Route 7/15 Norwalk Project – Project Advisory Committee Meeting #2

Tuesday, May 23rd, Norwalk City Hall
Route 7/15 Norwalk - AGENDA

- Introductions
- PAC Meeting #1 Summary
- Overview of Traffic Conditions
- Bicycle and Pedestrian Update
- Draft Purpose and Need
- Context/Visual Assessments
- Design Visualization
- Next Steps/Questions
1. Reviewed PAC roles and responsibilities
2. Revisited project history and current status
3. Identified key important project issues
4. Viewed new interchange Alternative 26 (Signals)
Route 7/15 Norwalk - WHAT DID WE HEAR?

**Parkway Character**
- Landscape and aesthetics
- Understanding topography/visualization tools

**Environmental/Cultural**
- Separate Section 106/4(f) meeting

**Network Linkages**
- How will signalization impact roadways?
- Safety and access to NRVT
- Bicycle and pedestrian improvements needed
OVERVIEW OF TRAFFIC CONDITIONS
Traffic Study Area

• Four corridors
  • US 7
  • CT 15
  • Main Avenue
  • New Canaan Avenue
Traffic Study Area

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Route 7/15 Norwalk

Core Traffic Study Area

- CT 15 interchanges with Route 7 and Main Avenue
Traffic Data Collection

Turning movement counts (Peak Period)
23 intersections
Traffic Data Collection

Automated traffic recorder counts (24 Hour)
29 locations
Traffic Data Collection

Travel time data collection (Peak Period)
Study area corridors
Peak Hour Traffic Volumes

- Main Ave: 2,000 vph
- Route 15: 5,000-7000 vph
- Route 7: 4,500 vph
Average Daily Traffic Volumes (ADT)

- Main Ave (south): 25,000 vpd
- Main Ave (north): 17,000 vpd
- Route 15: 55,000-72,000 vpd
- Route 7: 41,000-45,000 vpd
Route 7/15 Norwalk - TRAFFIC CONDITIONS

Traffic Modeling and Analyses

• Three traffic models being used (Synchro, HCS, VISSIM)
• Evaluating conditions at 23 intersections, at 54 limited access highway segments along Route 7 and Route 15, and along study area corridors
Traffic Modeling and Analyses

How do we evaluate traffic operations?

- Travel Speed
- Travel Time
- Level of Service (LOS)
**Route 7/15 Norwalk - TRAFFIC CONDITIONS**

**Level of Service Classifications**

- **LOS A / LOS B**
  - Best qualities of service
  - Traffic is at free flow with little to no restrictions on travel speed or overall mobility.
  - There are no delays.

- **LOS C / LOS D**
  - Acceptable qualities of service
  - There are some restrictions in travel speed and mobility is a bit restricted.
  - Delays are minimal/acceptable.

- **LOS E / LOS F**
  - Failing or deficient
  - Travel speeds decline significantly and mobility is severely restricted. Demand is greater than capacity.
  - Delays are significant.
Route 7/15 Norwalk - TRAFFIC CONDITIONS

Existing Level of Service
Route 7/15 Norwalk - TRAFFIC CONDITIONS

Skycomp Aerial Origin-Destination (O-D) Study

- Understanding how people travel in, around, and through the study area
- Wednesday, September 21, 2016
  7AM-9AM, 11AM-1PM, 4PM-6PM
Skycomp Aerial O-D Study – Field of View

• +/- 21,000 photos analyzed over three peak periods
Skycomp Aerial O-D Study – Field of View

- +/- 21,000 photos analyzed over three peak periods
Skycomp Aerial O-D Study – Conditions at Main Ave / Route 15 Interchange

- Understanding mobility is just as important as understanding traffic demand
NB US 7 Off-Ramp to New Canaan Ave (AM Peak Hour)

- Average travel time to NB CT 15: 5 minutes
- Almost 20% of vehicles have destinations within 1 mile of the Main Avenue/CT 15 interchange
Route 7/15 Norwalk

NB US 7 Off-Ramp to New Canaan Ave (PM Peak Hour)

- Average travel time to NB CT 15: 8 minutes
- 14% of vehicles have destinations within 1 mile of the Main Avenue/CT 15 interchange
SB CT 15 off-ramps to Main Avenue (AM Peak Hour)

- Average travel time to SB Route 7: 6 minutes
- 30% of vehicles destined to New Canaan Ave and points south
SB CT 15 off-ramps to Main Avenue (PM Peak Hour)

- Average travel time to SB US 7: 7 minutes
- 18% of vehicles destined to New Canaan Ave and points south
STOP Controlled on-ramps

Short distances to enter/exit the Parkway
Route 7/15 Norwalk - SAFETY ISSUES

Steep grades along the Parkway

Main Ave / Creeping Hemlock Drive / Glover Ave intersection
Route 7/15 Norwalk - SAFETY ISSUES

Merritt Parkway Crashes (2010-2014)

Number of crashes from 2010-2014 in 1/2-mile segments:
- < 101
- 100 - 200
- 200 - 300
- > 300
- * = fatal injury

Exits:
- Exit 27: 202 crashes
- Exit 36: 232 crashes
- Exit 40: 363 crashes
- Exit 42: 228 crashes
- Exit 44: 232 crashes
- Exit 48: 287 crashes
- Exit 35: 220 crashes
- Exit 38: 220 crashes
- Exit 49: 241 crashes
- Exit 52: 287 crashes

Locations:
- Norwalk
- Westport
- Fairfield
- Trumbull
- Milford
- Stratford
- Bridgeport
- New York - Connecticut
- Greenwich
- Stamford
- Darien
- Stamford
BICYCLE AND PEDESTRIAN
Route 7/15 Norwalk - BICYCLE AND PEDESTRIAN

Main Avenue looking north at Creeping Hemlock intersection

Main Avenue looking south from underneath Merritt Parkway

Main Avenue looking towards Merritt 7
Assessing use and demand

- Coordination with NRVT and Norwalk Bike/Walk Task Force
- Pedestrian and bicyclist counts at intersections
- Strava - “opt-in” data recording focused more on recreation trips
- Journey to Work data
- Qualitative field observations
Route 7/15 Norwalk - BICYCLE AND PEDESTRIAN

Bicycling (STRAVA)

Running/Walking (STRAVA)
Route 7/15 Norwalk - BICYCLE AND PEDESTRIAN

Legend
- Corridor Number
- Sidewalk/Footpath on two sides of street
- Sidewalk/Footpath on one side of street
- Sidewalk/Footpath Improvements
- Crosswalk Improvements
- Sidewalks & Footpaths (non-priority corridor)
- Existing Multi-Use Path
- Tier 1 Priority Path
- Tier 2 Priority Path
- School
- Train Station
- Bus Station
- 1/4 Mile Radius of School & Transit Center

Norwalk Pedestrian and Bikeway Plan (2012)
DRAFT PURPOSE AND NEED
What is Purpose & Need?

1. Defines the transportation problem
2. Limits range of alternatives - “reasonable, prudent and practicable”
3. Guides the alternatives analysis process
4. Clear, well-justified, specific and comprehensive

P&N is the foundation for the selection of a course of action
Route 7/15 Norwalk - ALTERNATE SCREENING

FULL RANGE OF ALTERNATIVES

Agency Coordination

Comparative Screening

Initial Screening

Detailed Screening

Alternative Refinement

Public Involvement

FINAL ALTERNATIVES FOR EVALUATION
Route 7/15 Norwalk - DRAFT PROJECT PURPOSE

- Improve **system linkage** between Route 7 and the Merritt Parkway
- Improve the **mobility** for all users at the Merritt Parkway’s Main Avenue and Route 7 Interchanges
- Improve **safety** in the vicinity of these interchanges
• Ensure long-term serviceability of corridor
• Maximize public investment in corridor
• Ensure better interchange integration with environment and neighborhood context
• Provide for pedestrian and bicycle access
Discussion with PAC on general questions

- Open discussion on DRAFT text
- Interest in sub-committee to further refine?
- Next steps
CONTEXT/VISUAL ASSESSMENTS
• Merritt Parkway Guidelines
• Merritt Parkway Landscape Master Plan
• Merritt Parkway Conservation and Restoration Plan: Bridge Restoration Guide
• Existing tree assessment and inventory
Intersection of the Merritt Parkway and Main Avenue (Route 7) Downtown Winnipauk, 1938. View northwest. (Bepler, Route 7 the Road North – Norwalk to Canaan, p 18).

Merritt Parkway intersection with Main Avenue, 2017. Google Maps.
Merritt Parkway intersection with Route 7, 1940. (Merritt Parkway Construction, Connecticut State Library, State Archives)

DESIGN VISUALIZATION
Route 7/15 Norwalk - DESIGN VISUALIZATION

Model Introduction

NB Merritt Parkway Flyover (PM Peak)
Route 7/15 Norwalk - DESIGN VISUALIZATION

Model Introduction

NB Route 7 Flyover (PM Peak)
Model Comparison

Main Avenue looking south from intersection with Creeping Hemlock Drive, 2016. Google Maps

Main Avenue looking south from intersection with Creeping Hemlock Drive, 2017. RDV Visual Simulation.
Model Comparison

Main Avenue looking northeast from Merritt View Building, 2016. Google Maps

Main Avenue looking northeast from Merritt View Building, 2017. RDV Visual Simulation.
Route 7/15 Norwalk - DESIGN VISUALIZATION

Interactive 3D Model Website
NEXT STEPS
Route 7/15 Norwalk - NEXT STEPS

- Continue development of existing conditions section of EA/EIE
- Continue to refine current alternates
- Refine visualization model
- Continue to meet with stakeholders
- Criteria prioritization exercise
- Historic working group (106 and 4(f))
- PAC meeting in September
- Early fall scoping meeting
Route 7/15 Norwalk - NEXT PAC Meeting

- Review of scoping meeting
- Update on existing conditions work
- Modeling/simulation update
- Criteria ranking
- Review of alternates
- Other suggestions?