South Shore Boulevard - Existing Conditions



South Shore Boulevard:

1

Segment 1 - White Bear Avenue to McKnight Road

2

Segment 2 - McKnight Road to Bellaire Avenue

3

Segment 3 - Bellaire Avenue to County Line Road

Preliminary Information:

Traffic Breakdown:

Based on AM and PM peak hour spot counts, daily traffic on South Shore Boulevard is slightly favored toward the westbound direction

(up to 62% westbound and 38% eastbound depending upon the segment)

Two-Lane Roadway Capacity:

10,000 vehicles per day for planning level purposes

Parking Restrictions:

Signed:

Northbound traffic, just north of South Shore Boulevard intersection with County Road F/County Line Road

Eastbound traffic, north side of South Shore Trinity between access driveway and South Shore Boulevard intersection with Bellaire Avenue

County Text Descriptions:

30 feet east to 30 feet west of 2480 South Shore Boulevard (South Shore Trinity) 20 feet between 2595 and 2601 South Shore Boulevard (Bellaire Beach) 500 feet on either side of South Shore Boulevard intersection with County Road F

Primary Options for Consideration:

One-Way Eastbound:

Eliminate westbound travel on South Shore Boulevard segments 1, 2, and 3 (Individual segment optional variations not shown)

One-Way Westbound:

Eliminate eastbound travel on South Shore Boulevard segments 1, 2, and 3 (Individual segment optional variations not shown)

Impact Metrics for Conversion to One-Way:

Average Daily Traffic Volumes

The percent of change expected from the existing daily traffic to the forecasted traffic with one-way operation

Access

The percent number of existing accesses, both public streets and private driveways, impacted by a change to one-way operation Considers how many intersections will require a different action by the driver, not any impact to volumes or routes

Crash History

The percent number of crashes reduced or increased based on the historic crash types and trends

Only the South Shore Drive intersection with White Bear Lake had a high number of crashes to be considered for impacts At South Shore Drive & White Bear Avenue 6 of the 12 crashes could be prevented by switching to an eastbound only configuration

Travel Routes

The percent of change expected from the existing in terms of route mileage and number of stops within that route

Considers the travel routes from each segment (1, 2, and 3) to each destination (A, B, and C)

Major Generators

The percent of change expected from the existing in terms of route mileage and number of stops within that route

Considers the travel routes from the west (from White Bear Lake or Highway 61) to S Shore Trinity or Bellaire Beach (Item 4)

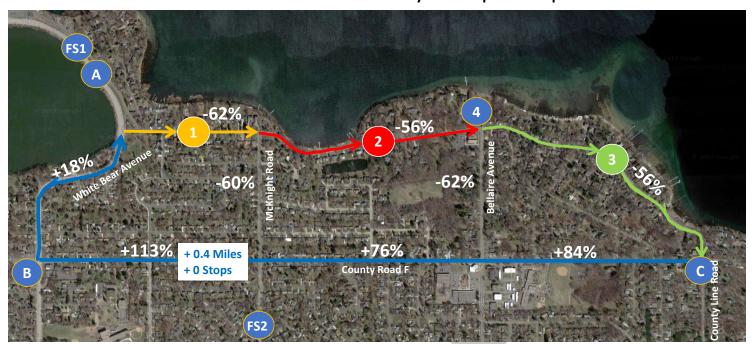
Emergency Vehicles

The percent of change expected from the existing in terms of route mileage and number of stops within that route

Considers the travel routes from White Bear Lake Fire Station 1 (FS1) and White Bear Lake Fire Station 2 (FS2) to segments 1, 2, and 3

Note: assumes the emergency vehicle obeys the one-way operation as opposed to wrong way driving with the lights and siren on

South Shore Boulevard - Eastbound Only Travel Option Comparison



Average Daily Traffic Volumes

The expected percentage change (+ or - ##%) in traffic is shown above for each study segment All roads remain under the daily planning level capacity

Access All 14 public road intersections and 124 private driveway accesses would be impacted by this conversion

<u>Crash History</u> South Shore Drive intersection with White Bear Avenue would have had six of 12 crashes eliminated with this conversion

<u>Travel Routes</u> New Westbound Corridor Route - Change in mileage and number of stop controlled intersections from existing route

Evaluation Criteria	Existing Configuration		One-Way Eastbound → → →					
	Travel Route Mileage	Travel Route Stops	Travel Route Mileage	Travel Route Stops	Change In Travel Route Mileage	Change In Travel Route Stops		
Travel Route Impacted by Conversion								
Segment 1								
To A	0.3	1	1.6	3	+ 1.3	+ 2		
То В	0.6	2	1.0	3	+ 0.4	+ 1		
From C	1.3	2	2.1	3	+ 0.8	+ 1		
Segment 2								
To A	0.7	2	2.1	4	+ 1.4	+ 2		
То В	1.1	3	1.6	4	+ 0.5	+ 1		
From C	0.9	1	1.6	3	+ 0.7	+ 2		
Segment 3								
To A	1.3	3	2.4	3	+ 1.1	0		
То В	1.6	4	1.8	3	+ 0.2	- 1		
From C	0.4	0	1.1	2	+ 0.7	+ 2		
Major Trip Generator Route Impacted by Conversion								
Spot 4								
To A	1.0	3	1.9	4	+ 0.9	+ 1		
То В	1.3	4	1.4	4	+ 0.1	0		
Emergency Vehicle Route Impacted By Conversion								
FS1 No Changes		-	-	_				
FS2 To Segment 1	1.5	4	2.1	4	+ 0.6	0		

South Shore Boulevard - Westbound Only Travel Option Comparison



Average Daily Traffic Volumes

The expected percentage change (+ or - ##%) in traffic is shown above for each study segment All roads remain under the daily planning level capacity

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Access

All 14 public road intersections and 124 private driveway accesses would be impacted by this conversion

Crash History

South Shore Drive intersection with White Bear Avenue would not have had any of the 12 crashes eliminated with this conversion

<u>Travel Routes</u> New Eastbound Corridor Route - Change in mileage and number of stop controlled intersections from existing route

	Existing Configuration		One-Way Westbound ← ← ←				
Evaluation Criteria	\$\$\$						
	Travel Route Mileage	Travel Route Stops	Travel Route Mileage	Travel Route Stops	Change In Travel Route Mileage	Change In Travel Route Stops	
Travel Route Impacted by Conversion	on						
Segment 1							
From A	0.3	0	1.6	3	+ 1.3	+ 3	
From B	0.6	1	1.0	3	+ 0.4	+ 2	
To C	1.3	2	2.1	4	+ 0.8	+ 2	
Segment 2							
From A	0.7	1	2.1	4	+ 1.4	+ 3	
From B	1.1	2	1.6	4	+ 0.5	+ 2	
To C	0.9	1	1.6	4	+ 0.7	+ 3	
Segment 3							
From A	1.3	2	2.4	4	+ 1.1	+ 2	
From B	1.6	3	1.8	4	+ 0.2	+ 1	
To C	0.4	0	1.1	3	+ 0.7	+ 3	
Major Trip Generator Route Impacted by Conversion							
Spot 4							
From A	1.0	2	1.9	4	+ 0.9	+ 2	
From B	1.3	3	1.4	4	+ 0.1	+ 1	
Emergency Vehicle Route Impacted By Conversion							
FS1							
To Segment 1	1.6	3	2.9	6	+ 1.3	+ 3	
To Segment 2	2.0	4	3.5	7	+ 1.5	+ 3	
To Segment 3	2.6	5	3.7	7	+ 1.1	+ 2	
FS2							
To Segment 2	1.6	4	2.1	5	+ 0.5	+ 1	
To Segment 3	2.2	5	2.4	5	+ 0.2	0	