

Near Westside Neighborhood and University Avenue Corridor Transportation Study

Public Workshop #2

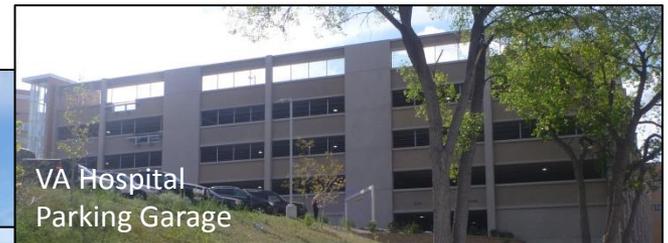
September 12 and 23, 2013

Presentation Outline:

- **Brief Review of Study Scope, Background, and Current Conditions**
- **Results of Online Survey and Workshop #1**
- **Top 4 Issues**
 - Enhanced transit/mode shift
 - Pedestrian/bike crossings of University Avenue
 - Commuter parking
 - Cut through traffic
- **Display materials for review and comment**

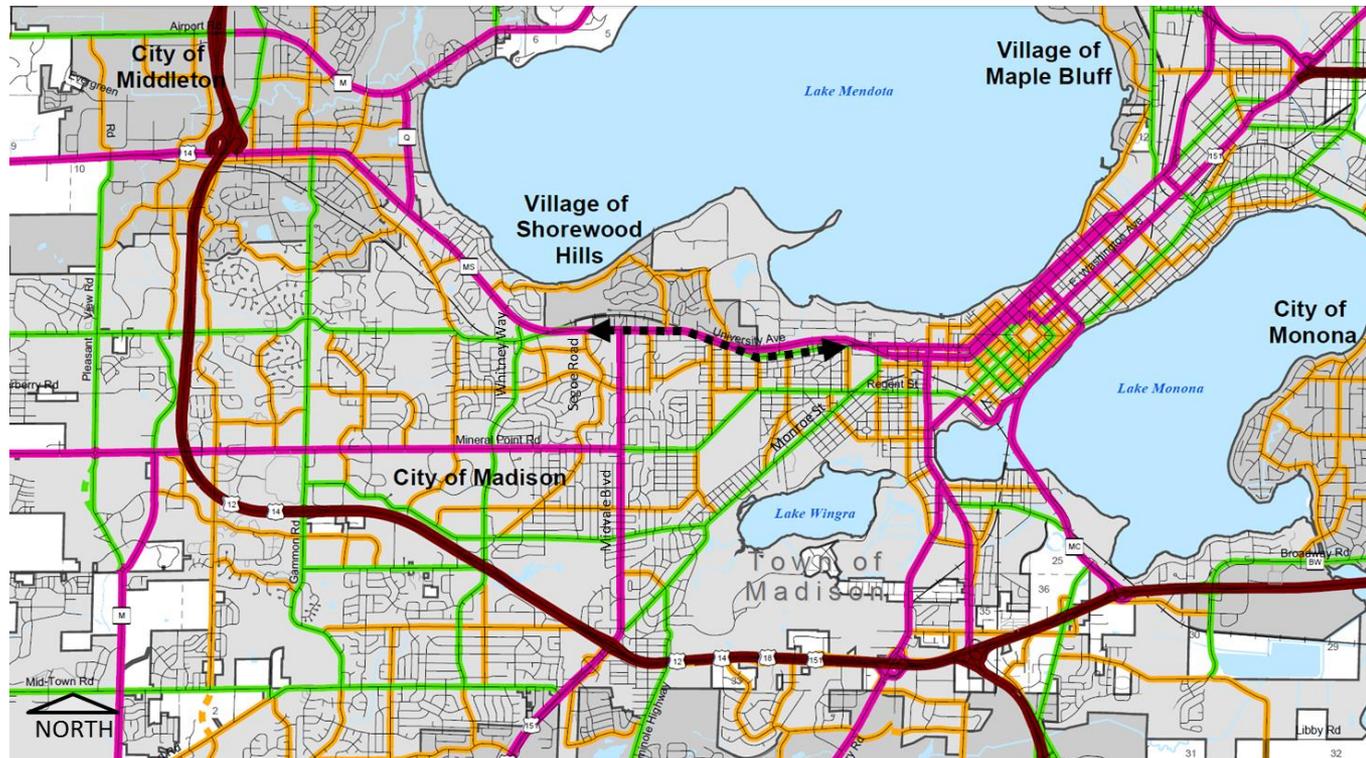
Reason for Study:

- **University Avenue Corridor**
 - Transportation artery carrying about 55,000 vehicles per day
 - Few non-freeways in WI carry volumes over 50,000 vpd
 - Most are in Madison (Natural Geography)
 - Near capacity currently during peak travel periods
 - Redevelopment in the City, Village, and on UW Campus



Study Limits and Overview:

- **Study Corridor**



Functional Classifications	
	Principal Arterials- Interstate
	Principal Arterials- Other Freeways
	Principal Arterials - Others
	Minor Arterials
	Collectors - Urban
	Collectors - Major, Rural
	Collectors - Minor, Rural

University Avenue Study Corridor

Study Corridor is from Segoe Road to Breese Terrace

Map Source: Madison Area
Transportation Planning Board

Study Limits and Overview:

- **Study Scope and Schedule**

Phase 1 –
Needs, Base
and Future
Conditions

TIA Review for West
Campus Area

Regional Traffic
Review

Base and Future
Operations

Meetings

- 2 Workshops

Jan. - May 2013

Phase 2 –
Solutions and
Improvement
Analysis

U-Bay & Farley
Intersection

University Avenue
Corridor

Regent
Neighborhood

Shorewood Hills

Meetings

- 2 Workshops

June – Sep. 2013

Phase 3 –
Implement-
ation and
Final Reports

Funding
Opportunities

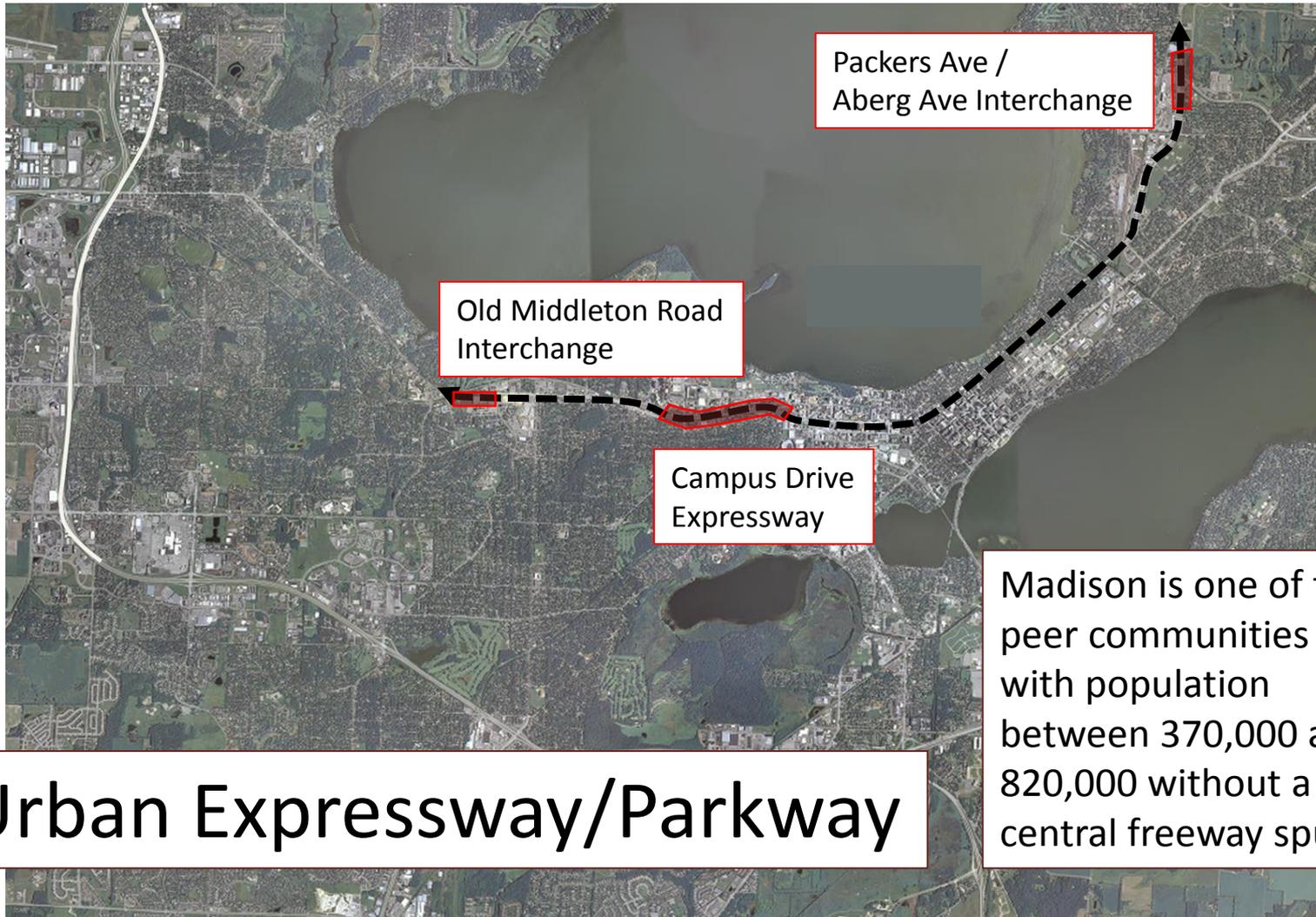
Short-Term, Long-
Term, and
Implementation
Report

Meetings

- 1 Public Meeting

Sep. – Dec. 2013

Background and Current Conditions:



Urban Expressway/Parkway

Packers Ave /
Aberg Ave Interchange

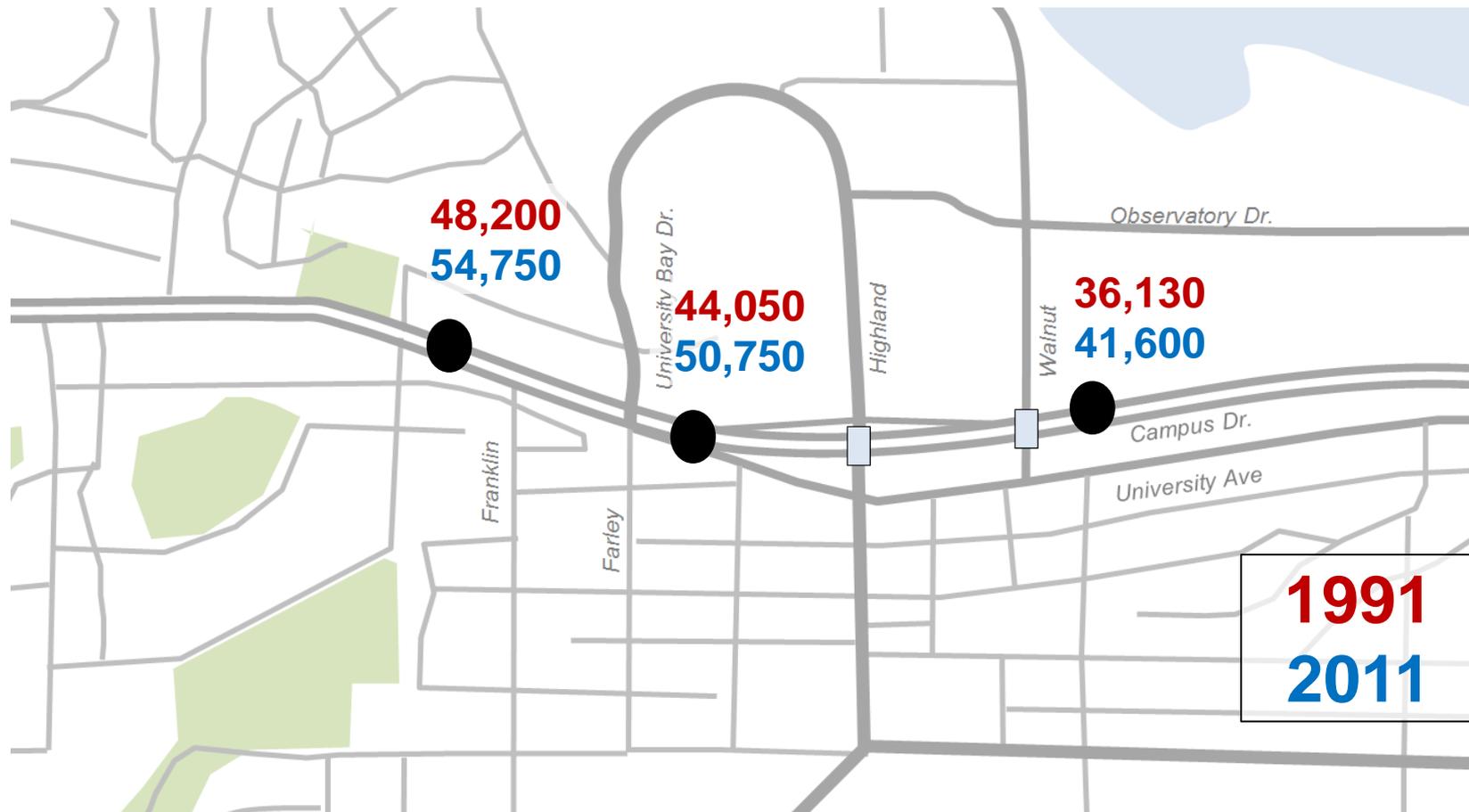
Old Middleton Road
Interchange

Campus Drive
Expressway

Madison is one of two peer communities with population between 370,000 and 820,000 without a central freeway spur

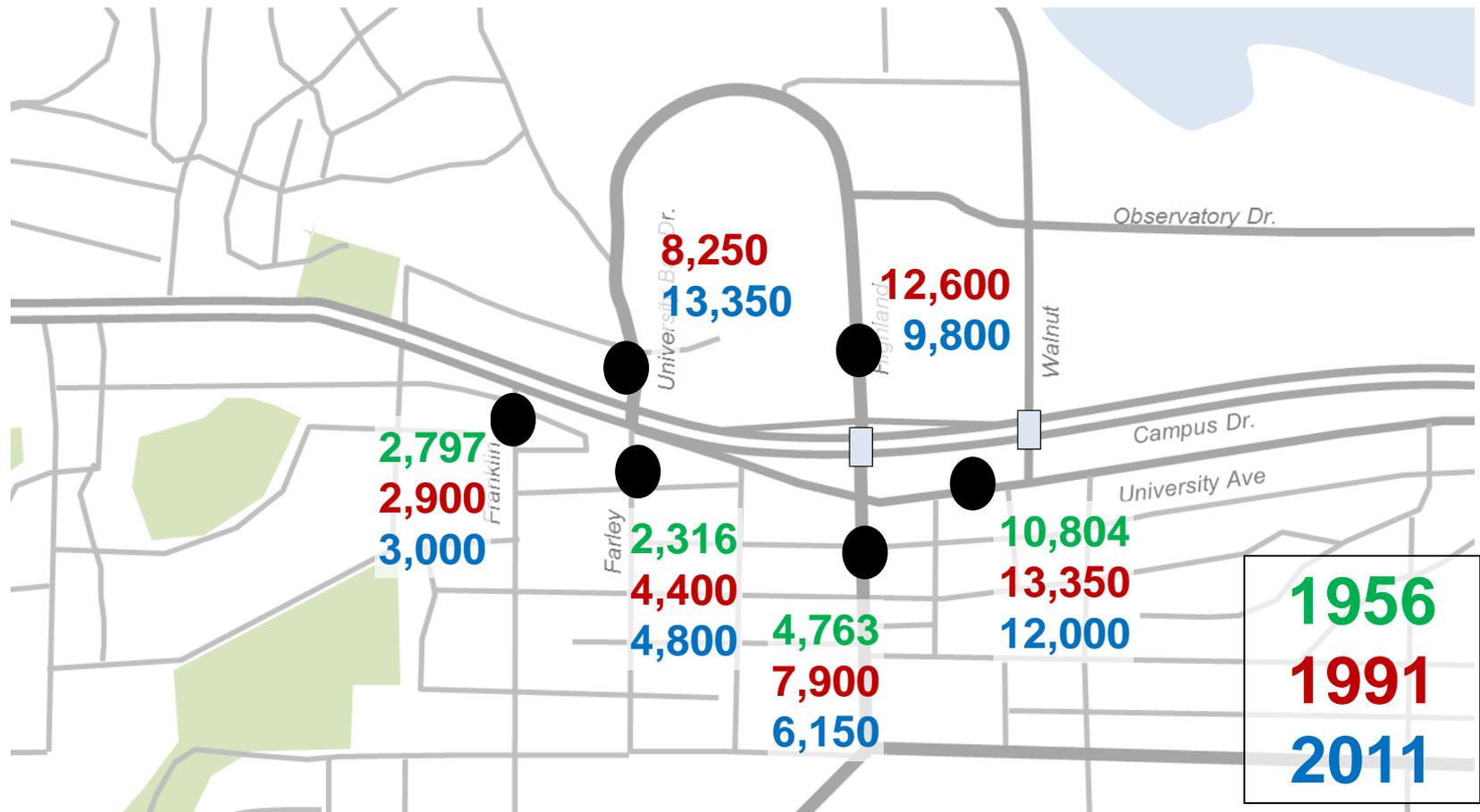
Traffic Volumes

- Generally have **increased** on University Ave/Campus Dr.



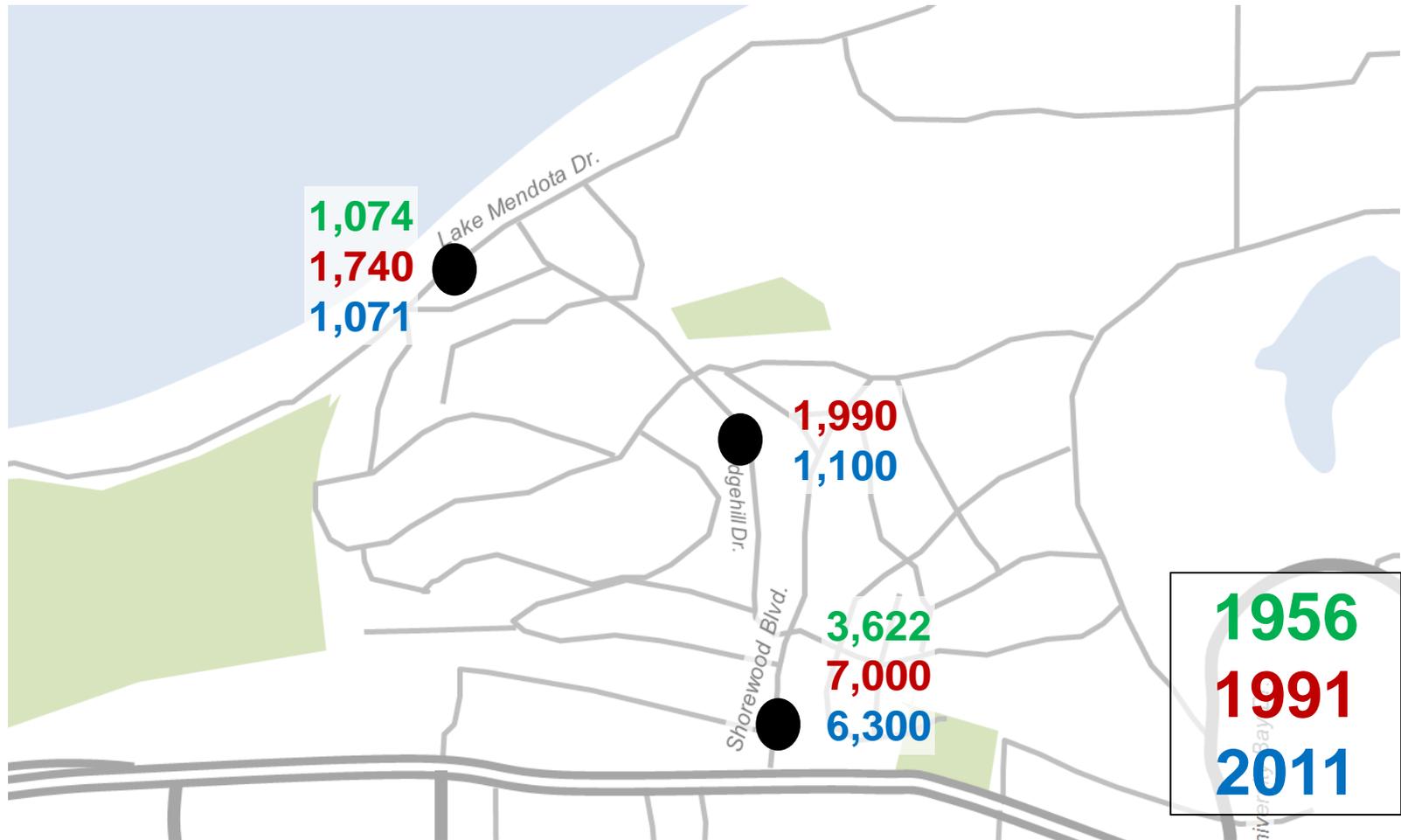
Traffic Volumes

- Generally have maintained or decreased on sidestreets between 1991 and 2011



Traffic Volumes

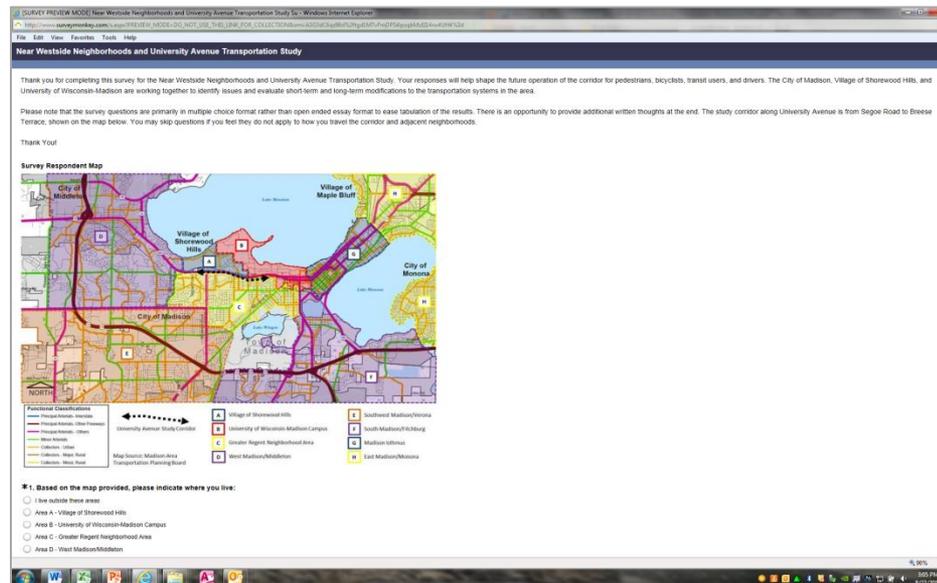
- Generally have **maintained or decreased** on sidestreets between 1991 and 2011



1956
1991
2011

Results of Online Survey:

- Over 1,000 Responses
- 34% live in the Village
- 33% live in the greater Regent neighborhood
- 29% work at UW, 11% on the Isthmus



Results of Online Survey:

- **Traveling the corridor – at least a few times per week:**

	Village	Regent Neighborhood	Overall Survey
Drive to work	76%	46%	60%
Drive for errands	94%	79%	81%
Metro Transit	15%	33%	27%
Bicycle	46%	48%	42%
Walk	38%	42%	32%

Results of Online Survey:

- **Motor vehicle issues - ranking:**

	Village	Regent Neighborhood	Overall Survey
Peak congestion along corridor	1 st	2 nd	1st
Crossing or left-turns out	2 nd	5 th	2nd
Congestion at major intersections	3 rd	1 st	3rd
Left-turns from University	4 th	4 th	4th
Speeds	5 th	3 rd	5th

Results of Online Survey:

- **Neighborhood transportation issues - ranking:**

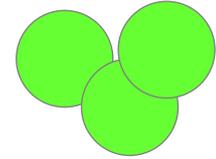
	Village	Regent Neighborhood	Overall Survey
East-west bike connections	1 st	1 st	1 st
Bike/ped crossings	3 rd	2 nd	2 nd
North-south bike connections	4 th	3 rd	3 rd
Cut-through traffic	2 nd	5 th	4 th
On-street commuter parking	5 th	4 th	5 th

Results of Online Survey:

- Level of corridor modifications:

	Village	Regent Neighborhood	Overall Survey
Small to manage impacts	55%	59%	60%
Major to prevent and/or reverse impacts	35%	32%	30%
None	10%	9%	10%

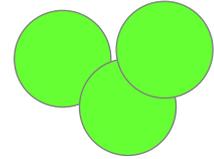
Results of *Shorewood Hills* Workshop #1



- **Dot Exercise and Written Comments**

- ★ Reduce cut through traffic (15 dots)
- ★ Implement light rail/improved transit (8 dots)
- ★ Improve bike/ped crossings (7 dots)
 - Provide park and ride lots (5 dots)
 - Reduce speeds on local streets (3 dots)
 - Improve bike system connections (3 dots)
- ★ *Continue to encourage mode shift* (16 dots)

Results of *Greater Regent Neighborhood* Workshop #1



- **Dot Exercise and Written Comments**

-  Enhanced transit/mode shift (32 dots)
-  Pedestrian and bike crossings of University Ave. (21 dots)
-  Parking issues on neighborhood streets (16 dots)
-  Cut through traffic (14 dots)
 - Bike system connectivity (9 dots)
 - Reduce speeds on neighborhood streets (5 dots)

Enhanced Transit

- **Enhanced Transit**

- Giving lane to buses without expansion:
 - Concern regarding violations and speed differentials due to significant congestion upon opening
 - Requires about 20% reduction in MV traffic = 1987 traffic levels <or>
 - Requires 50% to 60% increase in transit ridership
 - BRT study did not propose dedicated lanes in this area due to ROW constraints
- Transport 2020, Bus Rapid Transit, Other...?

- **Pending creation of Regional Transit Authority**

Enhanced Transit

- **Transit Priority**

- Measures that allow transit (buses) to achieve quicker travel times, improve service reliability, and increase incentives for travel by transit
- For this corridor potential measures could include:
 - Queue jump lanes at major intersections
 - Transit signal priority



Accommodate Modal Shift

- **All Roadway Modifications will Consider Impacts to:**
 - Pedestrians
 - Bicyclists
 - Transit Users
 - Motor Vehicles
- **Identify the Most Effective Means to Reduce SOMV Demand during Peak Hours**
 - Limit Parking
 - Park and Ride Opportunities
 - Incentives for Telecommuting and Staggered Shifts



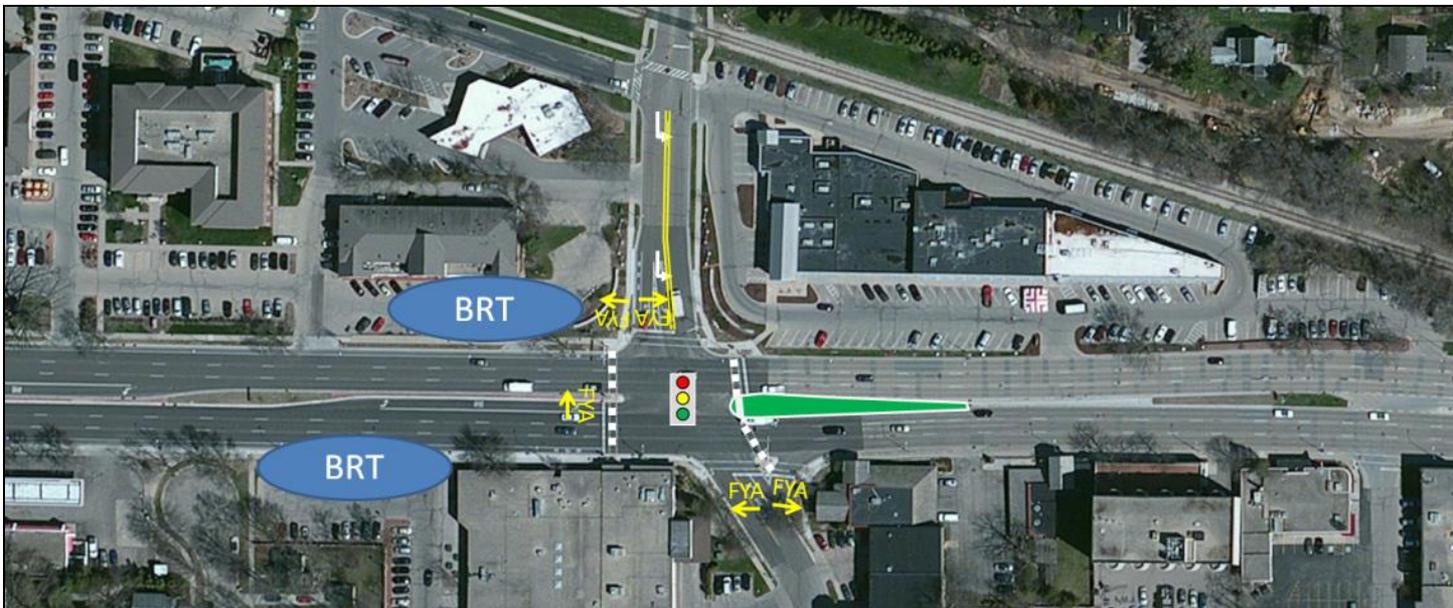
Bike and Pedestrian Crossings

- **Clearly Voiced Concerns and Proposals**

Citizens for Safe Corridors “Asks”	Current Status
Enhance corridor crosswalks	Investigating costs
“Vehicles Stop Here” signage at all stop bars	Investigating MUTCD usage, concern about over usage
Half signal at Blackhawk Avenue	May be possible, dependent on overall corridor modifications
Ped activated blankout signs “No Right-Turn When Pedestrians are Present”	Static signs more feasible, would be on a case by case basis
Advanced ped timings	Some exist, investigating others
Reduce speed limit to 30 mph	Speed data does not support this
Broad public education effort	Project team supports this

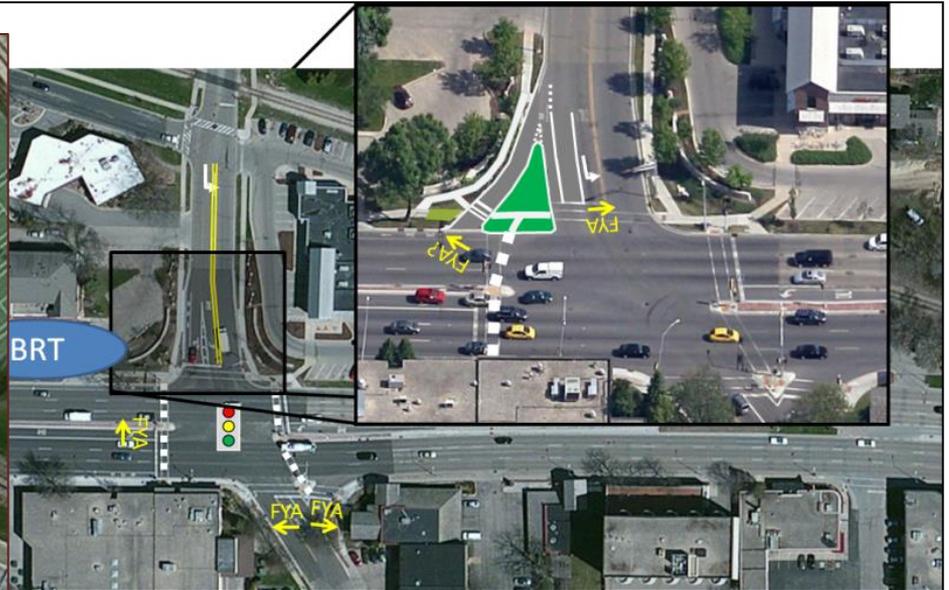
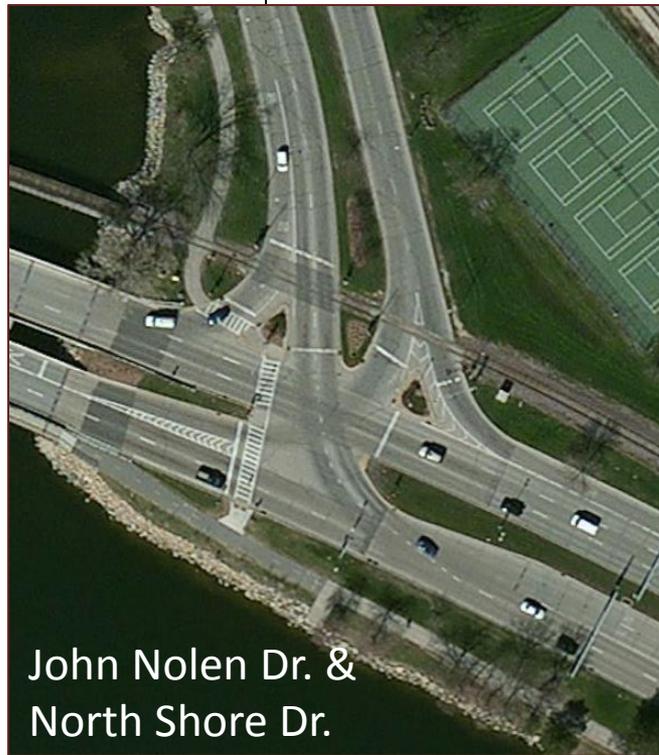
Bike and Pedestrian Crossings

- Multiple modifications being considered at Shorewood Boulevard



Bike and Pedestrian Crossings

- Multiple modifications being considered at Shorewood Boulevard



Neighborhood Parking

- Streets are used by varying degrees by commuters who complete their trip by foot, bike, or bus



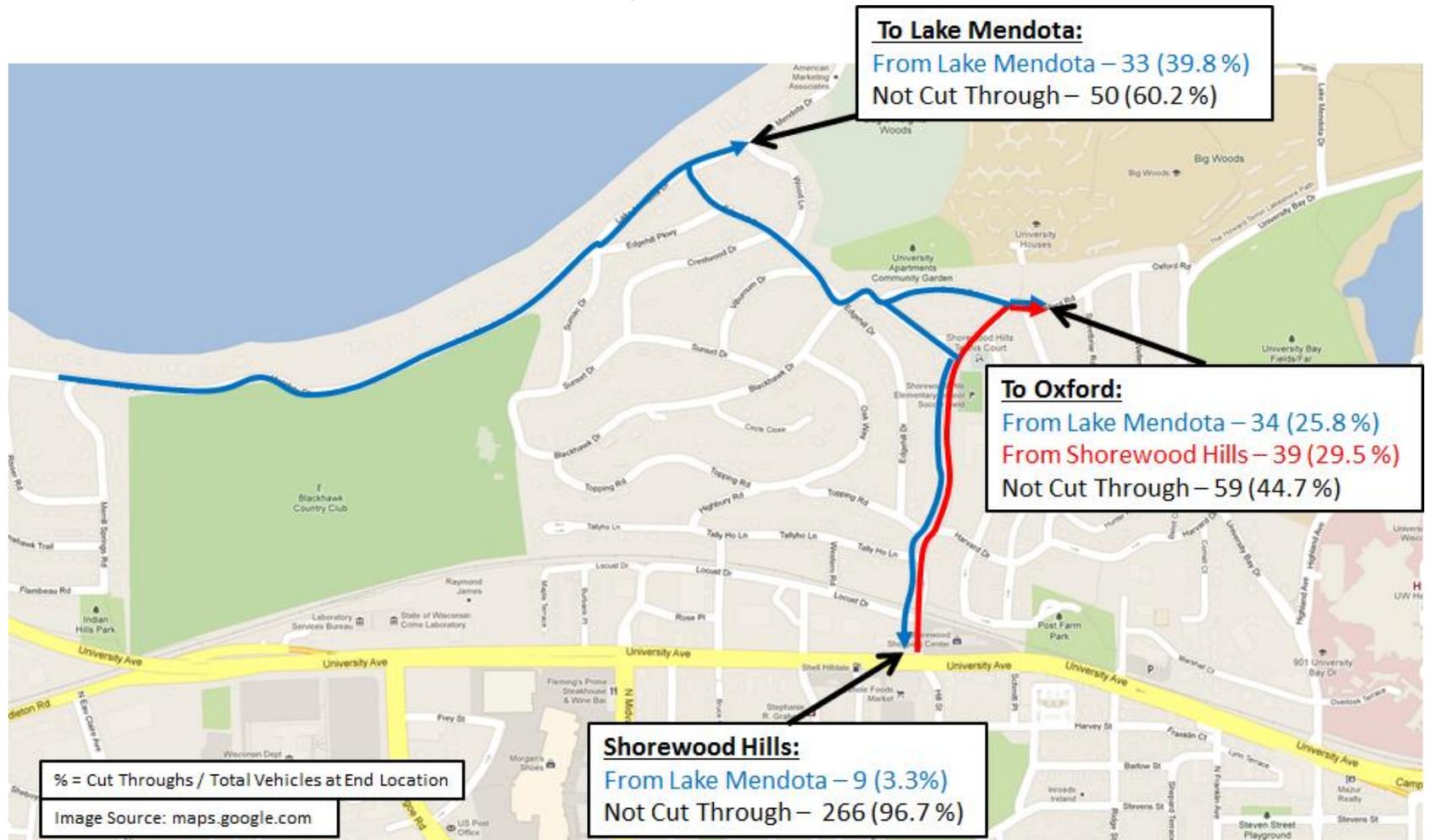
Neighborhood Parking

- **Consider participating in the RP3 program:**
 - Block by block program
 - Petition among neighbors showing >50% support and willingness to pay for permit parking program
 - At least one side or 50% must be zoned residential
 - A majority of the on street spaces must be occupied by commuter vehicles a majority of the time from 8:00 am to 6:00 pm.

The image displays a collage of resources for the RP3 program. On the left is a FAQ page with questions like 'I only have on-street parking. Why do you always give snow against my car?' and 'Is parking in the city exempt from when it snows?'. In the center is a list of 'PHONE NUMBERS RELATED TO PARKING ISSUES' such as 'Parking questions: 256-4170' and 'The Snow Emergency Hotline: 261-9111'. On the right is a brochure titled 'Parking in Madison's Residential Neighborhoods' which includes information about the RP3 program, a petition, and contact numbers for various services like 'Residential Parking Permits' and 'Snow Emergency Rules'.

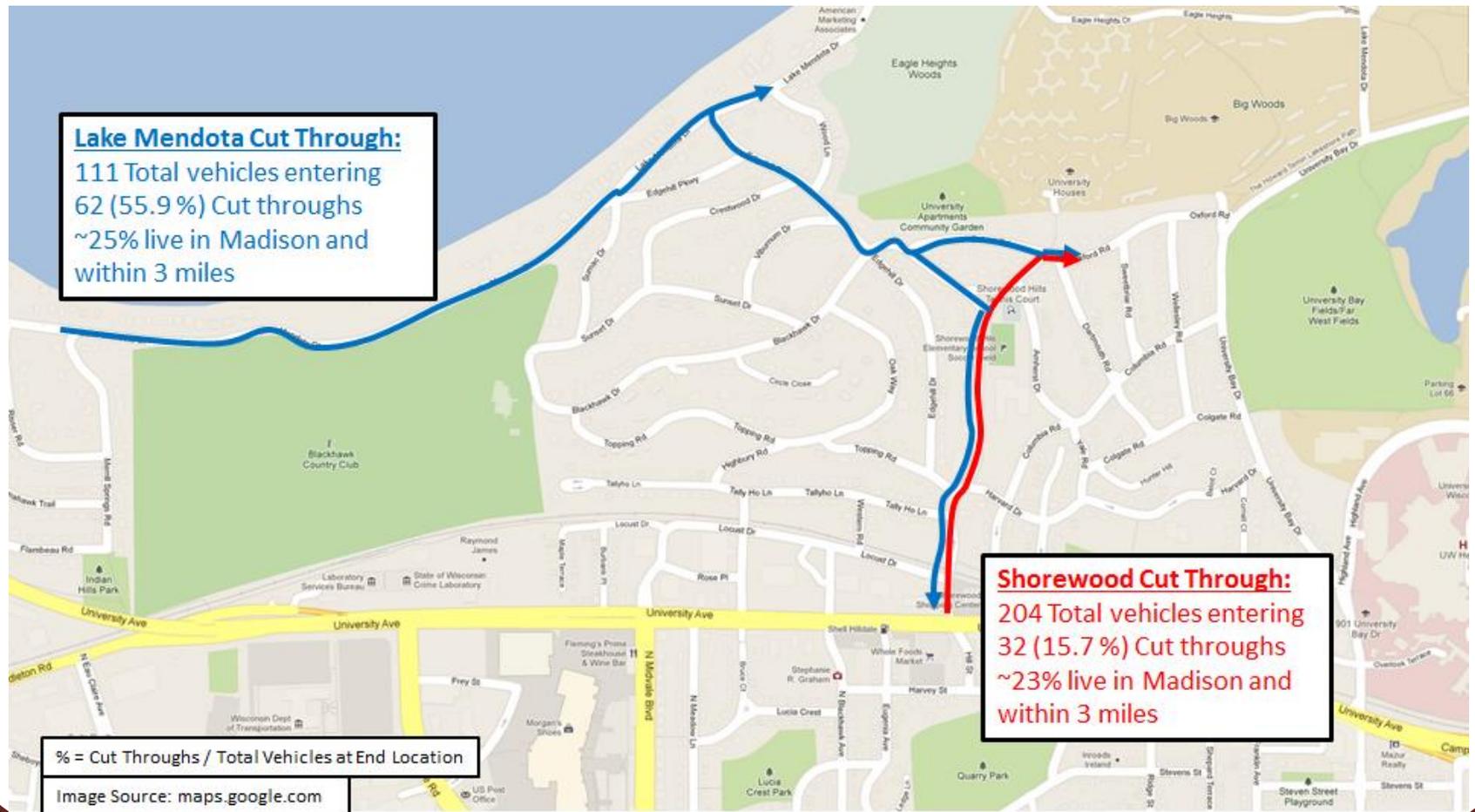
Cut Through Traffic

- Field License Plate Survey – AM Inbound 7:30 to 8:30 AM



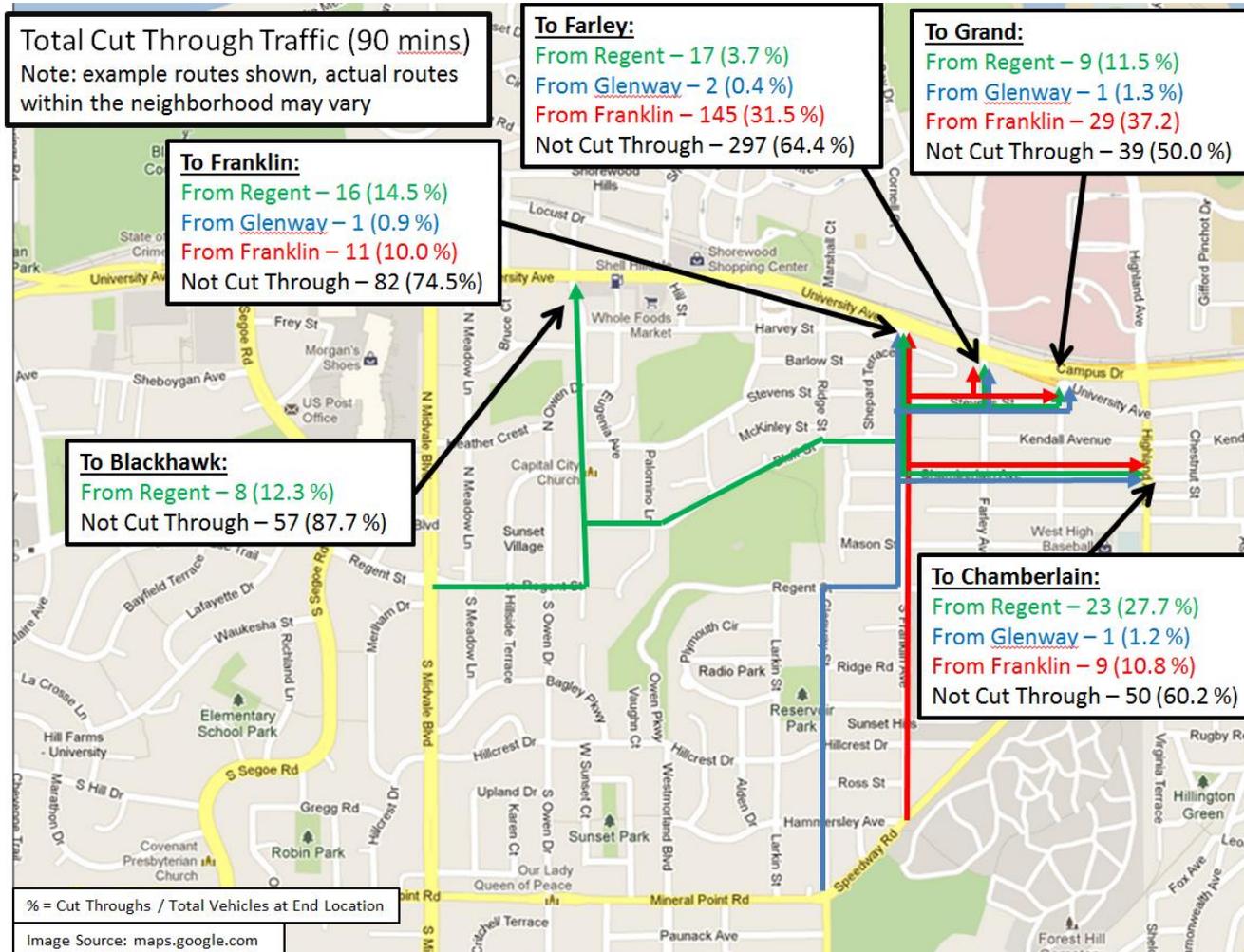
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Cut Through Traffic

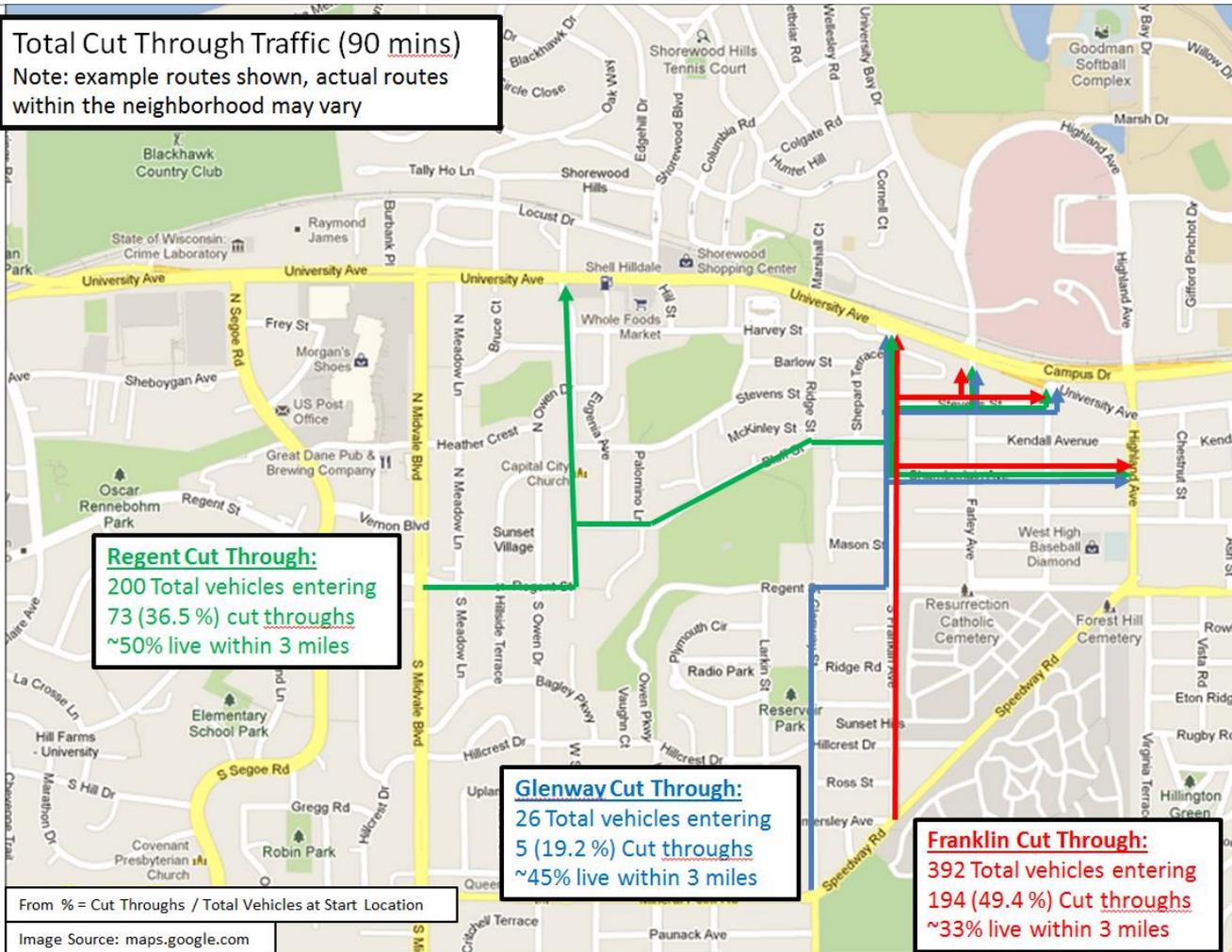
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Cut Through Traffic

- Field License Plate Survey – AM Inbound 7:00 to 8:30 AM

Total Cut Through Traffic (90 mins)
 Note: example routes shown, actual routes within the neighborhood may vary



Regent Cut Through:
 200 Total vehicles entering
 73 (36.5 %) cut throughs
 ~50% live within 3 miles

Glenway Cut Through:
 26 Total vehicles entering
 5 (19.2 %) Cut throughs
 ~45% live within 3 miles

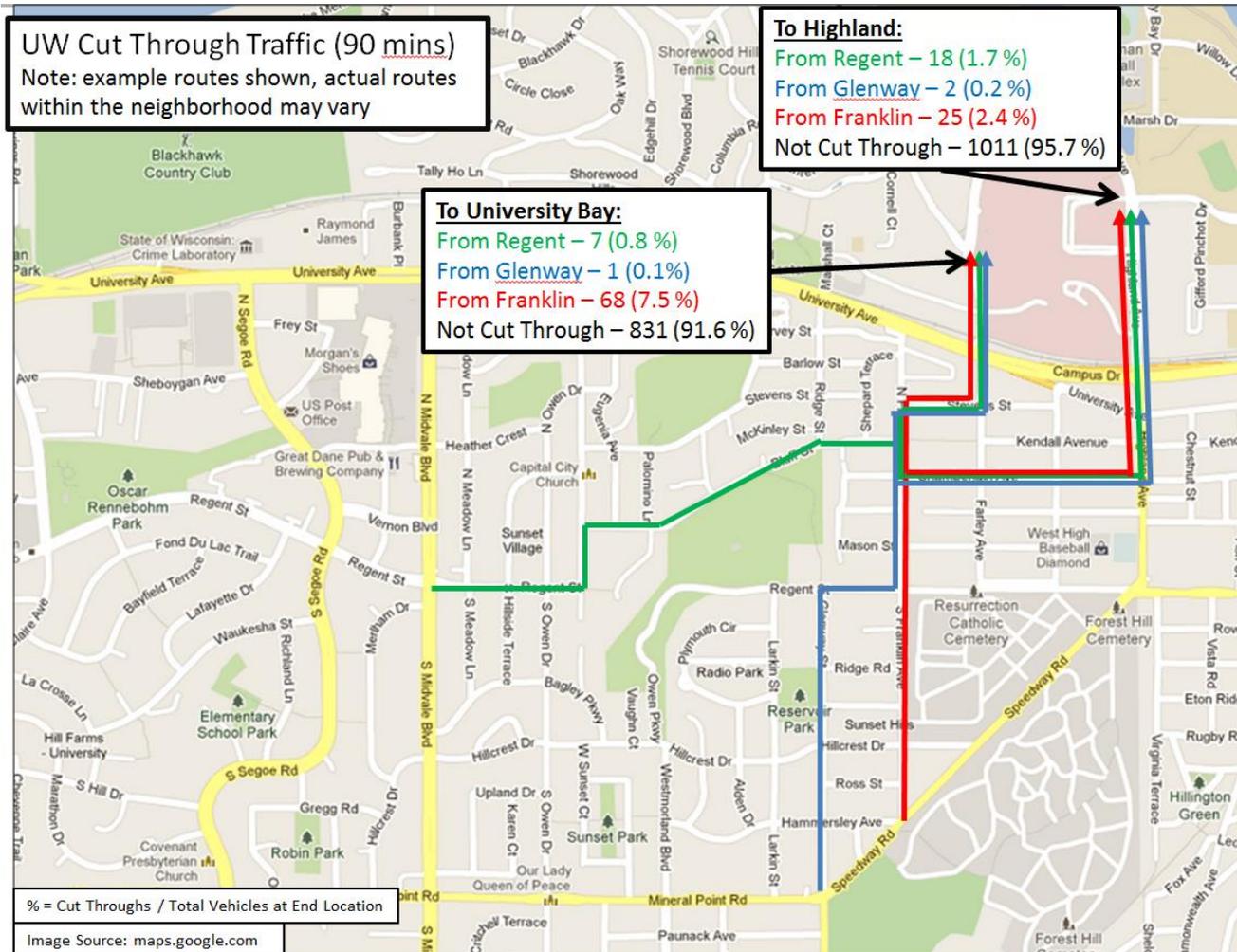
Franklin Cut Through:
 392 Total vehicles entering
 194 (49.4 %) Cut throughs
 ~33% live within 3 miles

From % = Cut Throughs / Total Vehicles at Start Location

Image Source: maps.google.com

Cut Through Traffic

- Field License Plate Survey – AM Inbound 7:00 to 8:30 AM



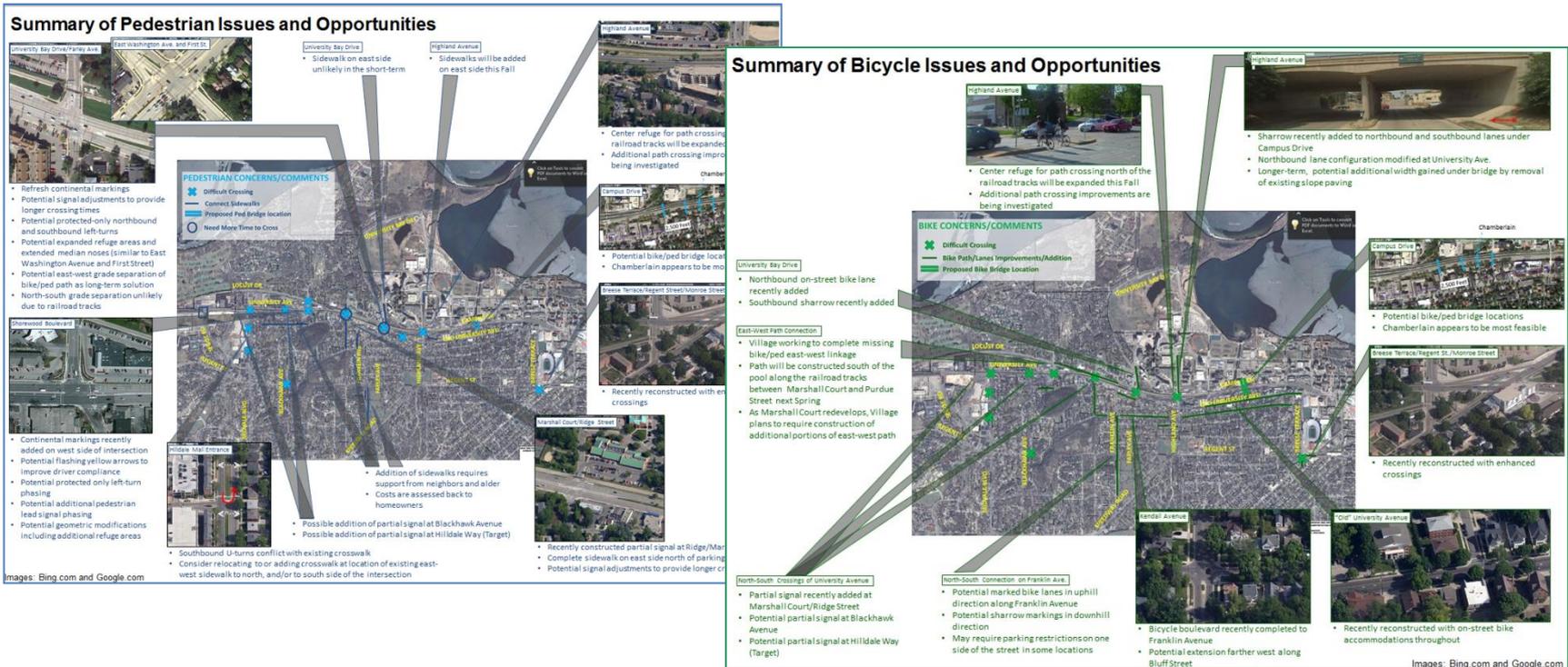
Cut Through Traffic

- **Mitigation Strategies**
 - Education
 - Yard signs encouraging slower speeds
 - Permanent speed display signs
 - First day of school/periodic roadside gatherings of neighbors
 - Enforcement (speed limit)
 - Engineering
 - Additional calming measures
 - Permanent changes in circulation (one-way streets or removal of access)



Workshop Exhibits:

1. Pedestrian Issues and Opportunities
2. Bike Issues and Opportunities



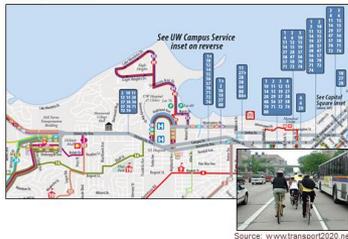
Workshop Exhibits:

3. Summary of Transit Conditions

4. Existing ROW and Potential Transit Priority

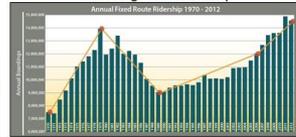
Summary of Transit Conditions

Metro Transit



In 2011, more than 14.9 million rides were recorded on Metro Transit 2010. Currently 8.6 percent of work trips in Madison use transit, which University Avenue is an extremely important transit corridor. There are numbers that serve University Avenue, not including supplemental school buses travel on University Avenue during a typical weekday, not including

Increasing Metro Ridership



Source: Metro Transit 2012 Annual Report

Bus Rapid Transit

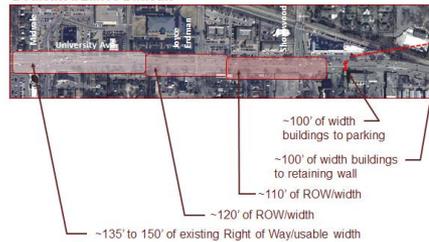


The Madison Transit Corridors Study (BRT Study) evaluated Bus Rapid Transit (BRT) in the city, completed in May 2013, was funded by part of a federal Sustainable Communities Planning grant administered by the Capital Area Regional Planning Commission MPO. The BRT Study evaluated four corridors: north, south, east and west out of which included a common central segment in the UW Campus area and central isthmus most heavily traveled transit corridors in the city with over 20,000 of about 60,000 West corridor, the study analyzed a Mineral Point Road alignment that included a guideway in the median of University Avenue. The total estimated cost of the BRT system is about \$138 Million (2016 dollars). It to range from about 4,000 to 10,000 trips per day on each of the corridors.

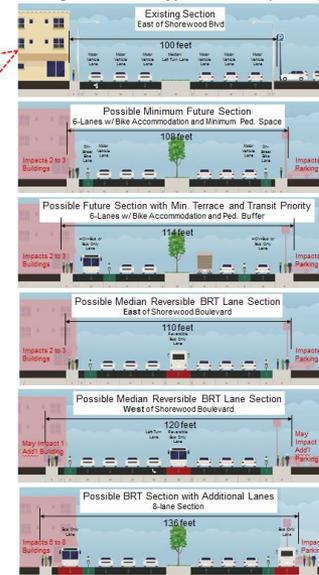
The study concluded that the fixed guideway alternative (BRT-only lanes in the median) would require additional right-of-way to be purchased from adjacent bus particularly severe impacts east of Shorewood Boulevard.

Summary of Existing Right-of-Way and Potential Transit Priority

University Avenue Width Constraints make Providing Dedicated Lanes Difficult



Existing and Potential Typical Sections (Looking West)



Potential Transit Priority along University Avenue at Intersections

Transit priority measures are roadway treatments that allow transit (buses) to achieve quicker travel times. Improving travel times for transit provides an incentive for transit use and can increase the people carrying capacity of the corridor.



- Potential treatments include:
- Queue jump for transit vehicles
 - Transit signal priority
- Most feasible at Midvale Boulevard and Farley Avenue/ University Bay Drive intersections

Source: BRT Service Design Guidelines, VIA Transit Sustainability Policy

Workshop Exhibits:

5. Corridor Modification Options

Base conditions shown on top row of each set of exhibits

Options generally proceed from lower build to higher build

University Avenue & Midvale Boulevard		Pedestrian	Bicycle	Transit	Motor Vehicles (115% of existing traffic)
Scenario	Base Conditions	Concerns regarding time to cross and small refuge areas within University Ave.	Difficult crossing	Existing Metro stops: <ul style="list-style-type: none"> Outbound west of Midvale Blvd. Inbound east of Midvale Blvd. Southbound south of University Ave. 	<ul style="list-style-type: none"> Overall Intersection LOS E (70.7 s/h) 5 movements at LOS F 3 additional movements approaching LOS F
	MB3: 8-Lane Corridor (3 All-Purpose Lanes, 1 Bike/Transit/Right-Turn Lane each direction)	<ul style="list-style-type: none"> Longer signal phases for crossing Longer distances to cross Little/no terrace along University Avenue for eastbound and westbound pedestrians 	<ul style="list-style-type: none"> Longer distances to cross More lanes to navigate eastbound and westbound Wider on-street east-west accommodation, but shared with buses and right turns 	Improves travel times and reliability for BRT and local service	<ul style="list-style-type: none"> Overall Intersection LOS E (70.7 s/h) 5 movements at LOS F 3 additional movements approaching LOS F
	HB2: Grade Separated Westbound Lefts and Northbound Rights	<ul style="list-style-type: none"> Similar conditions under bridge as today but with less turning traffic Longer crossing distances due to wider footprint to accommodate walls and structure 	<ul style="list-style-type: none"> Similar conditions under bridge as today but with less turning traffic Longer crossing distances due to wider footprint to accommodate walls and structure 	<ul style="list-style-type: none"> Generally compatible with BRT and local service east-west Requires relocation of local service transit stop on southbound Midvale Boulevard farther south 	<ul style="list-style-type: none"> Overall Intersection LOS C (34.8 s/h) 1 movement approaching LOS F

LB = Lower build, options that likely do not require property

MB = Medium build, likely require property but no relocations or grade separations

HB = Higher build, likely require property, relocations, and/or grade separations

Workshop Exhibits:

5. Corridor Modification Options

Yellow areas show approximate footprint

Orange/red areas show bridges/walls

Medium and Higher build Alternatives would include on-street bike accommodations

University Avenue & Midvale Boulevard

Scenario

Base Conditions



University Ave.

Midvale Boulevard

MB3: 8-Lane Corridor (3 All-Purpose Lanes, 1 Bike/Transit/Right-Turn Lane each direction)



BRT

HB2: Grade Separated Westbound Lefts and Northbound Rights



BRT

Image Sources: Bing.com, Google.com

Similar to Las Vegas, NV (left-only)

Pedestrian	Bicycle	Transit	Motor Vehicles (115% of existing traffic)
<ul style="list-style-type: none"> Concerns regarding time to cross and small refuge areas within University Ave. 	<ul style="list-style-type: none"> Difficult crossing 	<ul style="list-style-type: none"> Existing Metro stops: <ul style="list-style-type: none"> Outbound west of Midvale Blvd. Inbound east of Midvale Blvd. Southbound south of University Ave. 	<ul style="list-style-type: none"> Overall Intersection LOS E (70.7 s/vh) 5 movements at LOS F 3 additional movements approaching LOS F
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Workshop Exhibits:

5. Corridor Modification Options

BRT = Bus Rapid Transit

LOS = Level of Service for Cars and Buses

- A through D generally acceptable
- E indicates high congestion
- F indicates volume exceeds capacity

FYA = Flashing Yellow Arrow

University Avenue & Midvale Boulevard

Scenario

Base Conditions



MB3: 8-Lane Corridor (3 All-Purpose Lanes, 1 Bike/Transit/Right-Turn Lane each direction)



HB2: Grade Separated Westbound Lefts and Northbound Rights



Image Sources: Bing.com, Google.com

Pedestrian	Bicycle	Transit	Motor Vehicles (115% of existing traffic)
<p>Concerns regarding time to cross and small refuge areas within University Ave.</p>	<p>Difficult crossing</p>	<p>Existing Metro stops:</p> <ul style="list-style-type: none"> • Outbound west of Midvale Blvd. • Inbound east of Midvale Blvd. • Southbound south of University Ave. 	<ul style="list-style-type: none"> • Overall Intersection LOS E (70.7 s/vh) • 5 movements at LOS F • 3 additional movements approaching LOS F
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Prioritization Exercise:

- 1. Add notes directly to the maps if you wish.**
- 2. Place green “dot” stickers near modifications you feel are the highest priority or most desirable.**
- 3. Place orange/red “dot” stickers near modifications you feel are low priority, or are not reasonable/desirable**

