







https://www.downtownnorwichmobilitystudy.com/

# **Executive Summary**

City of Norwich, CT

#### PREPARED FOR

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# **Executive Summary**

The Chelsea Harbor/Downtown Norwich Mobility Study details an extensive evaluation and suite of recommendations for improving pedestrian, bicycle, transit, and vehicular transportation in Downtown Norwich. The study addresses key areas such as traffic operations, safety improvements, pedestrian and bicycle accommodations, traffic circulation, parking, and trail connections. The aim is to create a more efficient, safer, and accessible urban environment.

# **Study Area**

The Study area is focused on Downtown Norwich, including State Routes 2, 12, 32, and 82. The Study goals include improvements to livability, mobility, access to essential services, safe routes to the waterfront and Howard T. Brown Park, the Intermodal Transportation Center, the Norwich Marina, and other downtown destinations. This will be accomplished through expanded bicycle facilities, sidewalk network improvements, and the reconfiguration of multi-lane, high-speed through streets that currently exist as a barrier between downtown proper and the City's waterfront area, East, and West Side neighborhoods. The Study proposes alternatives to the current configuration and traffic flows of the study area with the above goals in mind.

#### **Preferred Alternatives**

The transportation improvements recommended are a result of extensive discussions and analyses to address mobility, safety, and operational concerns in Downtown Norwich. The proposals include both short-term, lower-cost fixes and long-term, more substantial infrastructure projects. These improvements are designed to enhance safety, create better pedestrian and cyclist infrastructure, improve traffic flow, and make downtown circulation easier. A summary of the changes are:

- Chelsea Harbor Drive is reduced from three lanes to two lanes, becomes a local street and is cut off from Water Street (see Figure 1).
- > Water Street/Route 2 becomes two-way, with one lane in each direction, carrying both eastbound and westbound traffic.

- With the removal of Chelsea Harbor Drive from the intersection, the traffic signal at the Water Street/Courthouse Square intersection can have a much simpler two-phase operation.
- Install a traffic signal at Water Street and Market Street to allow all vehicle movements from Market Street onto Water Street.
- Install curb extensions and a median island to reduce the crosswalk distance at Main Street/Broadway/Courthouse Square.
- Convert Washington Square into a roundabout, similar to Franklin Square.
- Convert Westside Boulevard from a one-way street to a two-way street and install bicycle lanes on both sides and sidewalks on the south side.
- Install a roundabout at the intersection of W. Main Street/Route 82 and N. Thames Street/N. High Street.
- The W. Main Street bridge/Route 82 also becomes a two-way street between Washington Square and N. Thames Street/N. High Street.
- Install a traffic signal at W. Main Street and Falls Ave/the Norwich Marina.

Figure 2 shows a map of improvement alternatives. Table 1 details the recommended alternatives with phasing and estimated costs.



Figure 1 **Chelsea Harbor Drive Proposed Cross-Section** 

Source: VHB

Figure 2 Chelsea Harbor/Downtown Norwich Overall Recommended Improvement Alternatives

Source: VHB

List of Recommended Concept Alternatives With Phasing and Cost for Downtown Norwich Table 1

Project Area	Concept Option	Grouping	Project Location	Project Type	Project Details	Proposed Phasing	Order of Magnitude Cost
TrojectArea	T	Orouping	Troject Education	Гојсстурс	Curb Extensions, shared-lane	Tildonig	Trugilituuc 003t
Downtown East	DE-1A	N/A	Main Street between Franklin Square and Viaduct Road	Complete Streets Improvements	markings, tighten up Cliff Street intersection, create crossing island	Short Term	\$2 million
Downtown East	DE-2A	N/A	Main Street at Viaduct Road/N. Main Street/Route 2 & 12	Intersection	Widen Viaduct Road for right-turn lane, pedestrian overlook	Long Term	\$5 million
Downtown North	DN-1	N/A	Franklin Street/Oak Street/Boswell Avenue	Intersection	Reconfigure intersection, curb extensions, convert to all way STOP	Short Term	\$1 million
Downtown Central	DC-1	N/A	Union Street/Broadway/Bath Street	Complete Streets & Circulation Improvements	Curb Extensions, shared-lane markings, circulation changes	Short Term	\$1 million
Downtown Central	DC-2	N/A	Broadway/Main Street/Courthouse Square	Intersection	Curb extensions, crossing island, circulation changes	Short Term	\$500,000
Downtown Central	DC-3	Downtown	Chelsea Harbor Drive	Corridor Complete Streets Improvements	Reduce lanes, circulation changes, separated bike lane, widen sidewalks, streetscape upgrades, convert Market St intersection to all-way Stop	Long Term	\$3 million
Downtown Central	DC-4	Central Circulation	Water Street	Circulation Changes	Downtown two-way conversion - convert Water Street to two-way	Long Term	\$1 million
Downtown Central	DC-5	Changes	Water Street at Courthouse Square	Intersection	Revise signal, remove Chelsea Harbor Drive from intersection, curb extensions	Long Term	\$1 million
Downtown Central	DC-6		Water Street at Market Street	Intersection	New traffic signal	Long Term	\$700,000

	Concept					Proposed	Order of
Project Area	Option	Grouping	Project Location	Project Type	Project Details	Phasing	Magnitude Cost
Downtown Central	DC-7		Water Street at Viaduct Road/Laurel Hill Ave	Intersection	Revise/new signal, Summer Street and Talman Street become one- way away	Long Term	\$1 million
Downtown Central	DC-8		Washington Square	Intersection	Install Roundabout	Long Term	\$5 million
Downtown West	DW-1	N/A	West Main Street at N. Thames Street/Westside Boulevard	Intersection	Install Roundabout	Long Term	\$6 million
Downtown West	DW-Bridge3- 1		Washington Street at Westside Boulevard	Intersection	Install Roundabout	Long Term	\$4 million
Downtown West	DW-Bridge3-	Bridge Option 3	Westside Boulevard	Corridor Complete Streets Improvements	Convert bridge to two-way; add sidewalks and bike lanes, pedestrian connection between Transportation Center Garage and Westside Boulevard	Long Term	\$2 million
Downtown West	DW-Bridge3-		West Main Street	Corridor Complete Streets Improvements	Convert to two-way, install bike lanes	Long Term	\$3 million

Three options were reviewed for the Downtown West area, which includes Washington Square, the Westside Boulevard bridge, the W. Main Street bridge, the Norwich Marina, and the Intermodal Transportation Center. These options considered ways to change circulation on the two bridges over the Yantic River and Hollyhock Island to enhance bicycle and pedestrian conditions and safety. In each option, roundabouts were proposed at Washington Square and the N. Thames Street/W. Main Street intersection. In addition, the options include a pedestrian bridge between the Transportation Center and Westside Boulevard for better pedestrian connectivity.

#### **Option 1: Bridge of Roses**

In Option 1, the Westside Boulevard Bridge would be transformed into an exclusive pedestrian/bicycle bridge, featuring widened sidewalks, separated bike lanes, and potentially areas for street vendors and food trucks. This plan would eliminate the road intersection with Washington Street and the vehicular connection to W. Main Street at the west end, creating more open space for parks and public amenities such as planting areas and public art. W. Main Street would become a two-way road to improve access to local businesses and amenities. A new traffic signal at W. Main Street and Falls Ave would also be introduced to enhance traffic flow and safety.

#### Option 2: W. Main Street Pedestrian Plaza

Option 2 proposes converting part of W. Main Street into a pedestrian plaza with multi-use paths, vending areas, seating, and green spaces, which would disconnect W. Main Street from Washington Street for vehicular traffic. Another roundabout would be installed at the intersection of Washington Street and Westside Boulevard, and traffic lanes on Washington Street would be reduced to allow better bike and pedestrian infrastructure. Westside Boulevard would be converted to a two-way street with bike lanes and sidewalks. W. Main Street would be converted to two-way traffic.

#### Option 3: Both Bridges Become Two-Way (Recommended Option)

Option 3, the recommended plan, would convert both the Westside Boulevard Bridge and W. Main Street into two-way roads, each with one lane in each direction, bike lanes, and sidewalks. Like Option 2, a new roundabout at Washington Street and Westside Boulevard would enhance safety, while reducing traffic lanes on Washington Street would create more open space for pedestrian and biking infrastructure. A new traffic signal at W. Main Street and Falls Ave is also part of this option to improve bus and pedestrian movements and marina access. See Figure ES-3 for a proposed cross-section of W. Main Street east of Falls Ave, and Figure ES-4 showing a top-down planview graphic of the changes proposed in Option 3.

Compared to the other two Options, Option 3 provides better bicycle and pedestrian mobility on both bridges and access to the Norwich Marina and Transportation Center. It also disperses traffic between the two bridges such that drivers going towards or coming from downtown are more likely to use W. Main Street, while drivers coming from the north on Washington Street who are planning to go west on Route 82 can use Westside Boulevard and avoid the roundabout and traffic at Washington Square. Option 3 also does not preclude the City of Norwich from pursuing Options 1 or 2 in the future. In fact, it allows the City to take a phased approach to these options and potentially evaluate them out on a temporary basis before fully committing to the Bridge of Roses in Option 1 or the pedestrian plaza in Option 2. It also allows time for drivers to acclimate to the traffic circulation changes proposed throughout the entire downtown which will need to be phased over many years and projects.

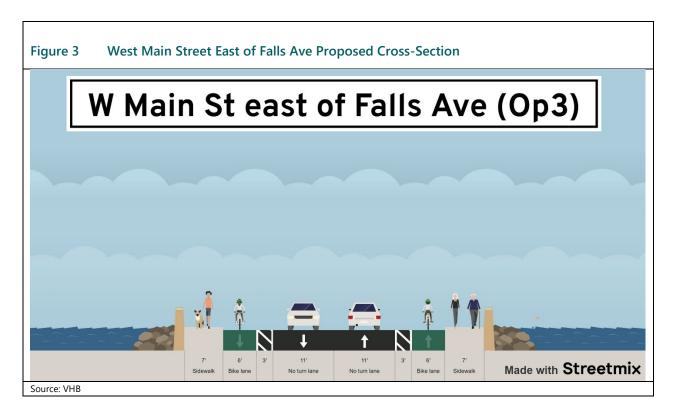


Figure 4 Downtown West Option 3: Both Bridges Two-Way



Source: VHB

### **No-Build and Low-Cost Improvements**

Additional improvements to traffic flow and safety can be made via lower-cost/no-cost actions whether the recommended scenario is implemented or not. These improvements include:

- Improve pedestrian infrastructure by maintaining ADA-compliant sidewalks and curb ramps.
- Construct new sidewalks on Westside Boulevard and Viaduct Road during bridge replacements. >
- Mark shared roadways for bicycling and construct/enhance bicycle parking facilities.
- Narrow travel lane widths to create space for bicycle lanes, as possible. >
- Improve bus frequency, utilize or construct new transit shelters, streamline bus routes, and address occasional flooding issues at the Transportation Center.
- Extend the Heritage Trail to Uncas's Leap and construct a trail under the Water Street bridge to City Landing and along the south side of the Main Street bridge over the Shetucket River.
- Improve navigation and wayfinding for the parking garages, maintain and repair parking facilities, rearrange reserved parking spaces, consolidate on-street regulations, and create loading zones for commercial deliveries.
- Enhance signal timing splits, update traffic signage in compliance with current standards, and maintain pavement markings.

# **Order of Magnitude Cost Estimates**

The total cost for the recommended downtown projects is approximately \$36 million, focusing solely on construction costs. This estimate excludes engineering, right-of-way acquisition, and permitting. Downtown East is estimated at \$7 million, Downtown North at \$1 million, Downtown Central at \$13.2 million, and Downtown West at \$15 million. Adjustments will be needed for inflation given the longterm nature of some projects.

Identifying federal and state planning and infrastructure grants is critical for funding these projects. Opportunities like the USDOT Reconnecting Communities & Neighborhoods Program offer substantial funding for both planning (up to \$2 million with a 20% non-federal match) and construction projects (minimum \$5 million, up to 80% federal share). Eligible applicants include state and local governments, MPOs, non-profits, and tribal governments. These funding sources present significant opportunities to address community connectivity challenges and environmental impacts, crucial for successful downtown planning and redevelopment.

# Improvement Alternatives Public Engagement

Given the significant transportation changes proposed for Downtown Norwich, public engagement was crucial. Efforts included multiple meetings with residents, city staff, and officials, media coverage, and a dedicated website for updates and feedback. These efforts included two TAC meetings, two City Council informational sessions that were open to the public, a public information meeting, and additional public outreach in the form of a pop-up event and walk-around in Downtown Norwich, a tactical urbanism demonstration, and information dissemination via the Norwich 360 website and Chelsea Harbor/Downtown Norwich Mobility Study website.

# **Study Summary**

The proposed improvements aim to significantly enhance bicycle and pedestrian access, traffic circulation, and traffic safety in Downtown Norwich with a Complete Streets approach for all users. While Option 3 is recommended, the City can re-evaluate Options 1 and 2 if needed. Other proposed changes include improved sidewalks, bicycling routes, transit, multi-use trails, and parking to ensure accessibility and safety. These improvements will foster a more welcoming and efficient urban environment for Downtown Norwich.