

2016 – 2020 Aitkin County Capital Road Improvement Plan

Prepared by the Aitkin County Highway Department

June 28, 2016

Background

The Aitkin County 2016 – 2020 Capital Road Improvement Plan has been prepared by the Aitkin County Highway Department working under the direction of the Aitkin County Board of Commissioners. Development of the plan occurred during County Board Meetings beginning in February 2012 and continuing through October 2015.

Due to large construction cost increases and declining construction revenue from 2007 through 2011, a significant portion of uncompleted projects listed in the 2007-2011 Capital Road Improvement Plan remained uncompleted at the end of 2011. Specifically, 19 of 37 programmed projects, representing approximately 45% of the total 2007-2011 program cost, were uncompleted at the end of 2011. In addition, numerous pavement resurfacing projects that weren't part of the 2007-2011 program needed to be constructed in the years following 2011 based on the pavement age and condition. As a result of the large disparity between program needs and available revenues, a series of one-year Capital Road Improvement Plans were approved for the years 2012 through 2015 while work on implementation of a new five-year plan continued.

Plan Purpose

The purpose of the Aitkin County 2016-2020 Capital Road Improvement Plan is to identify improvements on County Roads and County State-Aid Highways in Aitkin County that are planned for construction from 2016 through 2020.

Improvement Categories

Identified improvements fall into one of four construction categories. Those categories, listed in priority order are as follows.

1. Bridge Replacement
2. Pavement Resurfacing
3. Reconstruction
 - a. Existing Paved Highways
 - b. Existing Gravel Roads
4. Gravel Road Improvement

Bridge Replacement

Bridge replacement projects are selected based on calculated sufficiency ratings that are the result of bridge safety inspections conducted on each bridge under the County's jurisdiction.

Pavement Resurfacing

Pavement resurfacing projects are selected based on pavement condition data collected on a four-year frequency. In addition, observed pavement conditions and the geographical grouping of projects for lower construction prices are factors that determine when a resurfacing project is scheduled.

The specific type of pavement resurfacing project is determined during the design stage of the project based on the project's individual characteristics. Overlay, mill and overlay, reclaim and pave, and cold in-place recycle and pave are included in this construction category.

Reconstruction

Projects in this category are programmed based on two different criteria.

For existing paved highways that are in need of resurfacing and shoulder widening or other geometric improvements, the project is programmed based on the resurfacing need, with additional geometric improvements included as part of the project.

For existing gravel roads, each segment is prioritized based on a relative measure of annual average daily traffic (AADT), residence density, functional classification, safety deficiencies, complete route improvement, and private/public land ownership. The resulting priority ratings are updated with each Capital Road Improvement Plan update.

Gravel Road Improvement

Projects in this category involve drainage and roadbed improvements on roads that will remain as gravel surfaced roads. Projects constructed under this category are programmed based on observed deficiencies of gravel road segments.

Funding Sources

The following sources of funding are used to pay the costs of the projects listed in the Aitkin County 2016-2020 Capital Road Improvement Plan.

State-Aid Construction Funds

State-aid construction funds are the primary source of funding used to cover the costs of construction on state-aid routes. In Aitkin County, County State-Aid Highway routes are numbered 1 through 41.

Aitkin County Property Tax

Revenue generated from Aitkin County Property taxes is the primary source of funding for construction on non state-aid routes. In Aitkin County, non state-aid routes are those numbered 50-88.

Federal Highway Grants

Aitkin County is eligible to apply for federal highway grants for routes that are part of the federal aid secondary (FAS) system.

Minnesota State Bonds

Aitkin County is eligible to apply for state bond grants for bridge replacement projects and other regionally significant projects through the local bridge bonding program and the local road improvement program.

Trunk Highway Turnback Funds

Aitkin County received trunk highway turnback funds for reconstruction improvements needed on 9.55 of Trunk Highway 232 that become Aitkin County State-aid Highway 3 as a result of the negotiated turnback agreement.

Project List

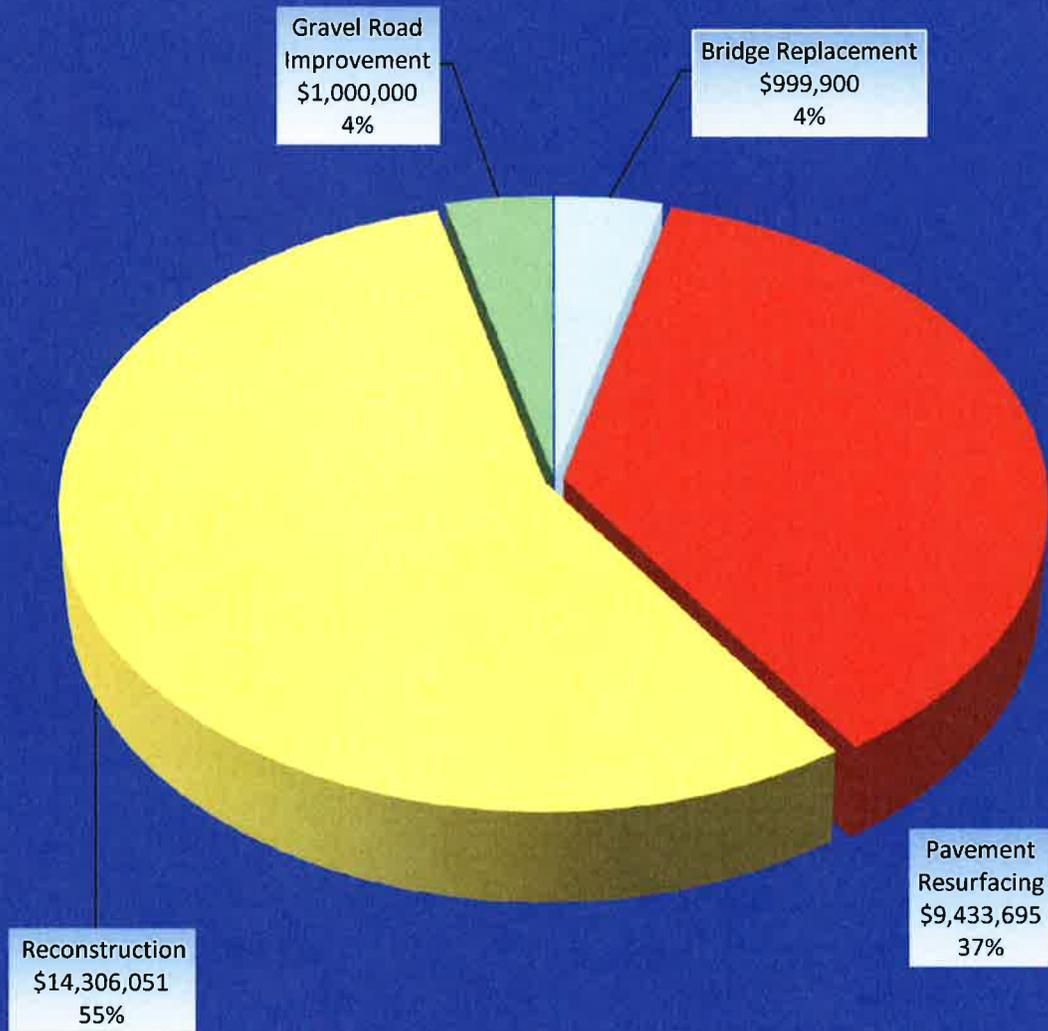
The following pages show the various projects included in the 2016 – 2020 Capital Road Improvement Plan. The cost shown for each project reflects the estimated cost of construction only. Additional project costs include costs for project development, engineering, right of way acquisition, and utility moves.

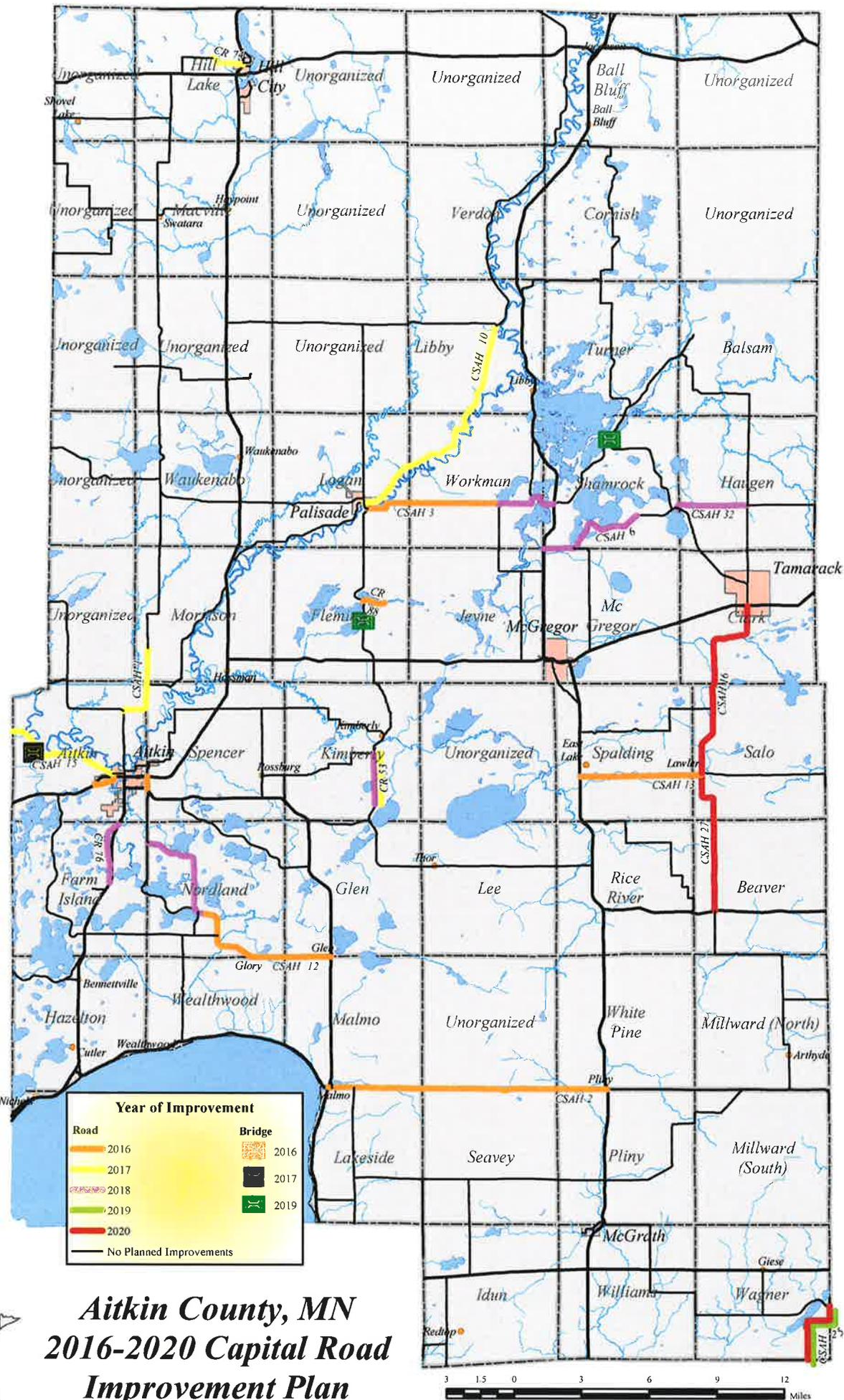
Proposed 2016 through 2020 Capital Road Improvement Plan

(**indicates previously programmed project)

	Length	Location	Estimated Construction Cost
2016			
CSAH 2 Pavement Resurfacing	12.4	TH 47 to TH 65	\$ 951,140
CSAH 3 Reconstruction	6.12	N. jct. CSAH 5 to 6.12 miles east	\$ 3,610,951
CSAH 12 Pavement Resurfacing	0.6	TH 210/US Hwy 169 to TH 47	\$ 113,189
CSAH 12 Pavement Resurfacing	6.9	TH 47 in Glen to 375th Ave	\$ 815,721
CSAH 13 Pavement Resurfacing	5.5	TH 65 to CSAH 16	\$ 542,366
CSAH 41 Pavement Resurfacing	1.08	TH 210 to TH 210	\$ 248,996
CR 88 Pavement Resurfacing	1.02	CSAH 5 to 1.02 miles east	\$ 122,083
			\$ 6,404,446
2017			
CSAH 1 Pavement Resurfacing	3.6	CSAH 22 to 3.6 miles north	\$ 520,000
**CSAH 10 Pavement Resurfacing	11.2	CSAH 3 to CSAH 18	\$ 1,353,200
CSAH 15 Pavement Resurfacing	6.08	Crow Wing Co. Line to CSAH 1	\$ 1,181,600
CSAH 15 Bridge Replacement	0.2	CSAH 15 over Cedar Brook	\$ 550,000
**CR 53 Reconstruction (Phase 1)	2.3	0.78 mile north of CSAH 4 to CSAH 5	\$ 1,040,000
CR 74 Pavement Resurfacing	1.53	US Hwy 169 to 1.53 miles west	\$ 312,000
			\$ 4,956,800
2018			
CSAH 3 Reconstruction	3.2	6 miles east of CSAH 5 to TH 65	\$ 3,500,000
CSAH 6 Pavement Resurfacing	5.1	TH 65 to 5.1 miles east	\$ 1,016,700
CSAH 12 Pavement Resurfacing	2.7	375th Avenue to Oriole Avenue	\$ 553,200
**CSAH 12 Reconstruction	2	Oriole Avenue to north junction CSAH 39	\$ 1,687,300
**CSAH 32 Reconstruction (Phase 2)	3.3	CSAH 6 to CSAH 31	\$ 1,038,300
**CR 53 Reconstruction (Phase 2)	2.3	0.78 mile north of CSAH 4 to CSAH 5	843,600
CR 76 Pavement Resurfacing	2.82	US Hwy 169 to US Hwy 169	350,000
			\$ 8,989,100
2019			
CSAH 5 Bridge Replacement	0.1	CSAH 5 over Fleming Lake inlet	\$ 168,700
CSAH 14 Bridge Replacement	0.2	CSAH 14 over Savanna River	\$ 281,200
**CSAH 25 Reconstruction (Phase 1)	3.3	Kanabec County Line to CSAH 23	\$ 1,427,700
			\$ 1,877,600
2020			
CSAH 16 Pavement Resurfacing	8.9	CSAH 16 to TH 210	\$ 1,353,500
**CSAH 25 Reconstruction (Phase 2)	3.3	Kanabec County Line to CSAH 23	\$ 1,158,200
CSAH 27 Gravel Road Improvement	6.6	TH 27 to CSAH 13	\$ 1,000,000
			\$ 3,511,700
Five Year Total:			\$ 25,739,646

Summary of Construction Costs by Construction Category





Aitkin County, MN 2016-2020 Capital Road Improvement Plan



Map prepared by Aitkin County GIS for graphic display purposes only.
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