

Public Scoping Meeting

State Project No. 167-108

Bridge No. 00773

Heroes Tunnel

Route 15 Wilbur Cross Parkway

Through West Rock Ridge

Towns of Hamden, Woodbridge

City of New Haven

Connecticut Department of Transportation

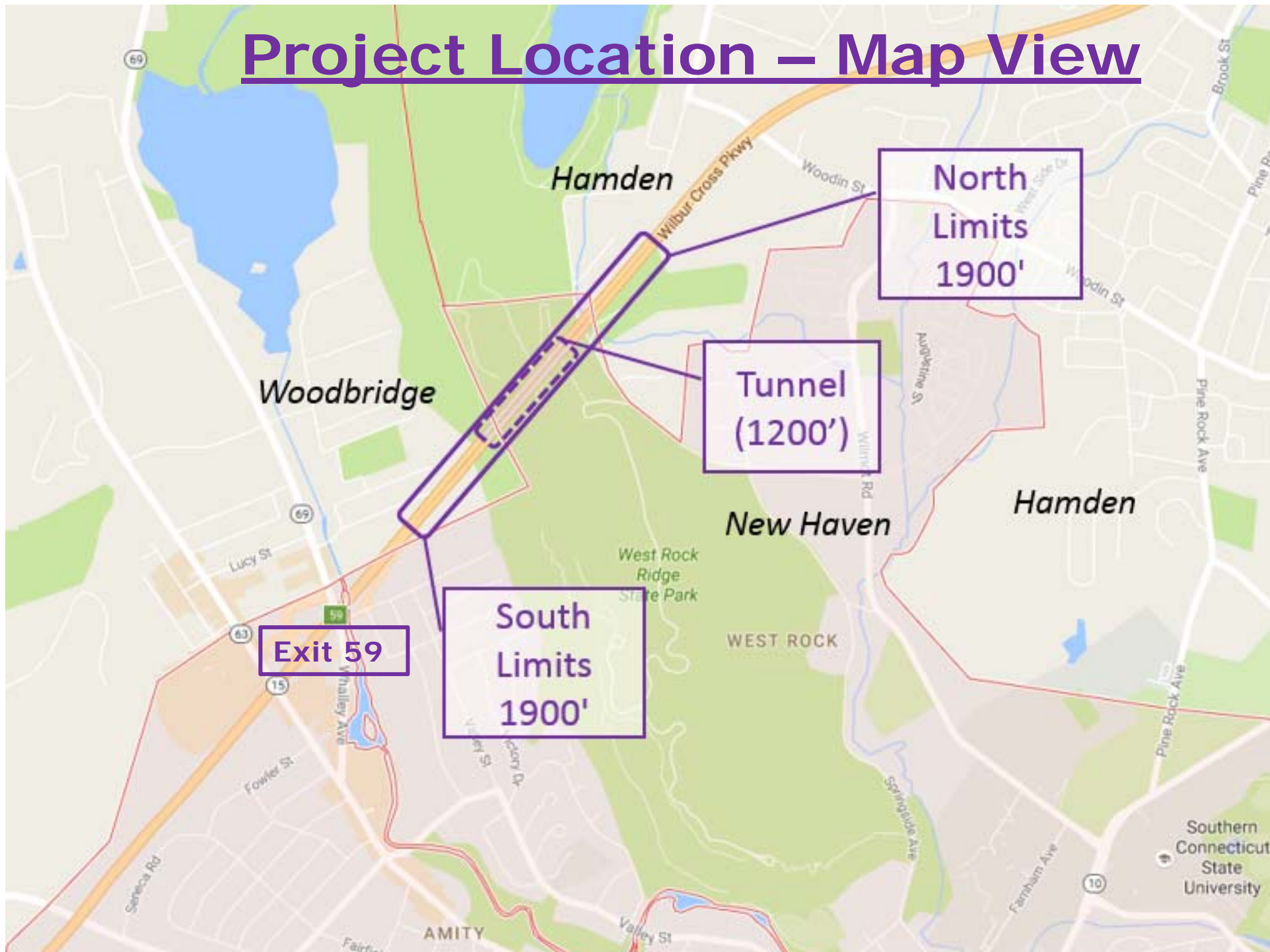


Agenda

- **Show Project Location and Limits**
- **Define Public Scoping Meeting**
- **Explain the Purpose of the Project**
- **Introduce CTDOT and Consultant Engineers**
- **Present an Overview of the Project**
- **Explain the Environmental Document Process**
- **Solicit Questions and Comments**



Project Location – Map View



Project Location – Aerial View

Existing Tunnel



Public Scoping Meeting

- **Gathering/Analysis of Information to Establish the Scope of Environmental Review**
- **Scoping: Prior to Preparing Any Environmental Document and Deciding on Project Alternatives**
- **Request Public to Submit Information to Identify Alternatives that Fulfill Project Purpose and Need**
- **Identify Specific Aspects of Environment to be Analyzed**
- **Public May Have Better Knowledge of Area and Resources**



Purpose Of Project

- To correct current overall rating of “Poor” determined by periodic inspections
- Tunnel is currently inspected on a yearly basis (biennial and special inspections)
- Current “Poor” rating not an indication of an imminent safety issue, but rather identifies the need for action before a more serious condition develops
- Project scope is anticipated to include rehabilitation and/or reconstruction to address structural and geometric deficiencies.



Project Roles

CTDOT Office of Environmental Planning

- **Coordination/Review of Environmental Aspects**
 - Mark Alexander, Assistant Planning Director
 - Kevin Fleming, Transportation Planner

CTDOT Division of Bridges, Bridge Consultant Design Unit

- **Oversight/Liaison/Coordination of Design Consultant**
 - Theodore Nezames, Manager of Bridges
 - Timothy Fields, Principal Engineer
 - David Cutler, Supervising Engineer
 - Derick Lessard, Project Engineer



Project Roles

CDM Smith

- Design Consultant Engineer
- Preparing Environmental Impact Evaluation/Assessment
- Preliminary Design of Preferred Alternative

Federal Highway Administration (FHWA)

- Federal Funding Anticipated for Alternative
- FHWA Engineers will be Associated with Project



CDM Smith

- New England-Based Global Consulting Engineering Firm
- Offices in East Hartford and New Haven (Church Street)
- International Tunnel Experts Supporting Local Offices/Project
- Inspection of Tunnels, Preparation of Reports
- Know Project, Environs, and Community



CDM Smith Team



- Principal – Larry Murphy
- Principal in Charge – Paul Schmidt
- Principal/Project Manager – **Joe Balskus**
- Public Engagement – **Dave Sousa**
- Environmental Assessment/Impact – Jane Wheeler
- Tunnel Designer – Mohammad Jafari



Tunnel Description

- **Opened in 1949 - Wilbur Cross Parkway**
- **Eligible for Listing on State/National Historic Register**
- **Only Highway Tunnel Through Natural Land Form in CT**
 - Carries 70,000 vehicle per day
- **Each Barrel 1200' long, 28' wide, 11' Lanes, 6" shoulders**
 - Standards Require 12' Lanes, 8' Shoulders
- **Non-Compliance w/Tunnel Standards/Requirements**
 - Geometrics, Ventilation and Emergency Systems
- **CDM Smith 2009 Inspection: Need for Rehabilitation**



Existing Conditions

- **Significant Deterioration**
 - Prior Biennial Reports
 - CDM Smith Inspection/Study
- **Peak Hour Congestion**
 - Recurring Bottlenecks
- **Emergency Response Constraints**
- **Fire Safety System - None**



Tunnels

- **Ground Water Infiltration**
 - Walls/Ceiling - Stalagmites
 - Freeze/Thaw Conditions
 - Falling Icicles
- **Cross Section Deficient**
 - 26' Existing Width
 - 50' Required (2 Lanes)
- **Frequent Maintenance Requires Tunnel Closures – Shifting Traffic**



Tunnel Walls



Tunnel Walls



Tunnel Ceiling



Tunnel Ceiling



Tunnel Ceiling



Tunnel Walls



Tunnel Cross Section

NOTE: All sidewalk shall be poured where enlargement and timber packing is Engineer's or rock over spring in concrete.

TYPICAL CROSS SECTION--TYPE I
WHERE STEEL SUPPORTS ARE NOT REQUIRED

NOTE:
All sidewall
shall be po
where enla
and timber
packing is
Engineer.
or rock ove
spring li
concrete

TYPICAL CROSS SECTION--TYPE I
WHERE STEEL SUPPORTS ARE NOT REQUIRED

Tunnel Cross Section



Rehabilitation or Reconstruction

- **Rehabilitation of Tunnel Evaluated in 2014 Report**
 - **Significant Traffic Impacts During Lane Closures**
 - **Geometrics Not Correctable Within Existing Tunnel Widths**
 - **Vehicle Speeds Through Tunnel Impacted**
 - **Narrowness of Tunnel Causes Reduced Speeds**
 - **Structural Integrity of Tunnels – Ground Water Infiltration**



Rehabilitation or Reconstruction

- **Rehabilitation Limits Benefits of Tunnels**
 - Future Service Life
 - Future Traffic Flow Capacity
- **Reconstruction Options Considered**

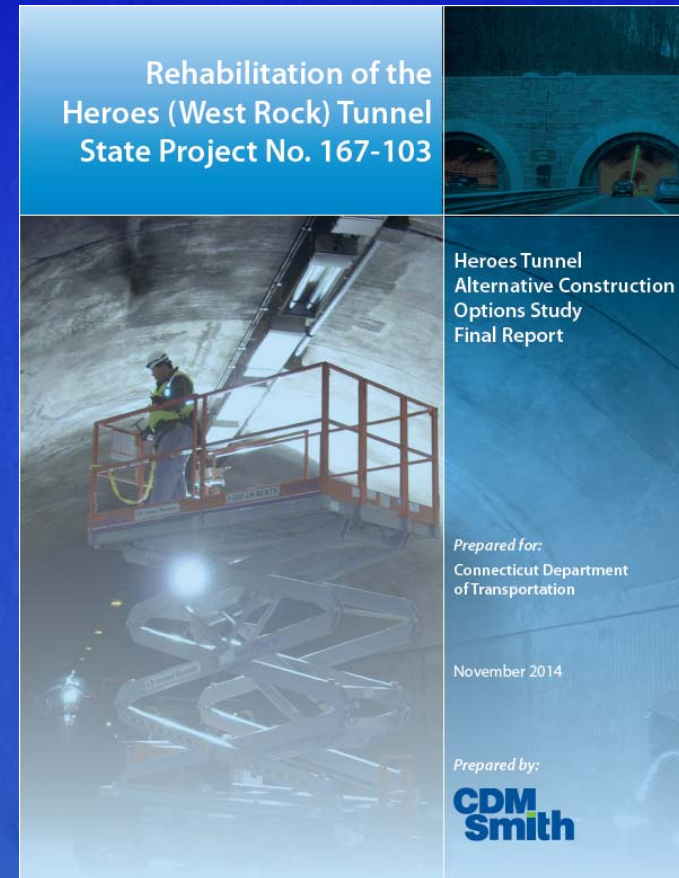


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Rehabilitation Reports Summary

- November 2014 Alternative Construction Options Study
- September 2016 Supplement
- Studied Several Options
 - New One-Lane Tunnel
 - New Two-Lane Tunnel
 - Widen Existing Tunnel
 - Close One Existing Tunnel/Detour
 - Close One Lane in Existing Tunnel
 - Construction Bypass Tunnel (short)
 - Construction Bypass Tunnel (long)
- Additional Options to be Explored
- No Build (Do Nothing)



This aerial map illustrates the Wintergreen Brook area, highlighting several key environmental and infrastructure features. The map includes the following labels:

- Forested Woodland:** Indicated by green shaded regions, primarily located in the upper left and lower center of the map.
- Wintergreen Brook:** Represented by a blue line flowing through the upper right portion of the map.
- Nature Center:** Located in the top right corner of the map.
- Existing Tunnel:** Marked by a red rectangular box in the center of the map.
- Natural Diversity Area:** Located in the bottom right corner of the map.

The map also shows surrounding residential areas, roads, and a baseball field in the lower left corner.

Natural Diversity Area

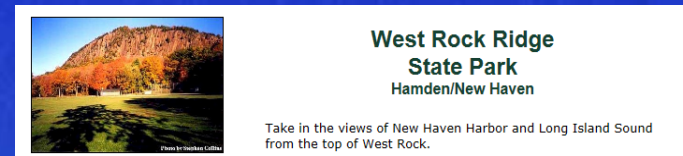
Environmental Document/Process

- **Prepare Environmental Document**
 - Alternative Analysis Including No Build
 - National/Connecticut Environmental Policy Acts NEPA/CEPA Processes
 - Potential Environmental Impacts of All Alternatives
 - West Rock Nature Center/West Rock Ridge State Park
 - Public Outreach
- **Preliminary Design**
 - Preferred Alternative
 - Construction Staging
 - Impacts



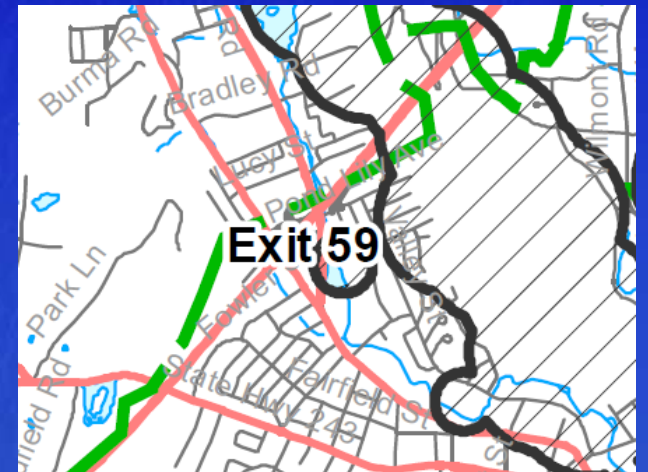
Environmental NEPA/CEPA Tasks

- Prepare Environmental Impact Evaluation (EIE)/Environmental Assessment (EA)
- Establish Purpose and Need
- Evaluate Alternatives
- Consider Construction/Post-Construction Impacts
- Conduct Field Studies
- Consider Sensitive Resources:
 - West Rock Nature Center (City)
 - Wintergreen Brook
 - West Rock Ridge State Park
 - Historic Designation



Environmental NEPA/CEPA

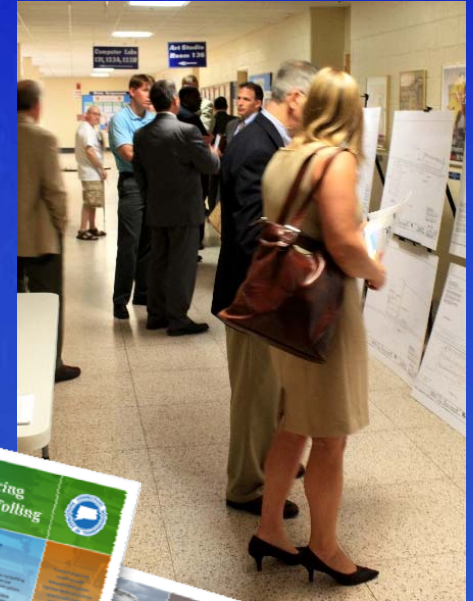
- Air quality
- Water quality
- Noise
- Groundwater
- Wetlands, water bodies and floodplains
- Cultural/Archaeological resources
- Recreational Resources
- Natural communities, including protected animal, plant species and their habitats
- Aesthetics
- Traffic



Public Involvement – Support Process

Includes:

- Community Advisory Committee
- Identification and Engagement of Stakeholders
- Project Website and Social Media
- Email Bulletins to Interested Citizens and Community Groups



Public Involvement

Includes Various Meetings:

- Outreach Events (Pop-Ups)
- Informational Meetings or Open Houses
- Formal Public Meeting(s)



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Potential Stakeholders – Public Outreach

Large Employers/ Business Orgs:

- Southern CT State University
- Sikorsky
- Yale University
- Greater New Haven Chamber of Commerce
- REX Regional Economic Xcelleration
- Yale-New Haven Hospital

Governmental:

- Elected Officials (Local, State & Federal)
- South Central Council of Gov'ts
- CT Dept. of Energy & Environmental Protection
- Federal Highway Administration
- U.S. Environmental Protection Agency

Non-Profit Orgs:

- CT Association for Community Transportation
- AAA of Southern New England
- CT Coalition for Environmental Justice
- CT Fund for the Environment
- Economic Development Corp. of New Haven
- CT Technology Council
- New Haven Urban Design League
- Elm City Cycling
- CT Business & Industry Association

Municipalities:

- Town of Woodbridge
- Town of Hamden
- City of New Haven

Transportation Providers:

- CT Transit
- Greater New Haven Transit District
- CT Rides
- CTDOT



Next Steps

- **Receive Public Comments**
 - Verbal, Written Form, Email
- **Early Work – Data Collection**
 - Archaeological Survey
 - Geotechnical (Borings)
 - Survey
- **NEPA Document Studies**
- **Preliminary Design – Alternative**



Time Line

- **Early Work – Next 6-9 Months**
- **Complete NEPA Document Studies**
 - 18-24 months
- **Preliminary Design – Preferred Alternative**
 - After NEPA



Questions/Comments

- End of Scoping Process Comment Period – October 7, 2016
- Comments Throughout Project Process
- Presentation Copy Will Be Available:
<http://www.ct.gov/dot/lib/dot/documents/0167-0108ScopingMeeting>
- Project Contacts



Contacts

Public Scoping Comments by October 7, 2016 to:

Mr. Mark W. Alexander, Transportation Assistant Planning Director
Connecticut Department of Transportation
Bureau of Policy and Planning
2800 Berlin Turnpike, Newington, CT 06131
dot.environmentalplanning@ct.gov

Project Comments throughout process should be sent to:

Mr. David A. Cutler, P.E., Transportation Supervising Engineer
Connecticut Department of Transportation
Bureau of Engineering and Construction
2800 Berlin Turnpike, Newington, CT 06131
860-594-3210
David.Cutler@ct.gov

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End of Presentation

<http://www.ct.gov/dot/lib/dot/documents/0167-0108ScopingMeeting>

Thank You!



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