



Efficient, Effective, Responsive

Dakota County

DRAFT 2040 Transportation Plan

Dakota County Planning Commission

May 28, 2020

Meeting Purpose



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- Background
- Estimated revenues and investment needs
- Key Outcomes
 - By Plan Goal
- Highlight Significant Changes
 - Policies
 - Practices



Key Starting Points

- 2030 Plan provided solid basis for investment
 - The County transportation system is in good condition
- Transportation technology and Pedestrian and Bicycle accommodation growing considerations
- County transportation revenues have increased
 - Other agencies have not kept pace
- Traffic growth less than anticipated in 2030 Plan
 - COVID-19 implications?

Residential Survey Findings

- High Ratings for:
 - Condition of County roads
 - Availability of bike and pedestrian options
 - Quality of snow and ice services
- Concerns with congestion have diminished
- Public transportation not identified as a top concern
- State Trunk Highways are a primary concern

Background



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Travel Demand Model Findings

- Traffic continues to grow (1%), but not as fast as previous (2+%)
- Travel habits are changing and people are not traveling as much
 - Comp plan densities
 - Telework and virtual commerce
 - Bike/Ped mode increases
- 2040 projections similar or lower than 2030 projections

Acknowledge unknown COVID-19 impacts

- Population and employment growth, societal changes, and behaviors affecting highway congestion and transit
- Unknowns affecting transportation investment needs



Background



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Engagement Activities

Agency Engagement

- 3 School Districts
- 6 Cities
- 2 Chambers of Commerce
- 9 Townships

Top Comments/Concerns

- Safety and management
- Concerns with Trunk Highways
- Intersection control
- Trails, cost-share, transit role

Public Engagement

- 9 In-person activities (pop-up events, community events and listening sessions)
- 1,300 Responses to surveys, interactive maps and ideas board

Top Comments/Concerns

- Traffic congestion or delay
- Walking and bicycle safety
- Availability/reliability of transit
- Driving safety and comfort

Background



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Agency Sub-Committees

- County Highways
 - Cities
- Trunk Highways
 - MnDOT, Met Council, Cities
- Transit and Multi-Modal
 - MnDOT, Met Council, Transit Providers, Cities

Transportation Plan Principles



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Principles apply to all Plan goals, transportation system development and operations

- Alignment with County Comprehensive Plan principles

- Updated Transportation Specific Principles
 - Transportation Safety and Standards
 - Transportation Planning
 - Social, Economic and Environmental Impacts (SEE)
 - Public and Agency Involvement
 - Context-Sensitive Design and Complete Streets
 - Transportation Technology
 - ADA Transition Plan

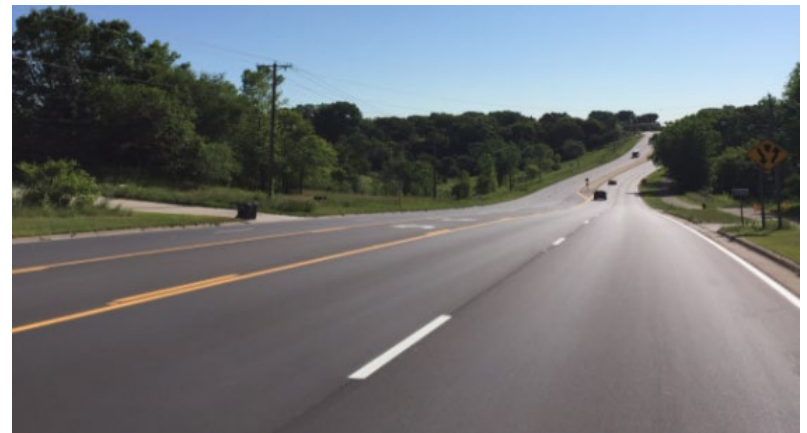
Goal 1: Resources



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Key Outcomes/Highlights

- Need vs revenue approach thru 2040
 - No COVID-19 implications included for needs or revenue
- Estimated revenue: \$1.36 billion
- Estimated proposed needs: \$1.65 billion
 - Net annual 2% inflationary reduction
 - No Trunk Highway investment

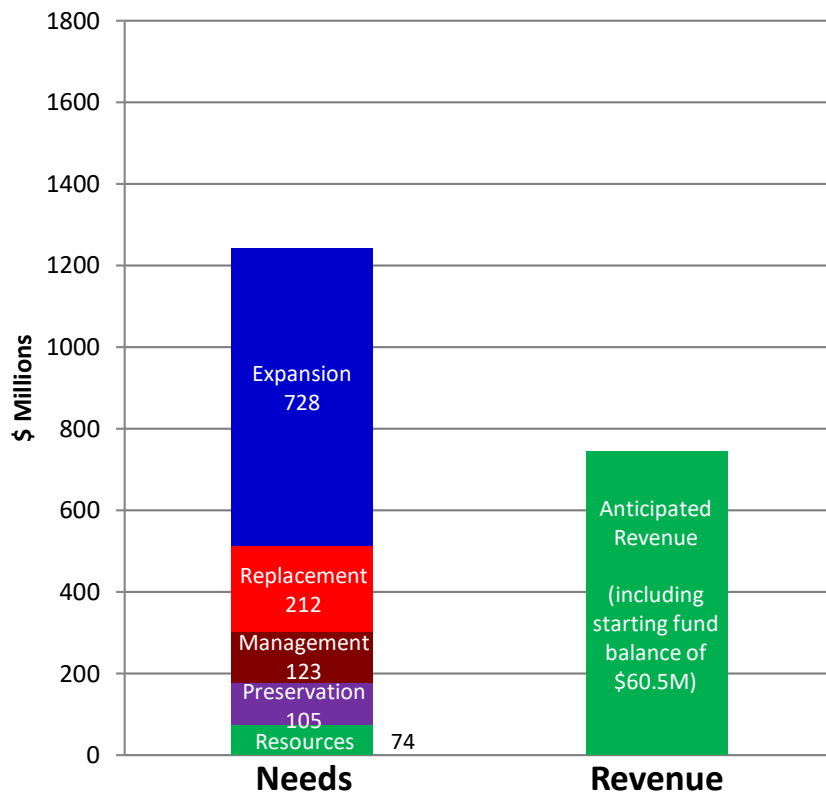


Goal 1: Resources

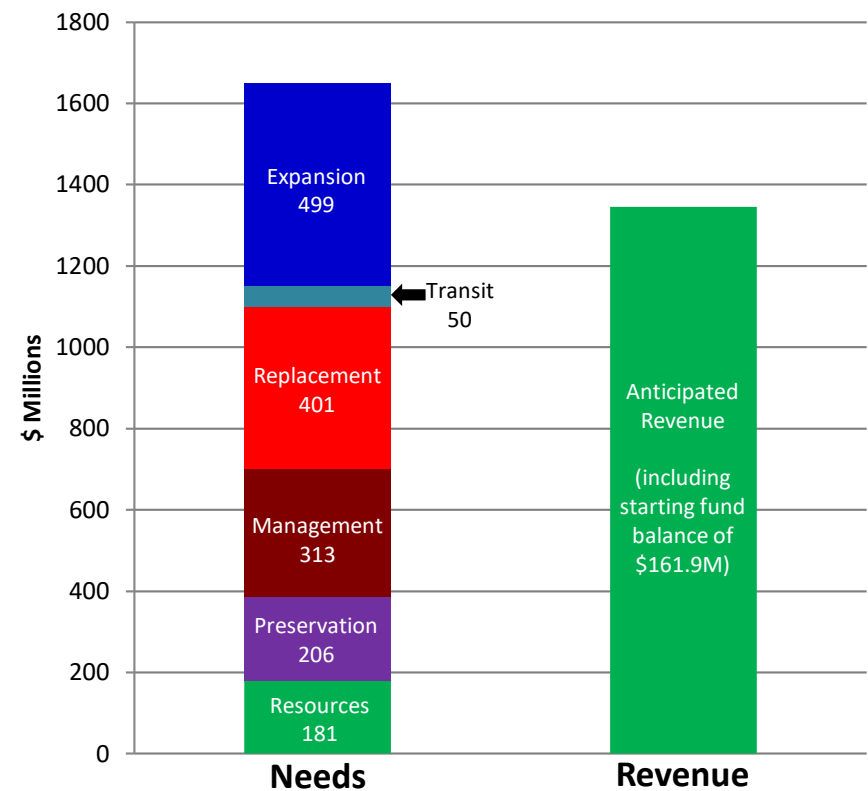


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Dakota County Highway Needs and Revenues 2016-2030



Dakota County Highway Needs and Revenues 2020-2040



Goal 2: Preservation



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Key Outcomes/Highlights

Top priority to minimize system life cycle costs

- Pavement and bridge investment similar to current
- Pedestrian and Bike Facilities (trails) pavement
 - Propose 100% County cost and management
 - City's retain snow and ice control
- Retaining Walls and Rail Crossings added
- Develop comprehensive city maintenance agreements

Goal 3: Management



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Key Outcomes/Highlights

Investment for safety and to defer expansion

- Jurisdictional Transfers updated
- Pedestrian and Bike Trail Gaps
 - Needs address priority trail gaps and highway crossings including Greenways (Approx. \$4 M annually)
 - Propose including stand alone projects as “Modernization”
- Rural intersection safety set aside
- Roundabouts 15% city base plus 15% per city leg

Goal 4: Replacement and Modernization



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Key Outcomes/Highlights

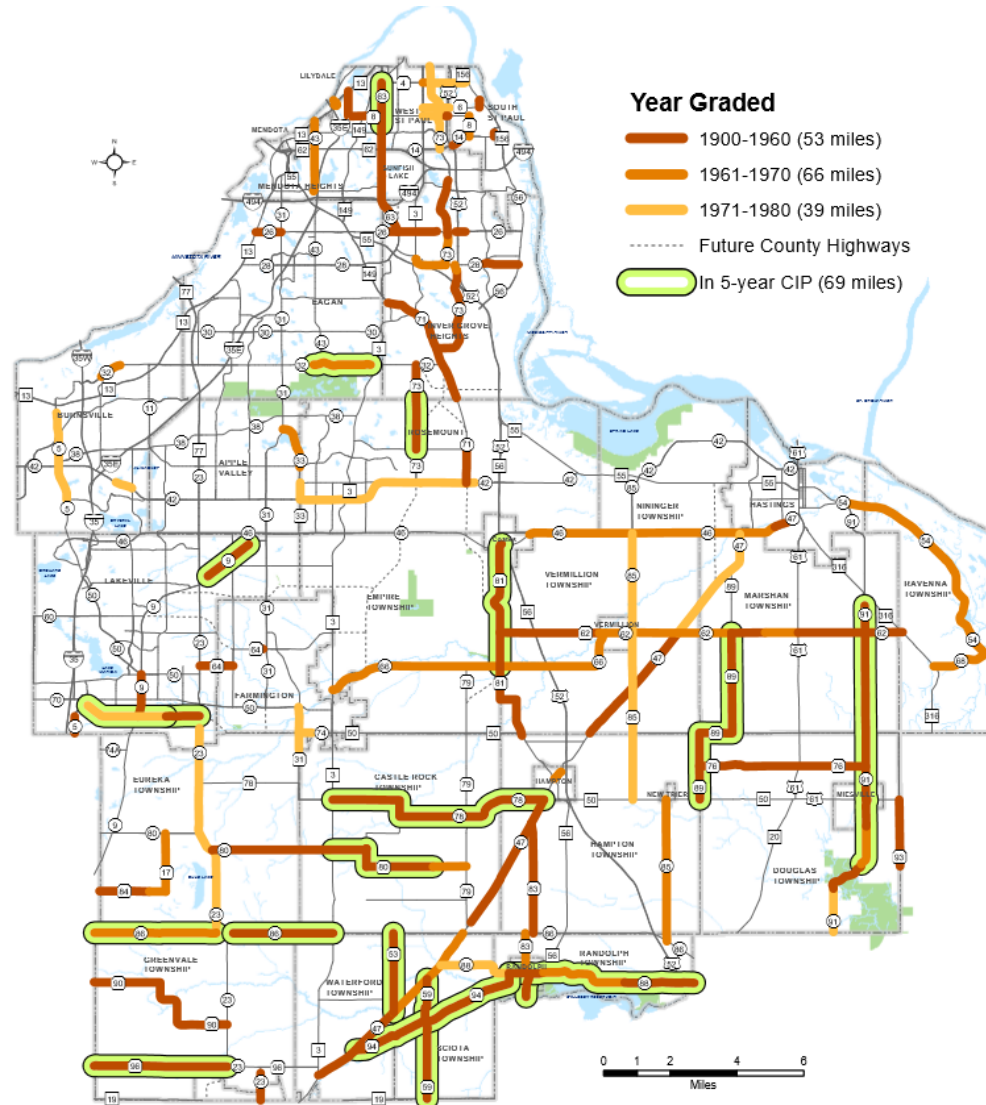
Replace and Modernize aged infrastructure

- Propose that Modernization inclusive of:
 - Turn lanes, medians, shoulders, trails and zone lighting, etc. in any combination
- Highway Replacement: 6 miles/year
 - 80 years old or more by 2040
 - 34 miles in MSA cities
 - Propose 15% vs. 25% City share
- Bridge Replacement limited
- 2- to 3-lane modernization and through-lane reductions
 - Recognition of safety and operational benefit
 - 4-lane sections with ADT < 80% of 3-lane capacity



Dakota
COUNTY

Road Age



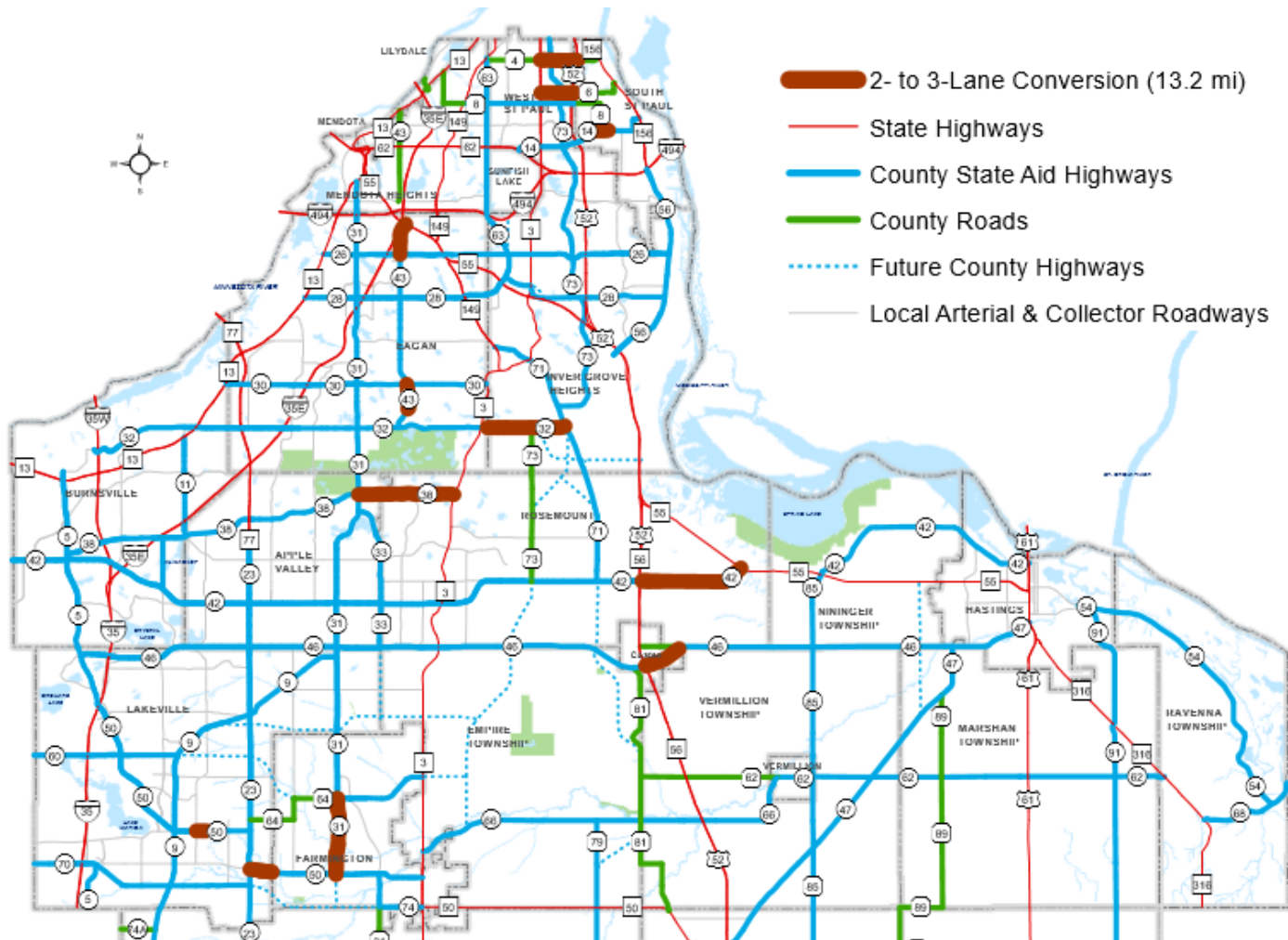
Prepared by:
Dakota County Office of GIS, 2/2020.

Goal 4: Replacement and Modernization



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2-Lane to 3-Lane Modernization

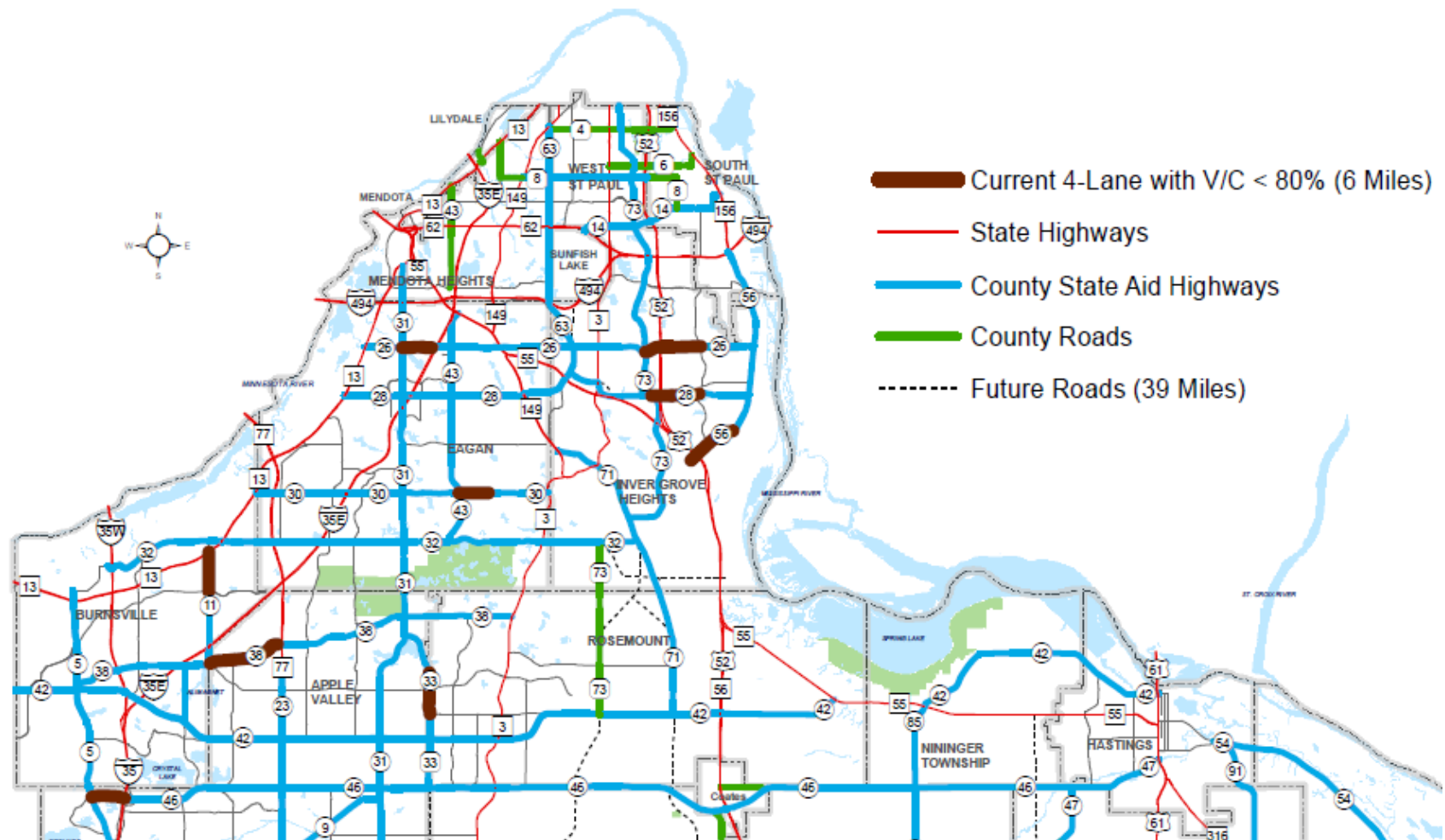


Goal 4: Replacement and Modernization



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Through Lane Reduction Candidates



Goal 5: Transit and Transitways



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Key Outcomes/Highlights

Defines spectrum of Transit services and applicability

- Recognition of diverse Post-CTIB transit needs
 - Refined County role and objectives - Partner
 - Propose County option to participate up to 50%
- Transit Enhancement
 - Capital investment, pilot projects, new service proposals
- Transitway Enhancement
 - Orange Line operating
 - Orange Line extension capital and operating
 - Red Line infill walk up stations

Goal 6: Expansion



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Key Outcomes/Highlights

Increased capacity to accommodate future travel demand

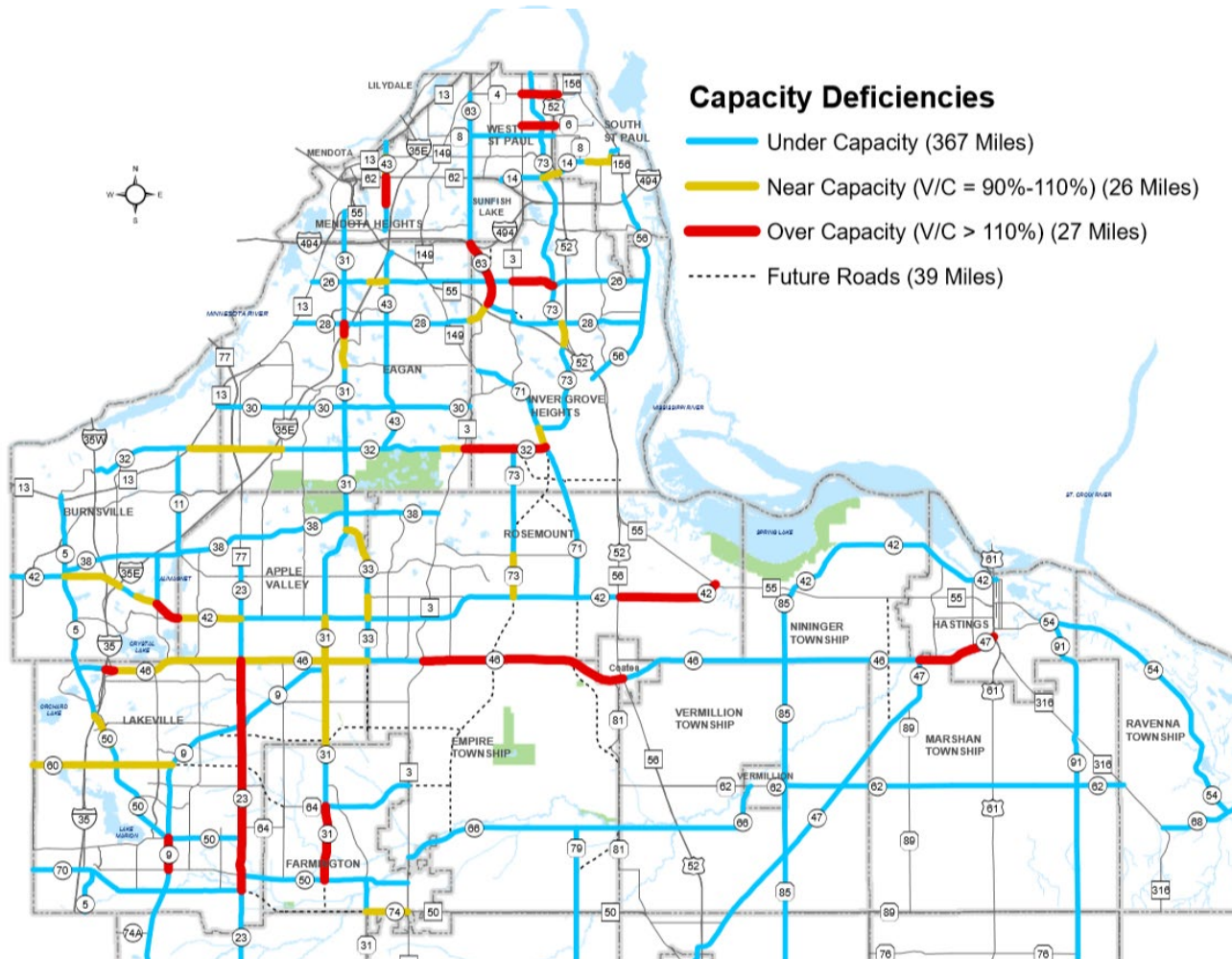
- Expect growth less than Travel Demand Model forecast
 - Downward trend in traffic, technology, COVID
- “Near Capacity” at 90 to 110% of existing road capacity
 - No needs assumed for these segments
- Lane Additions/Expansion at > 110% of capacity
- Future County Highway Alignments
 - Assumes initial 2 or 3 lane section
 - Excludes Empire and Nininger Twp. alignments

Goal 6: Expansion



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Dakota County Highway Capacity Deficiencies, 2040



Goal 6: Expansion



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Key Outcomes/Highlights

- County Highway Interchanges > 75,000 entering ADT
 - 2 locations vs. 8 in current Plan (Previously > 70,000 ADT)
- Trunk Highway project participation case by case
 - Participate in preliminary engineering to scope
 - No needs identified
 - May require additional revenue if intent is to meet County needs first

Total Investment Needs



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DRAFT Anticipated Investment Needs*

TOTAL Investment Needs by Time Frame (5-5-10 years)						
REVENUE/EXPENSE	2021-2025		2026-2030		2031-2040	
	CSAH	CR	CSAH	CR	CSAH	CR
Preservation	\$ 7.38	\$ 2.48	\$ 7.75	\$ 2.48	\$ 8.03	\$ 2.51
Management	\$ 11.32	\$ 4.83	\$ 10.70	\$ 6.81	\$ 8.67	\$ 5.79
Replacement & Modernization	\$ 17.90	\$ 8.98	\$ 24.27	\$ 2.47	\$ 12.60	\$ 0.66
Transit & Transitways	\$ -	\$ 0.98	\$ -	\$ 4.45	\$ -	\$ 2.30
Expansion	\$ 12.03	\$ 0.50	\$ 23.91	\$ 0.50	\$ 30.91	\$ 0.50
Resources	\$ 4.80	\$ 2.50	\$ 8.24	\$ 1.95	\$ 7.68	\$ 1.63
TOTAL (by CSAH & CR)	\$ 53.43	\$ 20.27	\$ 74.87	\$ 18.66	\$ 67.89	\$ 13.39

	CSAH & CR Combined	CSAH & CR Combined	CSAH & CR Combined
ANNUAL OVERALL TOTAL	\$ 73.70	\$ 93.53	\$ 81.28

* Does not include Trunk Highways

DRAFT Total Estimated 20-year Needs

\$1.65 Billion

Total Investment Needs



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Significant Financial Considerations

- Estimated 2040 Needs > Revenues by about \$290 million
 - 2030 Plan \$500 million shortfall
 - Expansion needs over stated?
 - Does not include Trunk Highway investments
- County Road Needs > County revenues by \$133 million
 - Turnback and Gravel Road paving needs overstated?
 - Assumes current level of Levy funding
 - Reliant on use of Transportation fund balance

Summary and Significant Changes



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- 2040 expansion needs less than 2030 Plan
 - Even further reduction possible
 - Greater emphasis on 3 lane sections
- Added Transportation Technology Principle
- Spectrum of transit services, more targeted County role
- Increased pedestrian and bicycle focus and investment
- Revenue increased more than needs, but still shortfall
- Proposed City cost sharing changes
 - 100% for trail/sidewalk maintenance
 - 85/15% for Replacement and Modernization with expanded definition
 - Roundabouts

Next Steps



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Schedule

Present Findings / Develop Draft Plan	
CONDAC & City Managers	May 15 & 22, 2020
County Planning Commission	May 28, 2020
County Board Workshop	July 14, 2020
Comp Plan Amendment/Release Draft for Comment	
County Board Approval	August 18, 2020
Required Comment Period (60 days)	Aug-Oct, 2020
Address Comments	Oct-Nov, 2020
Plan Adoption	
County Board adopt final plan & CPA	November 17, 2020

Questions / Discussion



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