NORTHERN ROCHESTER TRANSPORTATION STUDY

Public Open House

November 19, 2009
Community Presbyterian Church
3:00 – 5:00 PM and 5:30 – 7:30 PM

Meeting Agenda

- Recap Study Progress
- Review Identified Study Area Issues and Needs
- Solicit Public Feedback on Issues, Need and Alternatives

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Study Partners

- City of Rochester
  - ✓Richard Freese, Co-Project Manager
- Mn/DOT District 6
  - ✓Rhonda Prestegard, Co-Project Manager

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Study Goal

- To develop a unified Transportation Plan for northwest Rochester that can be implemented over time to address long-range traffic demands. Development of this Transportation Plan now will facilitate the agencies' abilities to preserve right of way and secure funding for the future phased implementation of these recommended improvements to City, County and State roads in the study area.

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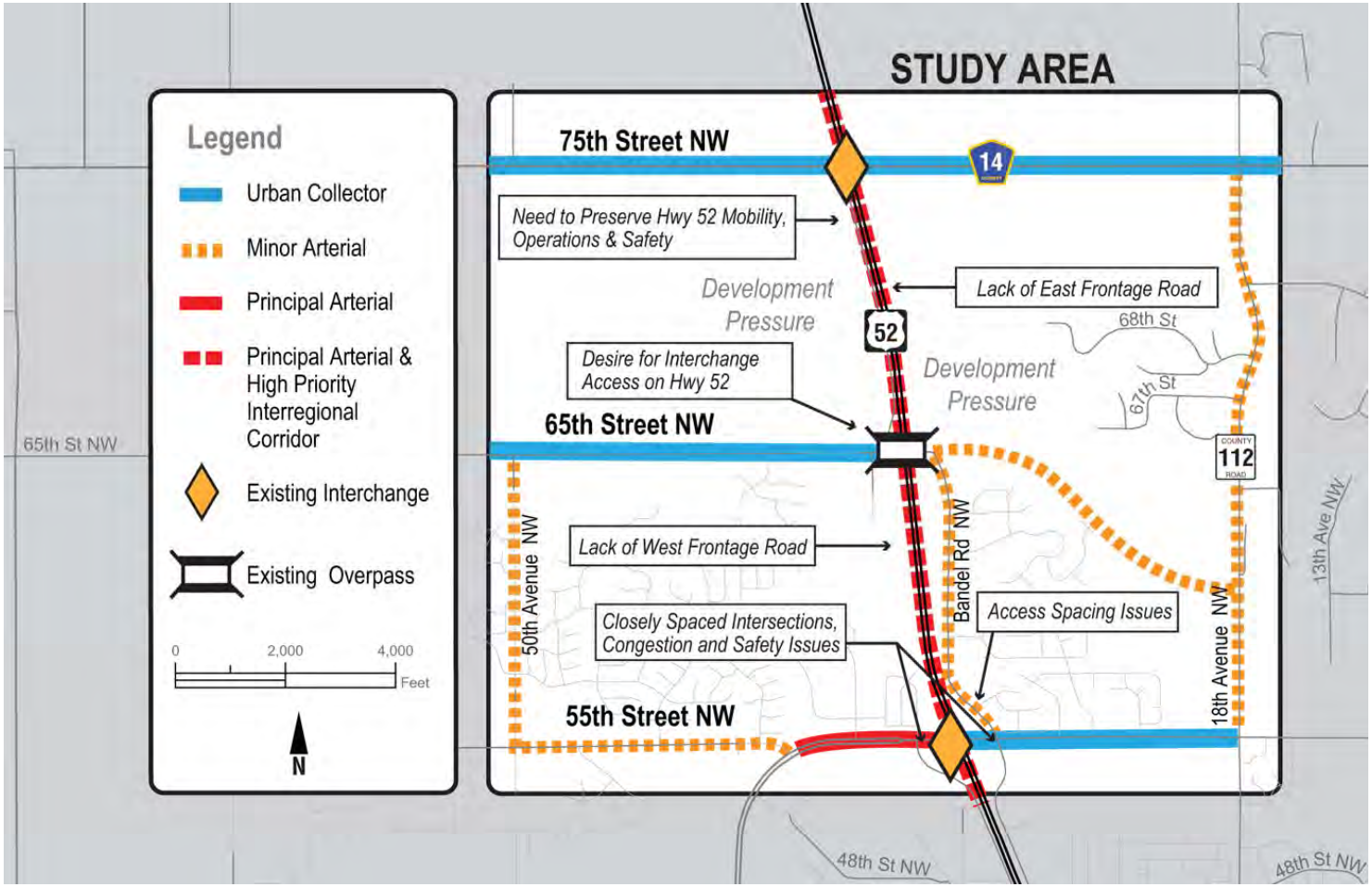
Key Study Area Issues



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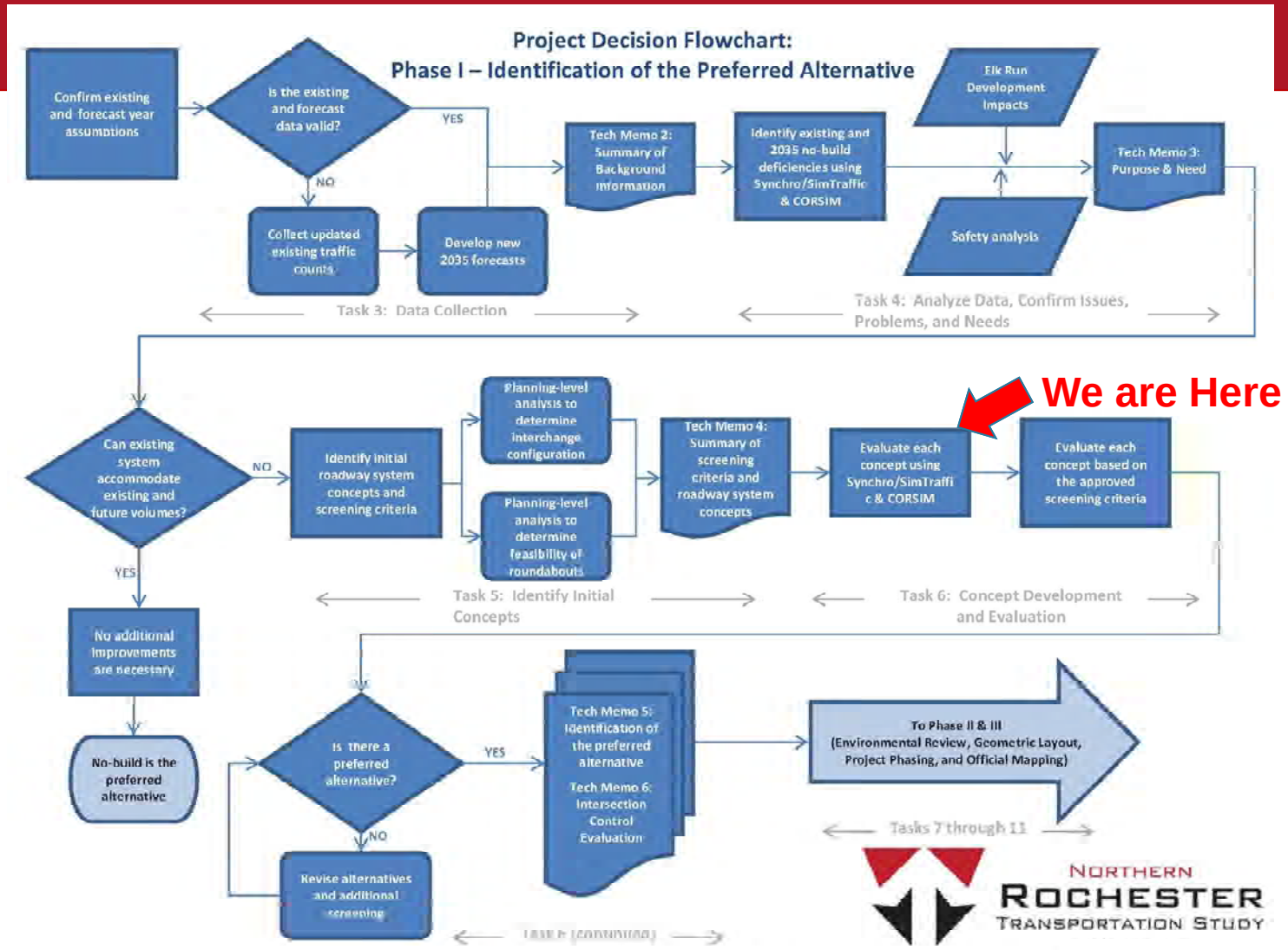
Study Approach



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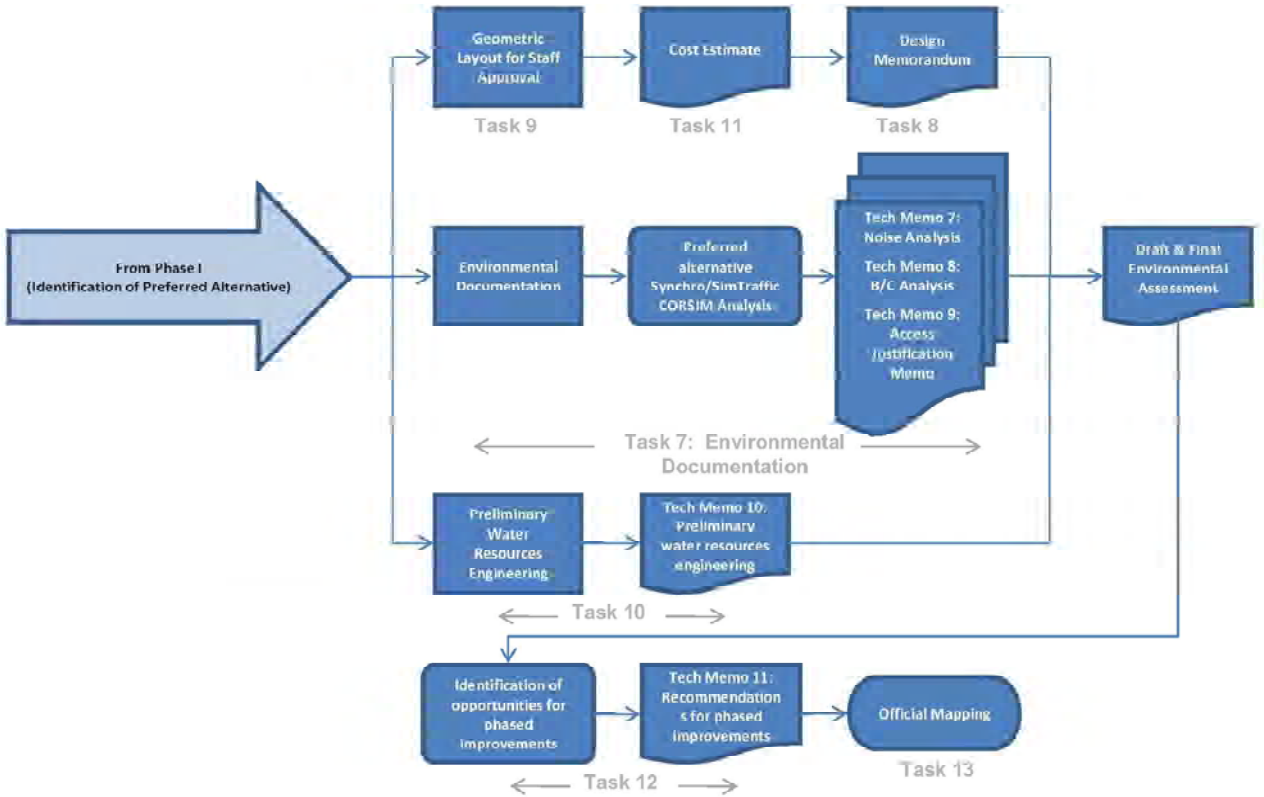
Study Approach

Project Decision Flowchart:
Phase II & III – Environmental Review, Geometric Layout, Project Phasing and Official Mapping



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Existing and 2035 No-Build Analysis

- Confirms/identifies issues and needs for both existing and 2035 No-Build
- Establishes purpose and need for improvements
- Analyzed peak hour capacity at multiple intersections

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Level of Service (LOS)

	Level of Service Designation	Signalized Intersection Average Control Delay per Vehicle (seconds)	Unsignalized Intersection Average Control Delay per Vehicle (seconds)	Description of Traffic Conditions
Acceptable	A	≥ 10	≥ 10	Stable Flow - Low delays; at traffic signals most vehicles do not stop; acceptable LOS
Acceptable	B	> 10-20	> 10-15	Stable Flow - Low delays; at traffic signals some vehicles must stop; acceptable LOS
Acceptable	C	> 20-35	> 15-25	Stable Flow - Moderate delays; at traffic signals some cycle failures; many vehicles must stop; acceptable LOS
Acceptable	D	> 35-55	> 25-35	Approaching Unstable Flow – Moderate delays; at traffic signals cycle failures become noticeable; many more vehicles must stop; limit of acceptable LOS
Unacceptable	E	> 55-80	> 35-50	Unstable Flow - Significant delays; at traffic signals cycle failures are frequent; most vehicles required to stop; unacceptable LOS
Unacceptable	F	Over 80	Over 50	Forced Flow / Failure - Significant delays; at traffic signals many cycle failures occur; most or all vehicles must stop; unacceptable LOS

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Existing Conditions

Existing Conditions:
AM Peak Hour Traffic

Existing Conditions:
PM Peak Hour Traffic

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Planned Improvements

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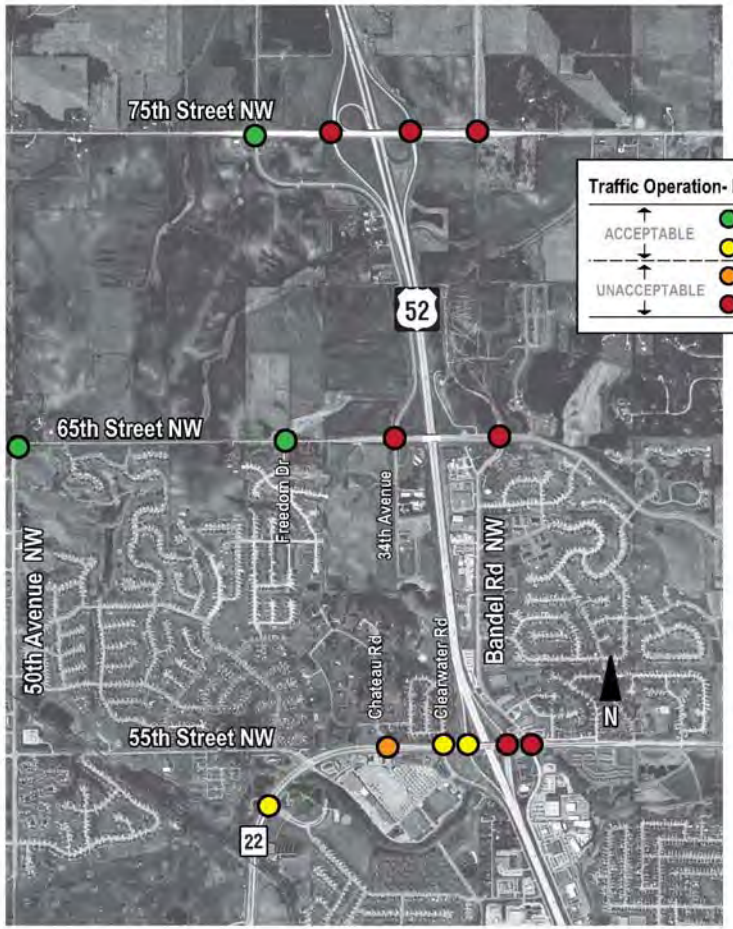
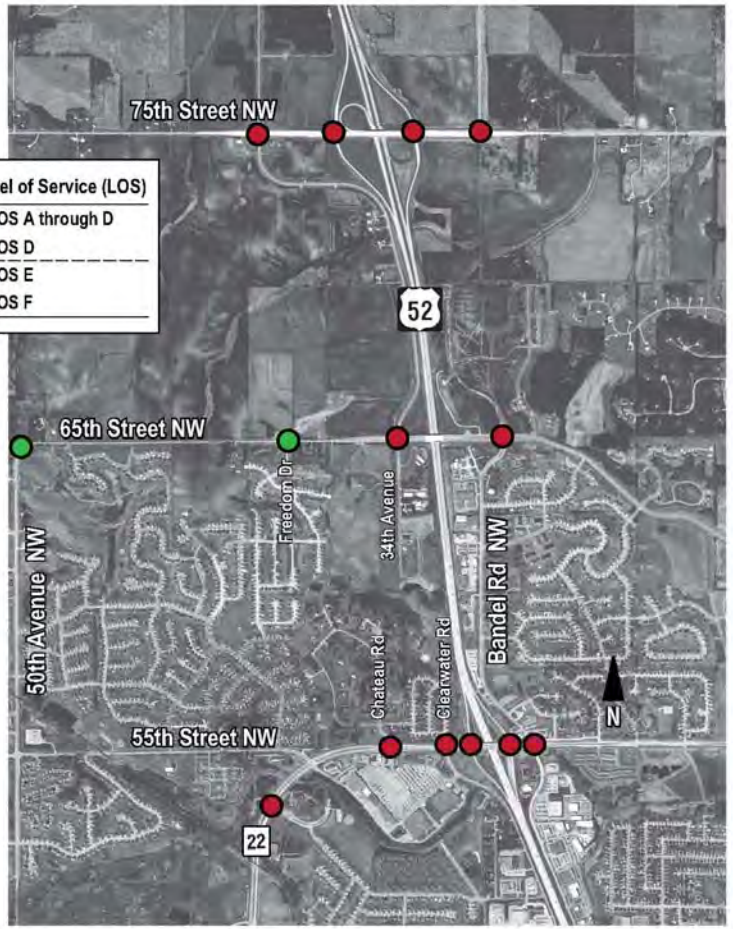
2035 No-Build Conditions



YEAR 2035 NO-BUILD CONDITIONS:
AM PEAK HOUR TRAFFIC



YEAR 2035 NO-BUILD CONDITIONS:
PM PEAK HOUR TRAFFIC

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Purpose and Need

- Purpose: Preserve important transportation corridors and improve long-term mobility, capacity, traffic operations and safety of the study area roadway system.
- Need:
  - ✓It's critical that Hwy 52 continues to perform its function as Urban Freeway/Expressway and High-Priority Interregional Corridor

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Purpose and Need

- Need (continued):
  - ✓Existing road system lacks continuous frontage/backage roads between 55th and 75th St.
  - ✓Current geometrics and traffic control along 55th St. and 65th St. cannot accommodate 2035 volumes
  - ✓Closely spaced signals along 55th St. contribute to congestion during peak periods & are expected to worsen in the future
  - ✓Crash rate on 55th St. is above the local averages

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Initial Screening

Table 1
First-Level Screening of Initial Concepts

Alternatives	**Are there system deficiencies to be resolved?**	Screening Criteria		
		Do ramp volumes at existing 55th Street NW/TH 52 Interchange ramps exceed capacity (12,000 – 15,000 ADT)?	Does 55th Street NW (between Chateau Rd and Bandel Rd) exceed capacity (28,000 – 32,000 ADT for 4-lane 55th or 48,000 – 55,000 ADT for 6-lane 55th Street)?	Does the TH 52 Volume (between 55th Street NW and 75th Street NW) exceed capacity (90,000 – 120,000 ADT)?
B	**Yes**	Yes	Yes*	No
C_2	**Yes**	Yes	Yes**	No
D_2	**Yes**	Yes	Yes**	No
E_2	**Yes**	No	Yes*	No
F_2	**No**	No	No**	No
G_2	**No**	No	No**	No

Notes:
*Assumes 4-lane 55th Street between Chateau Road and Bandel Road
**Assumes 6-lane 55th Street between Chateau Road and Bandel Road

Alt. B = No Build Year 2035
Alt. C_2 = Build Year 2035 with Initial Improvements
Alt. D_2 = Build Year 2035 with Initial Improvements and West Frontage Road
Alt. E_2 = Build Year 2035 Interchange Base
Alt. F_2 = Build Year 2035 Interchange Base with Initial Improvements
Alt. G_2 = Build Year 2035 Interchange Base with Initial Improvements and West Frontage Road

Improvements Under Consideration

- 55th Street: 6-lanes between Chateau & Bandel
- 55th Street Interchange Reconstruction
- 65th Street Interchange
- West Frontage Road between 55th and 65th St.
- Additional local roadway capacity improvements (additional lanes and/or turn lanes)

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Next Steps

- Evaluate Impacts, Costs and Benefits of Each Alternative

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Evaluation Matrix

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ALTERNATIVE EVALUATION MATRIX

DRAFT

			ALTERNATIVES					
Phase I Evaluation								
Transportation								
Develop a unified long-term transportation improvement plan that defines the study area's future transportation system, including the arterial and collector roadway networks and their associated access, including new access to TH 52.	Address existing and future operational and safety issues	Achieve acceptable intersection operations (overall intersection LOS "D" or better)						
	Minimize long-term operational impacts to TH 52	Minimize impacts to mainline TH 52 capacity and operations (volume-to-capacity less than 1.0)						
		Provides adequate reserve capacity for future growth and land use changes						
		Ability to minimize local trips on the freeway system (i.e., TH 52)						
	Equitably distribute traffic to arterials, collectors and local roadways based upon their intended functions	Reduce system overloads on supporting arterial network						
		Provides connectivity and continuity of local road system						
	Provide a supporting arterial network that serves future land uses	Consistency with adopted transportation plans						
Social								
Assess potential social impacts	Minimize long-term public costs for transportation infrastructure by maximizing existing and phased improvement investments to be consistent with long-range recommendations	Acres of Right of Way (Total)						
		Number of Partial Residential Acquisitions						
		Number of Partial Commercial/Industrial Acquisitions						
		Number of Partial Agricultural Acquisitions						
		Number of Full Residential Acquisitions						
		Number of Full Commercial/Industrial Acquisitions						
		Number of Full Agricultural Acquisitions						
		Minimize disruptions to adjacent neighborhoods						
		Impact on quality of life factors (visual, preservation of open space)						
		Disproportionate impact to low income or minority populations						
Environmental								
Assess potential impacts to the natural environment	Balance right of way and other social, economic and environmental impacts to the area	Acres of Wetlands						
		Acres of floodplain encroachment						
		Acres of Parks/Trails						
		Removal of structures containing asbestos/regulated materials						
		Impact to contaminated site						
Economic								
Assess economic impacts	Maximize economic growth potential	Estimated Right of Way Cost						
		Estimated Construction Cost						
		Estimated Total Cost						
		Benefit Cost Analysis						
		Impacts to tax base						
		Phase I Evaluation Summary						
		Carry Forward into Phase II: Detailed Alternative Evaluation? Yes/No						

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Next Steps

- Combine Improvements into Preferred Alternative Scenario (Winter 2009)
- Develop Phasing Plan
- Federal/State Environmental Documentation
  - ✓Public Open House (Spring 2010)
  - ✓Final Approval (Summer 2010)
- Official Map (Fall 2010)
- Construction of Initial Phases (Funding Dependent)

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Questions?

- Boards
- Comments
  - ✓Verbal – project staff available to discuss
  - ✓Written – comment cards available to fill out today or mail in

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