

## **APPENDIX A**

### **TRAFFIC OPERATIONS REVIEW SEGMENT OPERATIONS ANALYSIS**

## Segment Operations Analysis - Existing

### Enhanced Bus Route

Roadway	Segment Limits	Notes	Existing Cross-Section	Posted Speed Limit	Approximate Maximum Daily Capacity	Existing ADT	Existing Roadway Operations
Lake St	France Ave to Excelsior Blvd		Four-Lane Divided Urban (Five-Lane)	35 mph	32,000	26,550	Under Capacity
Lake St	Excelsior Blvd to Thomas Ave		Six-Lane Divided Urban	35 mph	45,000	39,500	Approaching Capacity
Lake St	Thomas Ave to E Calhoun Pkwy		Six-Lane Divided Urban	35 mph	45,000	39,500	Approaching Capacity
Lake St	E Calhoun Pkwy to Hennepin Ave	On-St parallel parking	Three-Lane One-Way (EB) Urban	30 mph	27,000	17,100	Under Capacity
Lake St	Hennepin Ave to Dupont Ave	On-St parallel parking	Three-Lane One-Way (EB) Urban	30 mph	27,000	17,100	Under Capacity
Lagoon Ave	Dupont Ave to Hennepin Ave	On-St parallel parking Parking allowed in left through lane during off-peak hours	Three-Lane One-Way (WB) Urban	30 mph	27,000	14,200	Under Capacity
Lagoon Ave	Hennepin Ave to E Calhoun Pkwy	On-St parallel parking Parking allowed in left through lane during off-peak hours	Three-Lane One-Way (WB) Urban	30 mph	27,000	13,800	Under Capacity
Lake St	Dupont Ave to Lyndale Ave	On-St parallel parking	Four-Lane Undivided Urban	30 mph	22,000	22,600	Over Capacity
Lake St	Lyndale Ave to Blaisdell Ave	On-St parallel parking	Four-Lane Undivided Urban	30 mph	22,000	20,250	Approaching Capacity
Lake St	Blaisdell Ave to 2nd Ave		Four-Lane Undivided Urban	30 mph	22,000	20,250	Approaching Capacity
Lake St	2nd Ave to Portland Ave	On-St parallel parking	Four-Lane Undivided Urban	30 mph	22,000	20,100	Approaching Capacity
Lake St	Portland Ave to Elliot Ave	Limited on-st parallel parking	Four-Lane Divided Urban (Five-Lane)	30 mph	32,000	21,600	Under Capacity
Lake St	Elliot Ave to Cedar Ave	On-St parallel parking	Four-Lane Undivided Urban	30 mph	22,000	21,600	Approaching Capacity
Lake St	Cedar Ave to 21st Ave	On-St parallel parking	Four-Lane Undivided Urban	30 mph	22,000	21,600	Approaching Capacity
Lake St	21st Ave to Minnehaha Ave		Four-Lane Divided Urban (Five-Lane)	30 mph	32,000	23,100	Under Capacity

### Streetcar Route (Midtown Greenway)

Intersecting Roadway	Traffic Control	Notes	Existing Cross-Section	Posted Speed Limit	Approximate Maximum Daily Capacity	Existing ADT	Existing Roadway Operations
James Ave	Stop Sign	On-St parallel parking	Two-Lane Undivided Urban	30 mph	10,000	600	Under Capacity
Irving Ave	Stop Sign	On-St parallel parking	One-Lane One-Way (NB) Urban	30 mph	9,000	2,000	Under Capacity
Humboldt Ave	Stop Sign	On-St parallel parking	One-Lane One-Way (SB) Urban	30 mph	9,000	2,000	Under Capacity
5th Ave	Stop Sign	On-St parallel parking	Two-Lane Undivided Urban	30 mph	10,000	4,300	Under Capacity
20th Ave	Stop Sign		Two-Lane Undivided Urban	30 mph	10,000	1,000	Under Capacity
21st Ave	Stop Sign		Two-Lane Undivided Urban	30 mph	10,000	2,900	Under Capacity

Assumed Value

## Segment Operations Analysis - Year 2030

### Enhanced Bus Route

Roadway	Segment Limits	Notes	Proposed (2030) Cross-Section	Posted Speed Limit	Approximate Maximum Daily Capacity	Forecasted Year 2030 2030 ADT	Roadway Operations
Lake St	France Ave to Excelsior Blvd		Four-Lane Divided Urban (Five-Lane)	35 mph	32,000	28,900	Approaching Capacity
Lake St	Excelsior Blvd to Thomas Ave		Six-Lane Divided Urban	35 mph	45,000	43,000	Approaching Capacity
Lake St	Thomas Ave to E Calhoun Pkwy		Six-Lane Divided Urban	35 mph	45,000	43,000	Approaching Capacity
Lake St	E Calhoun Pkwy to Hennepin Ave	On-St parallel parking	Three-Lane One-Way (EB) Urban	30 mph	27,000	18,700	Under Capacity
Lake St	Hennepin Ave to Dupont Ave	On-St parallel parking	Three-Lane One-Way (EB) Urban	30 mph	27,000	18,700	Under Capacity
Lagoon Ave	Dupont Ave to Hennepin Ave	On-St parallel parking Parking allowed in left through lane during off-peak hours	Three-Lane One-Way (WB) Urban	30 mph	27,000	15,500	Under Capacity
Lagoon Ave	Hennepin Ave to E Calhoun Pkwy	On-St parallel parking Parking allowed in left through lane during off-peak hours	Three-Lane One-Way (WB) Urban	30 mph	27,000	15,100	Under Capacity
Lake St	Dupont Ave to Lyndale Ave	On-St parallel parking	Four-Lane Undivided Urban	30 mph	22,000	24,600	Over Capacity
Lake St	Lyndale Ave to Blaisdell Ave	On-St parallel parking	Four-Lane Undivided Urban	30 mph	22,000	22,100	Over Capacity
Lake St	Blaisdell Ave to 2nd Ave		Four-Lane Undivided Urban	30 mph	22,000	22,100	Over Capacity
Lake St	2nd Ave to Portland Ave	On-St parallel parking	Four-Lane Undivided Urban	30 mph	22,000	21,900	Approaching Capacity
Lake St	Portland Ave to Elliot Ave	Limited on-st parallel parking	Four-Lane Divided Urban (Five-Lane)	30 mph	32,000	23,600	Under Capacity
Lake St	Elliot Ave to Cedar Ave	On-St parallel parking	Four-Lane Undivided Urban	30 mph	22,000	23,600	Over Capacity
Lake St	Cedar Ave to 21st Ave	On-St parallel parking	Four-Lane Undivided Urban	30 mph	22,000	23,600	Over Capacity
Lake St	21st Ave to Minnehaha Ave		Four-Lane Divided Urban (Five-Lane)	30 mph	32,000	25,200	Under Capacity

### Streetcar Route (Midtown Greenway)

Intersecting Roadway	Traffic Control	Notes	Proposed (2030) Cross-Section	Posted Speed Limit	Approximate Maximum Daily Capacity	Forecasted Year 2030 2030 ADT	Roadway Operations
James Ave	Stop Sign	On-St parallel parking	Two-Lane Undivided Urban	30 mph	10,000	650	Under Capacity
Irving Ave	Stop Sign	On-St parallel parking	One-Lane One-Way (NB) Urban	30 mph	9,000	2,180	Under Capacity
Humboldt Ave	Stop Sign	On-St parallel parking	One-Lane One-Way (SB) Urban	30 mph	9,000	2,180	Under Capacity
5th Ave	Stop Sign	On-St parallel parking	Two-Lane Undivided Urban	30 mph	10,000	4,680	Under Capacity
20th Ave	Stop Sign		Two-Lane Undivided Urban	30 mph	10,000	1,090	Under Capacity
21st Ave	Stop Sign		Two-Lane Undivided Urban	30 mph	10,000	3,160	Under Capacity

Assumed Value

## **APPENDIX B**

### **TRAFFIC OPERATIONS REVIEW INTERSECTION OPERATIONS ANALYSIS**

### Existing Intersection Operations Analysis

Proposed Eastbound Station	Nearest Intersection	Existing AM Intersection LOS	Existing PM Intersection LOS
West Lake	Lake St/Market Plaza	B	C
Calhoun Parkway West	Lake St/W Calhoun Pkwy	C	D
Knox Ave	Lake St/E Calhoun Pkwy	B	C
Hennepin Ave	Lake St/Hennepin Ave	C	D
Dupont Ave	Lake St/Dupont Ave	B	B
Lyndale Ave	Lake St/Lyndale Ave	B	C
Nicollet Ave	Lake St/Nicollet Ave	C	C
I-35W	Lake St/2nd Ave	B	B
Portland Ave	Lake St/Portland Ave	B	C
Chicago Ave	Lake St/Chicago Ave	C	C
Bloomington Ave	Lake St/Bloomington Ave	B	B
Cedar Ave	Lake St/Cedar Ave	B	C
Midtown	Lake St/Hiawatha Ave	C	C
Minnehaha Ave	N/A	N/A	N/A

Proposed Westbound Station	Nearest Intersection	Existing AM Intersection LOS	Existing PM Intersection LOS
Minnehaha Ave	N/A	N/A	N/A
Midtown	Lake St/Hiawatha Ave	C	C
Cedar Ave	Lake St/Cedar Ave	B	C
Bloomington Ave	Lake St/Bloomington Ave	B	B
Chicago Ave	Lake St/Chicago Ave	C	C
Portland Ave	Lake St/Portland Ave	B	C
I-35W	Lake St/3rd Ave	A	A
Nicollet Ave	Lake St/Nicollet Ave	C	C
Lyndale Ave	Lake St/Lyndale Ave	B	C
Dupont Ave	Lake St/Dupont Ave	B	B
Hennepin Ave	Lagoon Ave/Hennepin Ave	C	D
Knox Ave	Lagoon Ave/E Calhoun Pkwy	B	B
Calhoun Parkway West	Lake St/W Calhoun Pkwy	C	D
West Lake	Lake St/Market Plaza	B	C

### Year 2030 Intersection Operations Analysis

Proposed Eastbound Station	Nearest Intersection	2030 AM Intersection LOS	2030 PM Intersection LOS
West Lake	Lake St/Market Plaza	C	D
Calhoun Parkway West	Lake St/W Calhoun Pkwy	C	D
Knox Ave	Lake St/E Calhoun Pkwy	B	C
Hennepin Ave	Lake St/Hennepin Ave	C	E
Dupont Ave	Lake St/Dupont Ave	B	B
Lyndale Ave	Lake St/Lyndale Ave	C	D
Nicollet Ave	Lake St/Nicollet Ave	C	C
I-35W	Lake St/2nd Ave	B	B
Portland Ave	Lake St/Portland Ave	B	C
Chicago Ave	Lake St/Chicago Ave	C	C
Bloomington Ave	Lake St/Bloomington Ave	B	B
Cedar Ave	Lake St/Cedar Ave	C	C
Midtown	Lake St/Hiawatha Ave	C	D
Minnehaha Ave	N/A	N/A	N/A

Proposed Westbound Station	Nearest Intersection	2030 AM Intersection LOS	2030 PM Intersection LOS
Minnehaha Ave	N/A	N/A	N/A
Midtown	Lake St/Hiawatha Ave	C	D
Cedar Ave	Lake St/Cedar Ave	C	C
Bloomington Ave	Lake St/Bloomington Ave	B	B
Chicago Ave	Lake St/Chicago Ave	C	C
Portland Ave	Lake St/Portland Ave	B	C
I-35W	Lake St/3rd Ave	A	A
Nicollet Ave	Lake St/Nicollet Ave	C	C
Lyndale Ave	Lake St/Lyndale Ave	C	D
Dupont Ave	Lake St/Dupont Ave	B	B
Hennepin Ave	Lagoon Ave/Hennepin Ave	C	D
Knox Ave	Lagoon Ave/E Calhoun Pkwy	B	B
Calhoun Parkway West	Lake St/W Calhoun Pkwy	C	D
West Lake	Lake St/Market Plaza	C	D