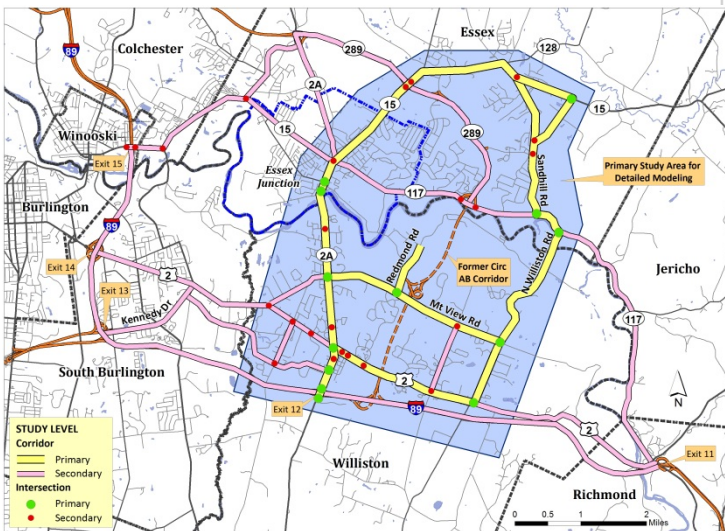




Williston-Essex Network Transportation Study

Steering Committee Meeting #4

Existing Traffic Conditions Network-Wide Goals & Objectives Preliminary Strategy Packages



September 25, 2012

Presentation Overview

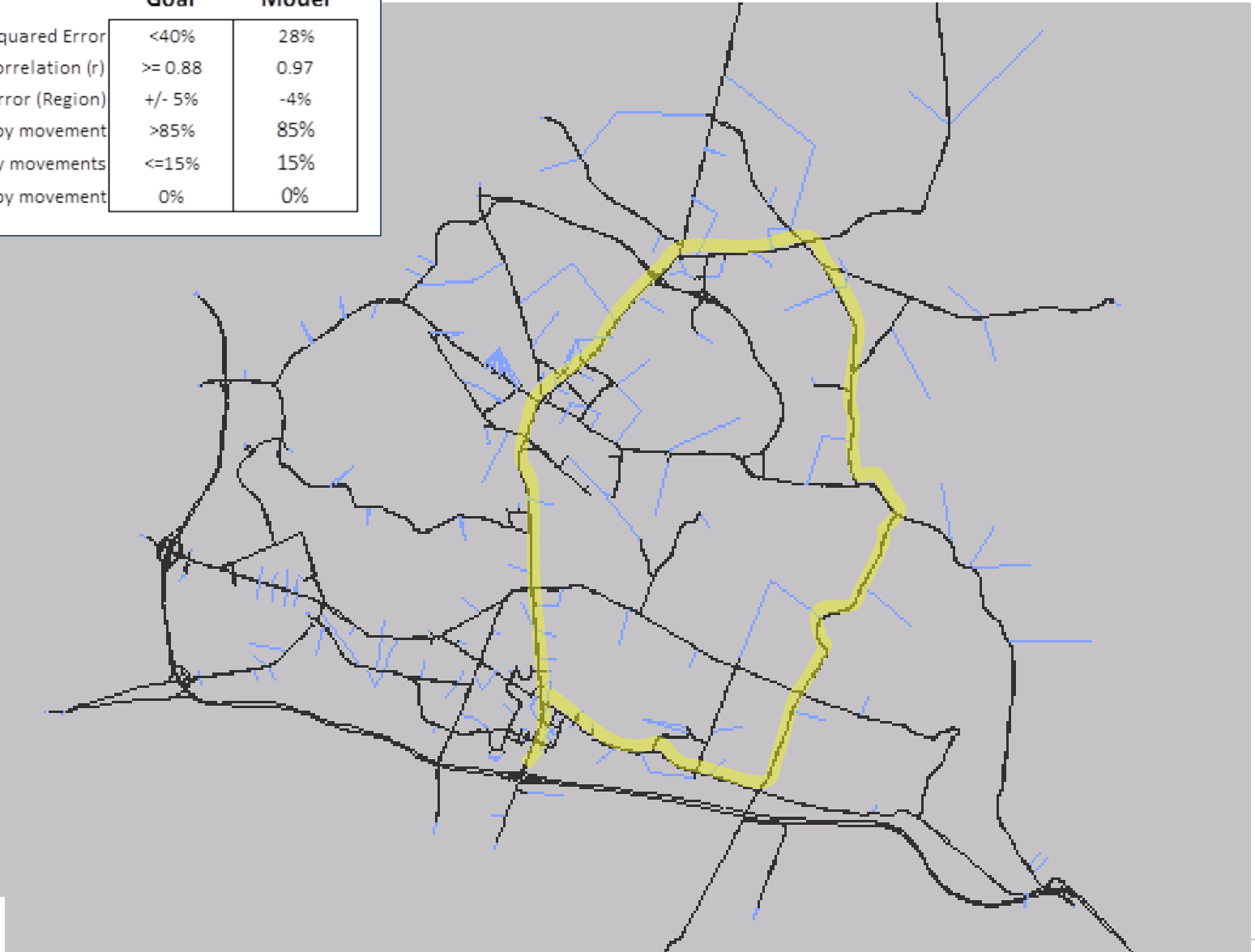
- Project Status
- Review of Traffic Conditions in Study Area
- Draft Network-wide Goals & Objectives (Discussion)
- Preliminary Strategy Packages (Discussion)
- Next Steps

Review Project Status







- Phase 1: Evaluation of two major network strategies
 - 3 Selectboard Meetings, 1 Public Meeting
- Phase 2: Analysis of Existing and Future Issues; Development of Transportation Network Goals
 - Task 1: Analysis of existing conditions; development of performance measures
 - Task 2: Establish goals and objectives
 - Task 3: Future year performance
- Phase 3: Develop and evaluate strategies
- Phase 4: Develop Implementation Plan for Transportation Corridors
- Phase 5: Develop Transportation Management Plan







Calibration

	Goal	Current Model
Root Mean Squared Error	<40%	28%
Coefficient of Correlation (r)	≥ 0.88	0.97
Percent Error (Region)	$\pm 5\%$	-4%
GEH ≤ 5 , by movement	$\geq 85\%$	85%
$5 < \text{GEH} \leq 10$, by movements	$\leq 15\%$	15%
GEH > 10 , by movement	0%	0%



Traffic Performance

	Average PM Peak Hour	Estimated Design Hour
VT 2A/I-89 Exit 12 SB Ramps	LOS	LOS
 Overall	C	D
VT 2A/I-89 Exit 12 NB Ramps		
 Overall	C	D
VT 2A/Marshall Avenue		
 Overall	D	E
VT 2A/US 2		
 Overall	C	D
VT 2A/Industrial Avenue		
 Overall	D	E
Mt View Drive/Redmond Road		
 SB, exiting Redmond Road	B	C

	Average PM Peak Hour	Estimated Design Hour
VT 2A/South Street/River Street		
 Overall	B	C
US 2/Brownell Avenue		
 Overall	C	D
US 2/North Williston Road		
 EB, along US 2	C	D
Mt View Road/North Williston Road		
 EB, Mt View	C	D
VT 117/North Williston Road		
 NB, along N Williston	C	D
VT 117/Sandhill Road		
 SB, exiting Sandhill Road	D	E

Goals and Objectives - Mobility Corridors

Create a safe and efficient highway network by improving commuting and travel reliability within selected mobility corridors (VT 2A, VT 15, US 2)

- Minimize congestion and improve travel times for key mobility corridors
- Improve local road system connectivity to provide routing alternatives for local trip making
- Improve safety by managing access to the primary corridors
- Address the High Crash Locations within the Study Area with strategies designed to reduce crash frequency and severity

Create a comprehensive multimodal transportation system in Village areas and Growth Centers

- Develop a safe bicycle and pedestrian-friendly transportation network
- Improve local circulation and access to businesses, neighborhoods and services
- Maximize multimodal connectivity between neighborhoods
- Protect neighborhoods from regional traffic

Provide safe and convenient transportation alternatives to serve the diverse needs of residents, businesses and visitors in the Study Area

- Increase public transit service in the study area
- Improve accessibility to public transit services and improve multimodal connections in the area
- Create a safe and continuous bicycle network to accommodate local circulation and commuting needs

Support economic development in Chittenden County by providing safe and efficient access to employment centers and retail facilities in the Study Area [Champlain Valley Technology and Innovation Park (CVTIP), Taft Corners and Essex Town Center]

- Improve travel reliability for freight movements within mobility corridors
- Provide safe and efficient access to the CVTIP site
- Reduce congestion and improve access to major retailers in the area
- Provide high quality non-motorized access between commercial centers and adjacent residential areas

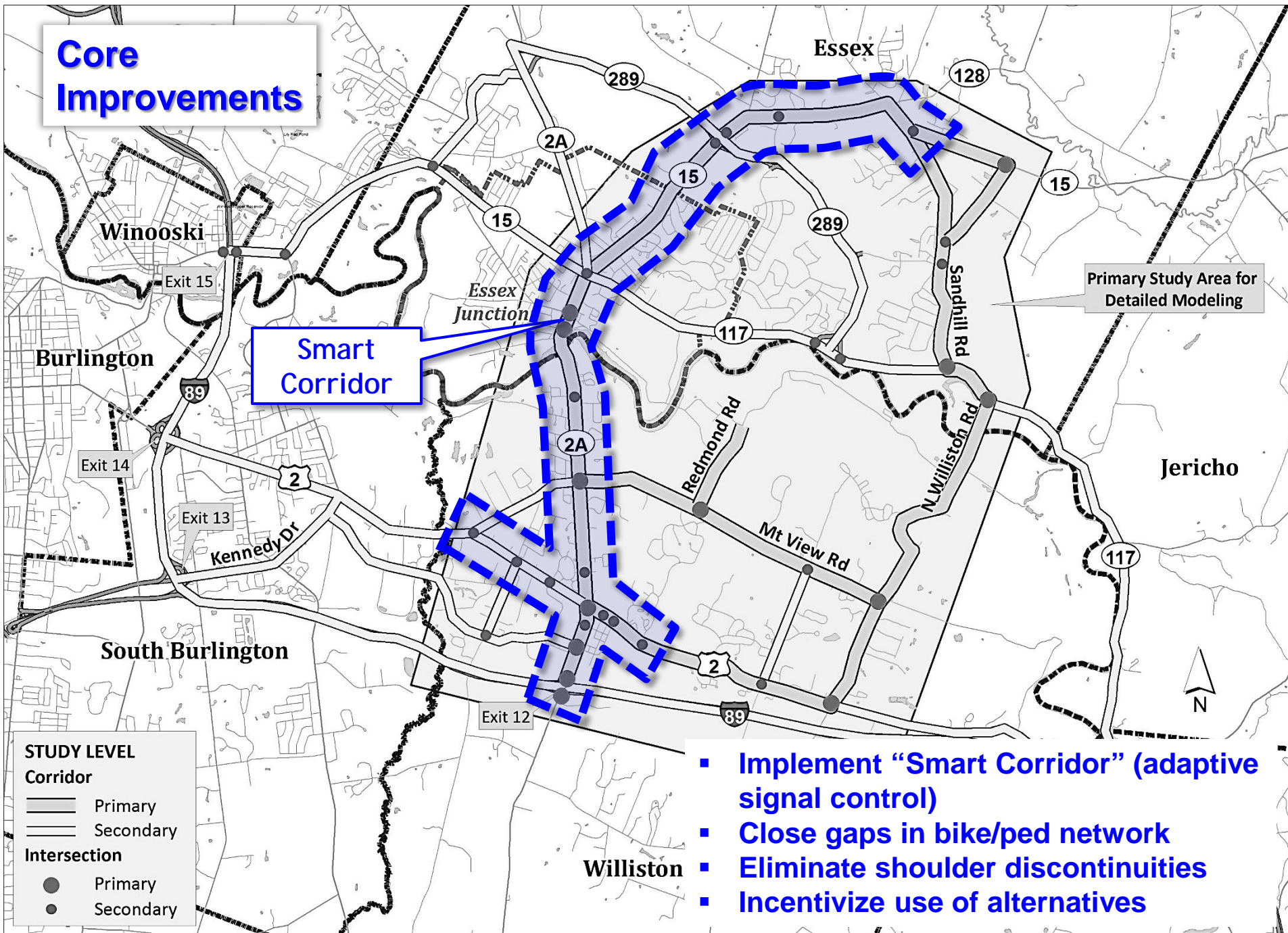
Maximize investments in a sustainable transportation

- Invest in multimodal alternatives to increase non-automobile commuting
- Encourage land use development to facilitate non-automobile commuting
- Minimize the environmental impact of transportation investments, including greenhouse gas emissions
- Promote transportation facilities that complement the municipal and regional land use plans

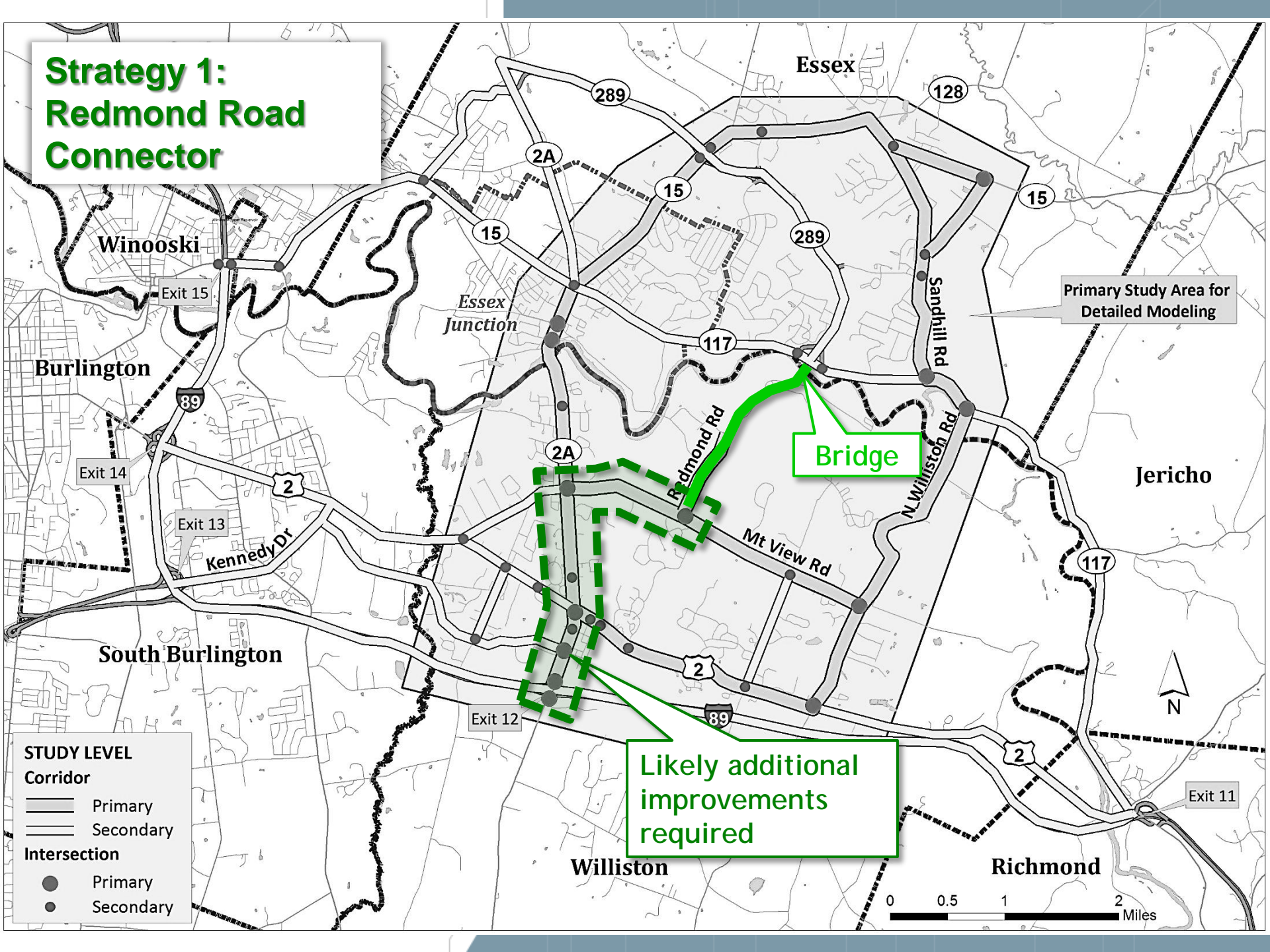
Preliminary Strategy Packages

- Five strategy packages for high level qualitative evaluation
- Results of qualitative evaluation will be presented at the October Steering Committee meeting
- Three strategy packages to be selected by the Steering Committee for quantitative evaluation in October
- Specific improvement concepts to be developed through the modeling process
- Hybrid strategy packages are likely to emerge after first round of modeling
- Core improvements will be included in all strategy packages

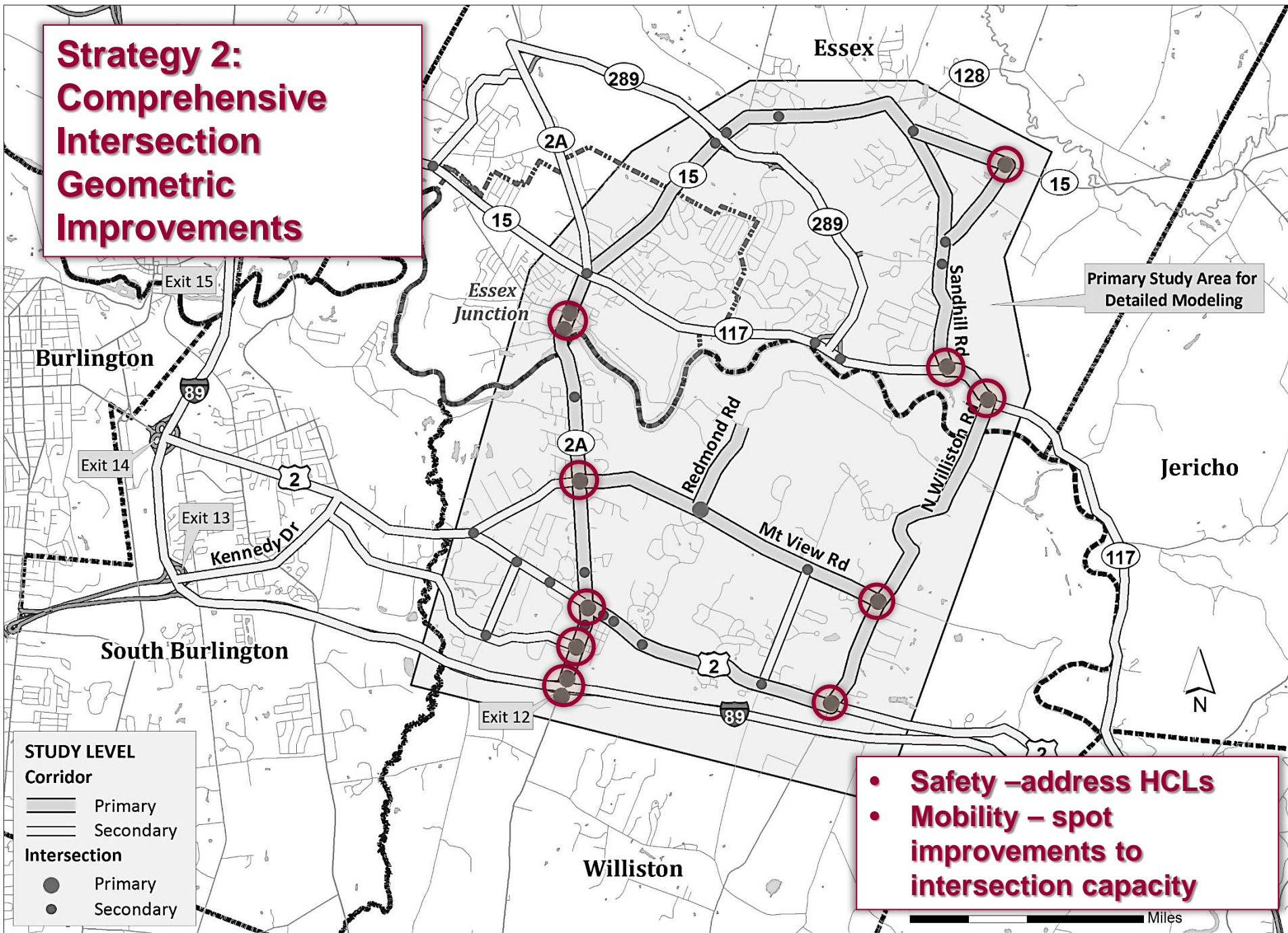
Core Improvements



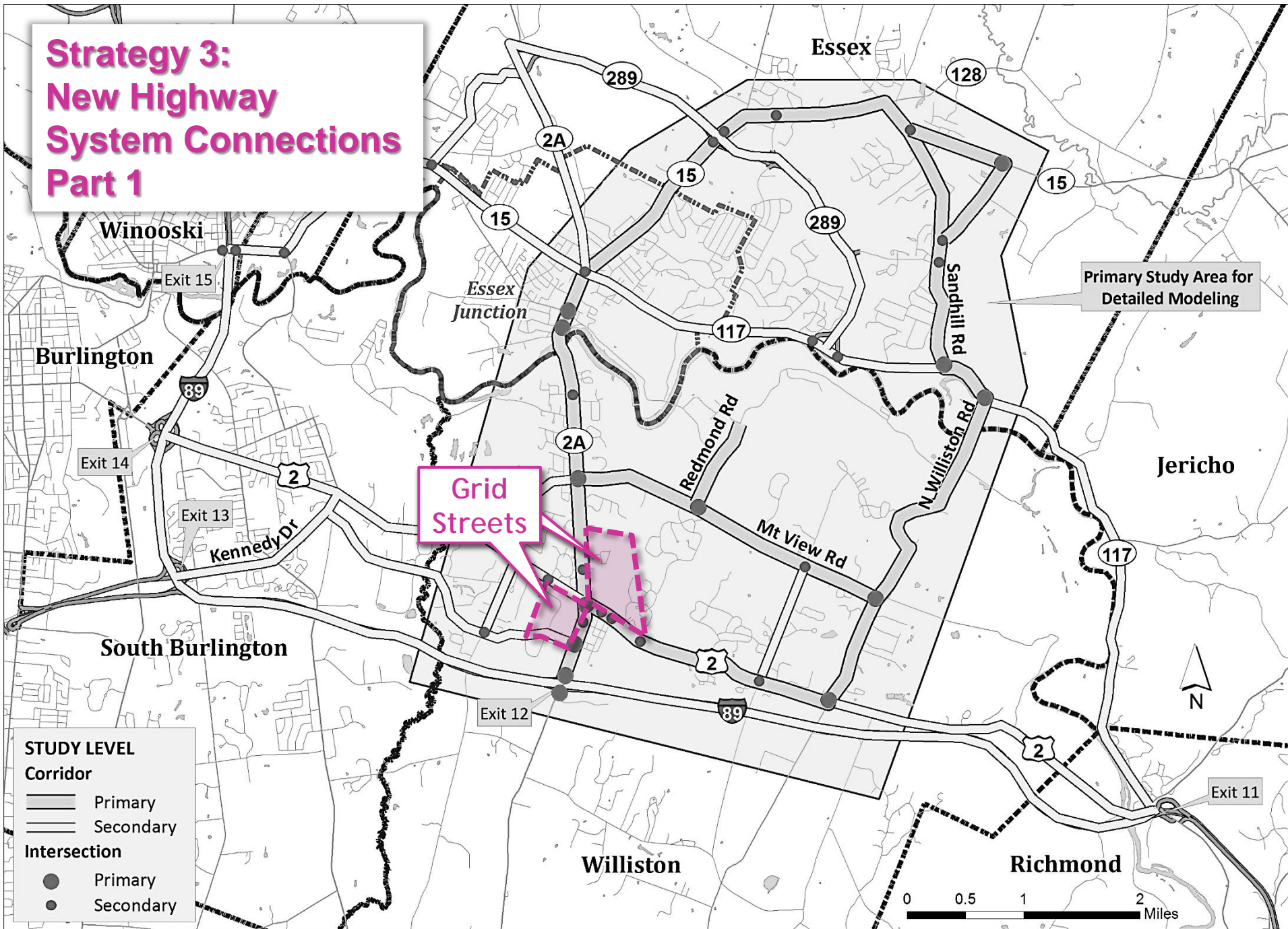
Strategy 1: Redmond Road Connector



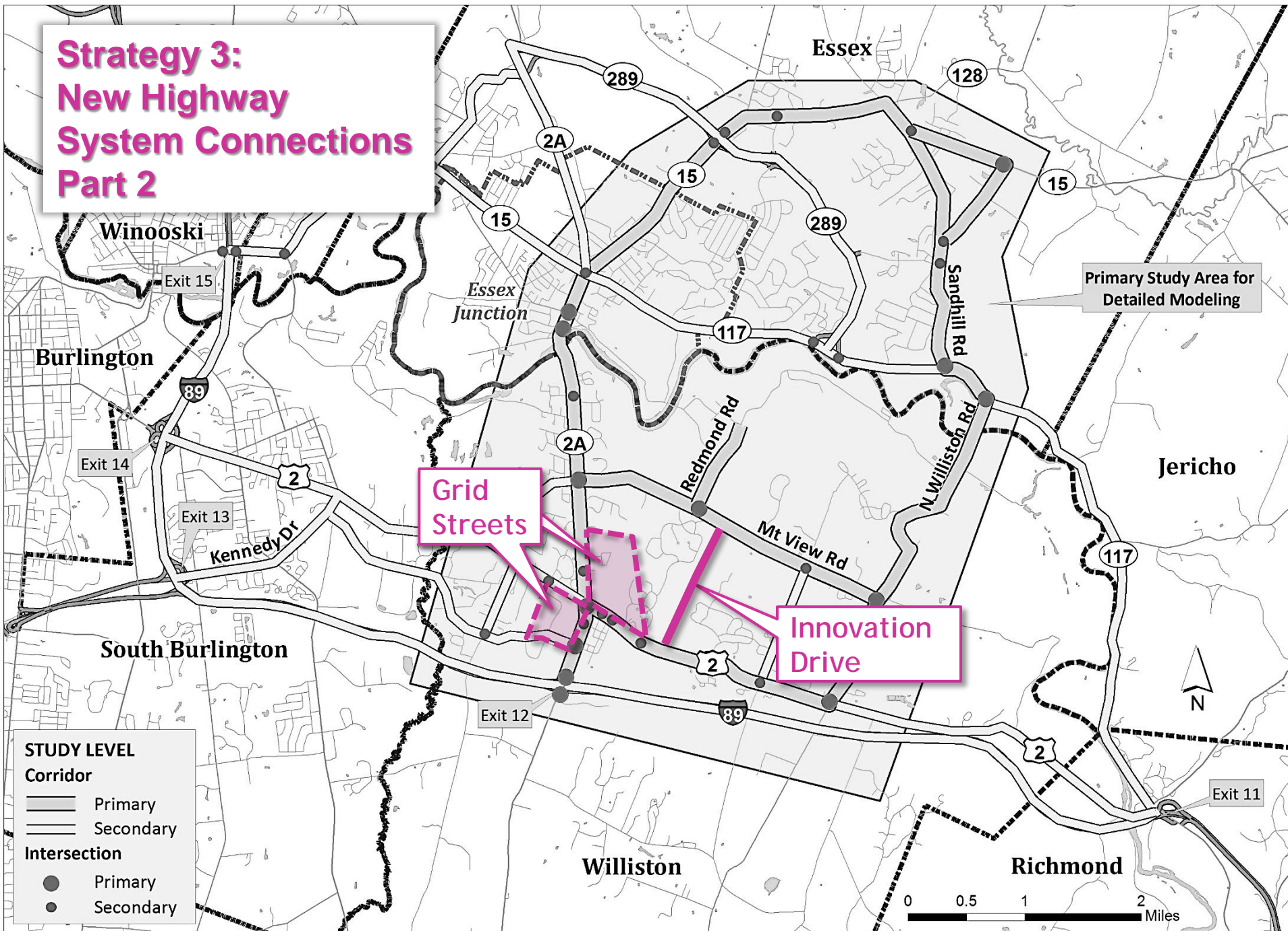
Strategy 2: Comprehensive Intersection Geometric Improvements



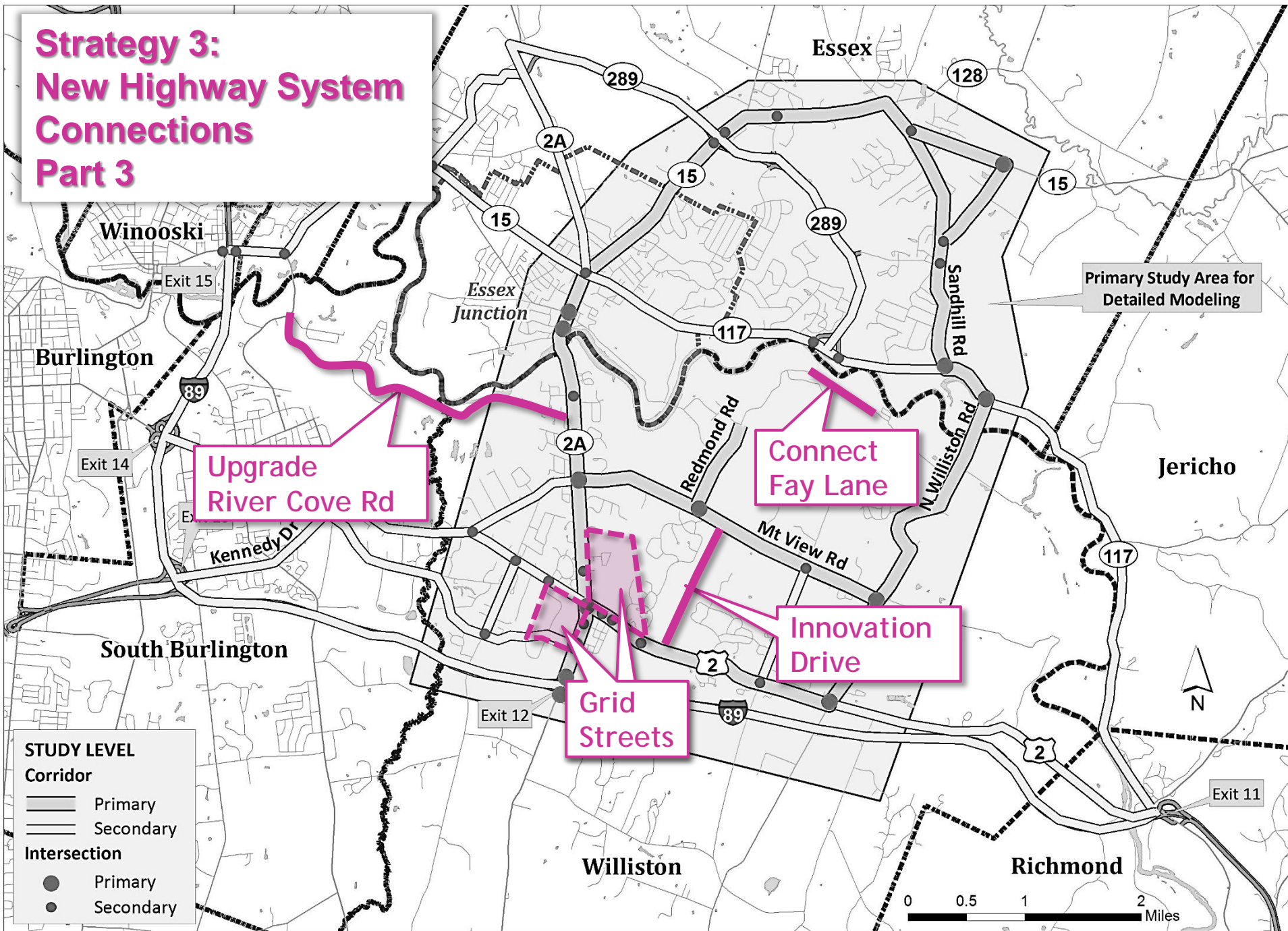
Strategy 3: New Highway System Connections Part 1



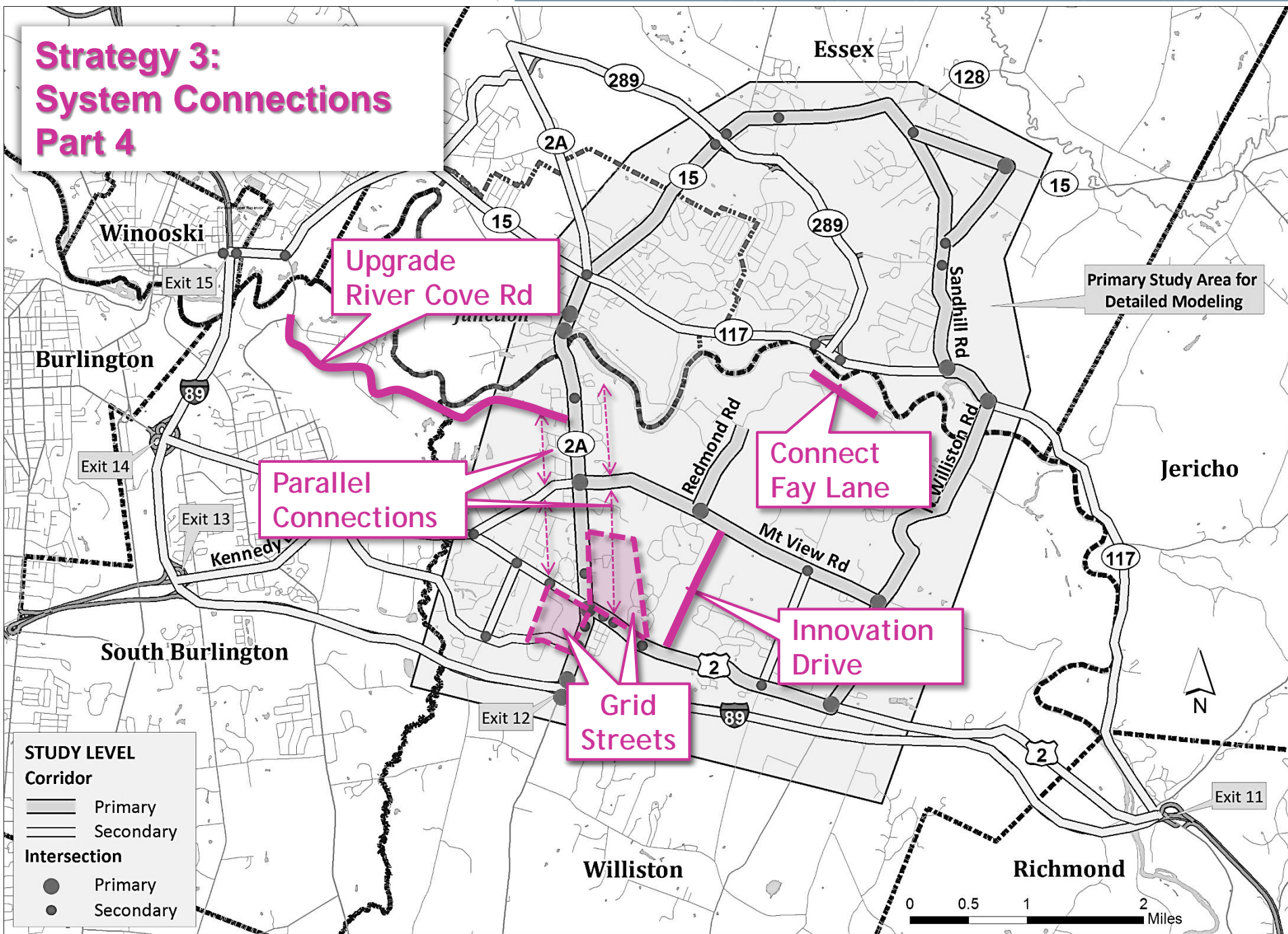
Strategy 3: New Highway System Connections Part 2



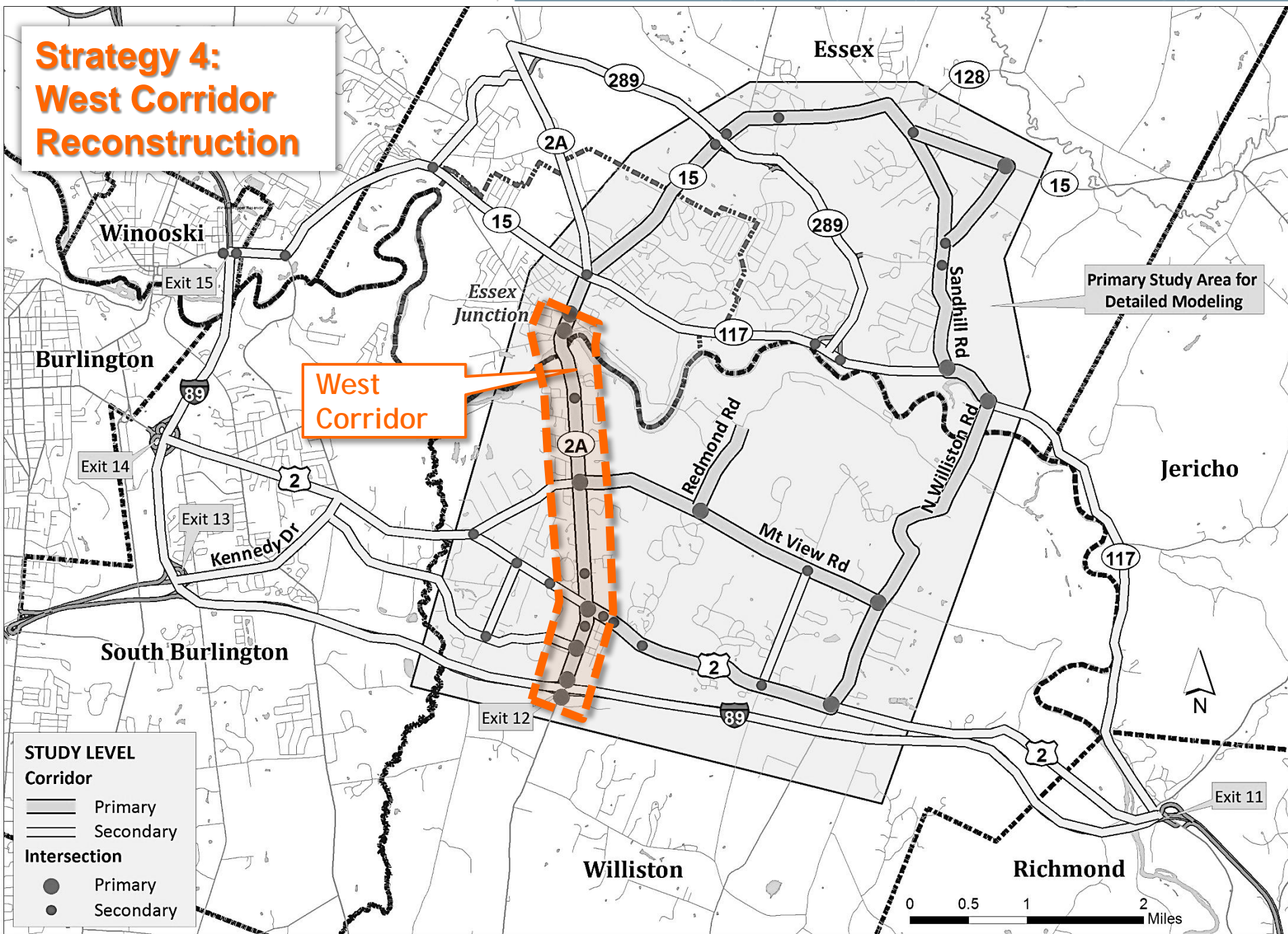
Strategy 3: New Highway System Connections Part 3



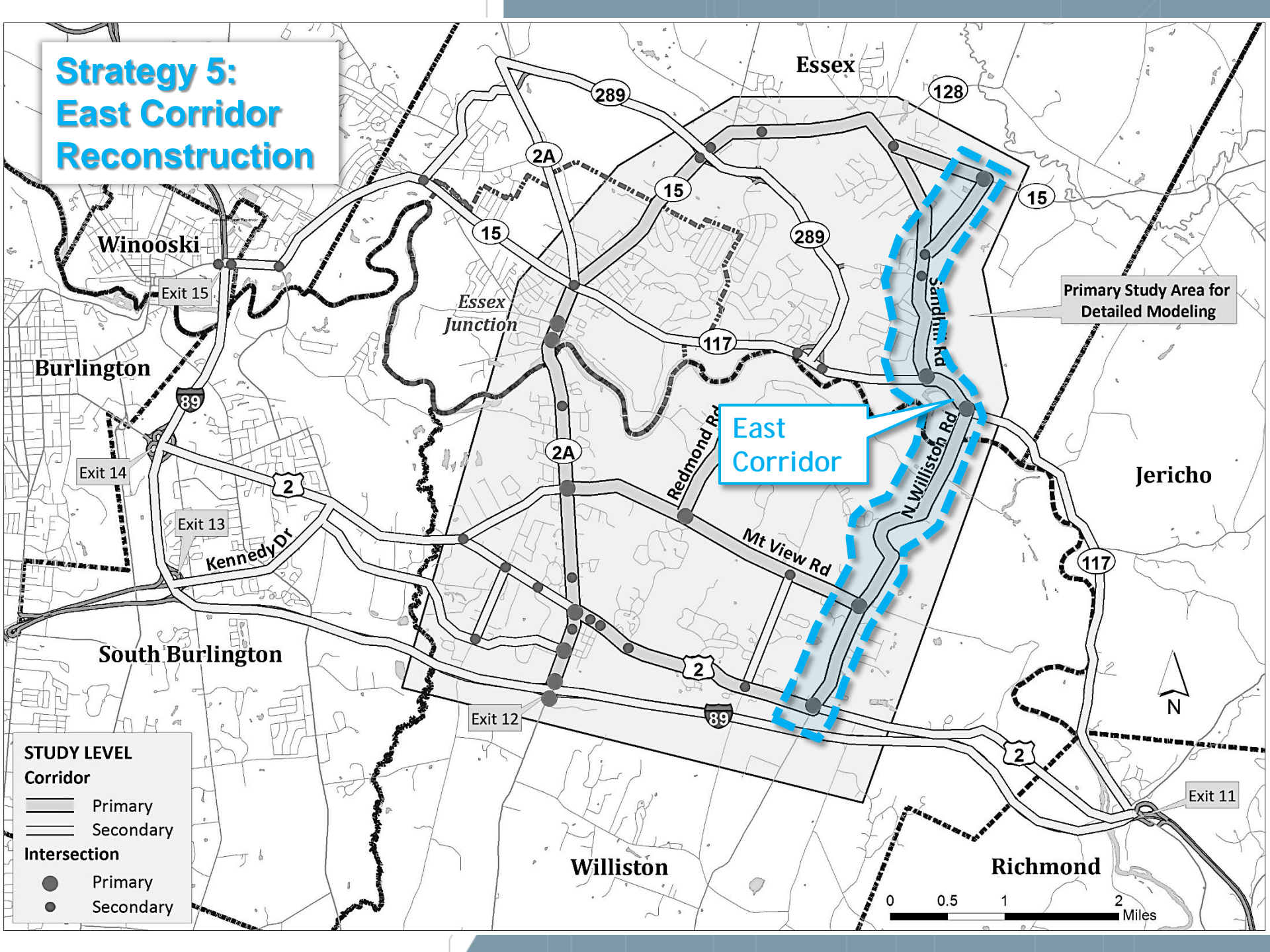
Strategy 3: System Connections Part 4



Strategy 4: West Corridor Reconstruction



Strategy 5: East Corridor Reconstruction



Next Steps

- Phase 2 Final Report (mid-Oct)
 - Study Area Goals & Objectives
 - Traffic Microsimulation Model Results
 - Existing and Future Conditions and Performance Measures
- Qualitative Evaluation of Five Strategy Packages
 - Steering Committee Meeting (Oct 25)
 - Select 3 Strategy Packages for Quantitative Evaluation
- Quantitative Evaluation of Three Strategy Packages
 - Steering Committee Meeting (Nov 28)
 - Selectboard Presentation (Dec)
 - Public Meeting #2 (Dec)
- Development of Network Implementation Plan