
- Insufficient station parking
- Lack of pedestrian and vehicular accessibility to the station
- Uncertainty regarding the implications of the I-84 Reconstruction Project

TOD Desire and Readiness in West Hartford

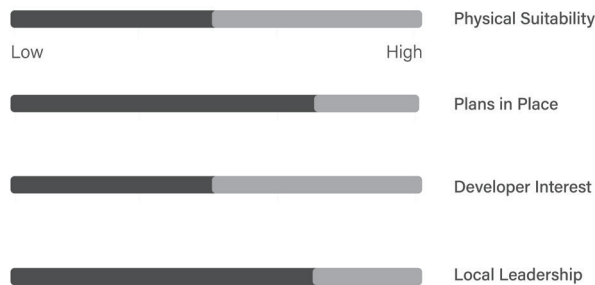


Windsor

The Windsor station area includes a mix of multi-family residential development east of the railroad tracks with supporting local retail and various civic uses west of the tracks, including Town Hall, the Town Green, and the public library. The recently completed Windsor Station Apartments is indicative of the scale of moderate-density residential projects that can enhance the character of the station area. Potential hurdles to TOD identified in Windsor were:

- Perceived lack of parking and uncertainty regarding future need for parking in Windsor Center
- Barrier (physical and perceived) created by Broad Street
- Limited active and pedestrian-oriented uses in Windsor Center
- Lack of a unified vision for the redevelopment of the Central/Union block
- Constrained development potential of the animal shelter site
- The need to secure funding for the proposed road diet on Broad Street
- Limited direct transit connectivity between the station area and the Day Hill Road employment center

TOD Desire and Readiness in Windsor

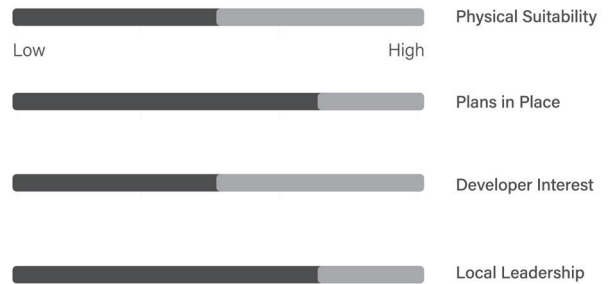


Windsor Locks

The Windsor Locks station will be relocated just north of the historic train station in what was historically a mixed-use and walkable downtown. Currently, the area lacks a discernable center and consists of auto-oriented uses along a roadway that primarily caters to vehicular throughput. The Town has taken several steps to advance downtown revitalization, including Complete Streets improvements and predevelopment activities. Potential hurdles to TOD identified in Windsor Locks were:

- Adverse effects of urban renewal on downtown identify
- Traffic and circulation issues at Bridge Street and Main Street
- Lack of pedestrian and bicycle accommodations on Main Street
- Limited area of planned Complete Streets improvements
- Topographic constraints associated with potential redevelopment sites
- The need to avoid displacement of existing uses in conjunction with future development
- Lack of precedent for use of tax increment financing (TIF) following recent state legislation

TOD Desire and Readiness in Windsor Locks

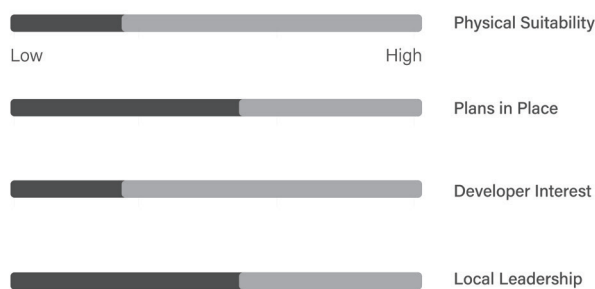


Enfield

The future Enfield station area in the Thompsonville neighborhood was historically a thriving downtown. Decades of private sector disinvestment has led to a need for revitalizing the area. Ongoing projects such as the redevelopment of the former casket-hardware factory into a transit center and the creation of enhanced riverfront access offer additional opportunities for redevelopment. Potential hurdles to TOD identified in Enfield were:

- Interdependencies between ongoing and forthcoming initiatives in Thompsonville
- Misconceptions of the impacts of TOD in the community
- Lack of private sector investment in Thompsonville
- Limited waterfront access and associated amenities
- Misalignment between existing zoning and development goals
- The need to balance goals of open space conservation and development along the waterfront
- Delays in advancing the Thompsonville Transit Center

TOD Desire and Readiness in Enfield



Station Area Recommendations

The D&R process highlighted key hurdles for TOD implementation in each station area, which reflected overall corridor-wide challenges related to dispersed residential and employment centers, limited physical and institutional structures to support TOD, and the need to better understand financial levers to catalyze TOD. The project team developed a set of tailored recommendations for each of the eight selected station areas. The recommendations build upon work completed in prior plans and studies and are therefore not intended to be exhaustive.

North Haven

- Position for future grant opportunities to implement proposed complete streets improvements in the station area.
- Prepare a development feasibility concept plan for priority sites to assess opportunities for assemblage and overcoming access constraints.
- Explore options to modify zoning to permit TOD-supportive densities and mix of uses in the station area.
- Leverage the planned ecological enhancements at the former Pharmacia & Upjohn site to create recreational opportunity and waterfront access in the station area.
- Coordinate with the North Haven Medical Center and other related uses to continue enhancing the medical epicenter.

Wallingford

- Prepare a development feasibility concept plan for priority sites in the downtown, based on different development and financing scenarios.
- Explore options to modify zoning in the downtown to support TOD that promotes redevelopment while maintaining the community's desired scale and form of future development.
- Develop a parking management plan to build on previous parking studies and address short- and long-term needs.
- Identify and implement strategies to leverage the old station building and Railroad Green as a focal point in the downtown.

- Develop a retail attraction and retention strategy in the downtown to extend the success of the Uptown retail center.
- Pursue funding opportunities to implement public realm improvements between Downtown and the new station.

Berlin

- Conduct a site redevelopment concept plan for 100 Harding Street, a potential catalytic site.
- Gauge developer interest in identified catalytic sites with consideration for necessary regulatory changes and associated public realm improvements.
- Continue to pursue funding opportunities for public realm improvements in Kensington Village.
- Consider public acquisition of the inactive rail spur to improve access to adjacent neighborhoods and maximize development potential on adjacent sites.
- Incentivize private property improvements in Kensington Village through a unified branding effort and continued financial support for the Town's Façade and Landscape Program.
- Continue efforts to address groundwater migration issues on the north side of Farmington Avenue to overcome potential constraints for redevelopment.
- Explore opportunities to rebuild the historic station as a civic/commercial space to anchor the station area.

Newington

- Perform review of alternative station siting and TOD potential analysis.

West Hartford

- Explore options to modify zoning in the West Hartford portion of the station area to support TOD.
- Develop a parking management/transportation access strategy to ensure safe and convenient multi-modal access.
- Continue to pursue inter-municipal coordination with Hartford to define a unified station area vision.
- Consider near-term opportunities for the redevelopment of catalytic sites in the station area.

- Define opportunities for phased development propositions over the longer term in the station area.
- Market the Flatbush Station area as a multi-modal hub that offers a direct connection to CTfastrak bus rapid transit service.

Windsor

- Develop a parking management strategy to address short- and long-term needs in Windsor Center.
- Explore options for implementation of public realm improvements on Broad Street.
- Coordinate with property owners of the Central/Union block to promote redevelopment.
- Develop a "social retail" attraction and retention strategy for Windsor Center.
- Enhance programming and connectivity of public spaces in Windsor Center.
- Coordinate with Day Hill Road employers and other local and regional entities to enhance transit accessibility to and from the station.
- Coordinate with Loomis Chaffee to explore the full redevelopment potential of the animal shelter site and adjacent property.

Windsor Locks

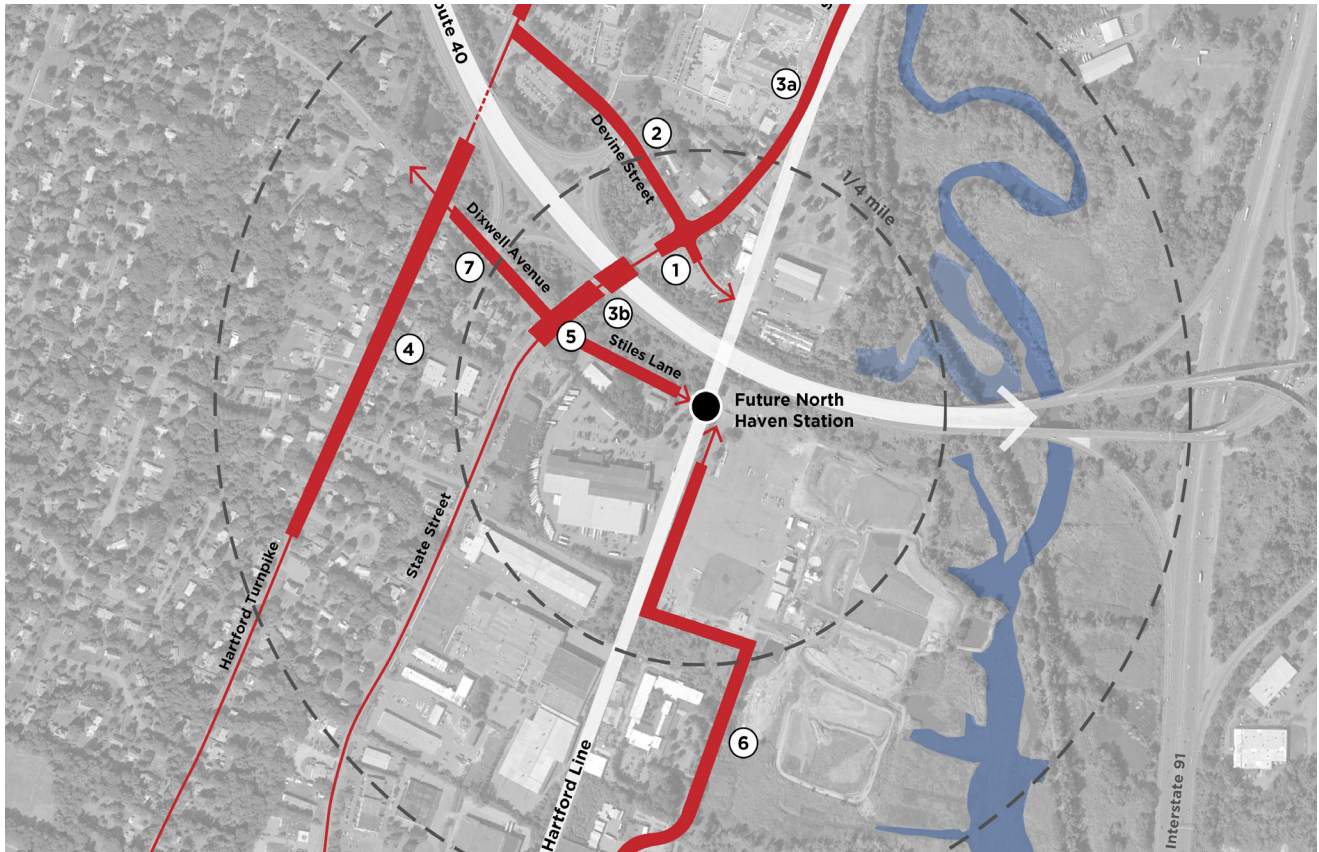
- Develop a strategy to rejuvenate the identity of the downtown through the creation of a town center along Main Street.
- Continue pre-development activities to facilitate the redevelopment of priority sites.
- Conduct site feasibility assessment to determine development potential on additional sites.
- Develop a value capture strategy for the recently enacted tax increment financing (TIF) district.
- Coordinate with Bradley International Airport, CTDOT, and CTtransit to maximize multi-modal opportunities.

Enfield

- Develop a blueprint for TOD implementation in Thompsonville.

- Develop and implement a public engagement program to establish community support for TOD in Thompsonville.
- Create an economic development strategy to attract private investment for key redevelopment sites.
- Consider alternative approaches to advance the Thompsonville Transit Center.
- Revisit previously proposed zoning amendments after establishing community support for TOD.
- Pursue funding to implement a recreational component to the River Access project.

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North Haven Walkability and Livability Plan Update. A sample graphic from the plan update, including proposed streetscape improvements to key corridors in the North Haven station area.

PART TWO

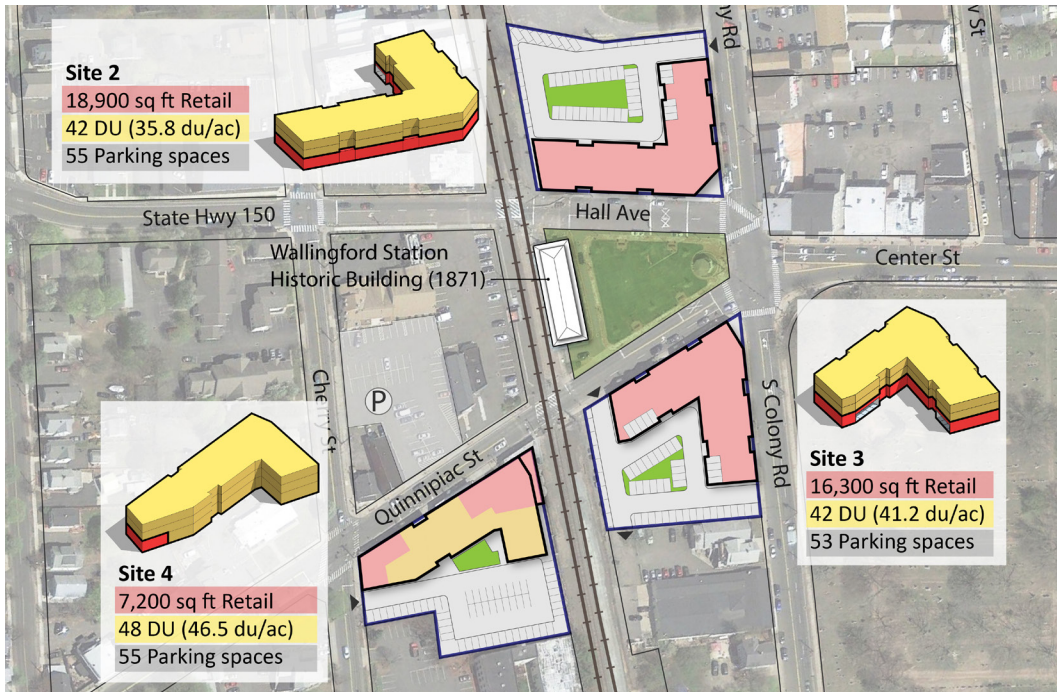
Overview

Part 2 of the Hartford Line TOD Action Plan enabled the project team to provide technical assistance to the selected station area municipalities to continue moving from TOD planning to implementation. While diverse, each coordinated effort was focused on identifying action-oriented next steps to address key TOD hurdles.

North Haven

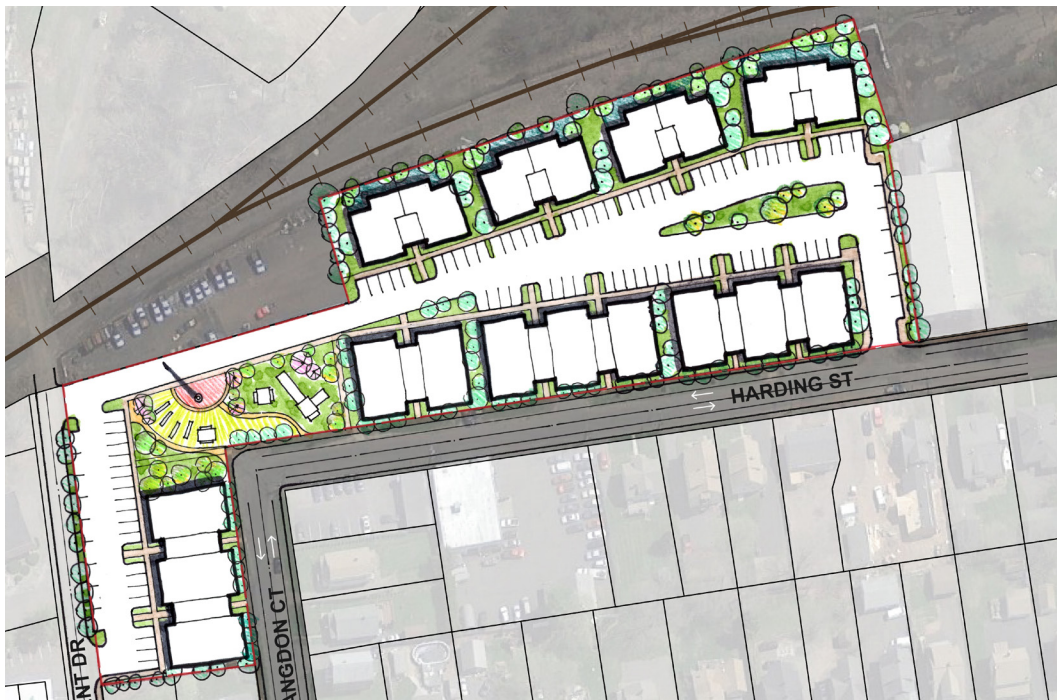
Walkability and Livability Plan Update

In 2015, CTDOT collaborated with the Town of North Haven to prepare a Walkability and Livability Plan for the future North Haven station. The purpose of the plan was to identify key issues that impact walkability of the proposed station area, as well as opportunities to promote TOD through public realm improvements. At the time of the 2015 plan, the future North Haven station was planned to be sited on Devine Street, east of State Street and north of Route 40. Subsequently, citing access constraints and significant environmental concerns, the proposed station location was modified based on an evaluation of alternative sites. The planned location of the future station was modified to be sited on Stiles Lane, south of Route 40 and east of State Street. Due to the station siting relocation, the project team and Town identified the need for an update to the 2015 North Haven Walkability and Livability Plan. This update built on recommendations in the 2015 plan and identified additional recommendations and next steps for infrastructure improvements that enhance access to the new station location.



Wallingford Targeted Development Feasibility Concept Plan.

Graphic representation of potential development options in the Wallingford station area.



Berlin 100 Harding Street Redevelopment Concept Plan.

Conceptual plan for 100 Harding Street, a potential redevelopment parcel located in the Berlin station area.

Wallingford

Targeted Development Feasibility Concept Plan

Although the Town, developers, and several property owners would like to see redevelopment in the Wallingford station area, the project team and Town identified a need to align the varied interests of these parties to realize a development vision. The purpose of preparing a development feasibility concept plan was to identify a financially feasible development scheme for priority sites. Through an iterative process, this effort consisted of two main components: 1) a physical planning exercise that tested site performance under different planning

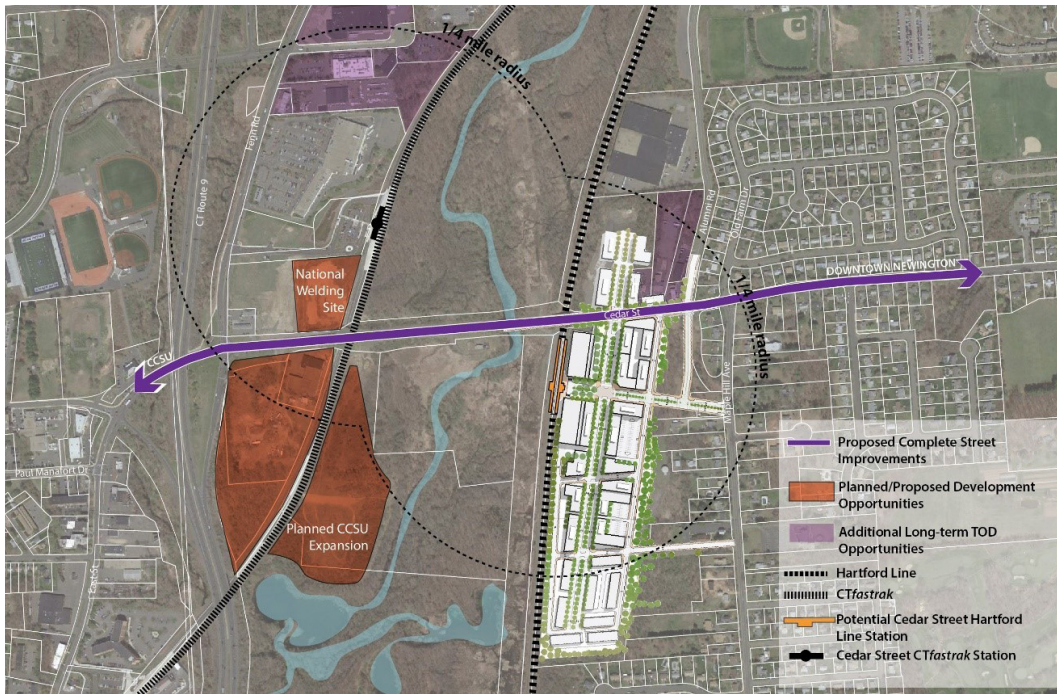
parameters to reach a preferred concept, and 2) a financial feasibility assessment that evaluated the preferred concept plan under multiple financing scenarios. The goal of this effort was to serve as a resource that demonstrates the interplay between financial variables and planning parameters on development feasibility. The development feasibility concept plan provides a framework upon which to build momentum in re-imagining the heart of downtown Wallingford.

Berlin

100 Harding Street Redevelopment Concept Plan

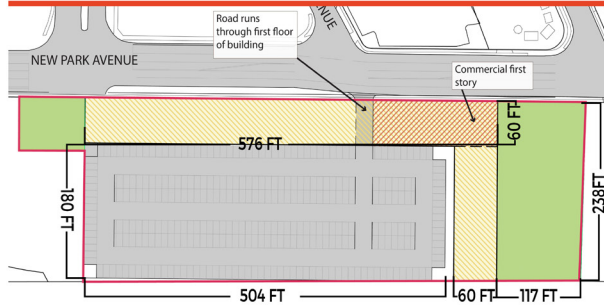
The 2017 Berlin TOD Kensington Village Plan focused on exploring the redevelopment potential of three sites in the vicinity of Berlin Station: (1) Depot Crossing; (2) an assemblage of 889, 903, and 913 Farmington Avenue; and (3) the Berlin Steel site. To complement this work, the project team collaborated with the Town to prepare a concept plan for an additional site with redevelopment

potential: 100 Harding Street. The concept plan reflects development programming, zoning, scale of development, historic preservation, and site design considerations identified through discussions with the Town. To advance redevelopment opportunity at 100 Harding Street, the project team identified additional next steps and recommendations.



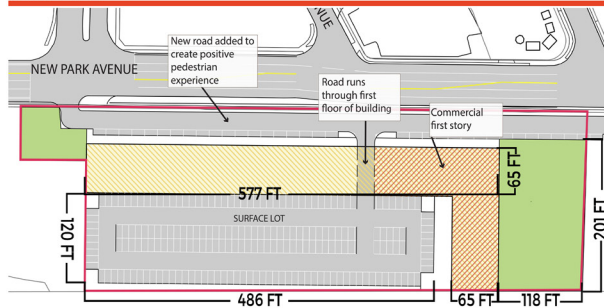
Newington Alternative Station Siting Assessment. Conceptual representation of long-term potential around an alternative future station location in Newington.

TEST-FIT 1



- 4 Stories (mixed-use)
- 10,000 sf retail
- 170 residential units
- 35,000 sf open space
- 320 parking spaces
- FAR: 1.0
- Street wall: 575 ft

TEST-FIT 2



- 4 Stories (mixed-use)
- 19,000 sf retail
- 160 residential units
- 33,000 sf open space
- 200 parking spaces
- FAR: 1.0
- Street wall: 575 ft

West Hartford Test Fits. Example test fits prepared for a site in the West Hartford station area.

Newington

Alternative Station Siting Assessment

Under the NHHS Rail Program, a new Hartford Line station was originally planned to be located at Newington Junction. However, during the Part 1 effort of the Hartford Line TOD Action Plan, the project team identified limited potential for TOD in the area surrounding this site. Identified hurdles for TOD implementation at Newington Junction include limited development potential, access challenges, and lack of community support. These initial observations

presented a need for exploring alternative station locations that hold greater potential to support TOD. The purpose of conducting an alternative station siting assessment was to identify a location for a future station that is economically beneficial to the Town, favorable to the local community, and supportive of Hartford Line ridership in a way that maximizes the potential for TOD.

West Hartford

Station Area Test Fits and TOD Zoning Analysis

While the future West Hartford station will be a future transit hub with direct cross-platform connection to CTfastrak, the zoning regulations in the station area are generally not supportive of TOD. Through development test fits, the project team conducted a build-out analysis to explore context-sensitive increases in density. The analysis

involved multiple build-out scenarios for two test sites near the station, exploring different parameters pertaining to land use program, scale of development, and parking. The findings of these test fits were used to identify zoning strategies and modifications to the existing zoning that would encourage TOD.



Windsor Center Parking Management Plan. Identified parking zones, based on utilization and clustering, as a component of the overall parking management plan.



Windsor Locks Station Area Build-Out Illustrative Plan. Portion of an illustrative plan outlining the potential full build-out of the future Windsor Locks station area, including private redevelopment and infrastructure improvements.

Windsor

Windsor Center Parking Management Strategy

In addition to decentralized surface parking in Windsor Center, there is a shortage of signage or striping to indicate the location of permitted on-street parking. As a result, there is a perceived lack of parking, while utilization rates are low for both on- and off-street parking throughout the day, including during peak periods. The project team and the Town developed a parking management study to better understand these existing parking conditions, as well as align the supply and demand for both public and private

parking in the near- and long-term within Windsor Center. Specifically, the parking management study focused on TOD scenarios and the effect they could have on future parking conditions. This effort built upon work completed the Town's 2014 Windsor Center Master Plan and Redevelopment Strategy, as well as the 2016 and 2017 On-Street and Off-Street Parking Survey. Ultimately, the results of this study were used to identify potential strategies to manage parking for future development proposals.

Windsor Locks

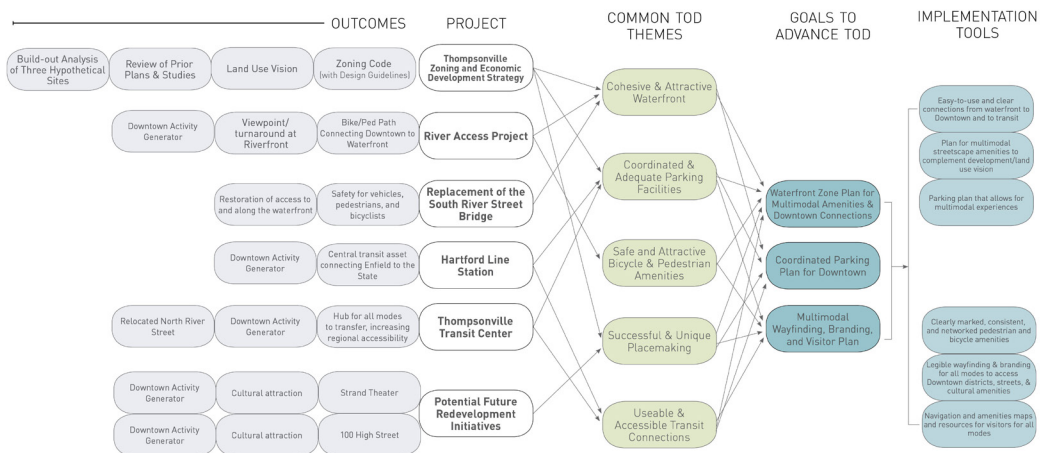
Station Area Build-Out Illustrative Plan

The Town of Windsor Locks is actively working to create a vibrant town center around the relocation of the Windsor Locks station to its historic downtown location along Main Street, by supporting mixed-use, context-sensitive redevelopment and pedestrian-oriented infrastructure improvements. The project team coordinated with the Town to prepare an illustrative plan highlighting the

potential full build-out of the station area based upon ongoing and planned improvements, and the overall Town vision. The purposed of this illustrative plan is to detail the transformative effect these improvements could have on downtown Windsor Locks. The project team also outlined how the illustrative plan can serve to assist with forming consensus around a singular, high-level vision.



Warehouse Point Connectivity Plan. A portion of a connectivity plan in Warehouse Point, connecting key gateways in the community with the future relocated station in Windsor Locks.



Thompsonville TOD Blueprint. A sample of the TOD blueprint, identifying interdependencies between ongoing and planned projects in the Thompsonville community of Enfield.

East Windsor

Warehouse Point Connectivity Plan

Due to its proximity to the future relocated station in Windsor Locks, the Town of East Windsor was added as a partner municipality in the Part 2 effort. The project team collaborated with the Town of East Windsor to identify Complete Streets strategies to create a connectivity plan for Warehouse Point. The plan focuses on key corridors and gateways within Warehouse Point including Main Street, Bridge Street, Water Street, Bridge Street and Main Street,

and Bridge Street and the Interstate I-91 access ramps. The recommendations developed for the Connectivity Plan were based upon an existing conditions analysis and findings from the 2018 Complete Streets and Development Concept Plan for Warehouse Point. Ultimately, the connectivity plan presents a framework for improving multi-modal connections both within Warehouse Point and to the relocated station in Windsor Locks.

Enfield

Thompsonville TOD Blueprint

The Town is actively working to advance various ongoing mutually beneficial initiatives, including an economic development strategy, zoning modifications, the Thompsonville Transit Center, and the River Access Project. To assist the Town's efforts to move from planning to implementation, the project team worked with the Town to develop a blueprint for TOD implementation in Thompsonville. The blueprint outlines critical paths forward, common themes and goals, and potential interdependencies among the many ongoing studies and

projects either planned or underway. The blueprint is designed to be an interactive tool that the Town can update in real-time to reflect progress made on each initiative and proactively identify implementation challenges that may arise in the future. The purpose of the blueprint is to serve as a strategic resource for Town leadership as they strive to concurrently advance multiple projects with an overarching objective to promote downtown revitalization in Thompsonville.

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CONCLUSION

The Hartford Line TOD Action Plan provided an opportunity for CTDOT to partner with municipalities to continue to position their respective station areas for TOD implementation. The Part 1 effort focused on identifying TOD issues and opportunities along the Hartford Line corridor. Eight station areas, including a combination of replaced, relocated, and new stations, were selected for detailed analysis. By assessing municipal TOD desire and readiness, the project team was able to identify each community's level of desire for TOD, which is critical to empowering local leaders to make decisions that set the stage for a station area strategy. In Part 2, TOD hurdles that were identified in Part 1 were addressed through technical assistance that informed action-oriented strategies for implementing TOD. Ultimately, the cumulative Hartford Line TOD Action Plan sought to support municipal and state-wide goals for economic opportunity, multi-modal connectivity, and community placemaking along a re-emerging and reinvigorated rail corridor.

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