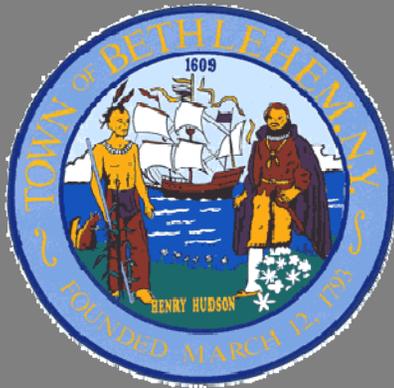


Town of Bethlehem

US 9W Corridor Transportation Planning Assessment



Presented to:

Bethlehem Town Board

June 2009

Capital District Transportation Committee
Metropolitan Planning Organization (MPO)



**US 9W Corridor
Transportation Planning Assessment
Advancing the Town of Bethlehem's
Comprehensive Plan and Economic Development Goals
December 2008**

Prepared for:

**The Town of Bethlehem
&
The Capital District Transportation
Committee (CDTC)**



Prepared by:



Overview

- *Study Background*
- *Route 9W Corridor Conditions and Improvements*
- *Selkirk Bypass Options and Recommendation*
- *Costs, Financing, Next Steps*



US 9W Study Background

Introduction:

- ❖ ● *Identified as Tier 1 priority in 2005 Comprehensive Plan*
- ❖ ● *Cooperative effort between T. of Bethlehem and CDTC*
- ❖ ● *Funded under CDTC's Linkage Study Program*

Participants:

- ❖ ● *Route 9W Study Advisory Committee*
 - ✓ - *Residents, NYSDOT, CDRPC, CDTA, ACDPW*
- ❖ ● *Wilbur Smith Associates*



US 9W Study Background

Purpose:

- ❖ ● *Identify US 9W transportation improvements needed to implement 2005 Comprehensive Plan*
- ❖ ● *Identify transportation and land use actions needed to support planned development in corridor*
- ❖ ● *Improve US 9W visual environment*
- ❖ ● *Review feasibility of Northern Selkirk Bypass Alignment*
- ❖ ● *Work toward development of financial plan for recommended improvements*



US 9W Study Background

Guiding Principles:

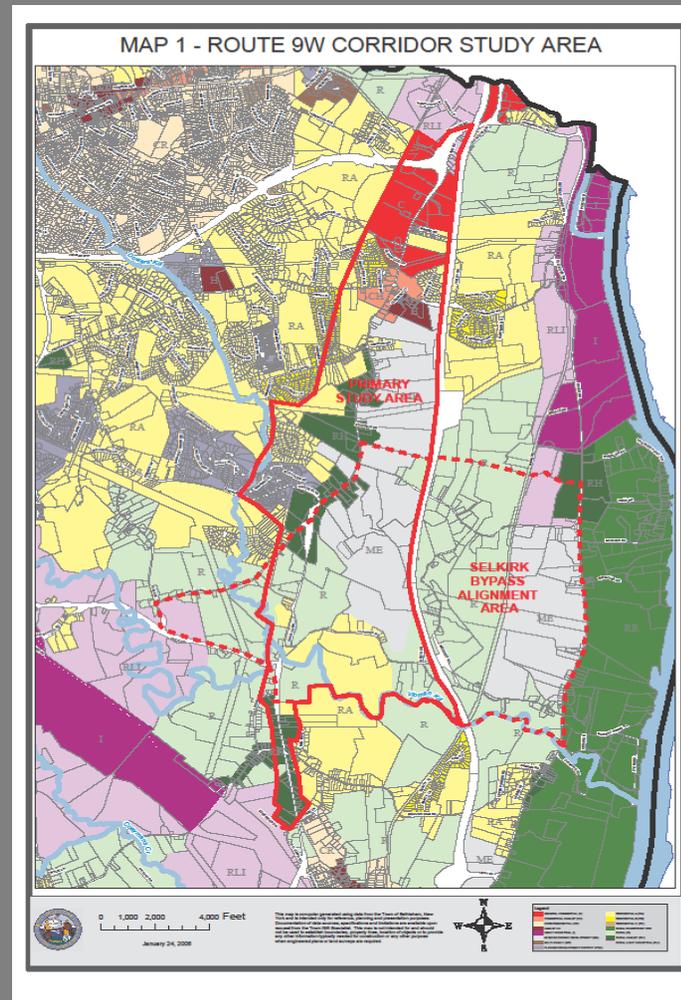
- *Transportation systems are important to the local and regional economy, and quality of life*
- ❖ ● *Transportation plans should not focus solely on the automobile, but should also promote other travel modes*
- ❖ ● *Transportation planning is also about creating attractive and livable communities*
- ❖ ● *Land use decisions are important in building workable transportation systems & quality communities*
- ❖ ● *Funding is a significant constraint*
- ❖ ● *Environmental protection is an important component*



US 9W Study Background

Study Area:

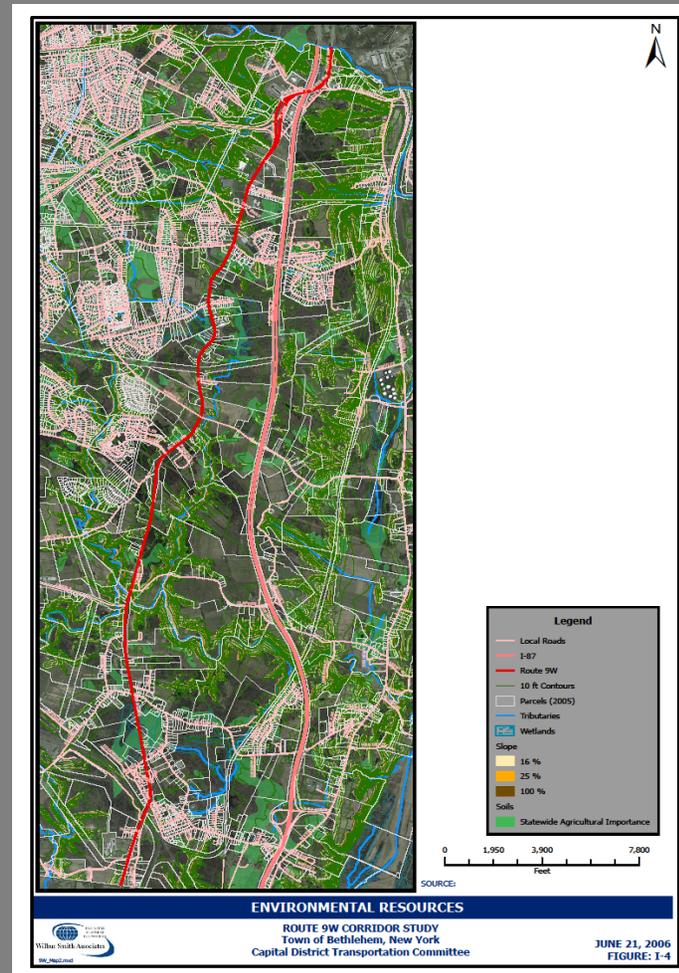
- Hanney Lane in the north to Cottage Lane in the south
- Six miles



US 9W Existing Conditions

Natural Features:

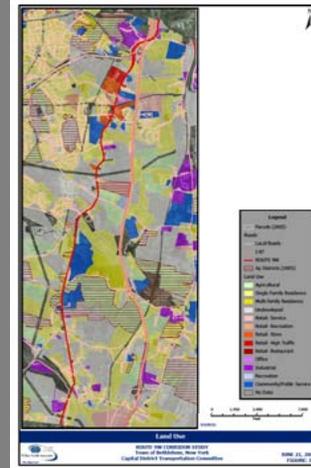
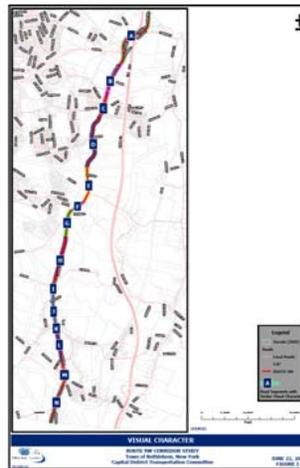
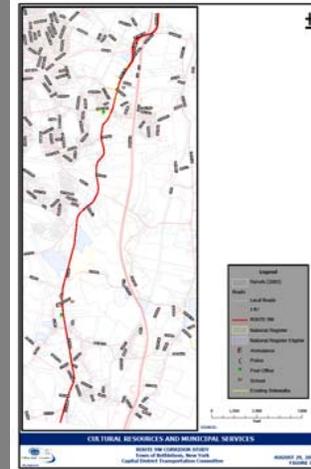
- Topography
- ❖ ● Wetlands
- ❖ ● Soils
- ❖ ● Water Features
- ❖ ● Floodplains
- ❖ ● Steep Slopes
- ❖



US 9W Existing Conditions

Cultural Features:

- Land Use
- ❖ ● Zoning
- ❖ ● Development Activity
- ❖ ● Historic Properties
- ❖ ● Agricultural Resources
- ❖ ● Visual Environment
- ❖ ● Municipal Services



US 9W Transportation Conditions

Transportation Features:

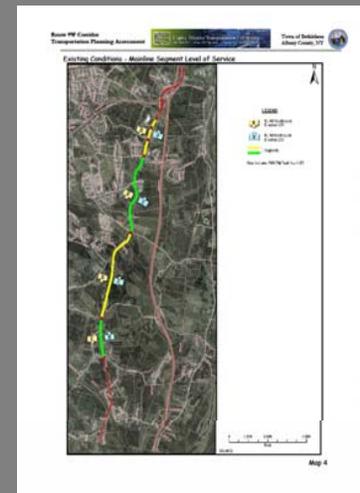
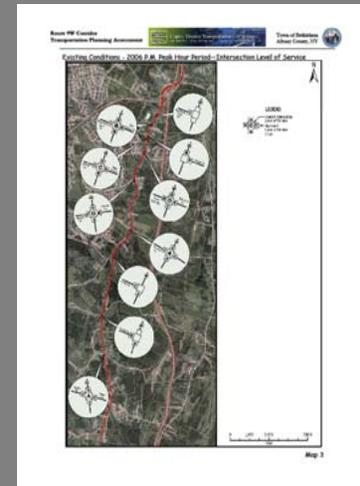
- Road Network / Traffic
- ❖ ● Arterial Access
- ❖ ● Pedestrian Circulation
- ❖ ● Bicycle Circulation
- ❖ ● Safety
- ❖ ● Transit Service
- ❖ ● Truck Traffic



US 9W Transportation Conditions

9W Traffic Conditions:

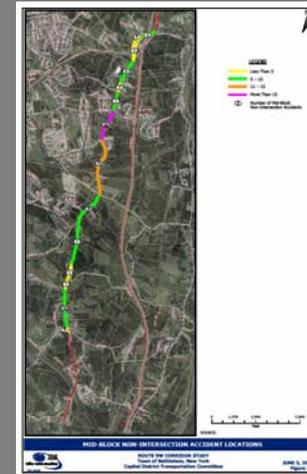
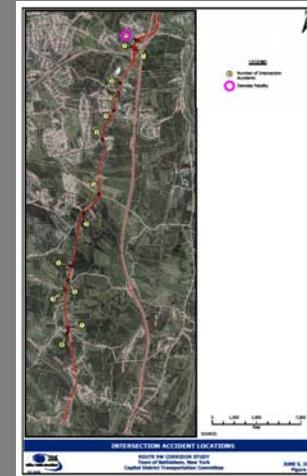
- 8,000 to 16,000 vehicles/day
- 40% traffic increase since 1990
- ❖ ● 54% trip generation increase
- ❖ ● Analysis (pm peak) shows:
 - Signalized intersections = LOS D or better
 - Unsignalized intersections = LOS D or better
 - 9W mainline well below its capacity
- ❖ ● Exceptions
 - WB left at Farm Family = LOS F
 - WB at Magee Drive = LOS F
 - EB at Creble Road = LOS E
 - Mainline between Feura Bush Rd. & Rte. 32



US 9W Transportation Conditions

9W Safety Conditions:

- Analyzed 3-year crash data
- ❖ ● 65% at mid-block locations
- ❖ ● 25% at signalized intersections
- ❖ ● High crash segments:
 - 9W from Feura Bush to Beacon Road
 - 9W from Wemple Road to Hague Blvd
- ❖ ● High crash intersections:
 - 9W at Bender Lane/Farm Family
 - 9W at Maple Avenue/Bridge Street



US 9W Transportation Conditions

Highway Access:

- 200+ access points
 - Interrupts traffic flow, reduces capacity, contributes to congestion
 - Increases vehicle conflicts, contributes to crashes

Pedestrian & Bicycle Circulation:

- ❖ ● Limited sidewalks, pedestrian signals, crosswalks
 - Discontinuous sidewalks north of Feura Bush Road
 - Absence of facilities south of Feura Bush Road
 - Few linkages to area neighborhoods
- No facilities designed specifically for bicycles
 - Limited , narrow or no shoulders
 - High traffic volumes and travel speeds
 - Bicycle LOS E for most segments



US 9W Transportation Conditions

Public Transit:

- **CDTA Route 7**
 - Service along 9W north of Feura Bush Road
 - 450% increase in ridership since 2003

Truck Traffic Issues:

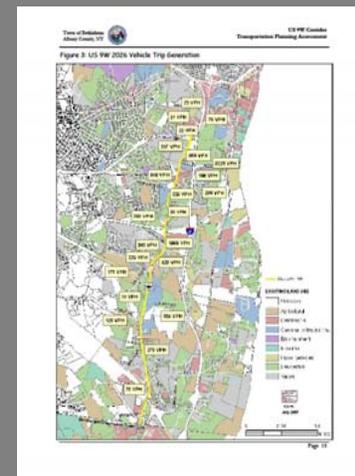
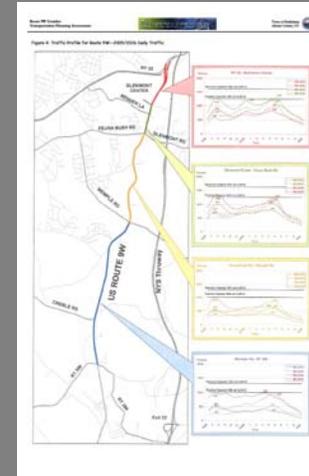
- ❖ ● **Maple Avenue truck traffic**
 - Residential nature of street through Selkirk
 - Links 9W and industrial area with Thruway Exit 23
 - Carries 525 trucks per day (20% of volume)
 - Creates safety / quality of life issues for residents



US 9W Transportation Conditions

9W Traffic Forecast:

- 20 year growth scenario
 - Based on current zoning, development activity, past growth trends, development constraints
 - 3.7 million S.F. of nonresidential space
 - 2,300 housing units
- ❖ ● Traffic forecast
 - Conducted for PM peak hour
 - 9,000 new PM trips
 - Increase from 5,600 to 14,700



US 9W Transportation Conditions

20 Year Traffic Impacts:

- **Summary**

- *Traffic volumes increase significantly but conditions remain tolerable and acceptable for most of the day and at most locations*
- *Major corridor-wide improvements are not necessary*

- ❖ ● **Projected 2026 deficiencies**

- *Mainline exceeds maximum capacity*
 - *From Feura Bush Road to Route 32*
- *Intersections experience LOS F*
 - *North Town Center Drive*
 - *Feura Bush Road*
 - *Bender Lane*
 - *Wemple Road*

Table 6: Traffic Flow & LOS Analysis

| Location | Year | Volume | LOS | Notes |
|-------------------------|------|--------|-----|------------------|
| North Town Center Drive | 2026 | 1,200 | F | Exceeds capacity |
| Feura Bush Road | 2026 | 1,500 | F | Exceeds capacity |
| Bender Lane | 2026 | 800 | F | Exceeds capacity |
| Wemple Road | 2026 | 1,000 | F | Exceeds capacity |



US 9W Transportation Conditions

20 Year Traffic Impacts (continued):

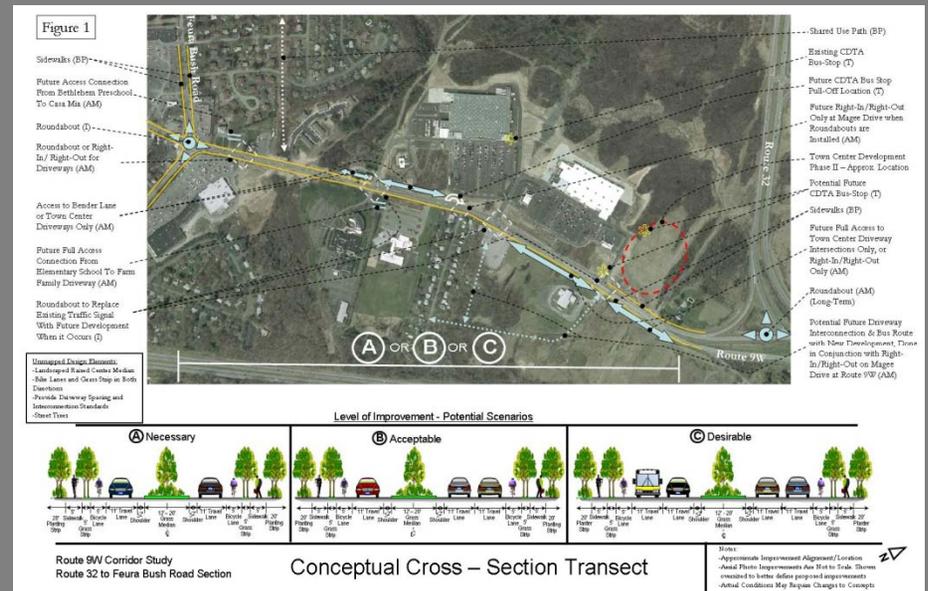
- *Other deficiencies*
 - *Increased traffic volumes exacerbate pedestrian and bicycle facility deficiencies*
 - *Higher traffic volumes increase likelihood of additional crashes at high crash locations*



US 9W Recommended Actions

Route 32 to Feura Bush Road:

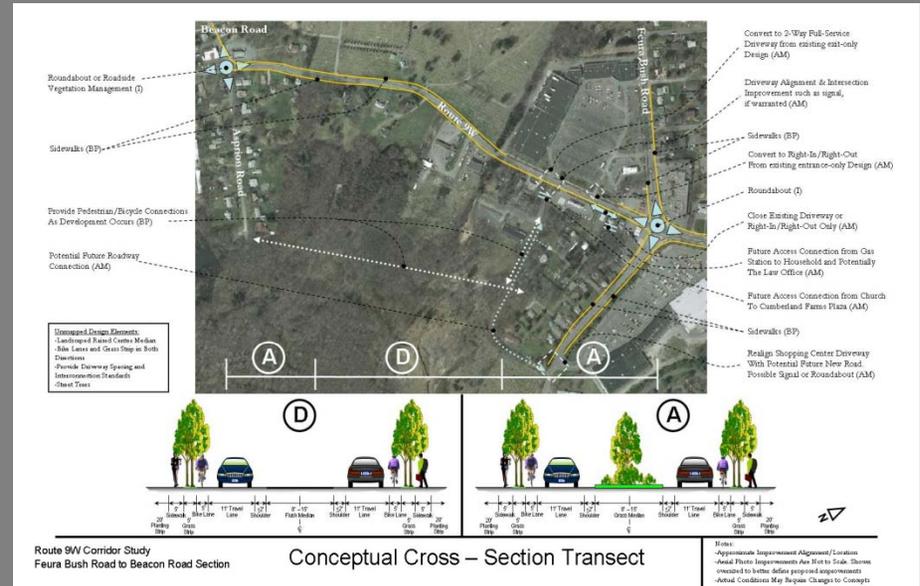
- Travel Lanes
- ❖ ● Raised Center Median
- ❖ ● Roundabouts
- ❖ ● Sidewalks
- ❖ ● Bike Lanes
- ❖ ● Bus Stops / Circulation
- ❖ ● Right in – Right out
- ❖ ● Shared Driveways
- ❖ ● Shared Use Path
- ❖ ● Streetscape Enhancements



US 9W Recommended Actions

Feura Bush Road to Beacon Road:

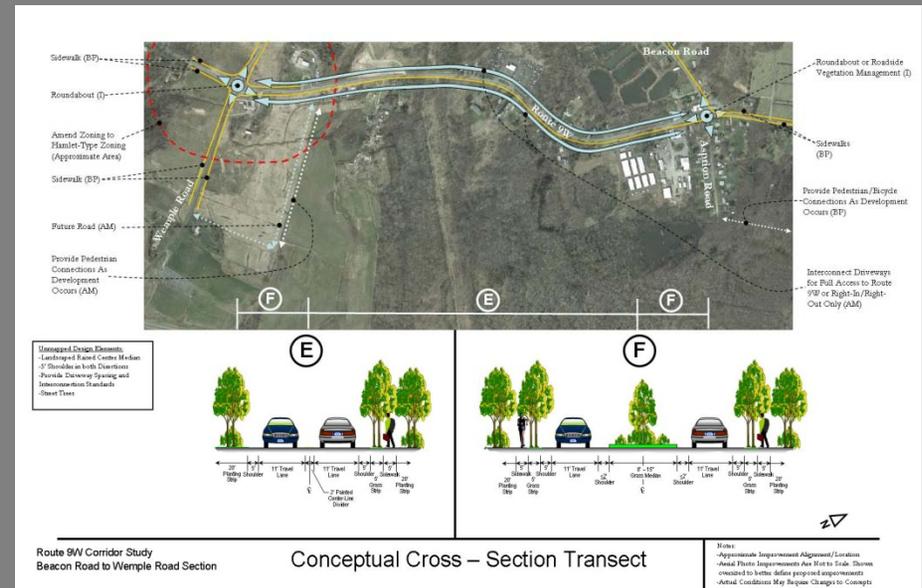
- Raised Center Median
- ❖ ● Flush Center Median
- ❖ ● Possible Roundabout
- ❖ ● Potential Roadway
- ❖ ● Sidewalks
- ❖ ● Bike Lanes
- ❖ ● Shared Access or
- ❖ ● Right in – Right out
- ❖ ● Plaza Driveways
- ❖ ● Shared Use Path
- ❖ ● Streetscape Enhancements



US 9W Recommended Actions

Beacon Road to Wemple Road:

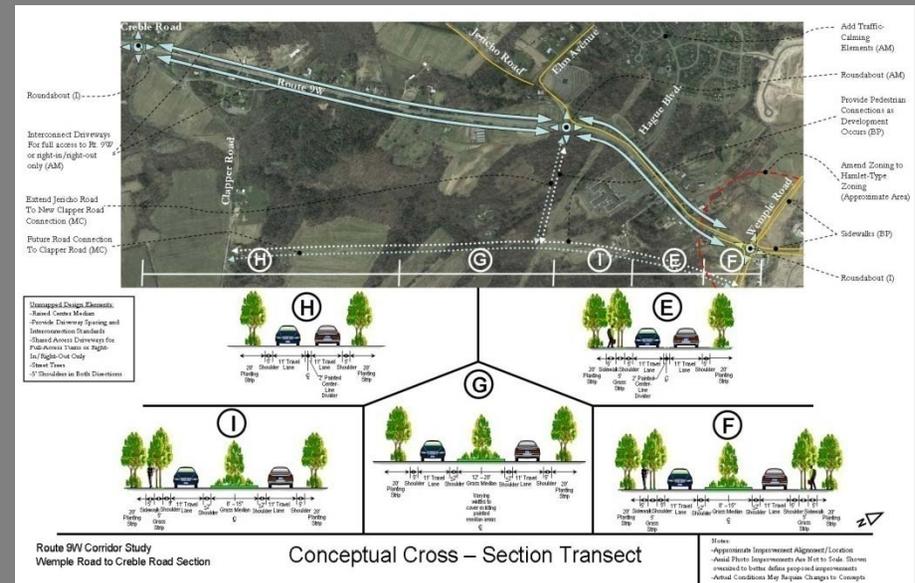
- Median at Intersections
- ❖ ● Roundabout
- ❖ ● Shared Access or
- ❖ ● Right in – Right out
- ❖ ● Sidewalks (one side)
- ❖ ● 5' Shoulder
- ❖ ● Street Trees
- ❖ ● Hamlet Zoning



US 9W Recommended Actions

Wemple Road to Creble Road:

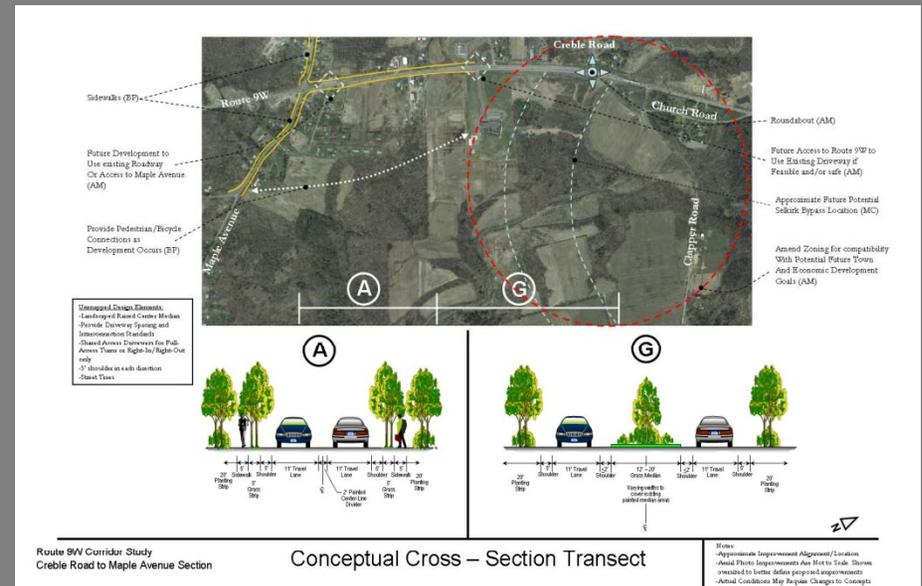
- New Collector Roads
- Median at Intersections
- ❖ ● Roundabout
- ❖ ● Shared Access or
- ❖ ● Right in – Right out
- ❖ ● Sidewalks to Jericho
- ❖ ● 5' Shoulder
- ❖ ● Street Trees
- ❖ ● Hague Traffic Calming



US 9W Recommended Actions

Creble Road to Maple Avenue:

- Selkirk Bypass Corridor
- Roundabout
- Median at Intersections
- ❖ ● Sidewalks to School
- ❖ ● Off-Road Connection
- ❖ ● 5' Shoulder
- ❖ ● Street Trees
- ❖ ● Zoning Amendment



Selkirk Bypass Evaluation

History:

- *Dates to 1989 Route 9W Study*
- *Placed on regional TIP in 1993*
- *Stalled over alignment issues*

Purpose:

- *Review feasibility of Creble Road area alignment*
- *Evaluate relative merits of northern, central and southern alignments*



Selkirk Bypass Evaluation

Guiding Principles / Goals:

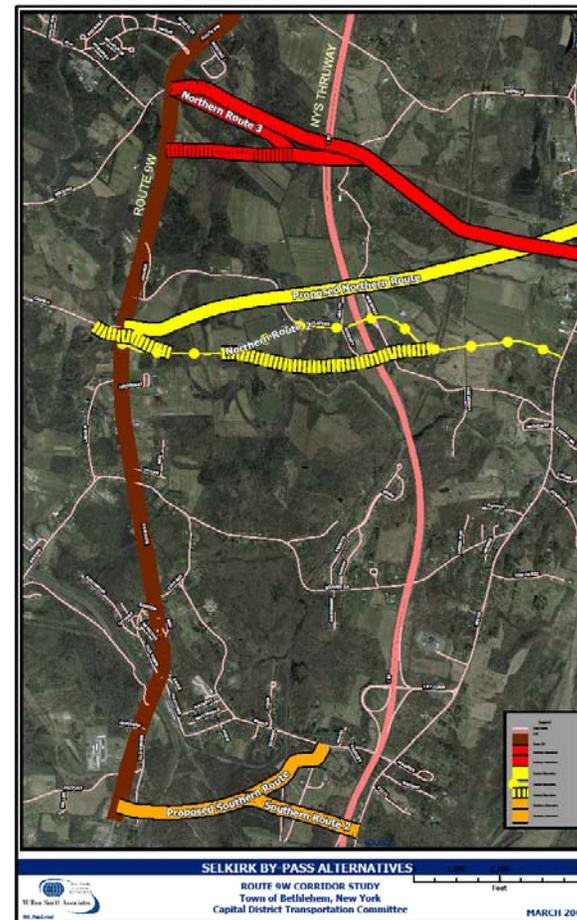
- *Improve quality of life by removing trucks from Rt. 396*
- *Establish economic development opportunities*
- *Reduce 9W traffic burden and improvement needs*
- *Minimize residential, business & environmental impacts*
- *Create opportunities for private sector participation in funding the new roadway*



Selkirk Bypass Evaluation

Alignment Options:

- **Northern**
 - near Wemple Road
- **Central**
 - near Creble Road
- **Southern**
 - south of Maple Ave



Selkirk Bypass Evaluation

Recommended Alignment:

- **Central alignment near Creble Road**
 - Removes substantial truck volume from Maple Avenue
 - Satisfies quality of life and safety objectives
 - Provides direct route from Thruway to industrial area
 - Removes trucks from 9W and allows turn-free access
 - Provides access to hundreds of acres of developable land
 - Creates significant economic development opportunities
 - Creates significant opportunity for private sector participation in capital improvements and construction of road
 - Provides reduced travel time, distance and cost benefits to truckers



Selkirk Bypass Evaluation

Roadway Design:

- *Two travel lanes*
- *35-40 mph design speed*
- *Street trees, shoulders*
- *Pedestrian and bicycle*
- *Sensitivity to environment and existing residences*
- *Access management*



Costs & Funding

Costs:

- \$27 – 40 million *9W Improvements*
- ❖ ● \$24.7 million *Bypass to Thruway*
- ❖ ● \$11.1 million *Bypass to Rt. 396*

❖ Funding:

- \$ 12 million on *Regional TIP*



Costs & Funding

Public Funding Sources:

- *CDTC Spot Improvement Program*
- ❖ ● *Transportation Enhancement Program*
- ❖ ● *CMAQ Program*
- *Transportation, Community and System Preservation*
- ❖ ● *Recreation Trails Program*
- ❖ ● *Safe Routes to School*

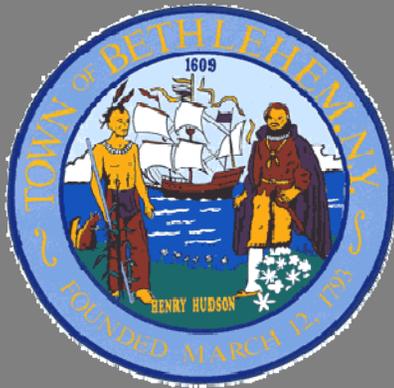
❖ **Private/Public Funding Sources:**

- *GEIS Mitigation Fees*
- ❖ ● *Project Specific SEQR Mitigation*
- ❖ ● *Transportation Development District*



Town of Bethlehem

US 9W Corridor Transportation Planning Assessment



Thank you!

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