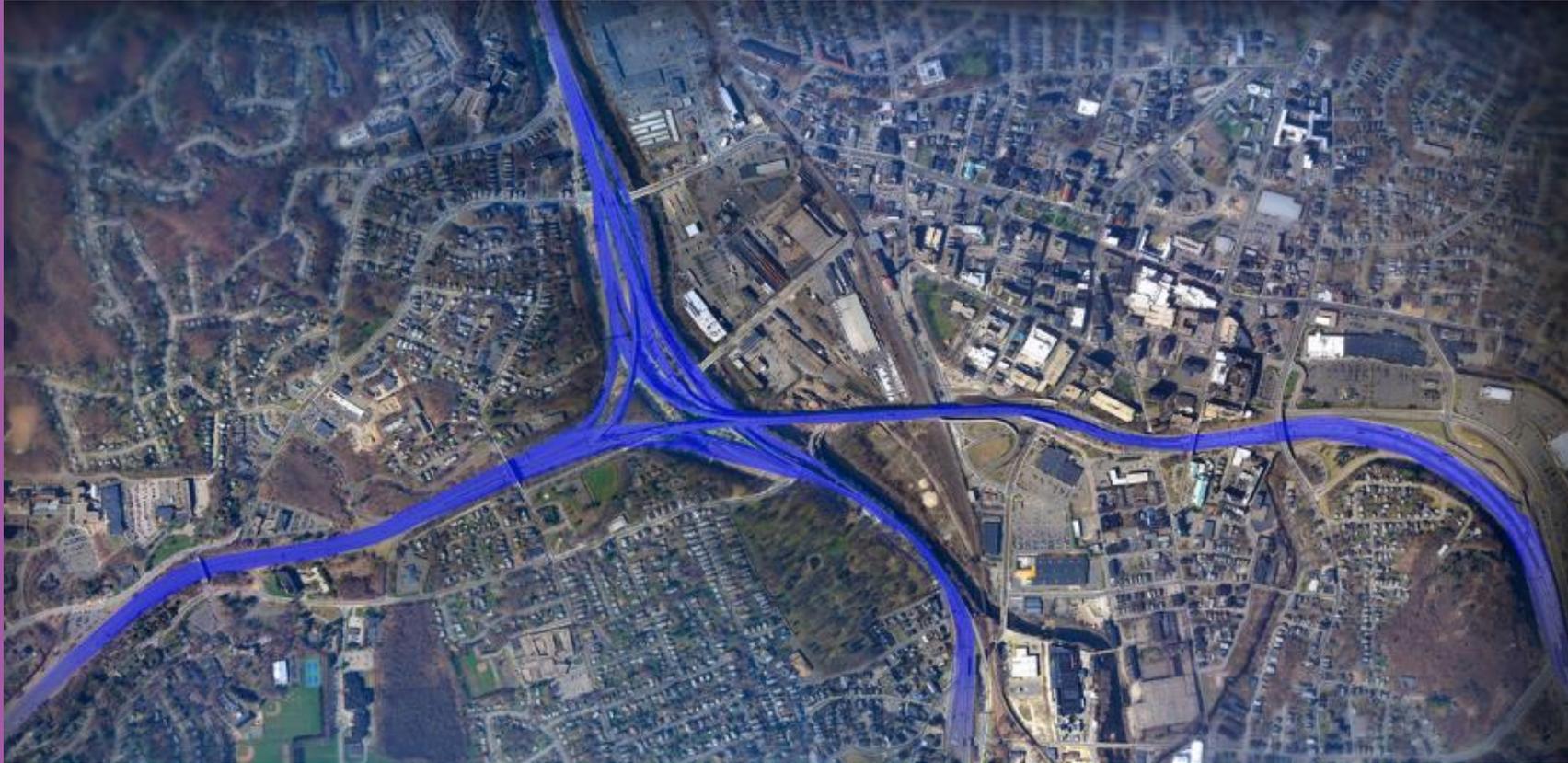


# New Mix Public Meeting 3

## January 31, 2023



**HNTB**



# Welcome!



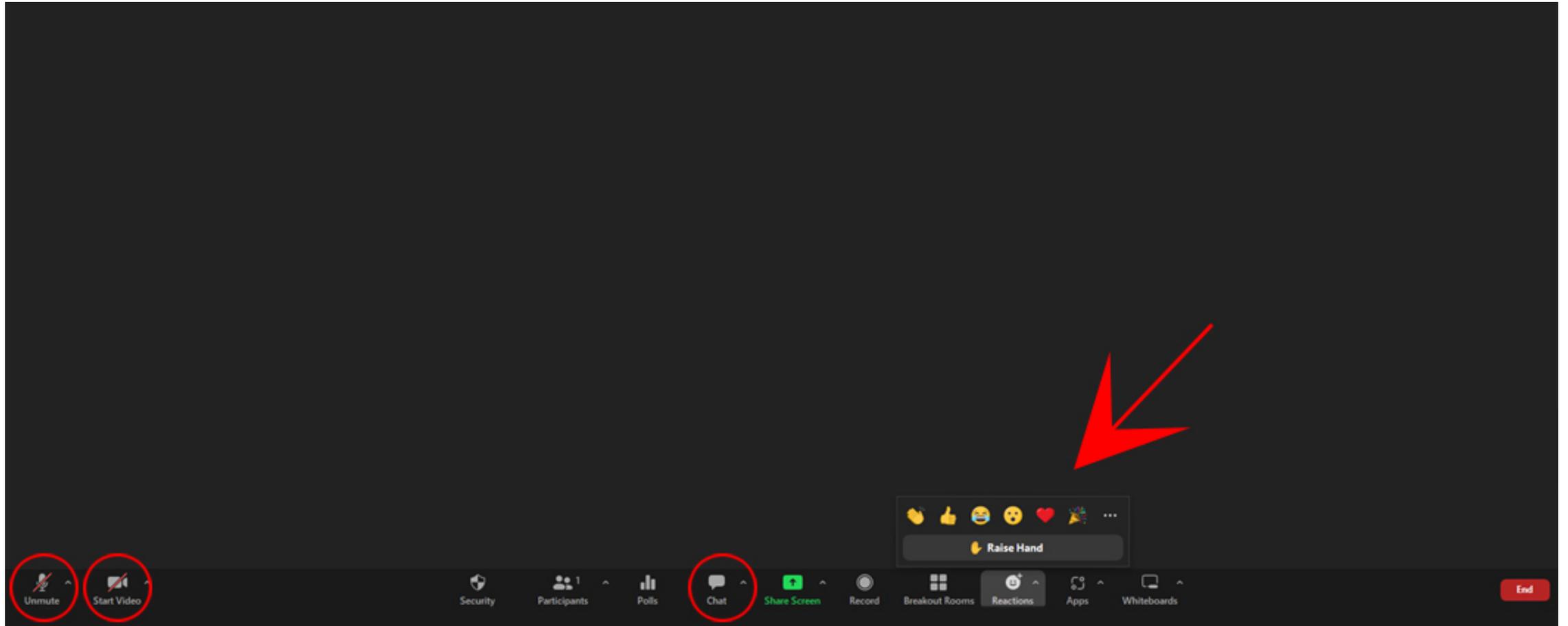
# Zoom Meeting Protocols

To ensure meetings are productive, friendly, and efficient, we request that attendees adhere to the following:

- Use respectful language & standard, professional meeting decorum.
- Remain muted when not speaking.
- Hold questions until after the presentation.
- Please note that if a backlog of pending questions and/or comments occurs we will ask that attendees limit initial comments to 2 minutes so that everyone has a chance to speak. Once everyone has had the opportunity to speak, we will then allow attendees who have additional comments more time.



# How To Zoom: Mute, Start Video, Chat, & Raise Hand



# How To Zoom: Select Real-Time Translation

Real Time Translation:

# Title VI - Civil Rights

No Person shall, on the basis of race, color or national origin, be excluded from participation or subject to discrimination in the development of this project.

- Civil Rights flyer available:  
<https://bit.ly/CTDOTCivilRights>
- Demographic Survey appreciated:  
<https://bit.ly/CTDOT-Feedback>



*CTDOT may adopt or incorporate Planning Products from this PEL Study into a federal or state environmental review process, pursuant to Title 23 U.S.C. § 168(d)(4). The project is formally identified as State Project No. 0151-0331.*



# The **New Mix** Leadership Team



## Connecticut Department of Transportation

- Michael N. Calabrese, PE, Division Chief
- Nilesh Patel, PE, Principal Engineer
- Jonathan Dean, PE, Project Manager
- Joe Belrose, EIT, Project Engineer

## HNTB Corporation

- Jacob Argiro, PE, Project Manager
- David Schweitzer, PE, Deputy Project Manager
- Chris Fagan, PE, Project Engineer
- Naomi Hodges, Environmental Lead
- Anna Mariotti, Public Information & Involvement



# Agenda

## **The New Mix Project**

*What is the New Mix? Why is it occurring?*

## **Early Planning for the New Mix: the Planning and Environmental Linkages (PEL) Study**

*What is the New Mix PEL Study?*

## **Screening the Universe of Alternatives: Evaluations to find a Range of Reasonable Alternatives**

*How is the PEL Study progressing?*

## **Getting to New Mix Construction: the Process and Anticipated Schedule**

*When and How will Construction occur?*

## **Learn More, Provide Input & Stay Involved with the New Mix**

*How to get involved and provide input?*

## **Attendee Poll, Question & Answer Session**



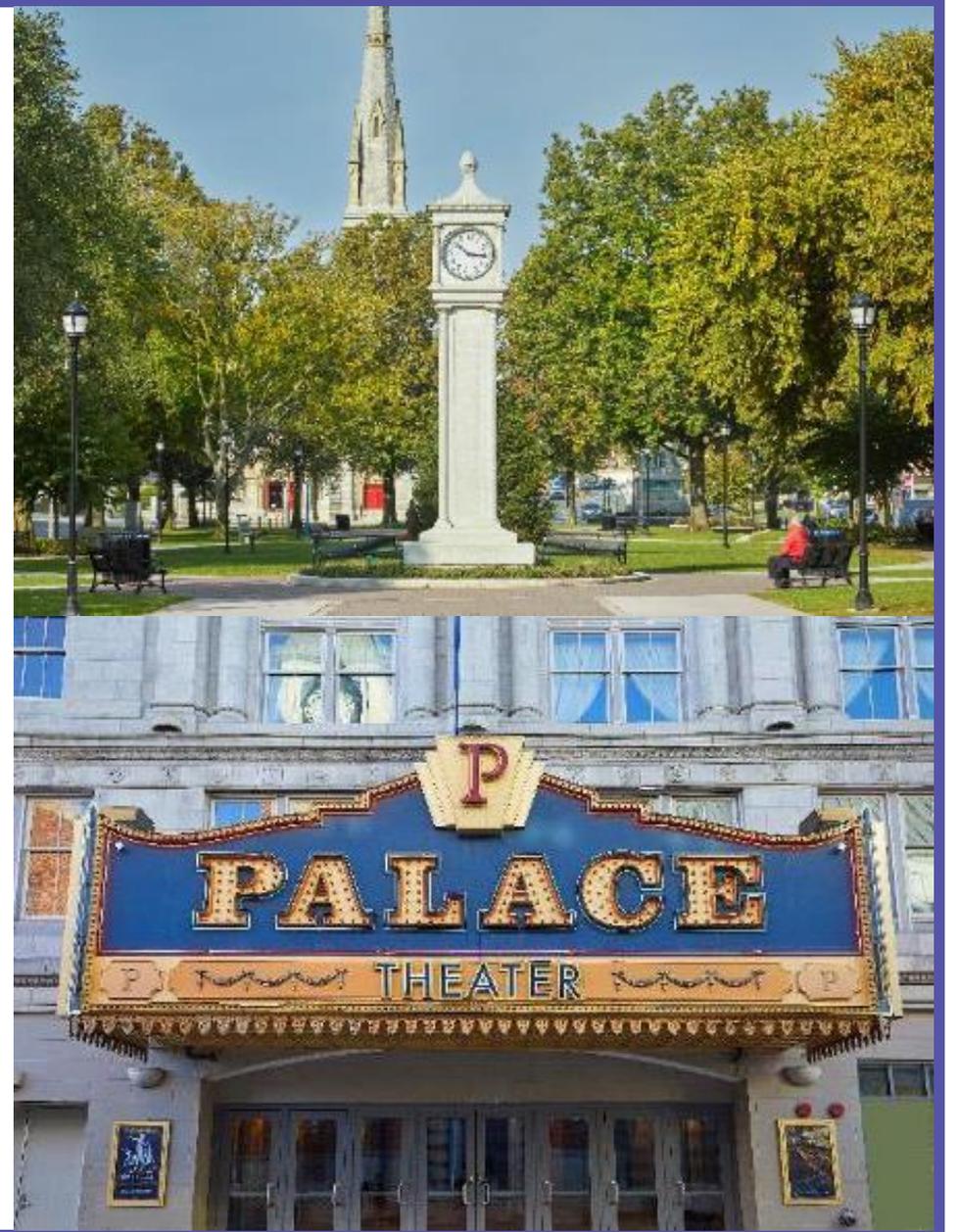
# The New Mix Project

# What is the **New Mix** Project? What does it aim to achieve?

The **New Mix project** is planning for the *long-term* future of the Mixmaster, when it reaches end of its serviceable lifespan.

The New Mix project will analyze rehabilitation and replacement options that can be implemented by 2045 and will:

- Modernize
- Improve safety & functionality
- Improve function of local road network & the interchange
- Reduce congestion & improve air quality
- Align with economic development & community plans



# Why is the **New Mix** Project Needed?

The existing interchange is:

- Aging; various components reaching end of serviceable lifespan (Rehab project extends lifespan until about 2045)
- Not designed to current safety & operational standards (sight lines, narrow shoulders, interchange spacing, left exits, etc.)
- Stacked structures cause repairs and maintenance to be costly, lengthy, and extremely disruptive to traffic flow



# Travel Patterns on the Mixmaster



**35%**

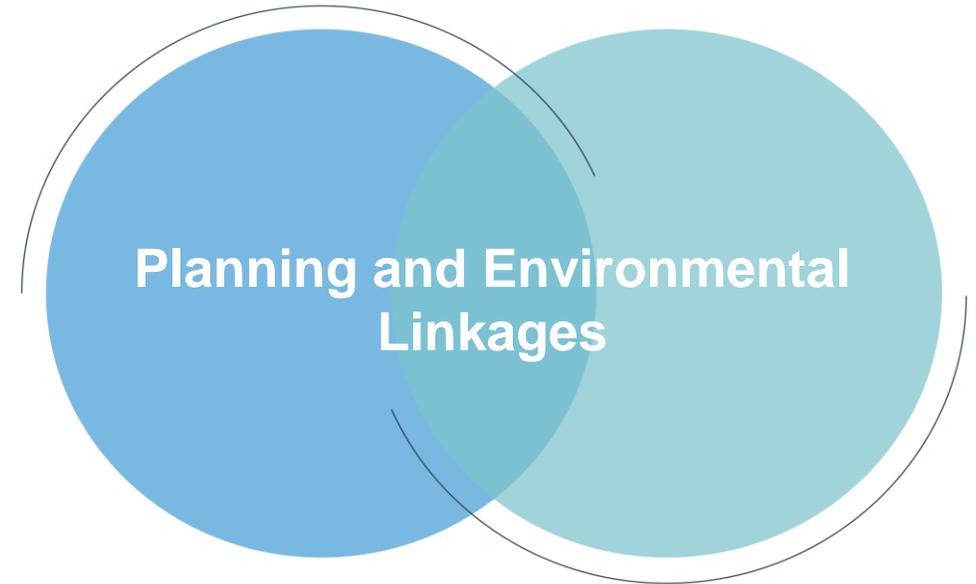
of traffic on the interchange is local traffic that enters and exits within the study area.

# Early Planning for the New Mix

*The Planning and Environmental Linkages (PEL) Study*

# What is the Planning and Environmental Linkages (PEL) Study that is being used for the **New Mix**?

- Federal Highway Administration (FHWA) recognized process
- Early start on technical studies, outreach, and public involvement
- Connect transportation planning and environmental/community concerns
- Identify key issues and risks associated with transportation projects
- Informs the National Environmental Policy Act (NEPA) Process

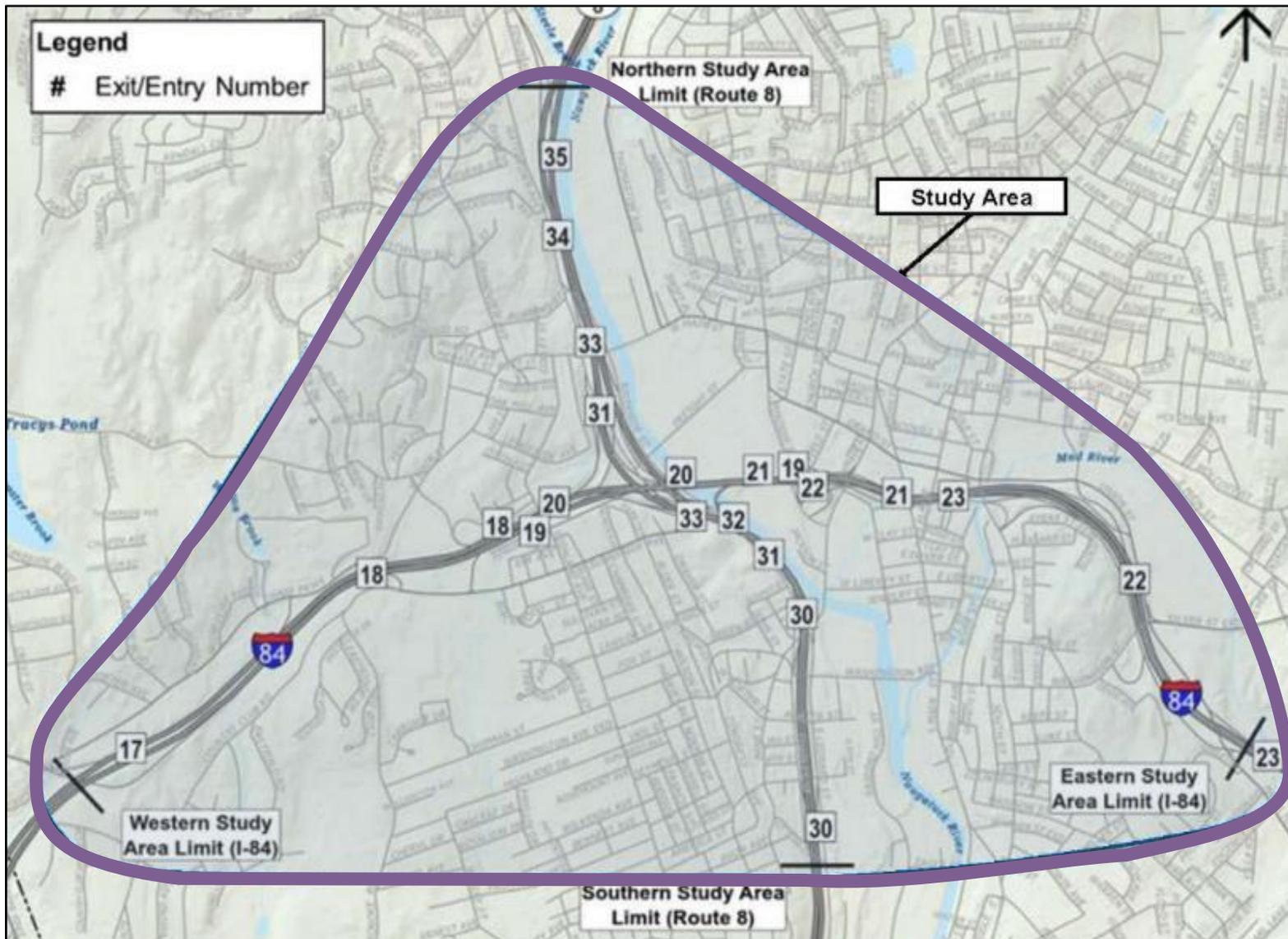


PEL Study= Pre-NEPA Process

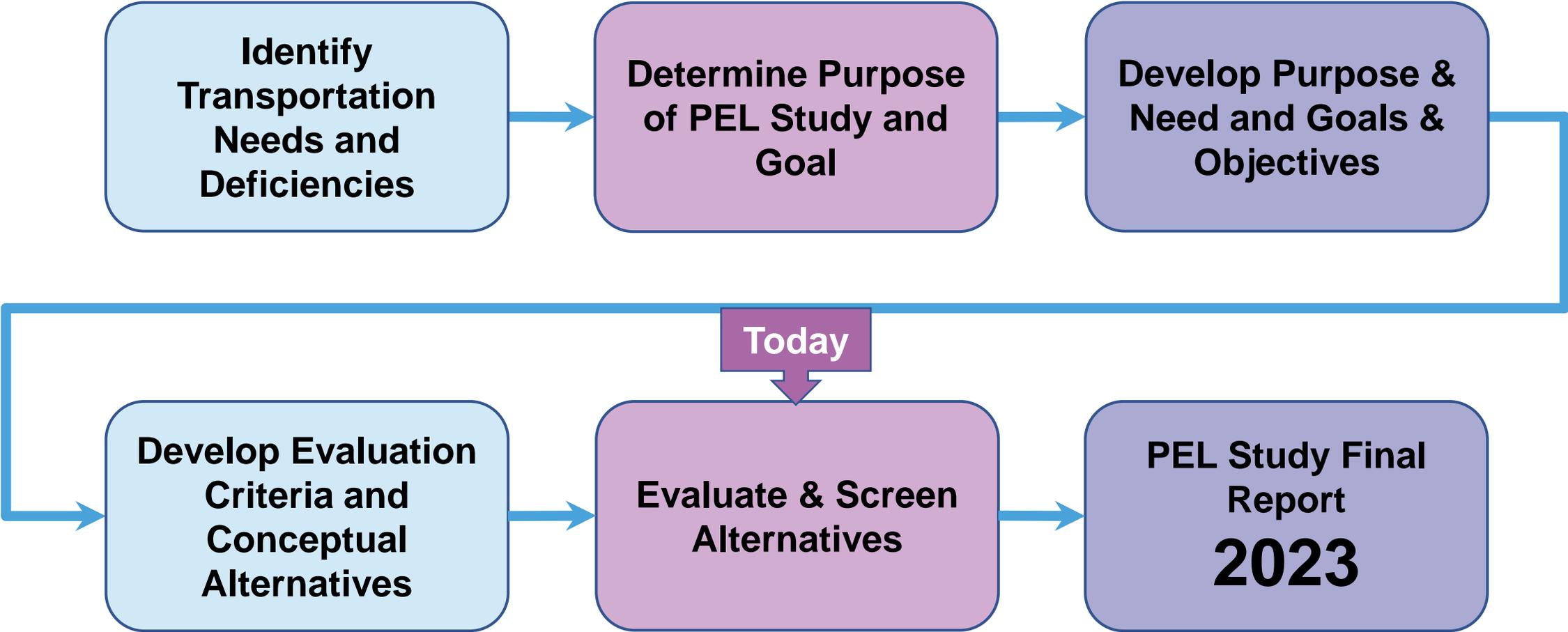
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# The *New Mix* PEL Study Area



# The *New Mix* PEL Study Process





Defining the problem and contextualizing the area:

- Existing and future transportation issues a.k.a. needs and deficiencies
- Multimodal, community and environmental context features





***CTDOT desires to establish a vision, or master plan, for the interchange that addresses and balances the regional importance of the Mixmaster for commuter traffic and motor freight users, while also improving multi-modal services, local connections and livability within the city of Waterbury to enhance and support social equity and economic vitality.***



NEEDS (problems)	PURPOSE (solutions)
Structural Deficiencies	To improve I-84/Route 8 bridge conditions.
Geometric Deficiencies	To improve I-84/Route 8 roadway conditions.
Operational (Traffic) Deficiencies (including congestion)	To improve the level of service of I-84/Route 8 and associated local road network.
GOALS & OBJECTIVES (Intended Outcomes)	
<ul style="list-style-type: none"> <li>• Allow for connections to the Naugatuck River and Greenway;</li> <li>• Enhance mobility equity and safety for bicyclists and pedestrians;</li> <li>• Integrate the Project with ongoing City projects;</li> <li>• Improve access to Downtown and key destinations;</li> <li>• Strengthen surrounding neighborhoods as gateways to the City's Central Business District (CBD);</li> <li>• Support City revitalizing goals of the CBD;</li> <li>• Enhance access to multimodal facilities;</li> <li>• Avoid, minimize or mitigate potential Project consequences to the environment;</li> </ul>	<ul style="list-style-type: none"> <li>• Improve system performance;</li> <li>• Reduce congestion;</li> <li>• Reduce crash rates;</li> <li>• Maintain critical system linkages in Connecticut and the Northeast;</li> <li>• Facilitate connectivity with Waterbury through the local road network including multimodal travel;</li> <li>• Improve the local roadway network;</li> <li>• Reduce interchange complexity;</li> </ul>

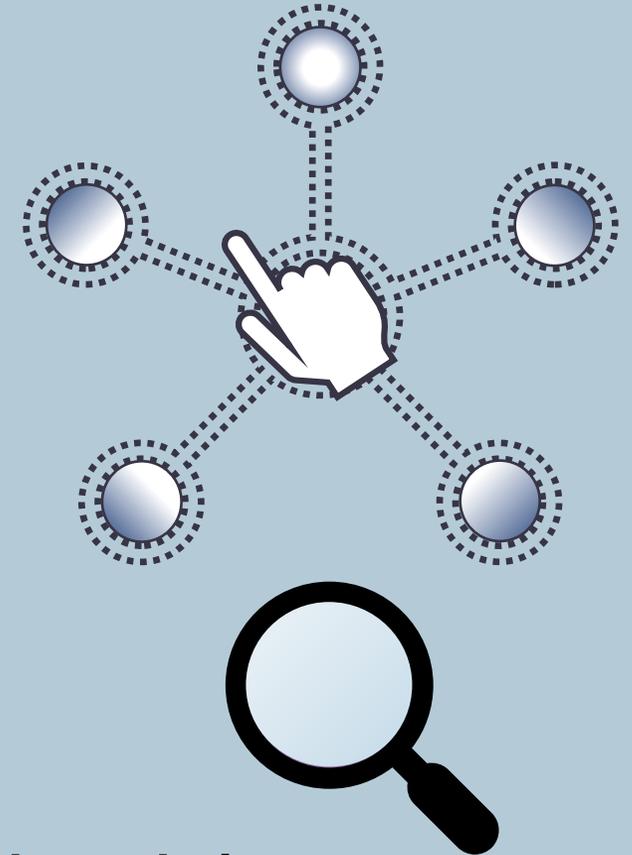
***May be further refined to incorporate issues and data identified during stakeholder and public involvement processes including coordination with project partners and the public.***



## The *New Mix* Universe of Alternatives (UOA)

Potential solutions for the long-term future of the Mixmaster interchange.

- Conceptual level of engineering performed, identifying the 24 alternatives that create the UOA.
- Includes many options such as: unstacking the mainlines, potential bypass routes, improving the local roadway network, and more.
- The UOA will be evaluated based on how well each alternative meets the project's Purpose, Needs, and Goals through three (3) levels of screening.

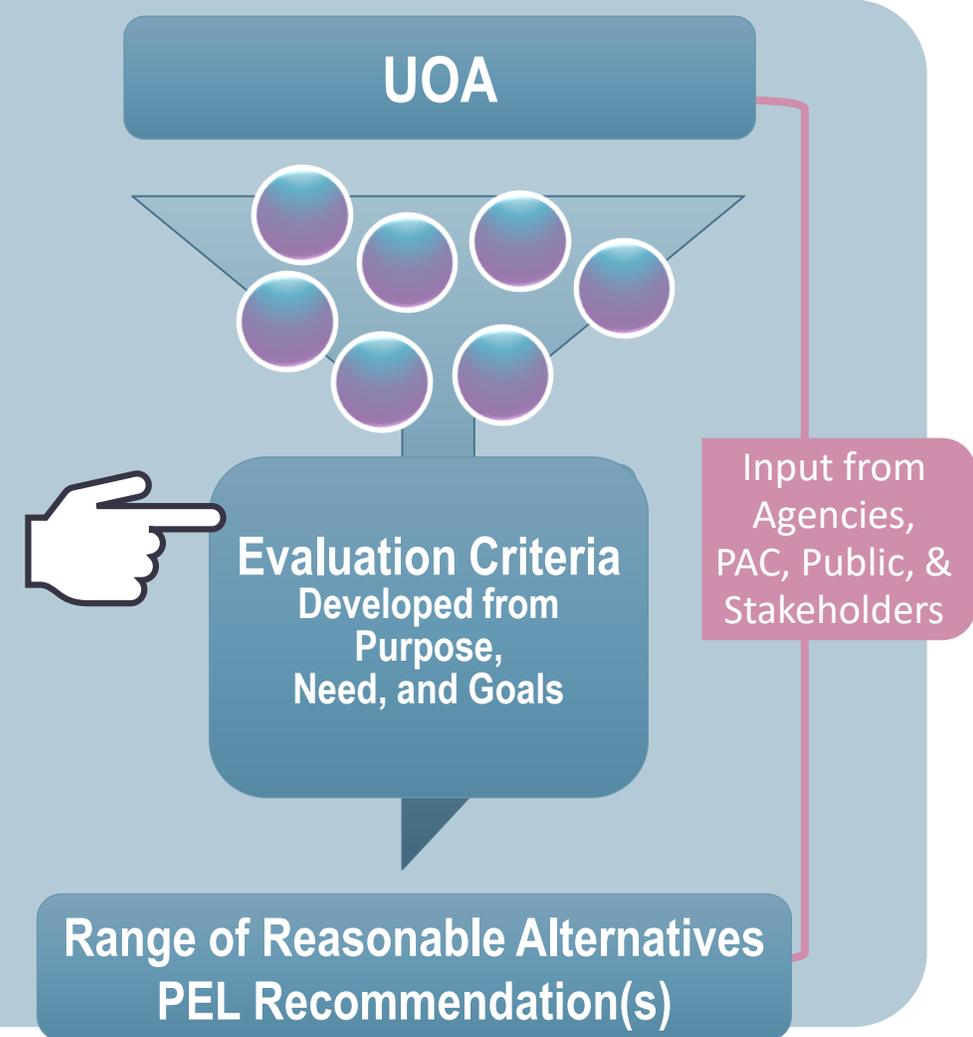


***View the UOA on the Project Alternatives page of the website***



## The *New Mix* PEL Process: Screening the Universe of Alternatives (UOA)

- **Level 1:** Evaluation of Fatal Flaws; engineering based on **Purpose** and **Need**
- **Level 2 :** Evaluation of the **Goals** of the project: informed through public outreach
- **Level 3:** Evaluation of the Impacts and mitigation opportunities are identified
- Concludes with the identification of the **Range of Reasonable Alternatives** and **PEL Recommendations** for NEPA
- Public outreach occurs during all phases of the PEL



Note:  = a Project Alternative within a UOA

# Screening the Universe of Alternatives

*Evaluations to find a Range of Reasonable Alternatives*

Develop Evaluation  
Criteria and  
Conceptual  
Alternatives

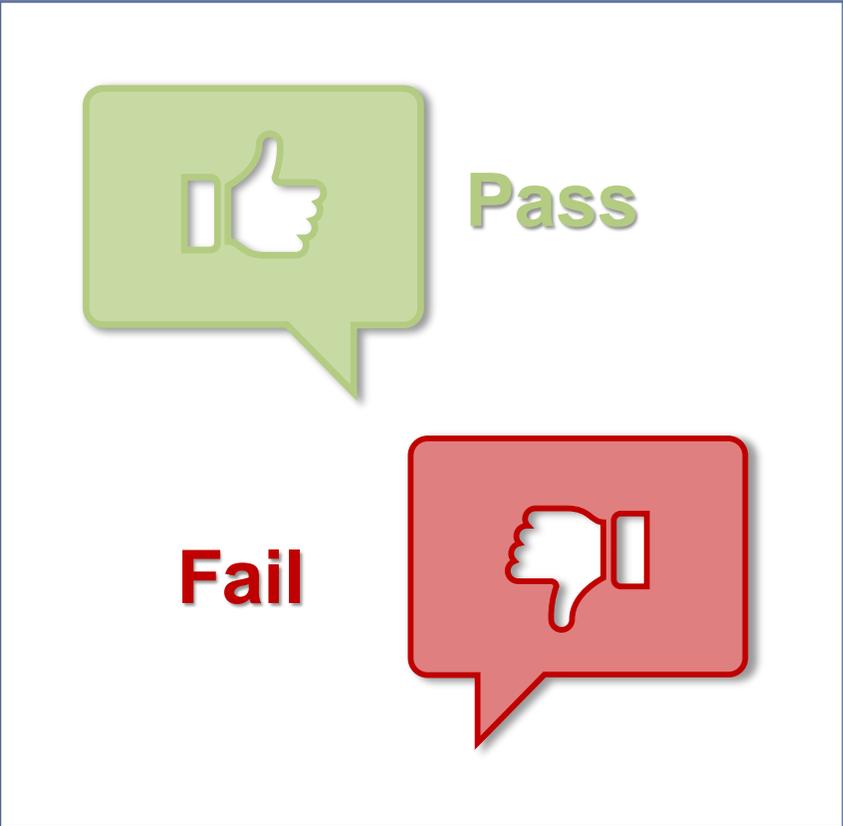


**Evaluate &  
Screen  
Alternatives**



PEL Study Final  
Report  
**2023**

## *New Mix* PEL Study Level 1 Screening Process



Can the Alternative Satisfy the  
Purpose of the Project?

Does it have any fatal flaws?



## Level 1 Screening Preliminary\* Results:

**24** Total Conceptual Alternatives Evaluated



**14** Conceptual Alternatives proposed to be **DISMISSED**:  
Failed to address the transportation need or is fatally flawed

**9** Conceptual Alternatives proposed to **ADVANCE**:  
Appear to address the transportation need and not fatally flawed

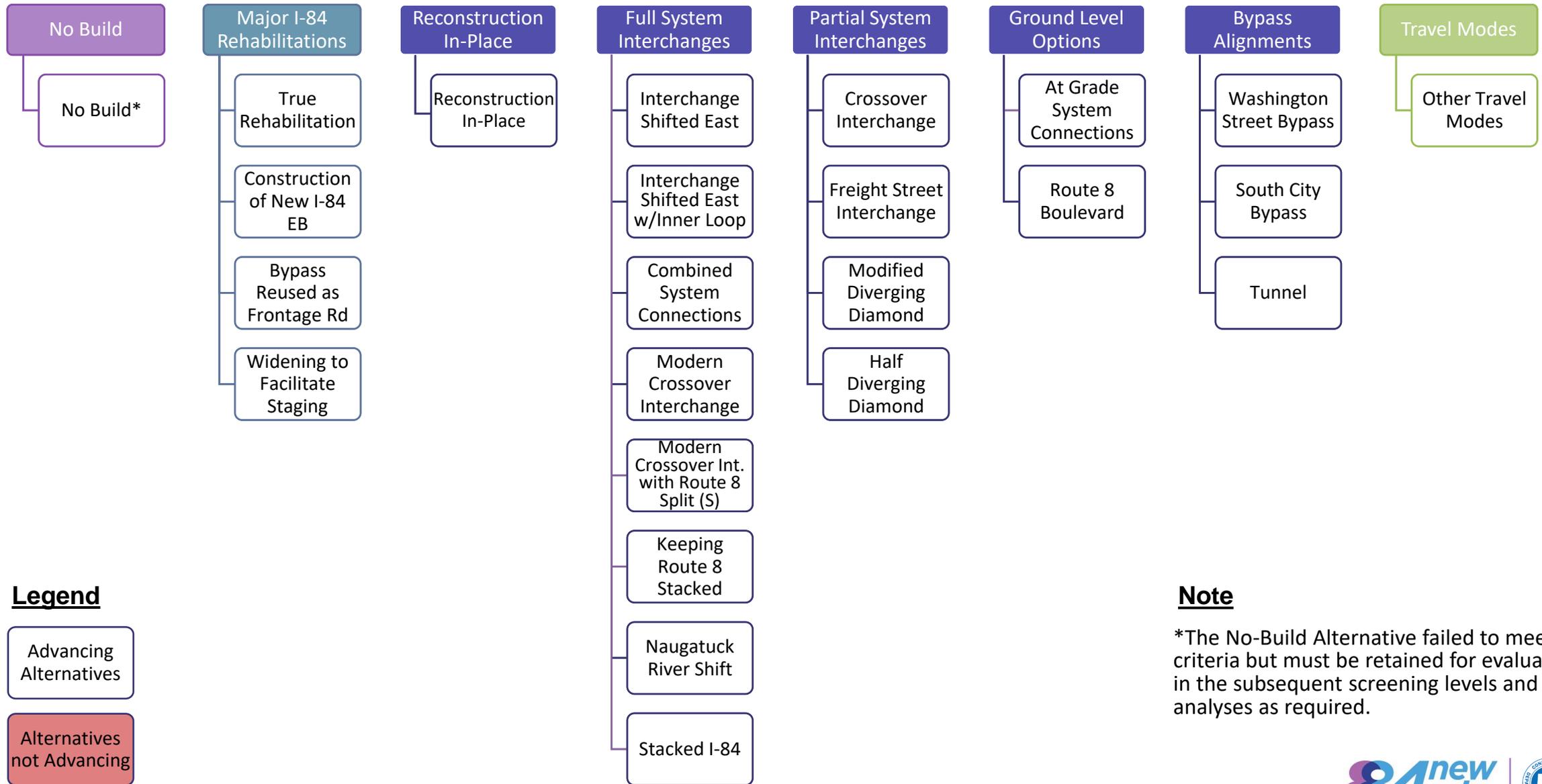


**1** No-Build Alternative must be retained for future evaluations<sup>+</sup>

\*Results are not final until after public input is received

<sup>+</sup>The No-Build Alternative failed to meet the criteria but must be retained for evaluation in the subsequent screening levels and NEPA analyses as required.

# Preliminary Level 1 Screening Results



Develop Evaluation  
Criteria and  
Conceptual  
Alternatives



**Evaluate &  
Screen  
Alternatives**



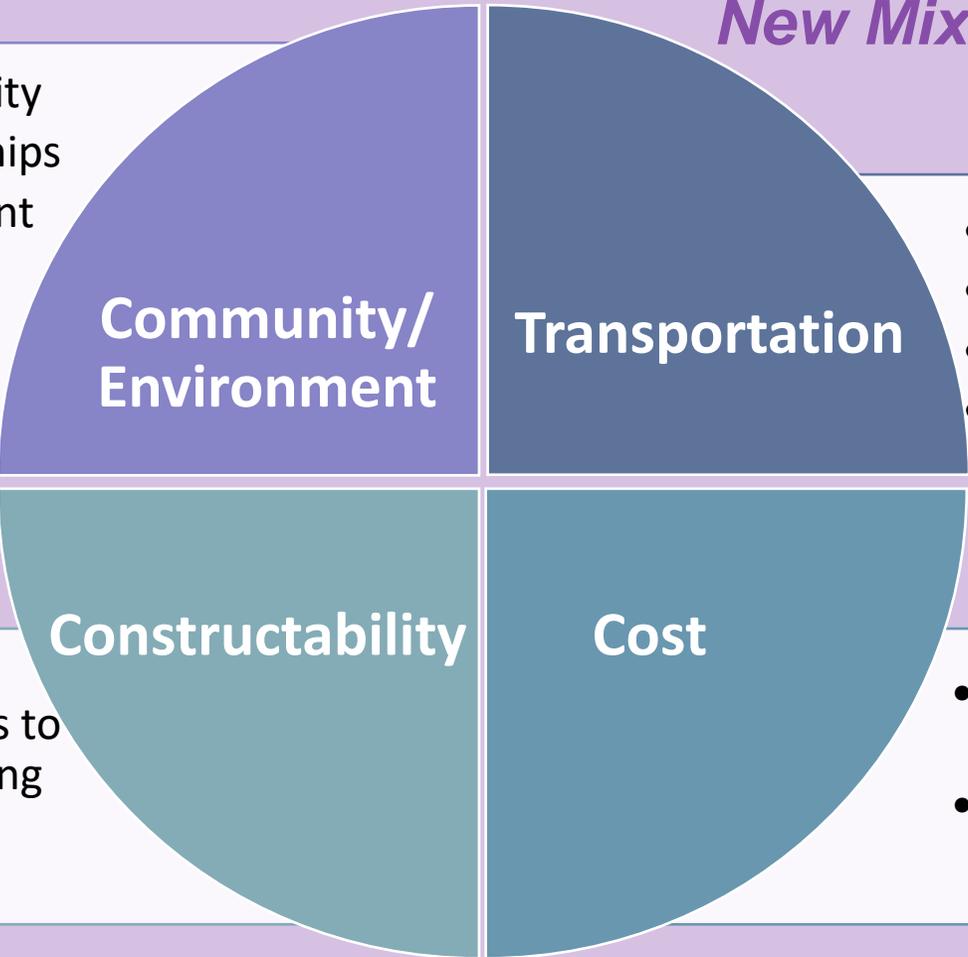
PEL Study Final  
Report  
**2023**

*New Mix* **PEL Study Evaluation  
Criteria: Next Levels**





***New Mix* PEL Study Evaluation Criteria: Next Levels**



- Enhance Connectivity & Mobility
- Enhance Modal Interrelationships
- Support Economic Development
- Avoid or Minimize Impacts (Community, Natural Resources, Cultural Resources, & Sensitive Populations)

- Improve system performance
- Reduce congestion
- Reduce crash rate
- Maintain critical linkages

- Maximize Ease of Construction
- Minimize Construction Impacts to Commuters and the Surrounding Community
- Provide phasing flexibility

- Financial resources can be made available
- Phasing opportunities and fundability

# Getting to New Mix Construction

*The Process and Anticipated Schedule*

# Why is the **New Mix** Project beginning now?

## Getting to Construction: High Level Overview & Timeline

### PEL Study

- Links transportation planning and environmental / community concerns
- Will identify a Range of Reasonable Alternatives

Today through 2023

### National Environmental Policy Act (NEPA) Process

- The Environmental Review Process for compliance with environmental laws
- Will identify a Preferred Alternative

2-4 years

### Design and Permitting

- Advanced design of the *Preferred Alternative* and associated break out projects
- State and Federal Permit Procurement

4-6 years

### Construction

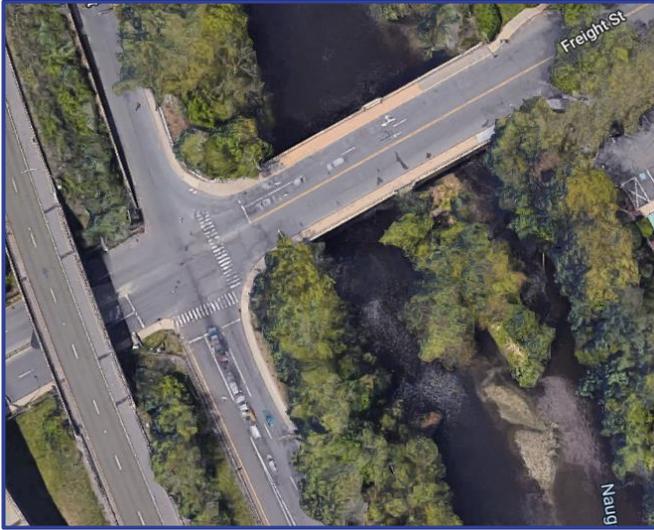
- Includes the Near-term, and Long-term breakout projects  
Anticipated completion in 2045

Initiating early 2030s



# How will construction occur?

## Projects to Occur Over Time



### Early Action Projects

Standalone improvements to the highway and local roadway network

### Near-Term Projects

Improvements to highway approaching Mixmaster compatible with Long-Term Projects



### Long-Term Projects

Reconstruction of core interchange structures

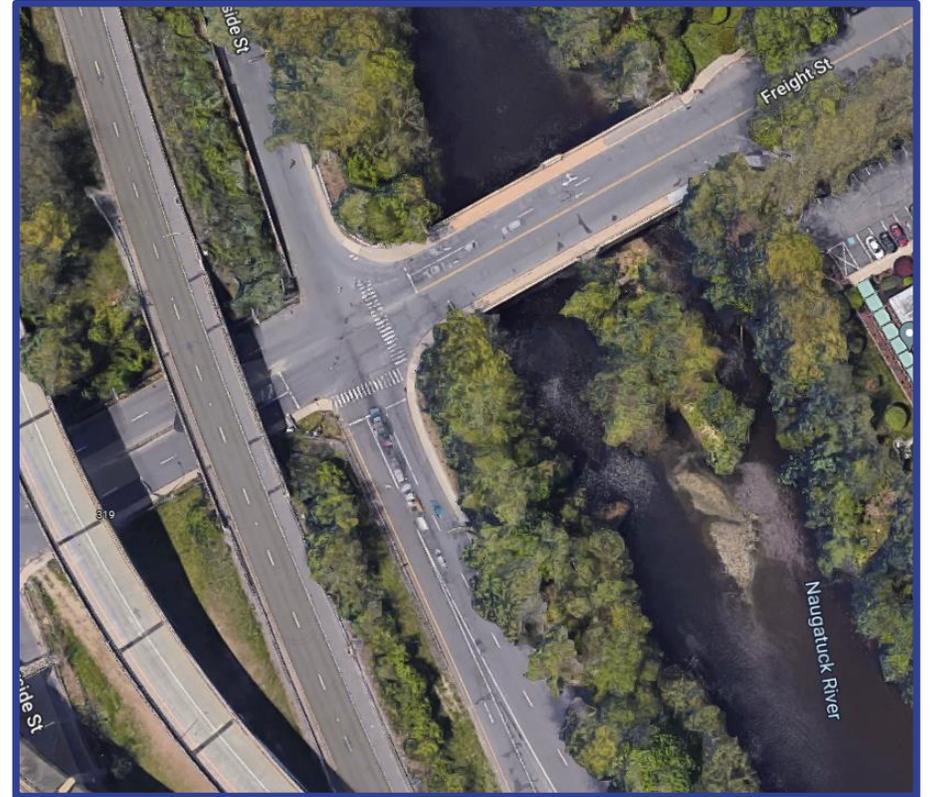


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# Early Action Projects

- Smaller, standalone improvements to the highway and local roadway network:
- Intended to improve traffic flow and safety, while the long-term planning for the New Mix is ongoing.
- Carried out in coordination with the City of Waterbury
- Independent of the New Mix Project and will go through a separate process.
- Early Action Projects are progressing.
- More information about Early Action Projects will be available in the coming months.



**Learn More, Provide Input, and  
Stay Involved with the New Mix**

# Next Public Meeting

Public Mtg #4 April/May 2023

**Where:**

Anticipated In-Person & Virtual Sessions

**Topics:**

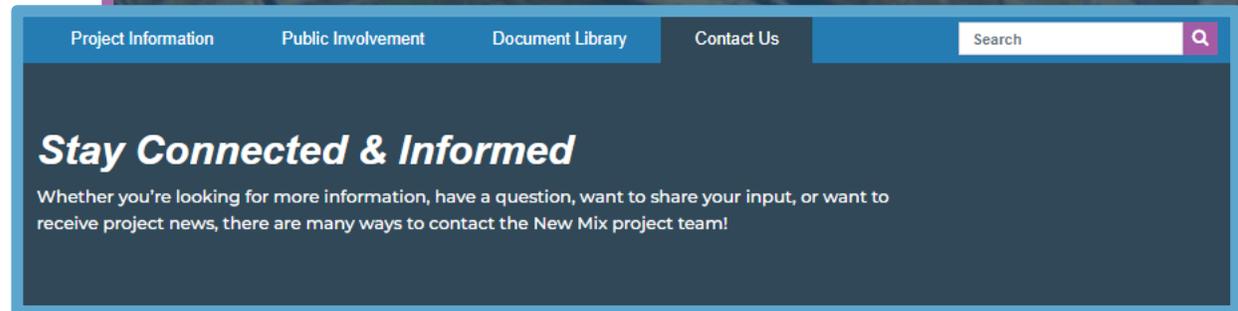
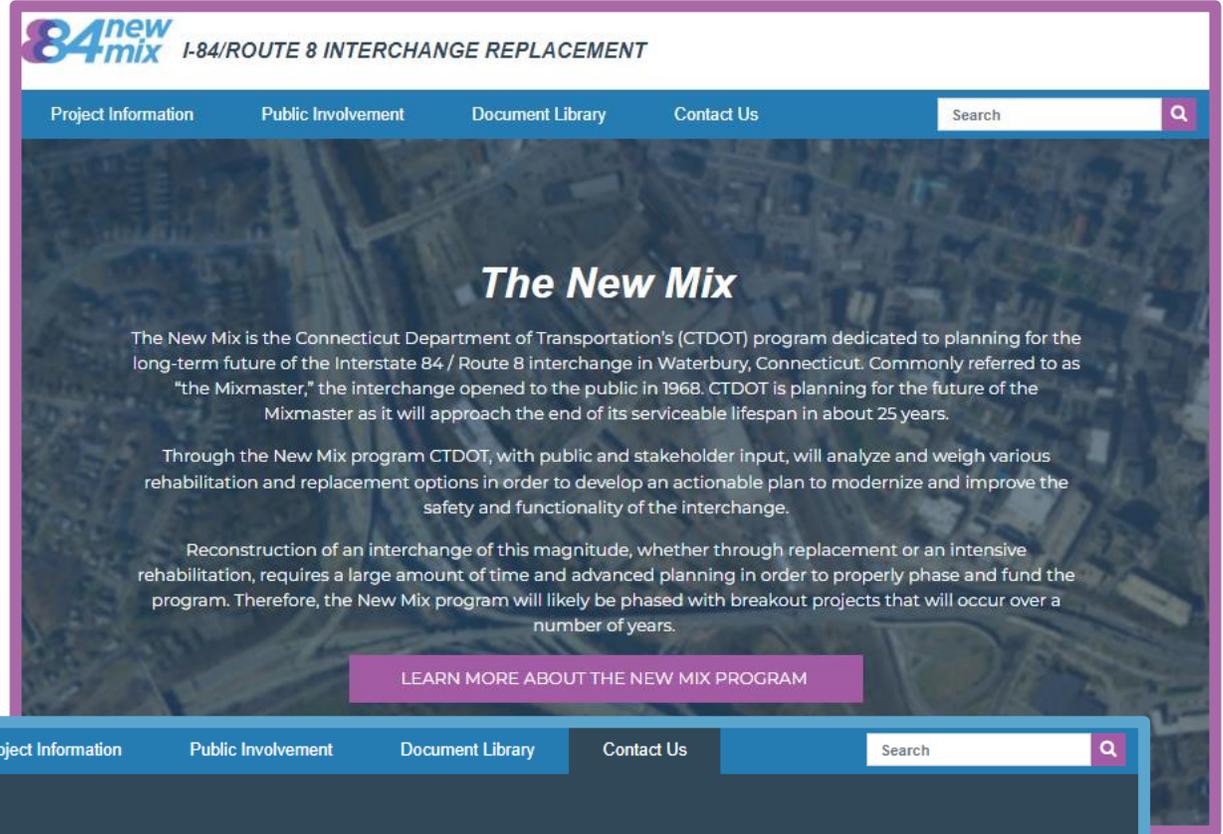
Present Level 2 & 3 Screening Results, the Range of Reasonable Alternatives, and obtain input from public



# Learn More, Provide Input, and Stay Involved

## NEWMIXWATERBURY.COM

- Learn about Project Alternatives History, FAQ, and more.
- Leave comments, ask questions 24-hours a day.
- Subscribe to New Mix email updates to be informed of future Public Meetings and opinion surveys.
- Watch videos of past public meetings.



# Question & Answer Session

State Project # 151-331

Share your feedback, input and ask questions:



Call us at 203-805-8018



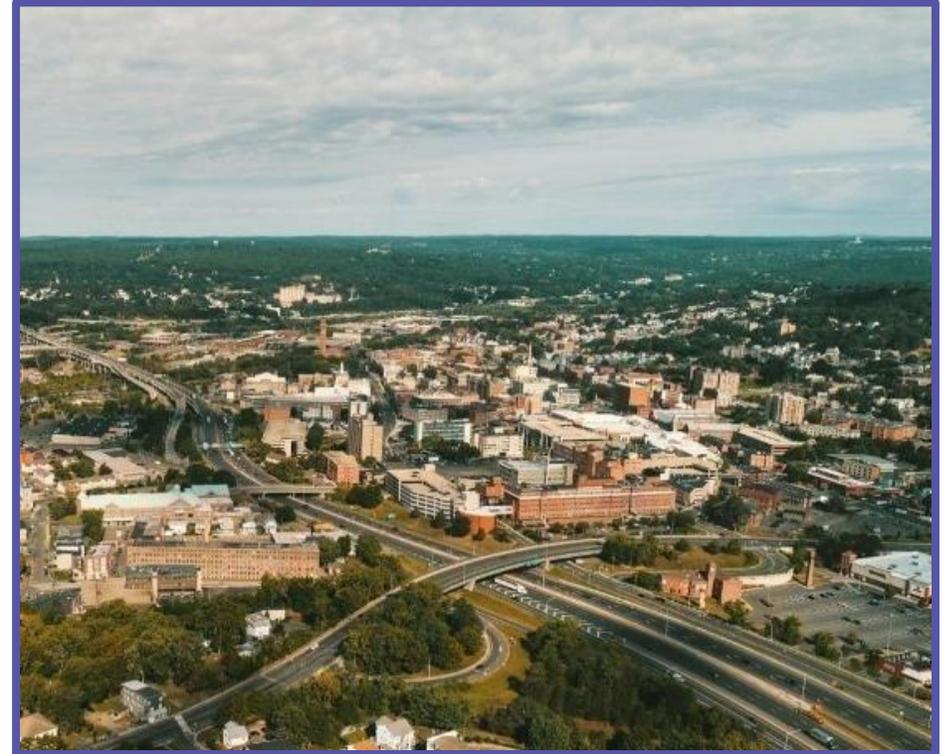
Project Email:  
[thenewmixwaterbury@gmail.com](mailto:thenewmixwaterbury@gmail.com)



Webpage: [newmixwaterbury.com](http://newmixwaterbury.com)



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# Thank you.

