

The U.S. DOT Federal Transit Administration and the Connecticut Department of Transportation

In cooperation with
The South Western Regional Planning Agency and
The Housatonic Valley Council of Elected Officials

Study Advisory Committee Meeting
Project No. 302-008
Ridgefield, Connecticut

June 23, 2009



PURPOSE and AGENDA

This meeting is a part of the NEPA/CEPA Process.

Agenda

- Introductions
- Project Update
- Current Activities
- Next Steps
- Discussion



Project Purpose

- Improve mobility options for the traveling public in the South Western and Housatonic Valley regions of Connecticut.
- Maintain and improve existing commuter rail service on the Danbury Branch as well as improve its feeder system and intermodal connections on the Branch.
- Help reduce congestion in the Route 7 corridor between South Norwalk, CT and New Milford, CT.



Alternatives Identified in Phase 1*

- No Build Alternative
- Transportation System Management (TSM)
- South Norwalk to Danbury Improvements
- Extension from Danbury to New Milford
- Improvements from South Norwalk to Merritt 7

*Alternatives resulted from the 2006 Feasibility Study



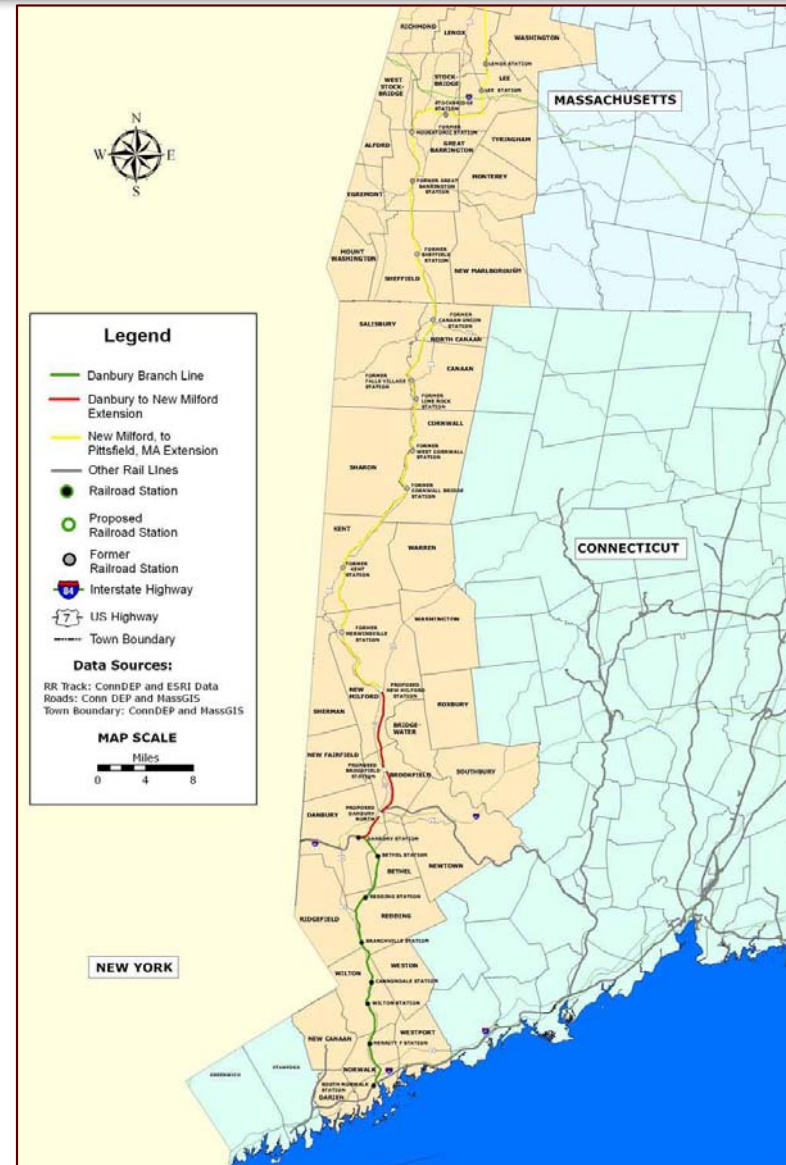
Scope of Phase 2

	<u>Est. Completion</u>
• Task 1 Project Management	<i>Duration</i>
• Task 2 Coordination	<i>Duration</i>
• Task 3 Public Outreach	<i>Duration</i>
• Task 4 Mapping and Graphics	<i>Duration</i>
• Task 5 Environmental Data Collection and Evaluation	<i>Fall 2009</i>
• Task 6 Transportation Alternatives Development and Evaluation	<i>Fall 2009</i>
• Task 7 Conceptual Engineering and Evaluation	<i>Fall 2009</i>
• Task 8 DEIS	<i>Fall 2010</i>
• Task 9 FEIS	<i>Spring 2011</i>



Scope of Phase 2

- The following tasks were added during the Scoping Process:
 - Consideration for future rail passenger service to Massachusetts
 - Addition of an electrified option between Danbury and New Milford



Completed Phase 2 Activities

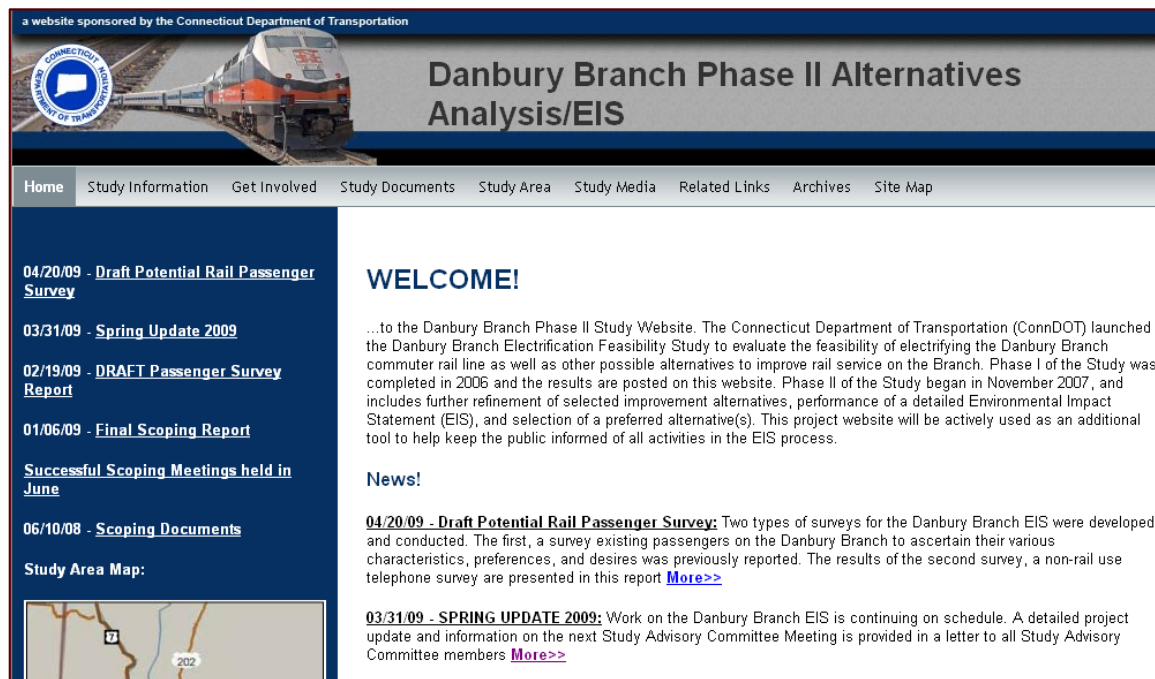
- Updated Study Website
- Task 2: Coordination Meetings
- Task 3: Scoping Meetings and Scoping Report
- Task 4: Base Mapping
- Task 5: Environmental Data Collection
- Task 6: Existing Transportation Systems Report
 - Rail Passenger Surveys
 - Baseline Train Performance Model
- Task 7: Existing Rail Infrastructure Report



Updated Study Website

Recently Added
Phase 2 Documents

Coming Soon
Public Comments Form



<http://www.danburybranchstudy.com>



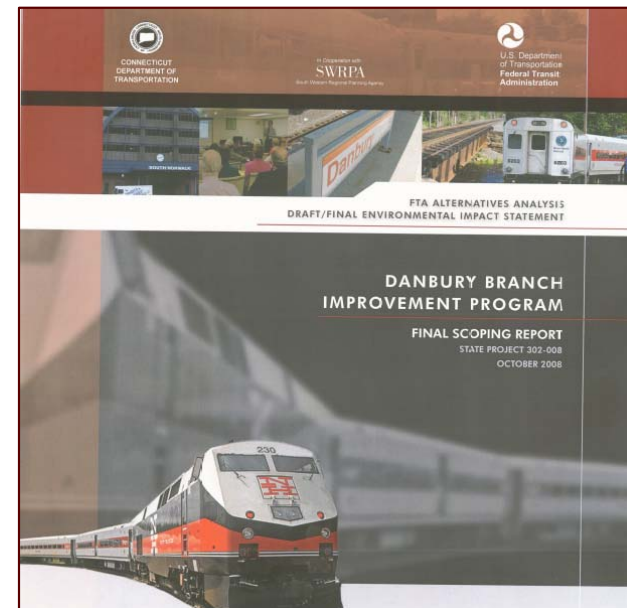
Task 2: Coordination Meetings

- To date there have been more than 40 meetings with:
 - Railroads
 - State and Federal Officials
 - Representatives from the 10 municipalities in the corridor
 - Regional Planning Agencies
 - Transit Districts
 - Other Stakeholders
- Coordination with these groups is ongoing.
- There will be a total of approximately 60 coordination meetings during this study.



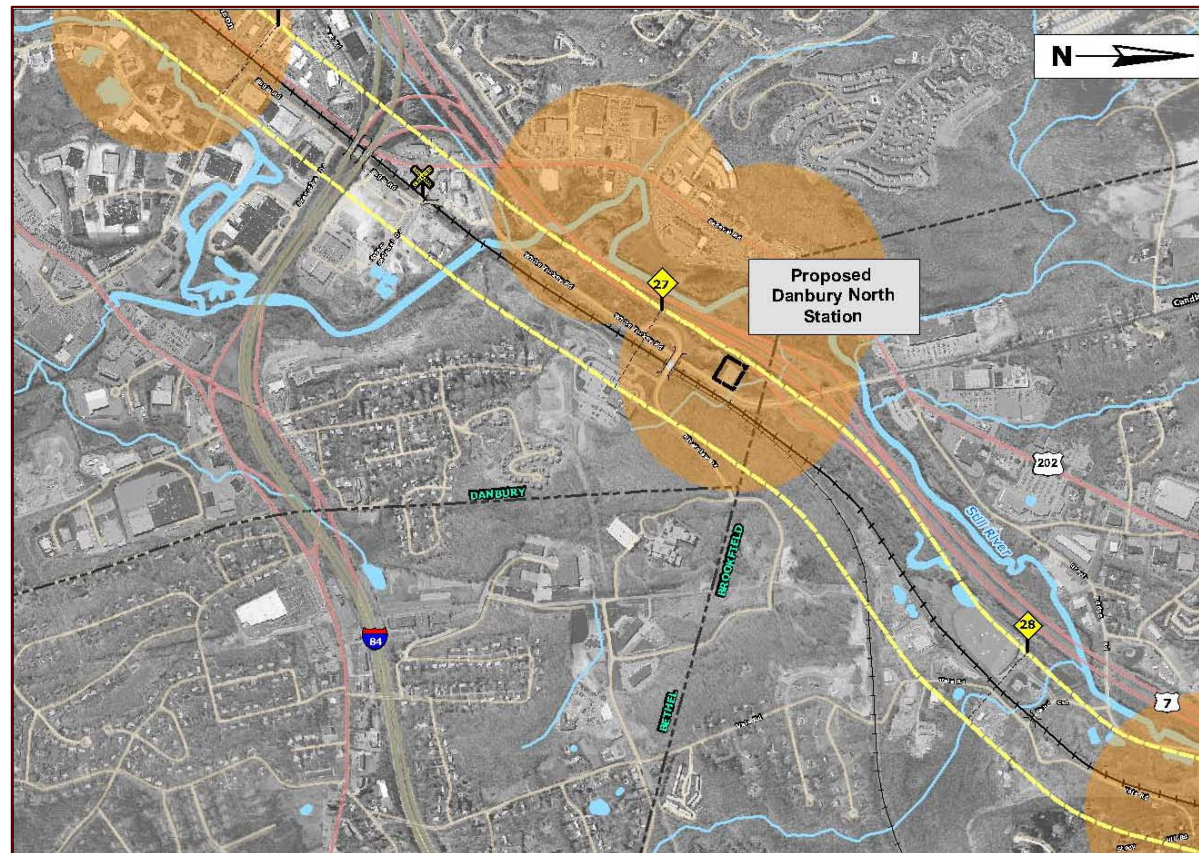
Task 3: Scoping Meetings and Scoping Report

- Three Public Scoping Meetings: June 17-19, 2008
- Agency Scoping Meeting: June 17, 2008
- Scoping Report: October 2008



Task 4: Base Mapping

- Environmental Data
- GIS Format
- 14 Sheets
- 1"=1,000'



Endangered Species Base Map



Task 4: Conceptual Improvement Layouts

- Aerial View
- CADD Format
- 82 Sheets
- 1"=200'



Task 5: Environmental Data Collection

- Baseline information on existing conditions (resources and constraints) within 500' on each side of track.
- Used for a screening level evaluation of biological, physical, and community resources.
- 18 Technical Memoranda
- 4 Tech Memos are in progress:
 - Noise & Vibration
 - Wetlands
 - Biological Diversity
 - Hazardous Contamination



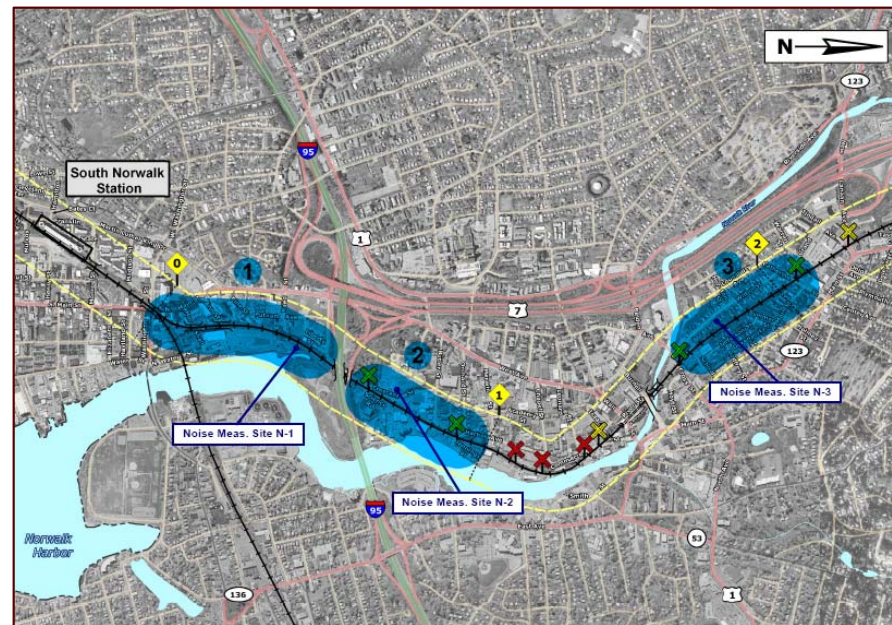
5.2 Topography, Geology, and Soils

- Elevation varies from 6 feet to 475 feet above sea level
 - Highest Point: Redding, between Mileposts 14 and 15
 - Lowest Point: Norwalk, around Milepost 0
- Geology and Soils
 - Various Surface and Bedrock Materials
 - Predominantly loamy soil, rockier in urban areas



5.2.1.1 Noise and Vibration

- Existing noise and vibration levels have been measured:
 - Norwalk, 4 locations
 - Wilton, 3 locations
 - Danbury, 2 locations
 - Brookfield, 2 locations
 - New Milford, 2 locations
 - Redding, 1 location
 - Bethel, 1 location
 - Redding/Wilton/Ridgefield, 1 location



*The writing for this section is in progress.



5.2.1.2 Air Quality

- Corridor mostly in attainment with air quality standards
- Non-Attainment Areas
 - Danbury
 - Norwalk



5.2.1.3 Energy

- The majority of the energy used by the Danbury Branch Line corresponds to the fuel consumed by train operations.
- Weekly Diesel Fuel Consumption: 9,372 gallons
- A small proportion of energy corresponds to electricity used at the eight passenger stations and for signal, communications, and radio systems.



5.2.3 Threatened and Endangered Species

- Habitats of state-listed animal and/or plant species:
 - Brookfield, Danbury, Redding, and New Milford
- New Milford has the most state-listed species:
 - 4 Plant Species
 - 7 Animal Species



Sharp-Shinned Hawk



Violet Wood Sorrel

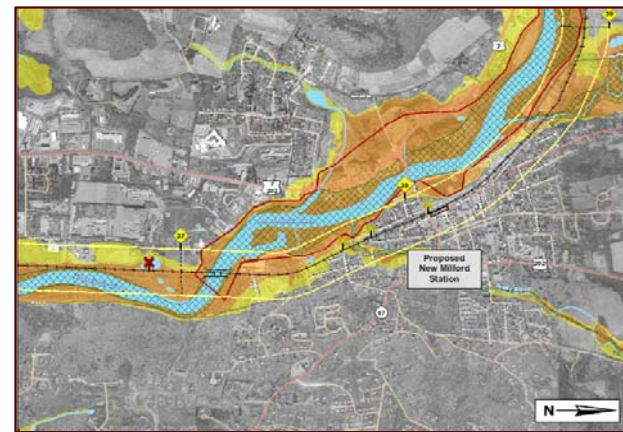
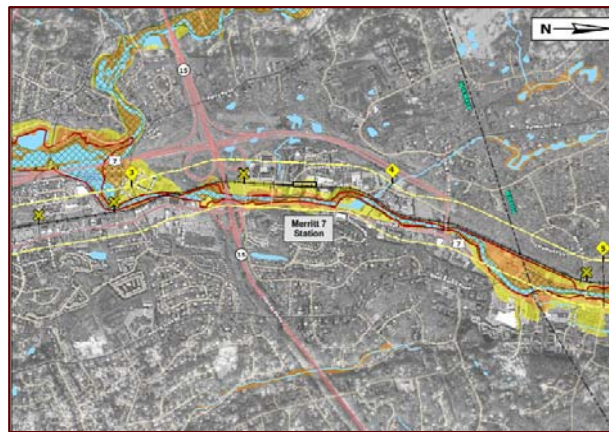


Bog Turtle



5.2.5 Floodplains and Floodways

- 31 miles of track lie over or adjacent to floodplains.
- In most places, tracks are elevated above flood elevations and cross over floodways and floodplains on bridges.
- Flooding generally does not interrupt rail service.



5.2.6 Historic Resources

- Survey done in coordination with Connecticut State Historic Preservation Office (SHPO)
- Historic resources are an important part of the character of a community.
- Resources include:
 - Buildings
 - Structures
 - Entire Properties
 - Objects
 - Districts
 - Railroads



Housatonic Railroad Station, New Milford



5.2.7 Archeological Resources

- Assessment of archeological sensitivity levels
- Evaluation of existing condition of previously recorded resources
- Identification of previously undocumented historic sites in Brookfield, Danbury and New Milford:
 - 6 railroad bridges
 - 3 structural foundations
 - 4 artifact clusters
 - 11 historic structural areas

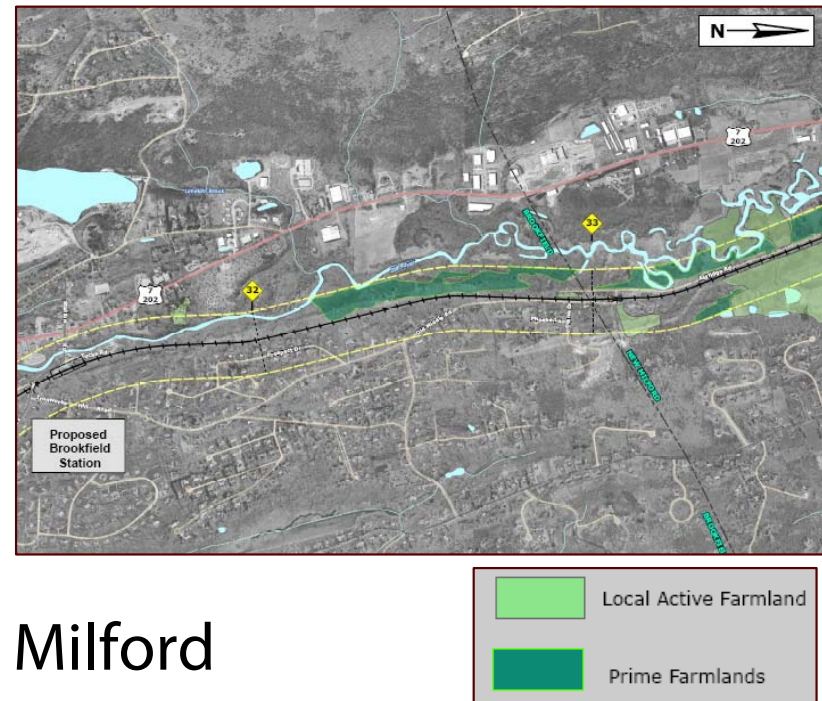


Newly Documented Mill Foundation in Brookfield



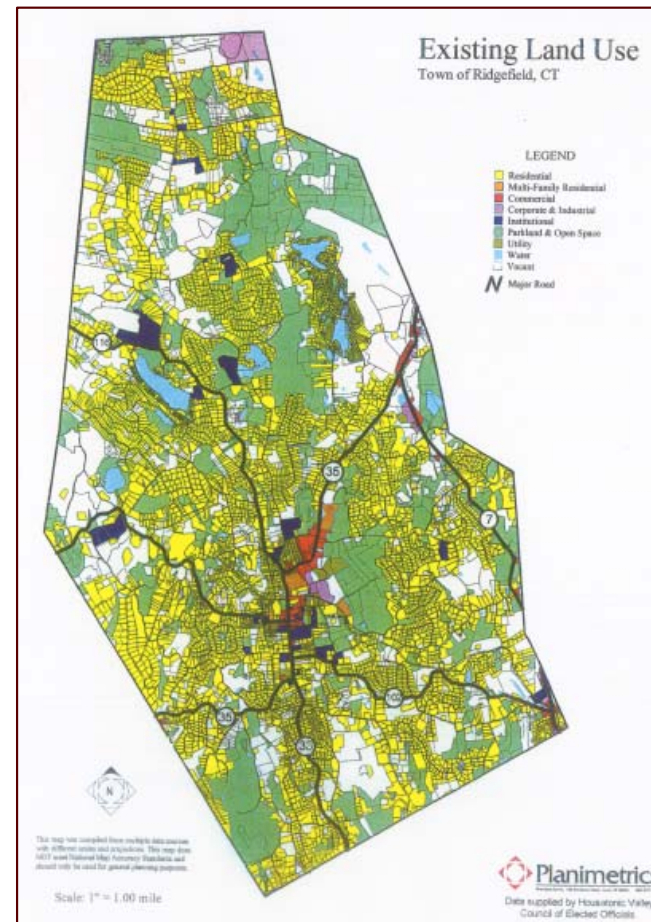
5.2.8 Prime Farmland and Active Farmland

- Prime Farmland:
 - 37 Parcels, from .4 to 23 acres
 - 20 Parcels in New Milford
 - Largest Parcel in Brookfield
 - No Parcels in Norwalk or Danbury
- Active Farmland:
 - Bethel, Brookfield, and New Milford



5.2.9 Land Use

- Example Identified Land Uses:
 - Residential Development
 - Industrial Development
 - Municipal/Government Lands
 - Agricultural Land
 - Undeveloped Land
 - Parks and Open Space
 - Planned Future Development
 - Commercial Development
 - Institutional Development
- Data Sources*
 - Zoning Maps
 - Plans of Conservation and Development



*There were no GIS Databases available for most towns.



5.2.11 Surface and Groundwater Resources

- Surface Water
 - Examples: rivers, lakes, reservoirs, ponds, and estuaries
- Groundwater
 - Originates from rain and melting snow/ice
 - Is the source of water for springs, aquifers, and wells



Norwalk River



Factory Pond, Redding



5.2.12 Public Recreational Lands

- 4(f) Lands: Publically owned open space or refuges
 - Must be protected from disturbance by DOT projects
 - Numerous locations in corridor
- 6(f) Lands: Purchased or developed with funds from the Land and Water Conservation Fund Act
 - Must be replaced if removed by development
 - Three locations in corridor:
 - Oyster Shell Park, Norwalk
 - Mathew's Park, Norwalk
 - Bogus Brook Park, Redding



Oyster Shell Park, Norwalk



5.2.13 Socioeconomics & Environmental Justice

- Environmental Justice calls for the evaluation of projects to see if there is a disproportionately high burden of adverse environmental impacts on under-represented groups
- Corridor has two relatively distinct socioeconomic sub-areas:
 - Norwalk to Danbury
 - Urban cores of economic activity
 - Surrounded by suburban areas
 - Danbury to New Milford
 - Relatively rural characteristics
 - Economic base in transition



5.2.14 Scenic Roads

- Identifies presence of and potential impact to scenic roads
- Within the study corridor:
 - 2 Town Scenic Roads
 - 1 National/State Scenic Highway



Seeley Road, Wilton



Merritt Parkway, Norwalk

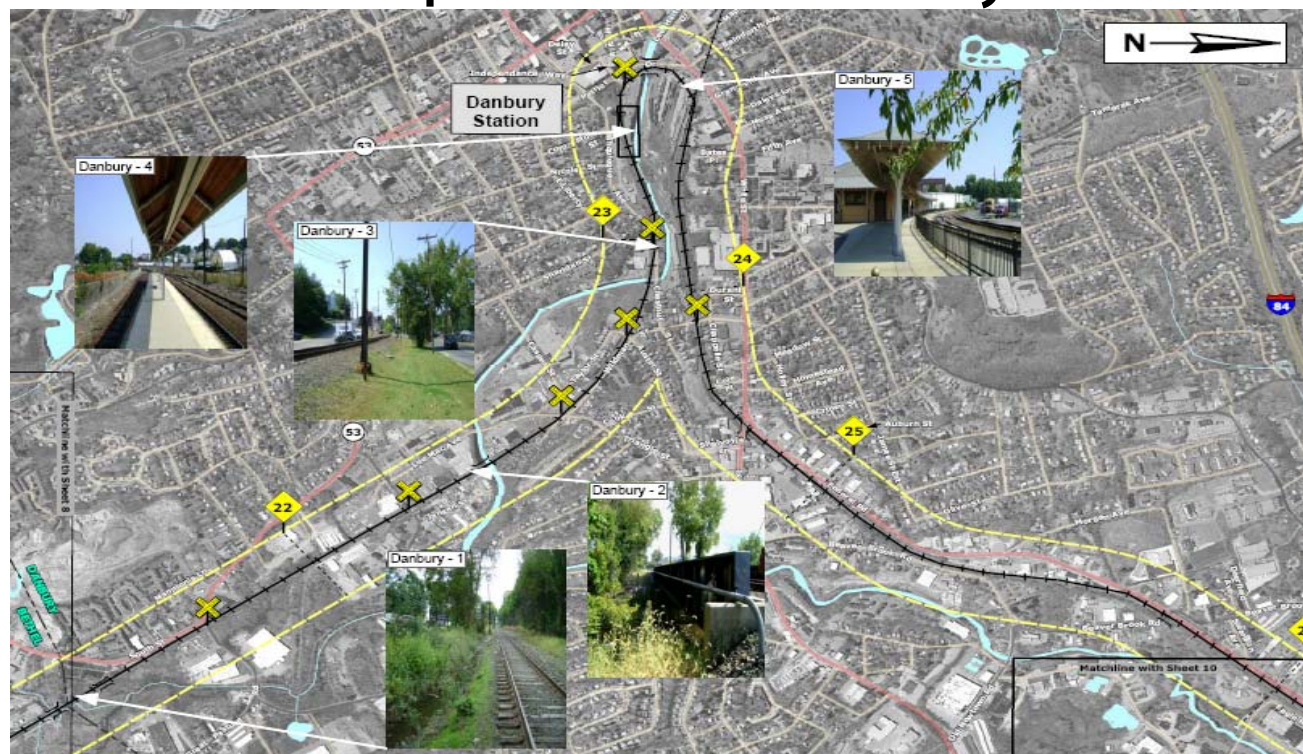


Marchant Road, Redding



5.2.15 Visual Resources

- Contribute to quality of life
- Can be natural or built elements
- Shape the aesthetic experiences of daily life



Visual Resources Map, Danbury



Task 6: Rail Rider Survey – Results

- 48% of passengers board at Bethel or Danbury
- 90% of trips are work-related
- 74% of passengers ride five days a week
- 72% of passengers drive alone to the station
- Improvements that would encourage increased rail usage:
 - More Frequent Service (86% of respondents)
 - Decreased Travel Time by 20% (81% of respondents)



Task 6: Potential Rail Rider Survey – Results

- 86% of commuters drive alone to work
- The average commute is 29 minutes.
- 73% of commuters are aware of Metro-North service.
- Improvements that would encourage increased rail usage:
 - Lower Cost of Train Fares (37% of respondents)
 - Decreasing Travel Time by 20% (37% of respondents)



Task 6: Baseline Train Performance Model

- Computer model of the existing railroad, locomotive, and coaches between Norwalk and New Milford
 - Program: Railsim Version 7
 - Equipment Characteristic Information: Metro-North
 - Track Alignment Information: Metro-North and HRRC
- Used to evaluate the benefits (i.e. reduced travel time) of track improvements and electrification
- Model calculated trip times within four minutes of existing schedule



Task 7: Existing Rail Infrastructure Report

- Field Investigations
- Passenger Stations and Sidings
- Profiles and Grades
- Curvature, Superelevation, Underbalance & Track Speed
- Track Structure
- Horizontal & Vertical Clearances
- Overhead and Undergrade Bridges
- Railroad Highway Grade Crossings
- Railroad Signal System
- Traction Power: Substations and Catenary
- Drainage
- Utilities

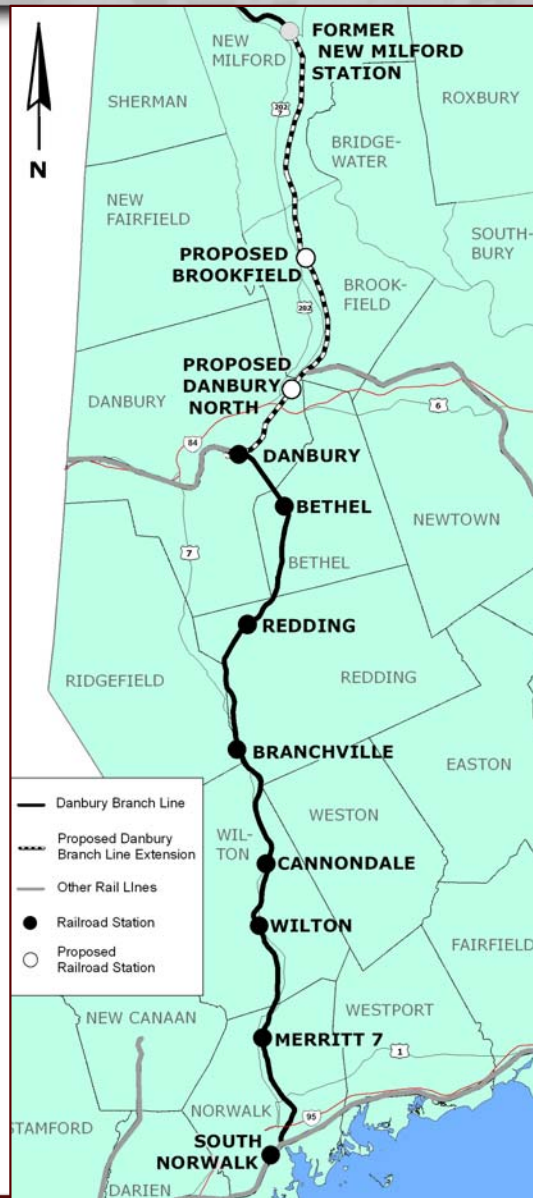


CURRENT ACTIVITIES

- Alternative Station Sites
 - Route 15/Merritt 7 Vicinity: 3 Sites
 - North Danbury: 2 Sites
 - Brookfield: 2 Sites
 - New Milford: 5 Sites
- Existing Stations
 - Norwalk to Danbury
- Transit Oriented Development Opportunities



Station Locations



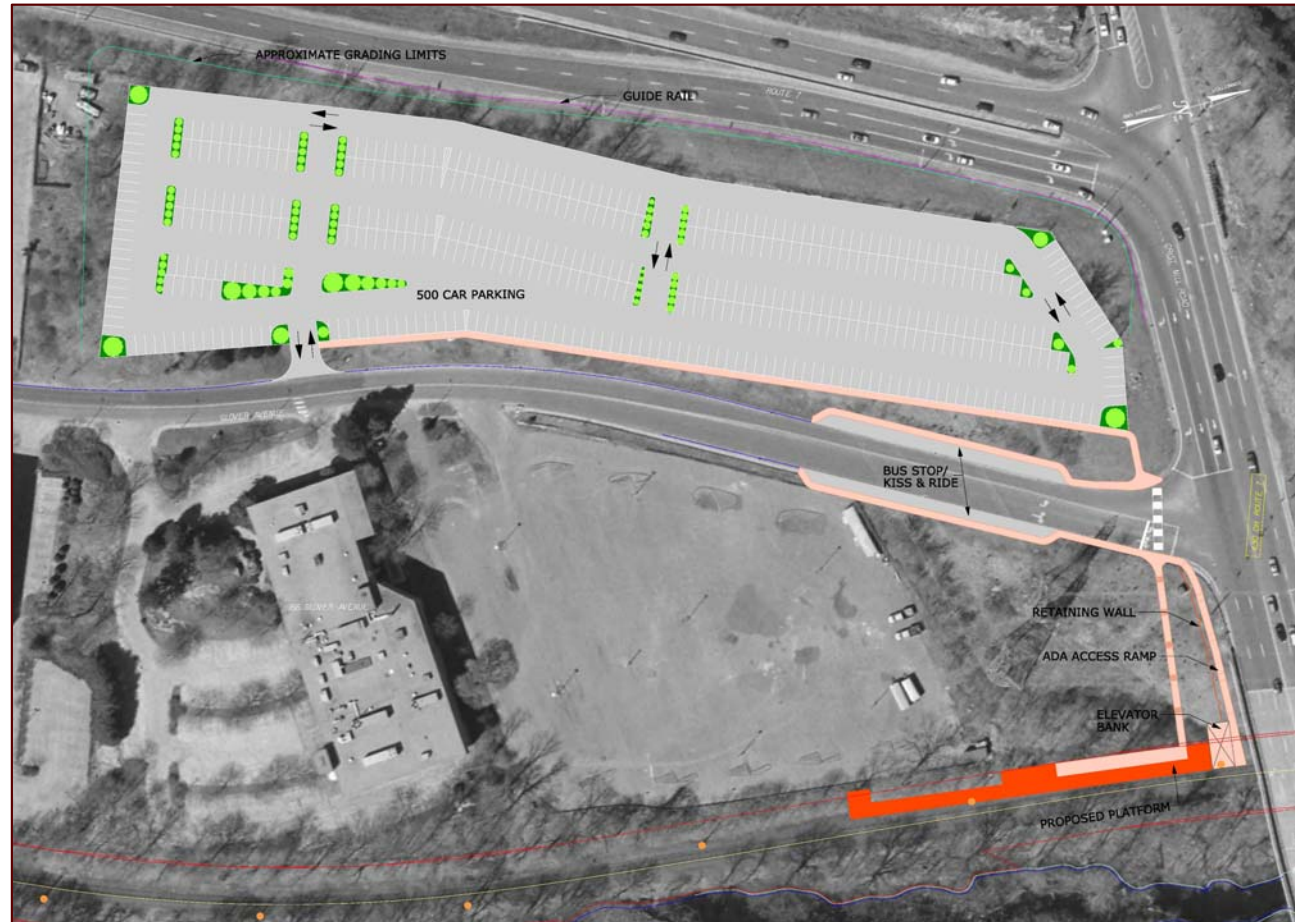
Merritt 7 Site 1: Glover/Oakwood Avenues

- Expand to Enhance Multimodal Operations
- Unsuitable Site: Existing Detention Basin
- Parking Garage
- High Level Platform



Merritt 7 Site 2: Glover Avenue (West)

- Surface Parking
- Relocated Station
- State-owned Land
- Adjacent to Rte 7
- Elevation Differential
- Distance to Tracks
- Poor Multimodal Operation



Merritt 7 Site 3a: Glover Avenue (East)

- Shared Garage
- Relocated Station
- New Site with High Level Platform
- Near Route 7
- Provision for Multimodal Operations



Merritt 7 Site 3b: Glover Avenue (East)

- Smaller Garage Footprint
- More levels needed to get desired number of spaces



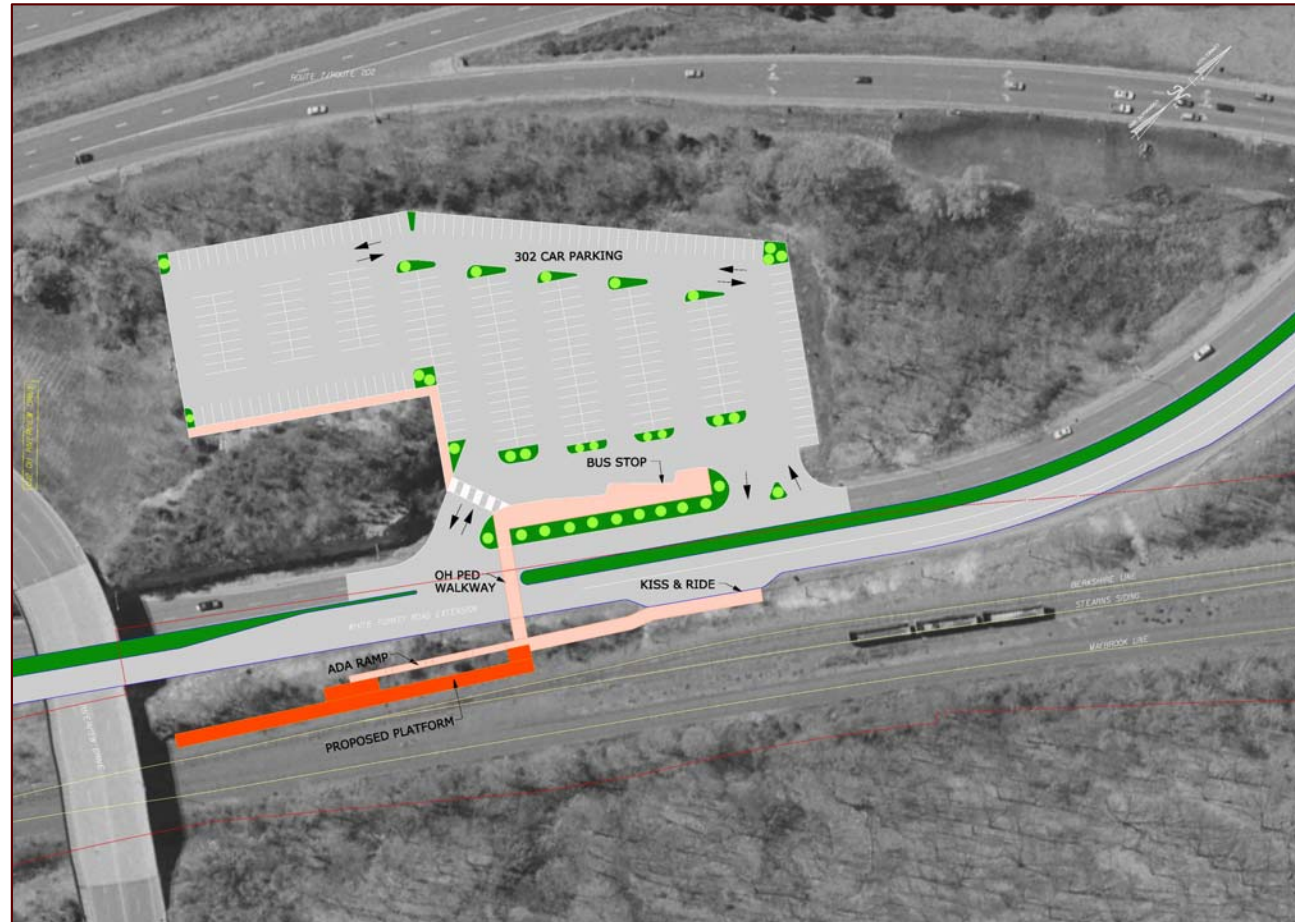
North Danbury Site 1: Riverview Drive

- Existing Development
- Track Work Required
- All Station Activities on Site



North Danbury Site 2: White Turkey Road Ext.

- Existing Park-and-Ride Lot
- Near Route 7 Interchange
- Isolated Location
- Separation from Railroad
- White Turkey Road Traffic



Brookfield Site 1: Pocono Road

- Near Municipal Buildings
- All Station Activities on Site
- Access to Route 7



Brookfield Site 2: Whisconier Road (Route 25)

- Former Railroad Station
- Congested Area
- Historic Buildings
- Limited Transit Access
- Track on Curve



New Milford Site 1: Pickett District Road

- Industrial Area
- Near Route 7
- Surface Parking
- Transit Accommodated
- May Require Track Reconfiguration



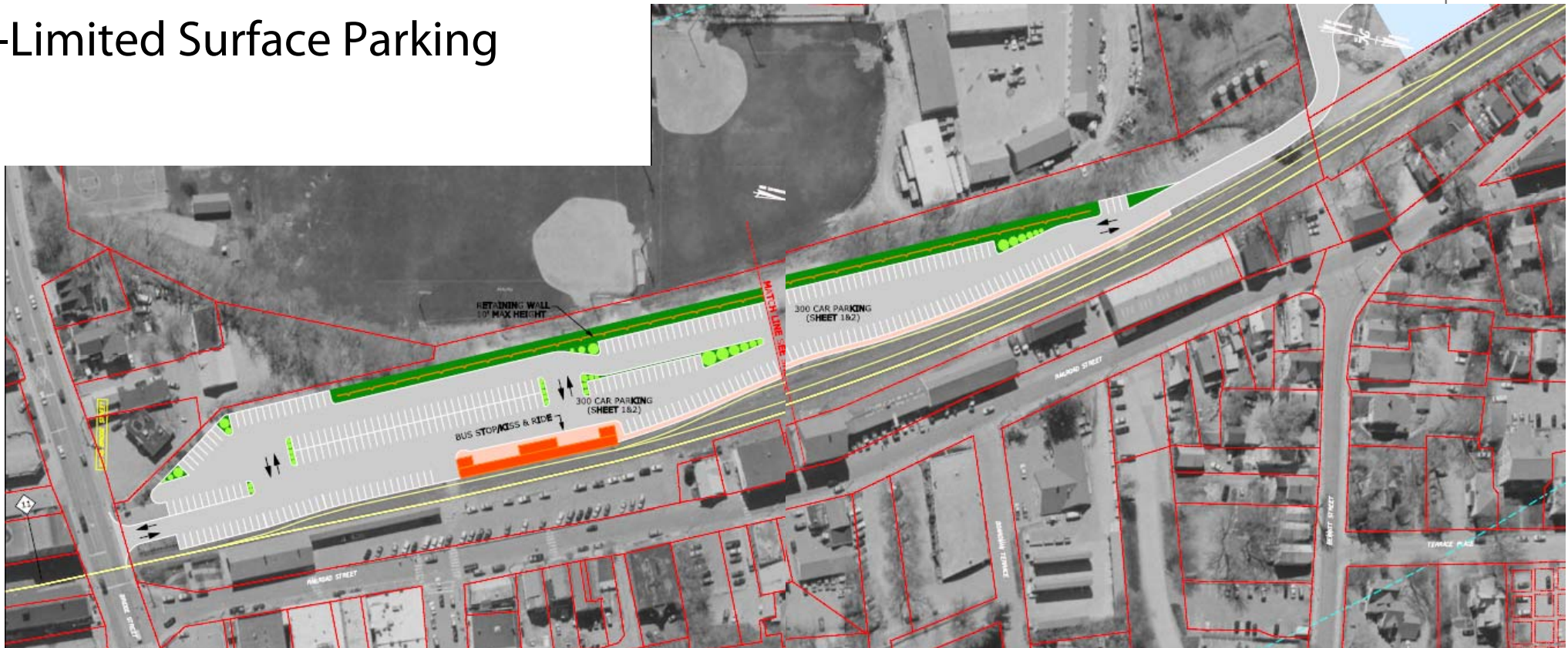
New Milford Site 2: Anderson Avenue

- Surface Parking
- Transit Accommodated
- Existing Business
- Borders Residential Area



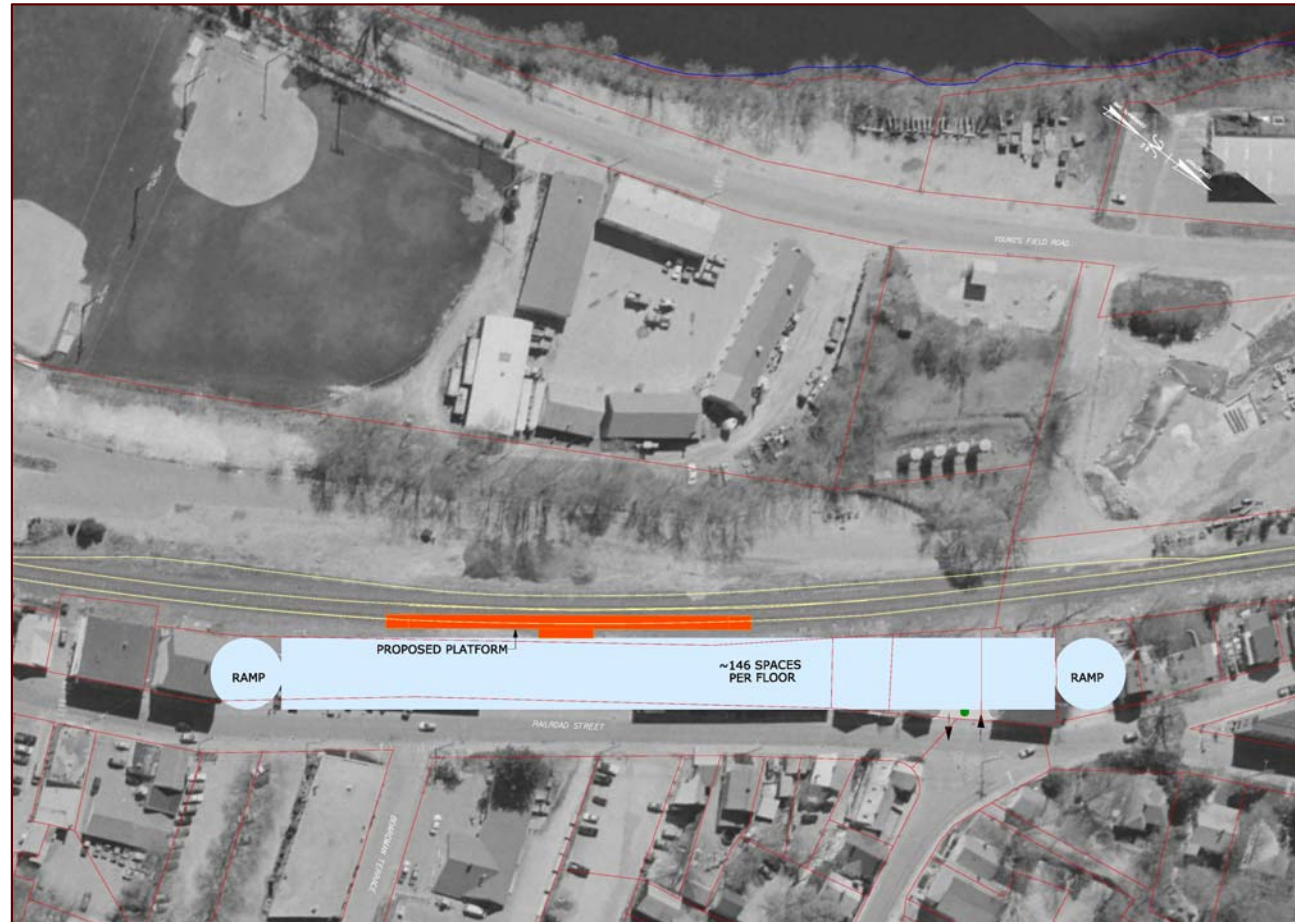
New Milford Site 3: Bridge/Railroad Streets

- Near Downtown
- Limited Surface Parking



New Milford Site 4a: Lumber Yard

- Borders
Downtown
- Limited Garage
Capacity
- No Transit
- Track
Reconfiguration



New Milford Site 4b: Lumber Yard

- Borders Downtown
- Bus
- Kiss & Ride
- Limited Garage Capacity



New Milford Site 5: Public Works Site

- Room for Garage
- Bus
- Kiss & Ride
- Across Tracks from Downtown



Norwalk to Danbury

- It is expected that ridership along the entire Danbury Branch will increase.
- Some improvements being considered for the stations between Norwalk and Danbury include:
 - Increased Parking
 - Transit Services
 - Passenger Information
 - Lengthened Platforms
 - Pedestrian and Bicyclist Facilities

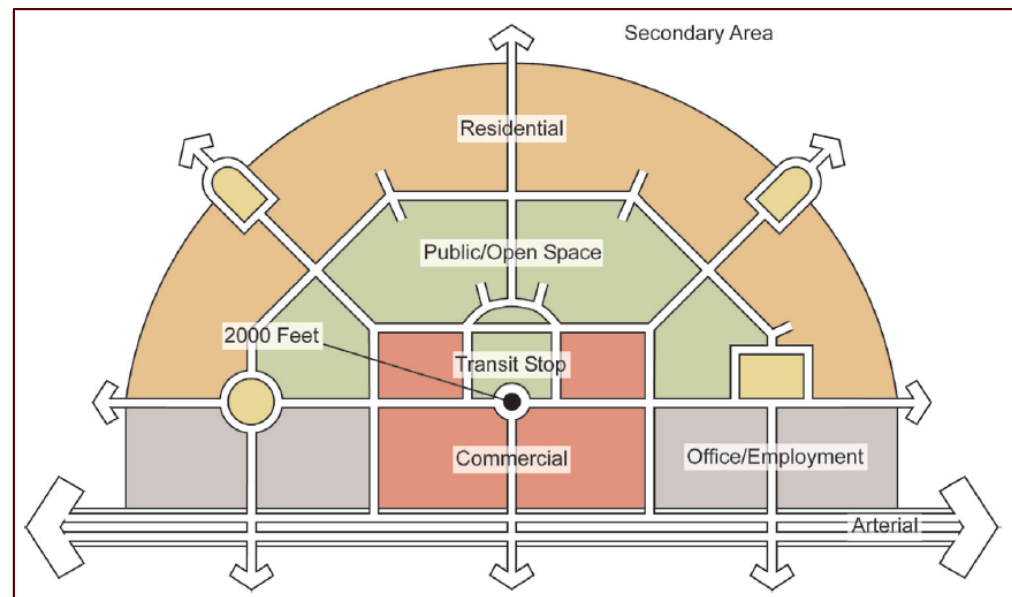


Wilton Station



Transit Oriented Development

- Definition: The creation of compact, walkable communities centered around high quality transit systems. This makes it possible to live a higher quality of life without dependence on cars.
- Goals of Study:
 - Coordinate existing TOD efforts in the study Corridor
 - Evaluate TOD opportunities in the Corridor in two phases

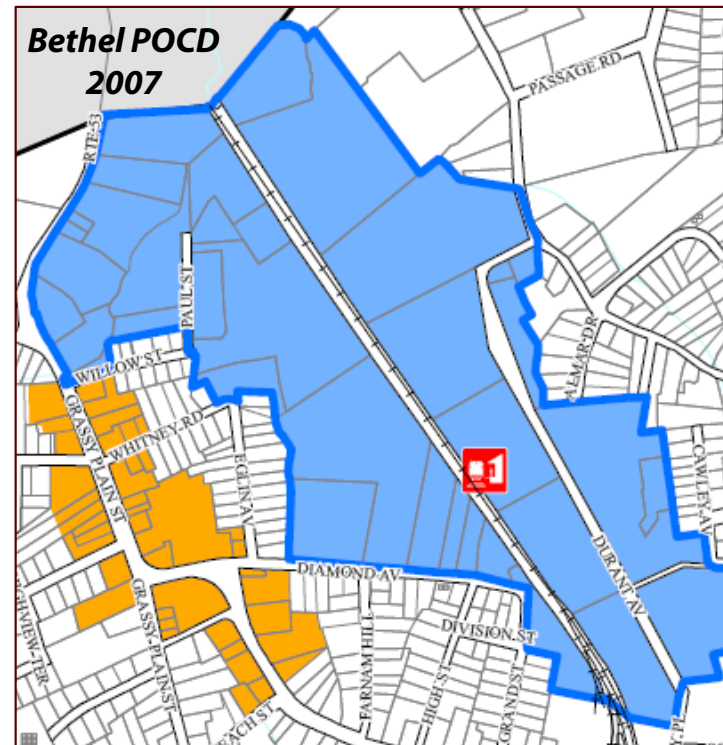


Calthorpe, 1993



Transit Oriented Development

- First phase, Summer 2009 :
 - Identify opportunities and constraints related to TOD in potential station areas
 - Document status of station area planning efforts by local municipalities
 - Identify potential new development adjacent to the corridor and station areas



Proposed TOD (blue) and Transit Supported Areas (orange) around train station in Bethel



Transit Oriented Development

- Second phase, Fall 2009 :
 - Identify the next steps required to move station area planning at high potential stations further in the development process
 - Identify resources at the local level or elsewhere that will assist in furthering the development process as needed.
- It is expected that local jurisdictions will contribute staff and financial resources in partnership with ConnDOT as part of this process.



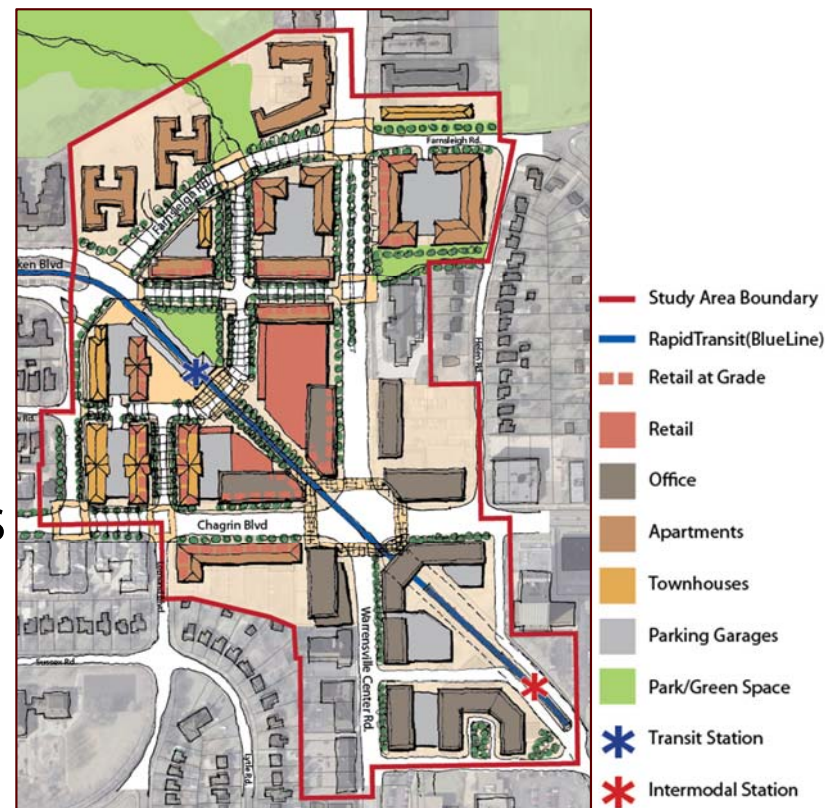
TOD Concept Drawing for White Plains, NY (2008)



Transit Oriented Development

- Next steps in this process may include:

- Conceptual Planning
- Zoning and land use regulation changes to promote TOD
- Identification of private sector partners
- Infrastructure Improvements
- Financial or regulatory incentive tools for towns to encourage TOD



TOD Plan for Shaker Heights, Ohio (2008)



NEXT STEPS

- Alternatives Development
- Alternatives Evaluation
- Second Study Advisory Committee Meeting
- Pre-DEIS Public Meeting



Alternatives Development

- No Build Alternative
- Transportation System Management (TSM): Shuttle Bus Service, Enhanced AM Reverse, Metro-North 2030 Plan
- South Norwalk to Danbury Improvements, including electrification, addition of passing sidings, and minor track realignment
- Extension of Diesel and/or Electric Passenger Service from Danbury to New Milford with new stations and track upgrade
- Partial Electrification from South Norwalk to Merritt 7 with feeder bus and/or rail service to complement the new service



Alternatives Evaluation

Example Criteria:

Operational Impact

Fleet Impact

Existing Roadway Conditions

Planned Roadway Improvements

Existing Transit Services

Bicycle & Pedestrian Access

Constructability

Local Acceptance

Existing Rail Facilities & Operations

Travel Demand: 2015, 2025, 2035

Environmental Impact

Time Savings

Existing Land Use

Capital Cost

Operational Cost

TOD Potential

ROW Requirements

Potential for Transit



Alternatives Evaluation

Federal Transit Administration (FTA) Criteria:

- Mobility Improvement
- Environmental Benefits
- Operating Efficiencies
- Cost Effectiveness
- Transit Supportive Land Use Policies and Future Patterns



Upcoming Meetings

- SAC Meeting #2: Fall 2009/Winter 2010
 - Review Alternatives
- Pre-DEIS Public Meeting: Winter 2010
- SAC Meeting #3: Pre-DEIS, Spring/Summer 2010
- DEIS Public Hearing: Summer/Fall 2010
- SAC Meeting #4: Pre-FEIS, Fall 2010
 - Review DEIS Comments and Responses



DISCUSSION

Questions/Comments?

