CITY OF ROCHESTER
City Council Agenda
Mayo Civic Center
Exhibit Hall 3

Special Meeting **June 14, 2017**
02:30 PM

1. MEETING NOTICE

1.1. Meeting Notice

1.2. Agenda

1.3. Study Summary

1.4. Evaluation Matrix

1.5. Scenarios

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NOTICE OF SPECIAL COUNCIL WORK SESSION

The City Council will hold a DMC Transportation Work Session on June 14, 2017 from 2:30pm – 5:30pm at the Mayo Civic Center, 30 Civic Center Drive SE, Rochester, MN 55904.

Posted: May 24, 2017

DMC Integrated Transportation Studies
DMCC Workshop Agenda

June 14, 2017 2:30 – 5:00 pm

Mayo Civic Center, Ballroom 2

Workshop Goals:

- To provide an update on actions and findings since the last DMCC Workshop
- To obtain input and concurrence on three selected scenarios

Integrated Transit Scenarios have been developed which combine a range of parking location approaches and transit alignments/modes/profiles (also in combination with City Loop route alternatives and Pedestrian Streets/protected bike lanes) to examine how they respond to DMC parking and multi-modal transportation needs. In this workshop, we will provide an overview of the ITS, introduction to the scenarios, and then rotate through three stations: 1) Scenario Evaluation and Recommended Scenarios, 2) Parking/TMA and Street Use, and 3) City Loop. Each station will have a facilitator and record comments from each group. After walking through the stations, we will allow ample time to review input, questions and discussion from the full group. We will also discuss the timeline and process for narrowing down the three scenarios to a single alternative by the end of September, 2017.

Agenda:

1) Introduction/Workshop Goals (Tina/Beth)

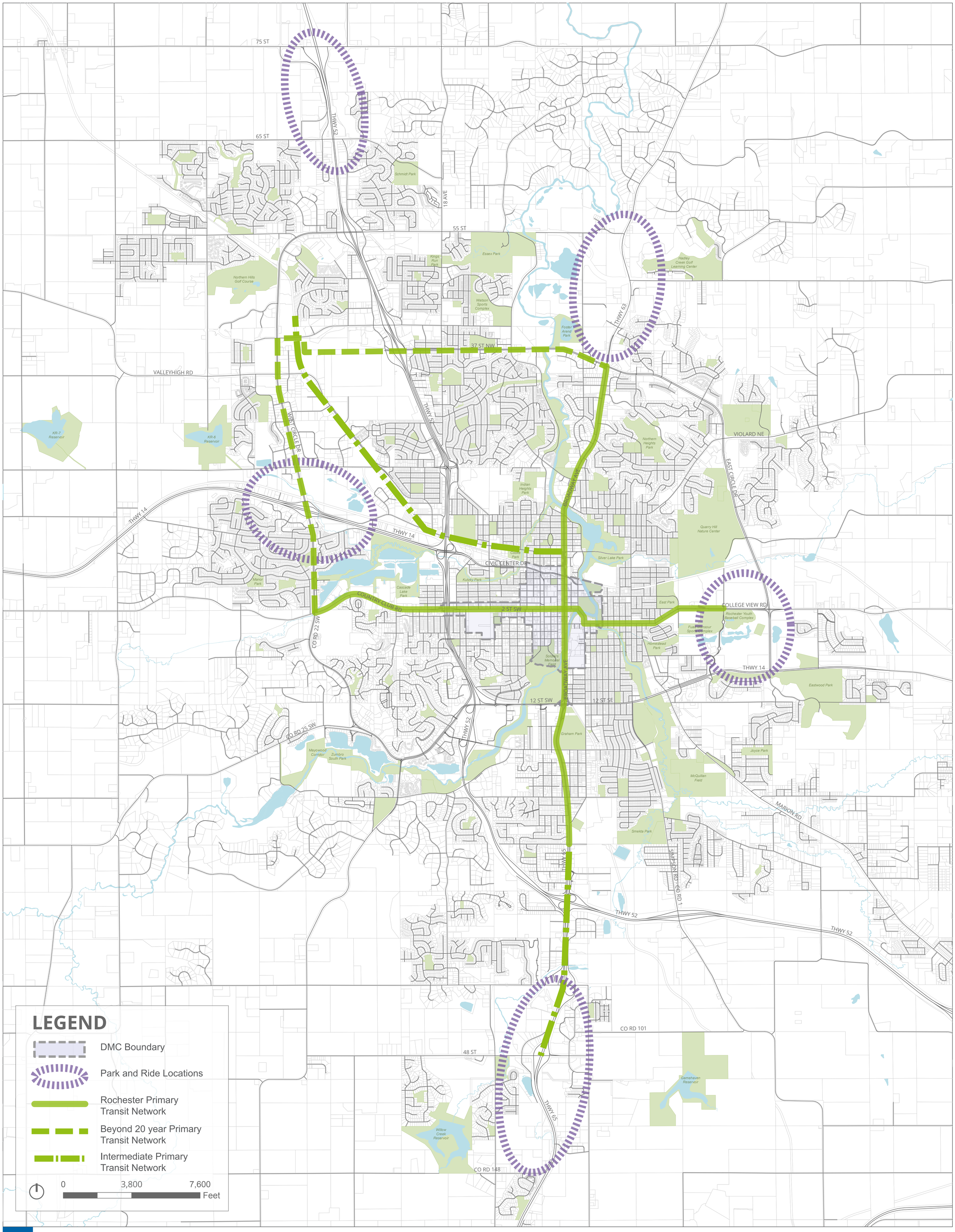
2) Overview of ITS studies and introduction to Scenarios (Beth)

3) Station Round Robin (three groups)
   - Scenario Evaluation
   - Parking/TMA and Street Use
   - City Loop

4) Review Input Received (All)

5) Questions/Discussion (All)
   - Concurrence with Three Scenarios moving forward

6) Next Steps (Beth)
   - Timeline for narrowing down the number of scenarios to one



ROCHESTER COMPREHENSIVE PLAN 2040 SCENARIO

Downtown Rochester Integrated Transit Studies

06/05/2017

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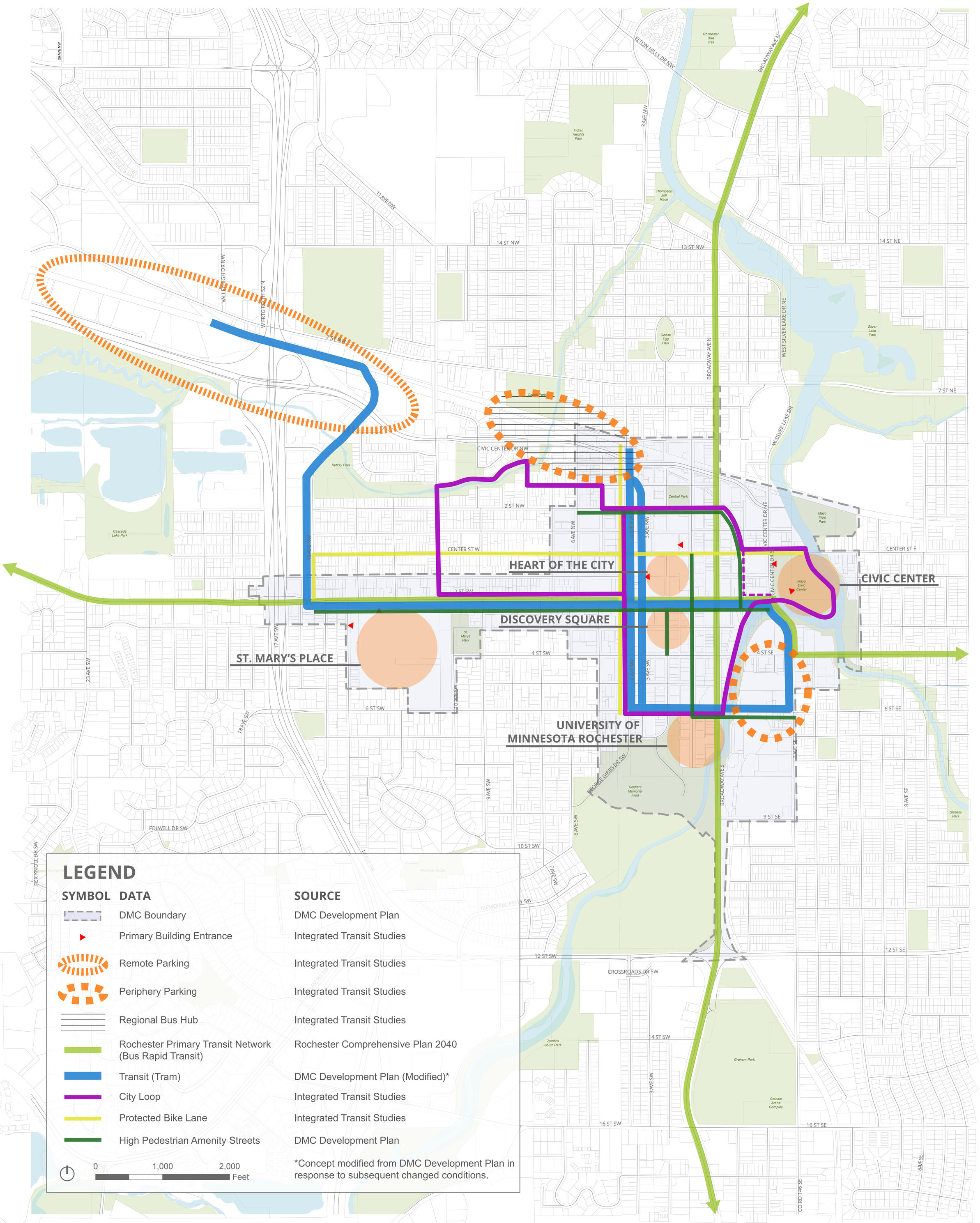

LEGEND

SYMBOL	DATA	SOURCE
	DMC Boundary	DMC Development Plan
	Primary Building Entrance	Integrated Transit Studies
	Remote Parking	Integrated Transit Studies
	Periphery Parking	Integrated Transit Studies
	Regional Bus Hub	Integrated Transit Studies
	Rochester Primary Transit Network (Bus Rapid Transit)	Rochester Comprehensive Plan 2040
	Transit (Tram)	DMC Development Plan (Modified)*
	City Loop	Integrated Transit Studies
	Protected Bike Lane	Integrated Transit Studies
	High Pedestrian Amenity Streets	DMC Development Plan

0 1,000 2,000 Feet

*Concept modified from DMC Development Plan in response to subsequent changed conditions.

INTEGRATED TRANSIT DMC MODIFIED SCENARIO

Downtown Rochester Integrated Transit Studies

06/05/2017

DMC TRANSPORTATION INFRASTRUCTURE PROGRAM MANAGEMENT

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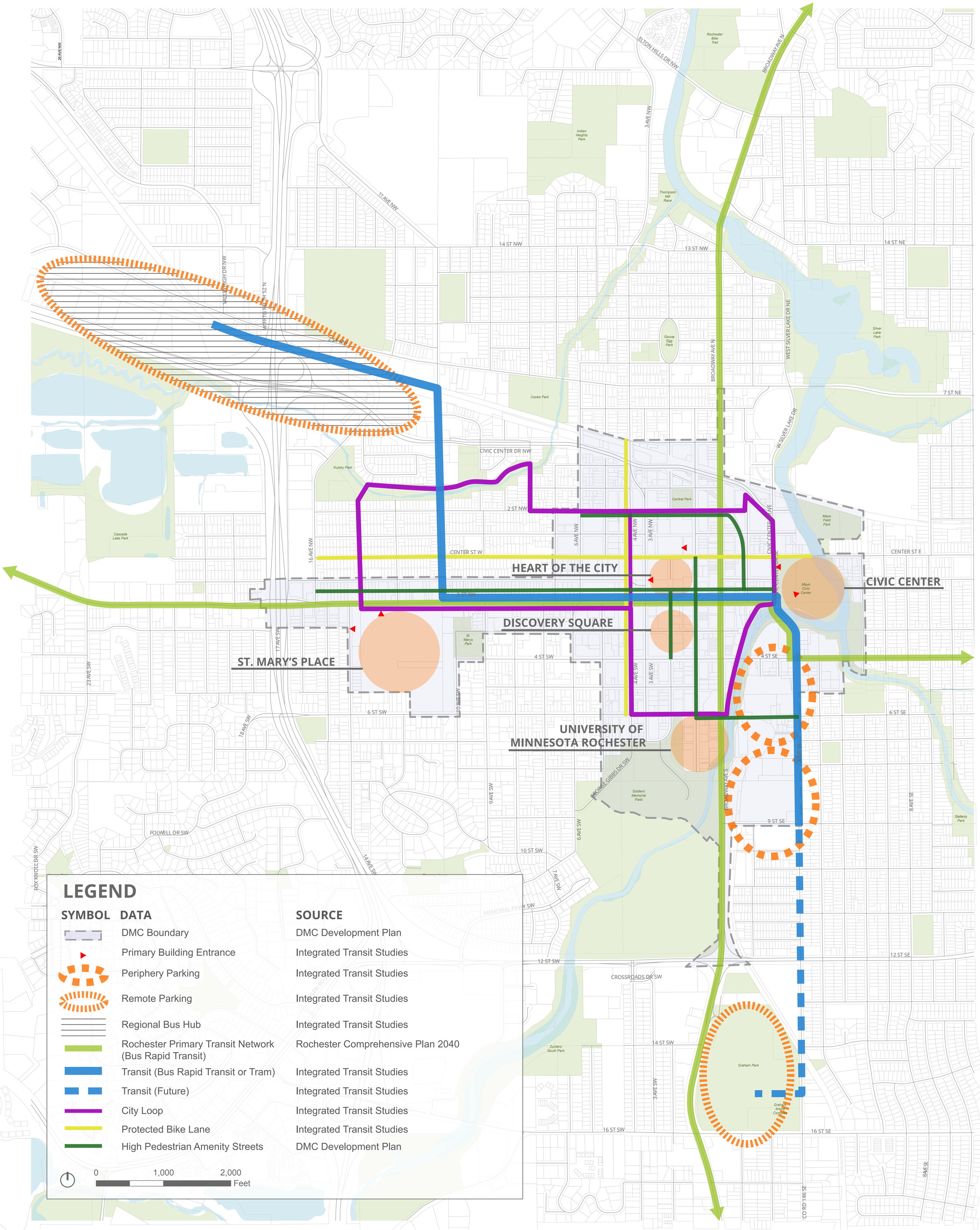

INTEGRATED TRANSIT SCENARIO A

Downtown Rochester Integrated Transit Studies

06/05/2017

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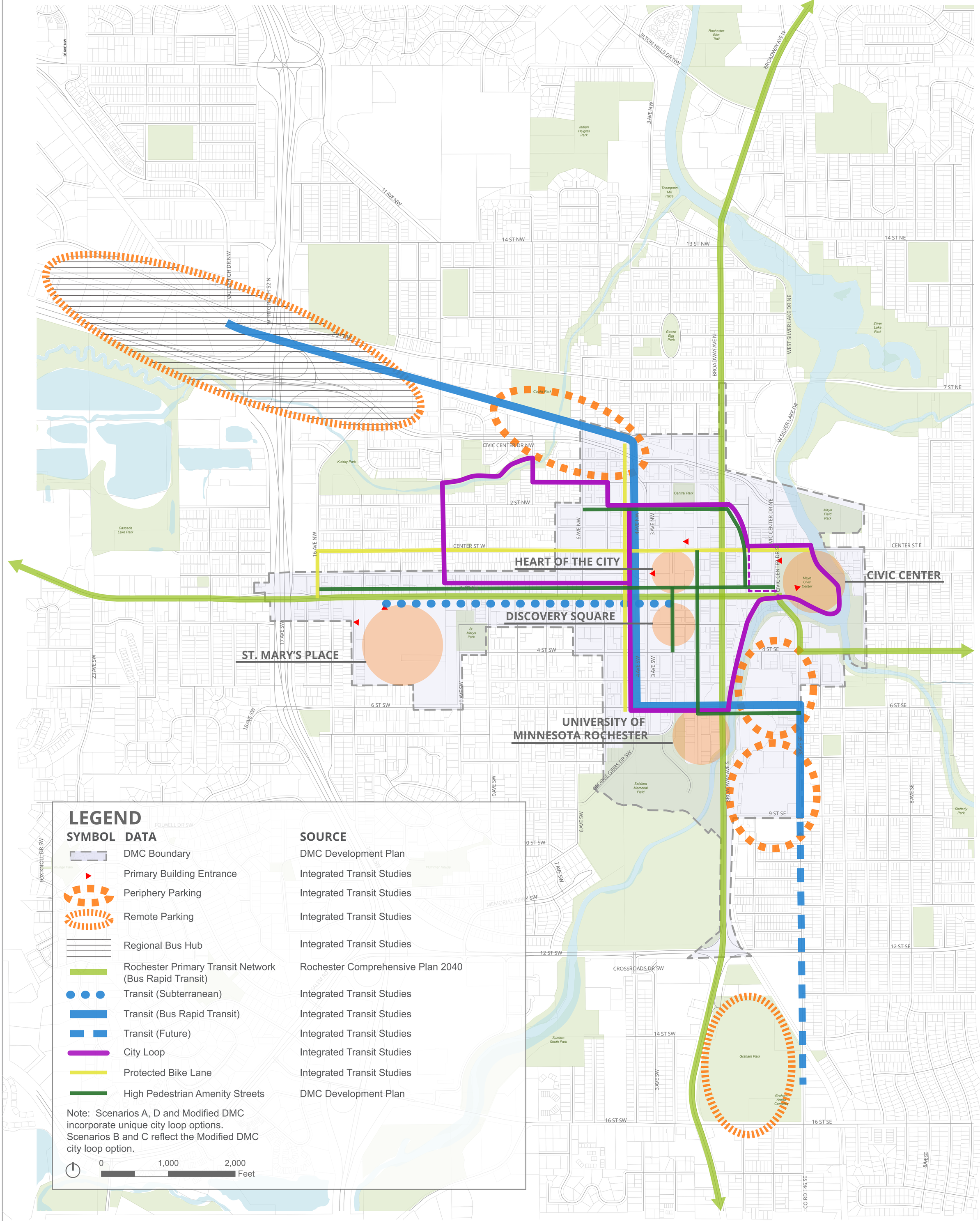

INTEGRATED TRANSIT SCENARIO B

Downtown Rochester Integrated Transit Studies

06/05/2017

J8614_DOWNTOWN_ROCHESTER_INTEGRATED_TRANSIT_STUDIES.INDD

INTEGRATED TRANSIT SCENARIO C

Downtown Rochester Integrated Transit Studies

HEART OF THE CITY

CIVIC CENTER

DISCOVERY SQUARE

ST. MARY'S PLACE

UNIVERSITY OF MINNESOTA ROCHESTER

LEGEND

SYMBOL	DATA	SOURCE
	DMC Boundary	DMC Development Plan
	Primary Building Entrance	Integrated Transit Studies
	Periphery Parking	Integrated Transit Studies
	Remote Parking	Integrated Transit Studies
	Regional Bus Hub	Integrated Transit Studies
	Rochester Primary Transit Network (Bus Rapid Transit)	Rochester Comprehensive Plan 2040
	Elevated Transit (Automated Guide-way Transit, Autonomous Vehicle)	Integrated Transit Studies
	Transit (Future)	Integrated Transit Studies
	City Loop	Integrated Transit Studies
	Protected Bike Lane	Integrated Transit Studies
	High Pedestrian Amenity Streets	DMC Development Plan

Note: Scenarios A, D and Modified DMC incorporate unique city loop options. Scenarios B and C reflect the Modified DMC city loop option.

0 1,000 2,000 Feet

06/05/2017

J8614_DOWNTOWN_ROCHESTER_INTEGRATED_TRANSIT_STUDIES.INDD

HEART OF THE CITY

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DISCOVERY SQUARE

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UNIVERSITY OF MINNESOTA ROCHESTER

LEGEND

SYMBOL	DATA	SOURCE
	DMC Boundary	DMC Development Plan
	Primary Building Entrance	Integrated Transit Studies
	Periphery Parking	Integrated Transit Studies
	Remote Parking	Integrated Transit Studies
	Regional Bus Hub	Integrated Transit Studies
	Rochester Primary Transit Network (Bus Rapid Transit)	Rochester Comprehensive Plan 2040
	Transit (At grade north of Civic Center Drive. Elevated south of Civic Center Drive)	Integrated Transit Studies
	City Loop	Integrated Transit Studies
	Protected Bike Lane	Integrated Transit Studies
	High Pedestrian Amenity Streets	DMC Development Plan

Note: Scenarios A, D and Modified DMC incorporate unique city loop options. Scenarios B and C reflect the Modified DMC city loop option.

0 1,000 2,000 Feet

INTEGRATED TRANSIT SCENARIO D

Downtown Rochester Integrated Transit Studies

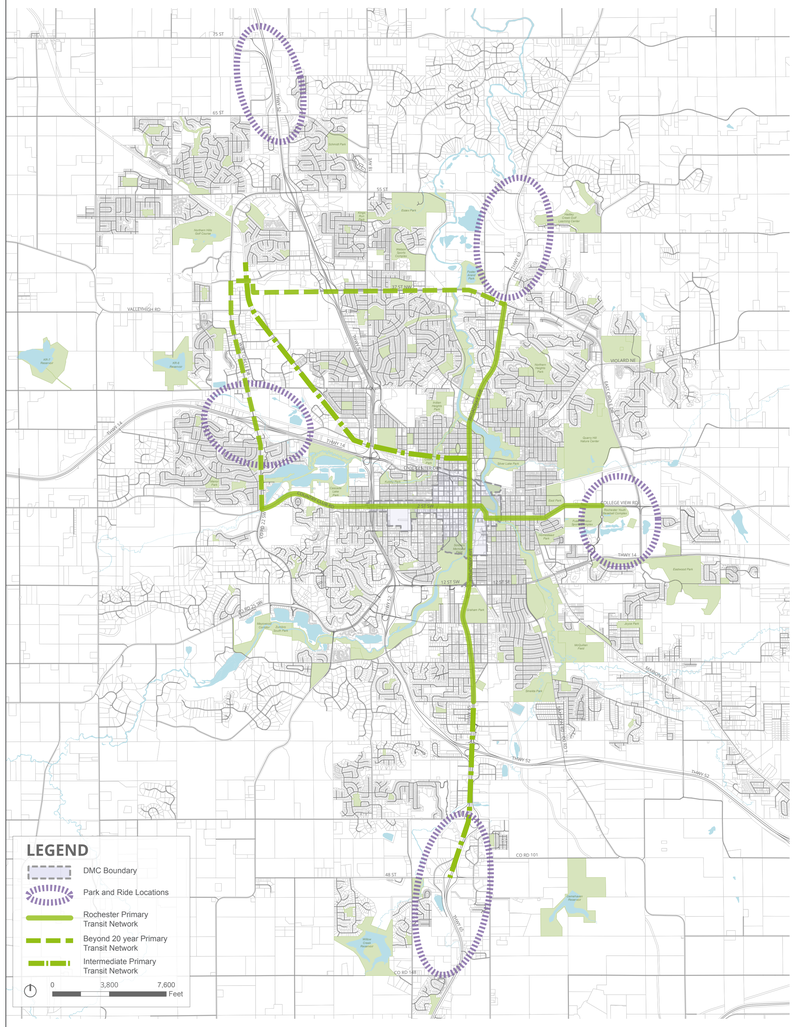
06/05/2017

J8614_DOWNTOWN_ROCHESTER_INTEGRATED_TRANSIT_STUDIES.INDD

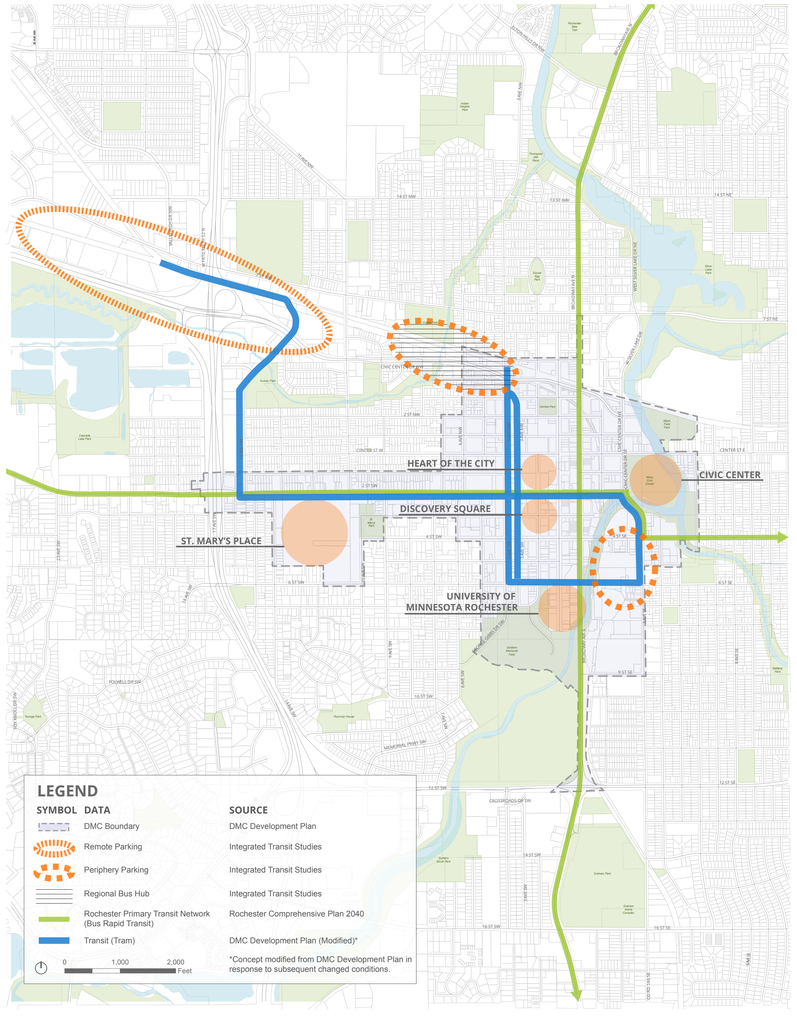
TRANSIT OPTIONS

	SCREENING CRITERIA	ADVANCE FOR FURTHER STUDY	ADVANCE FOR FURTHER STUDY					ADVANCE FOR FURTHER STUDY	
		MODIFIED DMC STREETCAR DEDICATED LANES	SCENARIO A (AT-GRADE DEDICATED LANES)		SCENARIO B (SUBTERRANEAN AV / AT-GRADE BRT)	SCENARIO C (ELEVATED)		SCENARIO D (AT-GRADE/ELEVATED)	
			BRT	TRAM		AV	AGT	AV	AGT
1	Market 1: Connectivity to Peripheral Parking	HIGH PARKING ACCESS	HIGH PARKING ACCESS	HIGH PARKING ACCESS	GOOD PARKING ACCESS	OK PARKING ACCESS	OK PARKING ACCESS	GOOD PARKING ACCESS	GOOD PARKING ACCESS
2	Market 2: Mayo Connection	MEDIUM FREQUENCY	HIGH FREQUENCY	MEDIUM FREQUENCY	HIGH FREQUENCY	HIGH FREQUENCY, GRADE SEPARATION	LOW FREQUENCY, GRADE SEPARATION	HIGH FREQUENCY, GRADE SEPARATION	HIGH FREQUENCY, GRADE SEPARATION
3	Market 3: DMC Internal Circulation	N/S AND E/W CIRCULATION, HIGH EMPLOYMENT SERVED	E/W CIRCULATION ONLY, HIGH EMPLOYMENT SERVED	E/W CIRCULATION ONLY, HIGH EMPLOYMENT SERVED	N/S AND E/W CIRCULATION AT DIFF GRADES, HIGH EMP	N/S AND E/W CIRCULATION, ELEVATED, HIGH EMP	N/S AND E/W CIRCULATION, ELEVATED, HIGH EMP	E/W ONLY CIRCULATION, ELEVATED	E/W ONLY CIRCULATION, ELEVATED
4	Potential Visual, Noise, Historic Building Impacts	POSSIBLE OVERHEAD WIRES ON 2 MAIN STREETS	LIMITED IMPACTS	POSSIBLE OVERHEAD WIRES ON 1 MAIN STREET	LIMITED IMPACTS	ELEVATED GUIDEWAY	ELEVATED GUIDEWAY	ELEVATED GUIDEWAY	ELEVATED GUIDEWAY
5	Ability to Attract DMC Development	HIGH QUALITY VERY HIGH INVESTMENT MODE BIAS HIGH	HIGH QUALITY MODERATE INVESTMENT MODE BIAS MEDIUM	HIGH QUALITY HIGH INVESTMENT MODE BIAS HIGH	HIGH QUALITY HIGH INVESTMENT (AV) MODE BIAS MEDIUM	HIGH QUALITY HIGH INVESTMENT MODE BIAS UNTESTED	MODERATE QUALITY HIGH INVESTMENT MODE BIAS HIGH	HIGH QUALITY HIGH INVESTMENT MODE BIAS UNTESTED	HIGH QUALITY VERY HIGH INVESTMENT MODE BIAS HIGH
6	At-grade Right-of-Way Requirement	ROW ON 2 MAIN STREETS	ROW ON 1 MAIN STREET	ROW ON 1 MAIN STREET	ROW ON 1 MAIN STREET	ONLY PIERS	ONLY PIERS	ONLY PIERS	ONLY PIERS
7	Ease of Access from Street Level	ON STREET	ON STREET	ON STREET	N/S ON STREET	ALL ELEVATED	ALL ELEVATED	ALL ELEVATED	ALL ELEVATED
8	Ease of Access from Skyway/ Subway Levels	ON STREET	ON STREET	ON STREET	PART SUBTERRANEAN	ALL ELEVATED	ALL ELEVATED	ALL ELEVATED	ALL ELEVATED
9	Service Simplicity	EASY TO FIND, USE	EASY TO FIND, USE	EASY TO FIND, USE	SURFACE EASY, SUBWAY MORE DIFFICULT TO FIND	EASY TO FIND INITIALLY COMPLEX TO USE	EASY TO FIND INITIALLY COMPLEX TO USE	EAST TO FIND INITIALLY COMPLEX TO USE	EASY TO FIND, USE
10	Scalability (ability to vary capacity/frequency by time of day)	LESS CAPACITY FLEXIBILITY THAN BRT	HIGH FLEXIBILITY	LESS CAPACITY FLEXIBILITY THAN BRT	HIGH FLEXIBILITY	HIGH FLEXIBILITY	LIMITED ABILITY TO ALTER CAPACITY	HIGH FLEXIBILITY	LESS CAPACITY FLEXIBILITY THAN BRT
11	Ability to Extend Service	EXPENSIVE TO EXTEND	INEXPENSIVE TO EXTEND	EXPENSIVE TO EXTEND	BRT INEXPENSIVE AV EXPENSIVE TO EXTEND	INEXPENSIVE TO EXTEND	VERY EXPENSIVE TO EXTEND	INEXPENSIVE TO EXTEND	VERY EXPENSIVE TO EXTEND
12	Order of Magnitude Capital Cost (Millions $2016)	$240-380	$35-110	$215-290	$100-180	$140-230	$175-345	$160-260	$225-450
13	Operating & Maintenance Cost	COMPLEX SYSTEM SUBSTANTIAL STAFFING	MODERATE TECHNOLOGY MODERATE STAFFING	COMPLEX SYSTEM SUBSTANTIAL STAFFING	MODERATE TECHNOLOGY MODERATE STAFFING	MODERATE TECHNOLOGY LIMITED STAFFING	COMPLEX SYSTEM SUBSTANTIAL STAFFING	MODERATE TECHNOLOGY LIMITED STAFFING	COMPLEX SYSTEM SUBSTANTIAL STAFFING
14	Potential for Public Funding	HIGH FUNDING NEEDS NUMEROUS PROJECTS FUNDED	MODERATE FUNDING NEEDS NUMEROUS PROJECTS FUNDED	HIGH FUNDING NEEDS NUMEROUS PROJECTS FUNDED	MIX OF MODERATE AND HIGH NEEDS FUNDING MIXED	MODERATE/HIGH FUNDING NEEDS LIMITED FUNDING RECORD	VERY HIGH FUNDING NEEDS NO RECENT FUNDING	MODERATE/HIGH FUNDING NEEDS LIMITED FUNDING RECORD	VERY HIGH FUNDING NEEDS NO RECENT FUNDING

ROCHESTER COMPREHENSIVE PLAN 2040 SCENARIO



INTEGRATED TRANSIT DMC MODIFIED SCENARIO

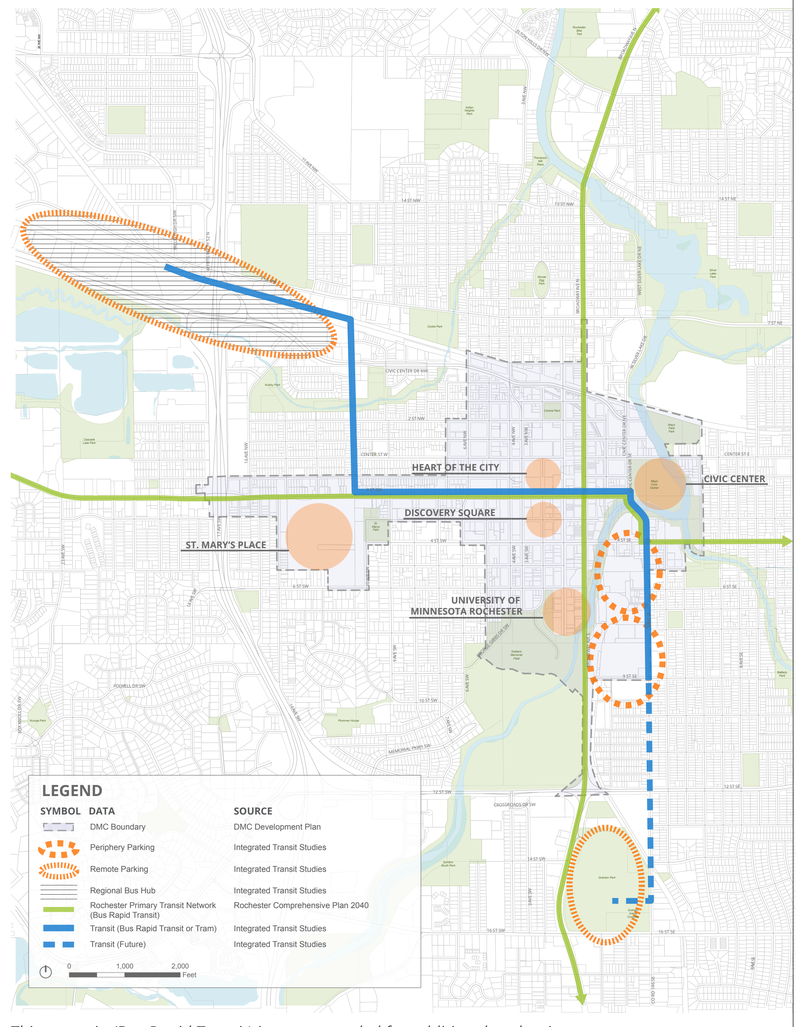


This scenario is recommended for additional evaluation.

SCENARIO HIGHLIGHTS

- Provides both east-west and north-south travel options
- Provides access to major destinations within DMC district
- Tram vehicles have high passenger capacity but require overhead power systems which could have visual impacts
- At-grade option (street level) is more cost-effective than elevated or subterranean options
- Regional bus hub immediately north of downtown

INTEGRATED TRANSIT SCENARIO A



This scenario (Bus Rapid Transit) is recommended for additional evaluation.

SCENARIO HIGHLIGHTS

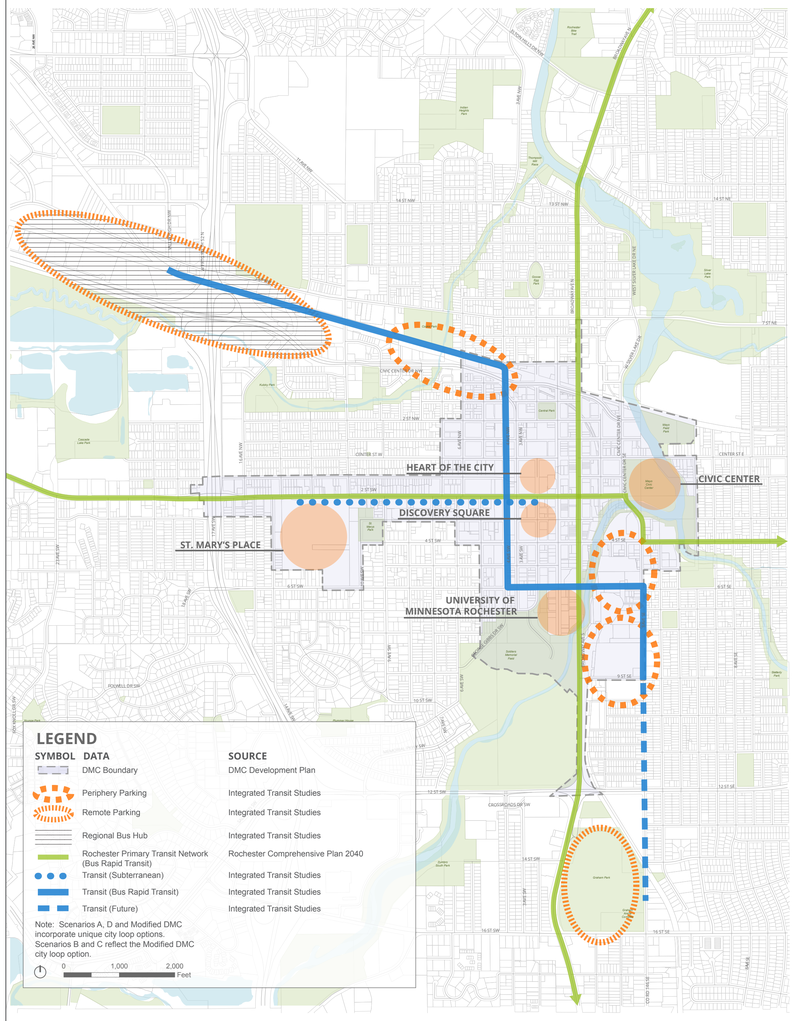
- Provides east-west travel option
- Connects commuters at remote and peripheral parking locations
- North-south connection along 11th Avenue avoids street congestion near St. Marys
- At-grade option (street level) is more cost-effective than elevated or subterranean options
- Regional bus hub at TH 52/14

TRANSIT AND PARKING SCENARIOS

Downtown Rochester Integrated Transit Studies

05/30/2017

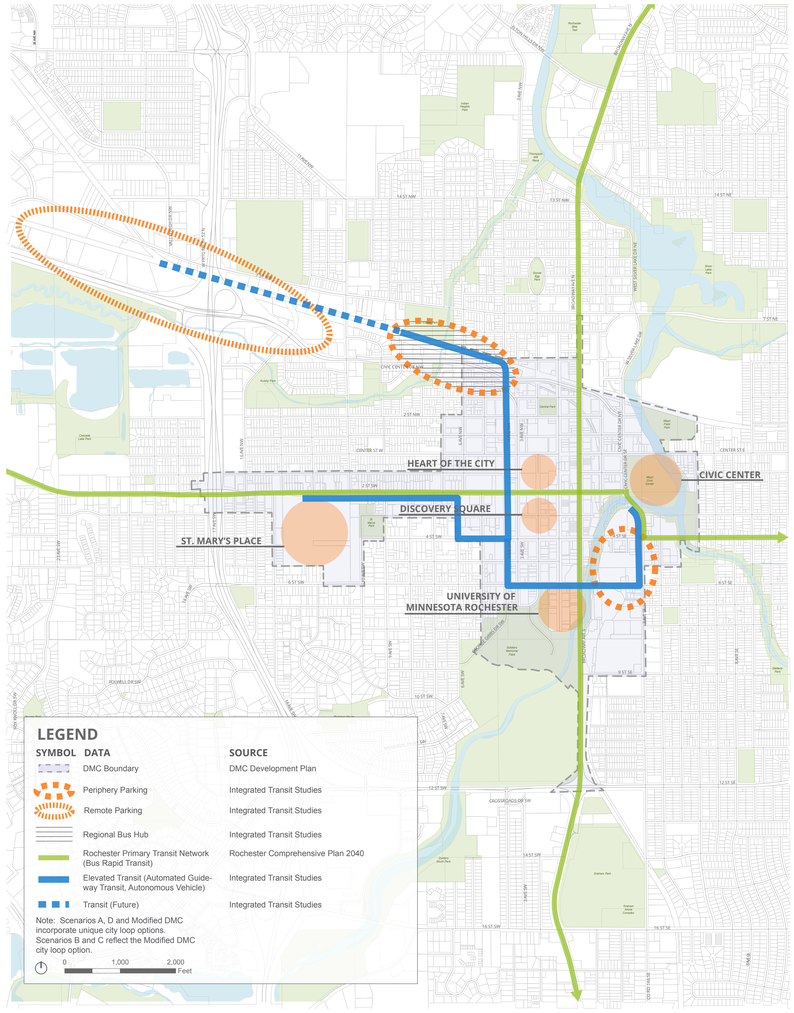
INTEGRATED TRANSIT SCENARIO B



SCENARIO HIGHLIGHTS

- Provides north-south travel option at street level; but requires an underground transfer to connect to St. Mary's
- Connects commuters at remote and peripheral parking locations
- Indirect access to St. Marys for commuters coming from remote or peripheral parking locations
- Subterranean option is costlier to construct
- Regional bus hub at TH 52/14

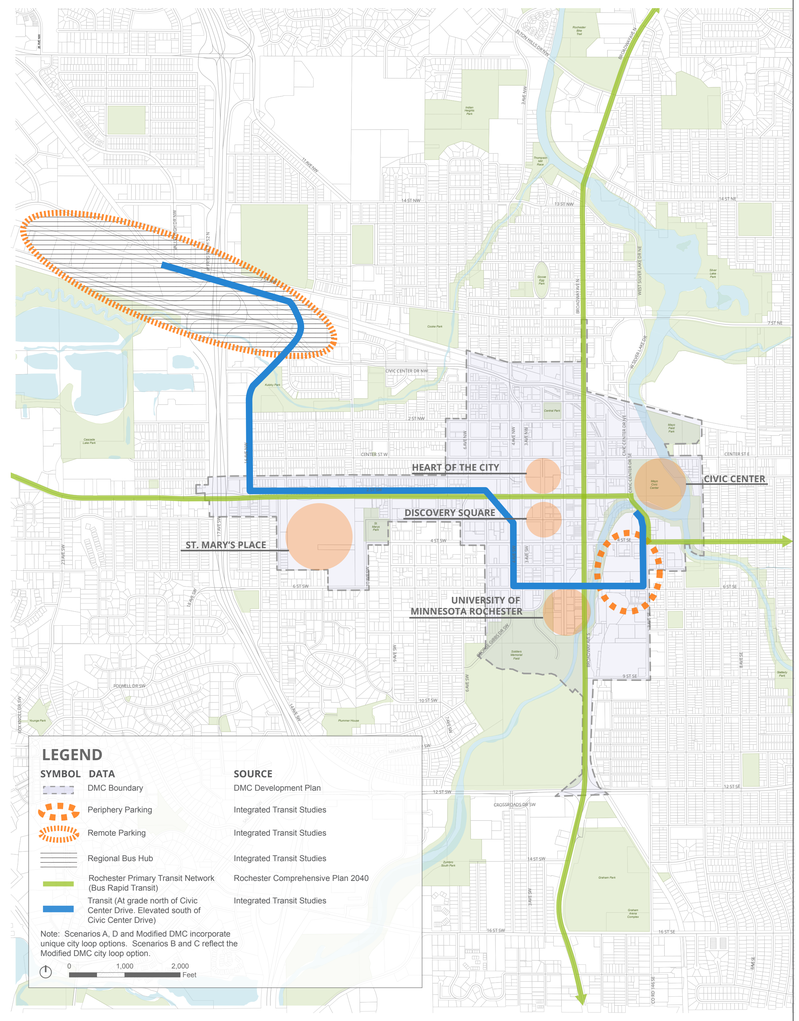
INTEGRATED TRANSIT SCENARIO C



SCENARIO HIGHLIGHTS

- Provides both east-west and north-south travel options; but more complex service plan
- Two transit routes on an elevated guideway; could have visual impacts due to structure
- Stations would be elevated, making it less convenient for connecting from street level
- Indirect access to St. Marys for commuters coming from northwest remote parking locations
- Minimizes impacts with traffic congestion due to elevated guideway
- Elevated option is costlier to construct
- Regional bus hub immediately north of downtown

INTEGRATED TRANSIT SCENARIO D



This scenario (Autonomous Vehicle) is recommended for additional evaluation.

SCENARIO HIGHLIGHTS

- Provides east-west travel option
- Could have visual impacts due to structure
- Stations would be elevated, making it less convenient for connecting from street level
- Connects commuters at remote and peripheral parking locations
- Minimizes impacts with traffic congestion due to elevated guideway
- Elevated option is costlier to construct
- Regional bus hub at TH 52/14