ACEC of Minnesota County Forecasting Seminar May 20, 2016



Douglas W. Fischer, PE County Engineer Anoka County Highway Department



Anoka County Highway Systems

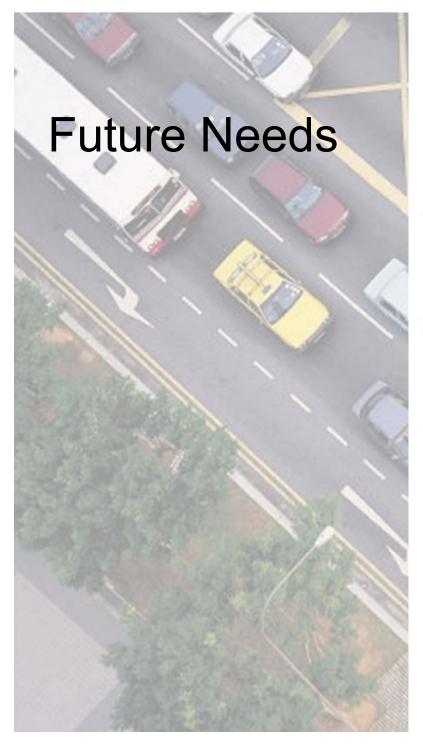
- Trunk Highway System
- **County State Aid and** County Road System
- City and Township System

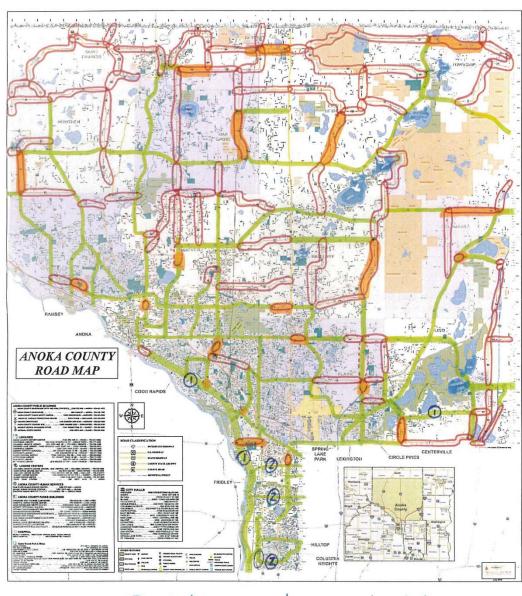
Anoka County Demographics

	1990	2000	2010	2020	2030	2040
Population	243,688	298,084	330,844	359,580	399,750	438,820
Households	82,437	106,428	121,227	136,260	154,300	171,130
Employment	81,132	106,814	106,387	126,660	136,100	145,420
					1	

Anoka County Transportation Needs (County Roads)

- Most Capacity Issues Completed
- Most Bridges Adequate (Structural and Functional)
- Pavement Condition Ratings at Goal Levels
- "Gap" Expansion Projects
- "Spot" Safety Improvements
- Rural Road Reconstruction

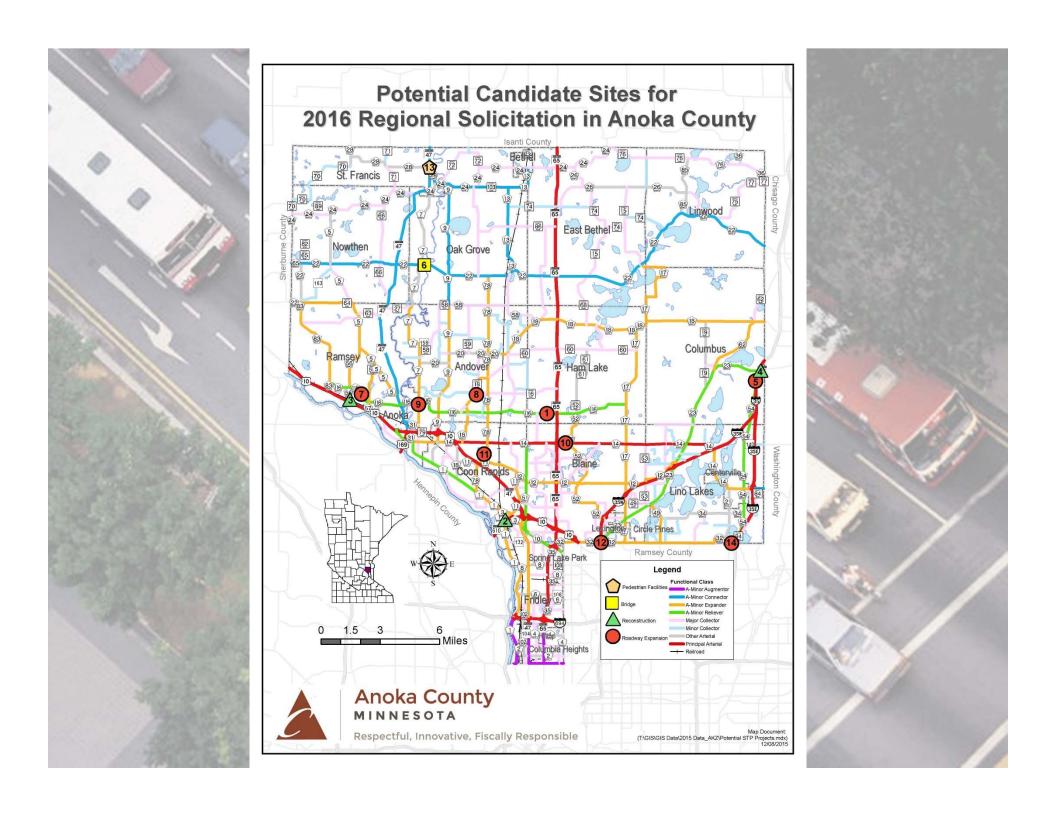


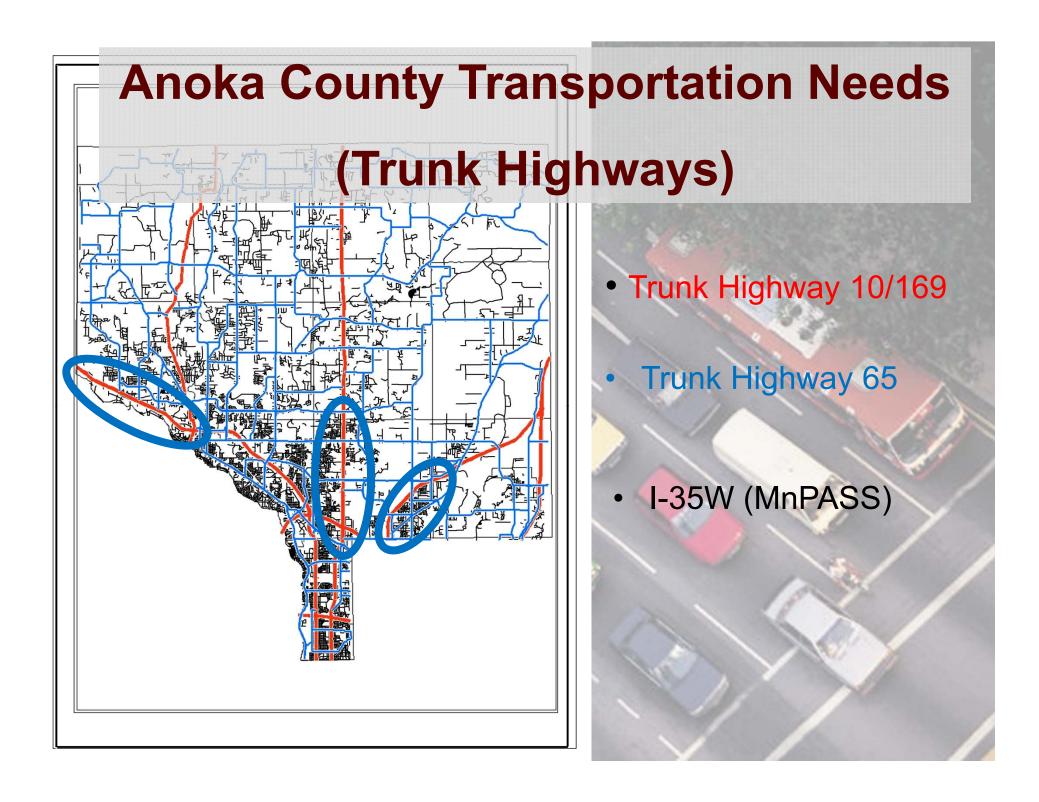


1 - Spot Improvements per Corridor Study.

2 - TWILT Combresion

- Full Build-Out/Haintain







Highway User Tax Distribution Fund (HUTDF)

- Gas Tax
- Motor Vehicle Sales Tax (MVST)
- License Tab Fees

Motor Vehicle Lease Sales Tax

Property Tax Levy

General Obligation Bonds

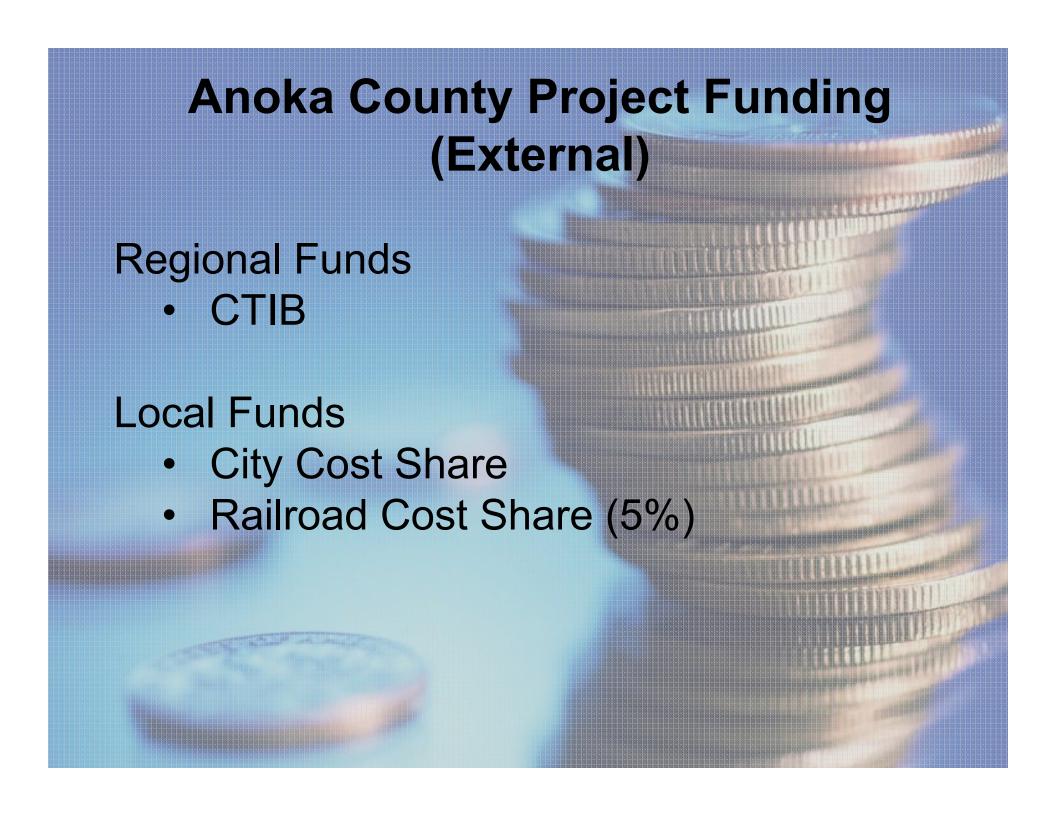
Anoka County Project Funding (External)

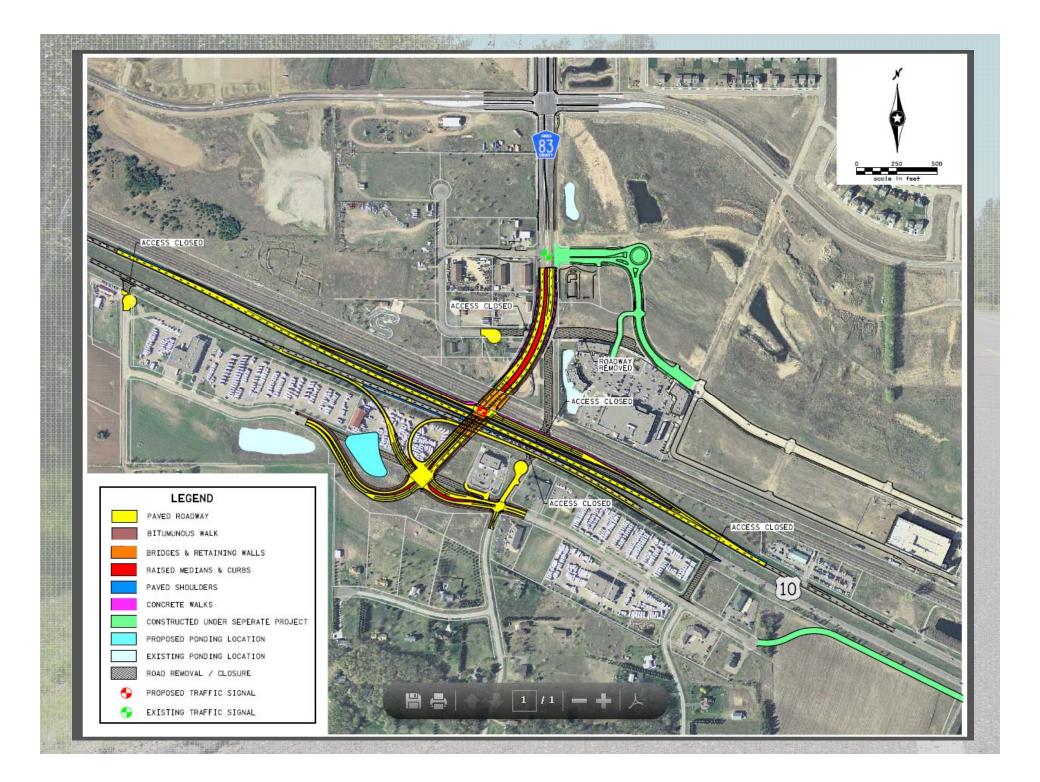
Federal Funds

- STP/HSIP (Regional Solicitation)
- TIGER
- Earmarks
- ARRA (Economic Stimulus)

State Funds

- Turnback Funds/Flex Account
- Bridge Bonds
- Local Road Improvement Program
- Cooperative Agreement
- Safe Routes to School
- TED/SAM/CIMS/Corridors of Commerce





TH 10 / CSAH 83 Interchange Funding Breakdown - Lunda Low Bid

City of Rumsey

Task	Total Estimated Cost	Sub-Task	Sub-Task Cost		2013 & Prior			2014				2015								Total Estimate Cost
				Lo	cal	Federal	Local	MnDOT	Federal	Lo	cal	CTIB LRIP		LRIP MnDOT		Federal		Other		
				Anoka Co.	Ramsey	HPP (1)	Anoka Co.	CIMS (2)	HPP (1)	Anoka Co.	Ramsey	Grant	Bonds	CIMS (2)	In Kind	HPP (1)	TIGER (3)	BNSF		
reliminary Engineering and nvironment Assessment	\$512,000	PE & EA	\$512,000	\$256,000	\$256,000														\$512,000	\$512,000
	C	FE	\$1,845,465	\$369,093		\$ 1,476,372													\$1,845,465	,
nal Design	\$2,180,465	FE (Amend)	\$235,000				\$47,000		\$188,000										\$235,000	\$2,180,46
		FE (Shop Dwgs)	\$100,000							\$20,000						\$80,000			\$100,000	
		Acquired	\$4,265,510		\$2,135,000		\$2,130,510			-\$2,130,510				\$2,130,510					\$4,265,510	
ght-of-Way Acquisition	\$7,020,835	Relocation	\$200,000				\$200,000			-\$200,000				\$200,000					\$200,000	\$7,020,83
gnt-or-way Acquisition	\$7,020,835	Appraised/Court Escrow	\$1,703,550				\$1,703,550			-\$1,703,550				\$1,703,550					\$1,703,550	\$7,020,83
,		Counter Offer Overage	\$851,775							\$1,275,341	-\$423,566								\$851,775	
		Bid Award	\$27,696,264									\$5,956,312	\$4,679,959	\$5,965,940			\$10,000,000	5 1,094,053	\$27,696,264	
onstruction	\$29,835,002	SA/CO/Overruns (7%)	\$1,938,738									\$1,085,694	\$853,045						\$1,938,738	\$29,835,0
		Max. Incentive	\$200,000									\$112,000	\$88,000						\$200,000	
onstruction Management	\$2,386,800	CE (8%)	\$2,386,800												\$2,386,800				\$2,386,800	\$2,386,80
ub-Totals	\$41,935,103	Sub-Total	\$41,935,103	\$625,093	\$2,391,000	\$1,476,372	\$4,081,060	\$0	\$188,000	-\$2,738,719	-\$423,566	\$7,154,005	\$5,621,004	\$10,000,000	\$2,386,800	\$80,000	\$10,000,000	\$1,094,053	\$41,935,103	\$41,935,10
ontingency	\$0	Contingency	\$0																\$0	\$0
rand Total	\$41,935,103	Grand Total	\$41,935,103	\$625,093	\$2,391,000	\$1,476,372	\$4,081,060	\$0	\$188,000	-\$2,738,719	-\$423,566	\$7,154,005	\$5,621,004	\$10,000,000	\$2,386,800	\$80,000	\$10,000,000	\$1,094,053	\$41,935,103	\$41,935,1

Notes:			Task	Amount	Primary Fund	Local Match	% Req.	% Actual											
(1) HPI	Federal Funds \$2,041,97	6	FE	\$2,180,465	\$ 1,744,372	\$436,093	20%	20%											
									Lo	cal	СТІВ	LRIP	Mni	рот	Fed	eral	Other		Total Cost
(2) CIN	1S Funds \$10,000,000		ROW	\$7,020,835	\$4,034,060	\$2,986,775	15%	43%	Anoka Co.	Ramsey	Grant	Bonds	CIMS	In Kind	НРР	TIGER	BNSF		
			Const	\$6,029,649	\$5,965,940	\$1,094,053	15%	18%	\$256,000	\$256,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	PE & EA	\$512,000
									\$436,093	\$0	\$0	\$0	\$0	\$0	\$1,744,372	\$0	\$0	FE	\$2,180,465
(3) TIG	ER Grant \$10,000,000		Const	\$14,679,959	\$10,000,000	\$4,679,959	20%	32%	\$1,275,341	\$1,711,434	\$0	\$0	\$4,034,060	\$0	\$0	\$0	\$0	ROW	\$7,020,835
									\$0	\$0	\$7,154,005	\$5,621,004	\$5,965,940	\$0	\$0	\$10,000,000	\$1,094,053	CONST	\$29,835,002
									\$0	\$0	\$0	\$0	\$0	\$2,386,800	\$0	\$0	\$0	CE	\$2,386,800
				_					\$1,967,434	\$1,967,434	\$7,154,005	\$5,621,004	\$10,000,000	\$2,386,800	\$1,744,372	\$10,000,000	\$1,094,053	Sub-Total	\$41,935,103
Orig. Cost	Actual Cost	\$ Savings	% Savings						\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Contingency	\$0
\$2,807,744	\$1,967,434	\$840,310	30%			Doct Di	d Comm	itmont	\$1,967,434	\$1,967,434	\$7,154,005	\$5,621,004	\$10,000,000	\$2,386,800	\$1,744,372	\$10,000,000	\$1,094,053	Grand Total	\$41,935,103
\$2,807,744	\$1,967,434	\$840,310	30%			POST-DI	u Comin	iitment	4.69%	4.69%	17.06%	13.40%	23.85%	5.69%	4.16%	23.85%	2.61%		100.00%
\$10,200,000	\$7,154,005	\$3,045,995	30%			\$4	1,935,10	03	11.77%	11.77%	42.81%	33.64%	% of Local-	+CTIB+LRIP					
\$8,000,000	\$5,621,004	\$2,378,996	30%										-						

Post-Tiger Commitment	\$2,807,744	\$2,807,744	\$10,200,000	\$8,000,000	\$10,000,000	\$2,268,400	\$1,716,800	\$10,000,000	\$1,200,000	\$49,000,688
	5.73%	5.73%	20.82%	16.33%	20.41%	4.63%	3.50%	20.41%	2.45%	100.00%
\$49,000,688	11.79%	11.79%	42.83%	33.59%	% of Local+CTIB+LRIP					

Pre-TIGER Commitment	\$2,807,744	\$2,807,744	\$10,200,000	\$8,000,000	\$10,000,000	\$1,600,000	\$1,476,371	\$0	\$565,605	\$37,457,464
Pre-ridek Commitment	7.50%	7.50%	27.23%	21.36%	26.70%	4.27%	3.94%	0.00%	1.51%	100.00%
\$37,457,464	11.79%	11.79%	42.83%	33.59%	% of Local-	+CTIB+LRIP				

ACHD "In-House" Capabilities

Highway Design & Construction **Bridge Construction** Signal Construction Transportation Planning Traffic Engineering **Environmental Document Preparation ROW Acquisition Grant Writing** Traffic Modeling

What We Need Help With

Bridge Design

Signal Design

"Science" behind certain environmental evaluations

Geotechnical Work

"Overflow" work that staff can't handle

What We Need Help With (Cont.)

Traffic Management

- Centrax
- Fiber Connectivity
- Flashing Yellow Arrow Retrofits

Innovative Intersections

- Signalized RCUTS
- Hybrid Interchanges

ACHD Consultant Selection Process

- ➤ Competitive bids not required (depending on size)
- ➤ RFP by invitation (unless federal funds)
- Selection based on team, experience, scope, schedule and cost

How to Get Selected

- Bring your "A" Team
- Highlight the project's greatest need (traffic forecasting, noise, wetlands, public involvement, etc.)
- Competitive cost and hours.
- Knowledge of project partners.
- Demonstrate ability to make our life easier!

How to Get Selected

➤ Get to know these people:

Andrew Witter, Assistant County Engineer

Jack Forslund, Multimodal Transportation Manager

Gina Pizzo, Senior Design Engineer

Jason Orcutt, Design Engineering Supervisor

Jane Rose, Traffic Engineering Manager

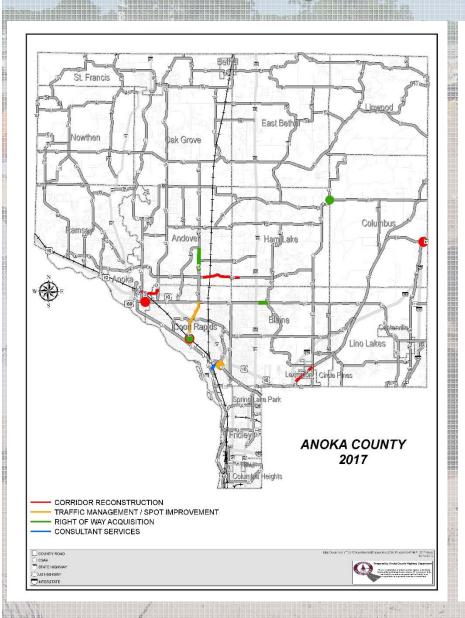
Harry Grams, Construction Engineering Supervisor



➤ Be Involved

➤ Demonstrate an Expertise

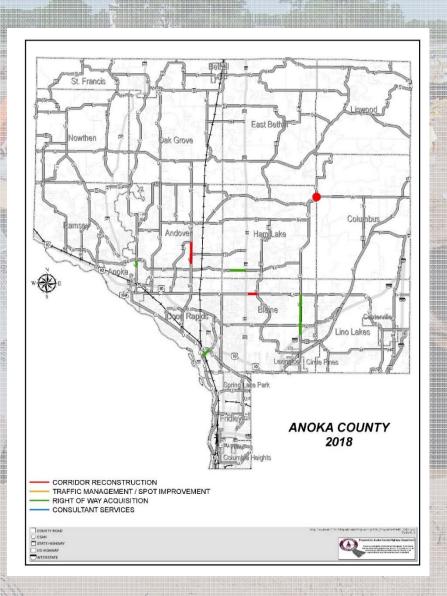
> Start Small



ANOKA COUNTY HIGHWAY DEPARTMENT 2017 Unfunded Highway Improvement Plan

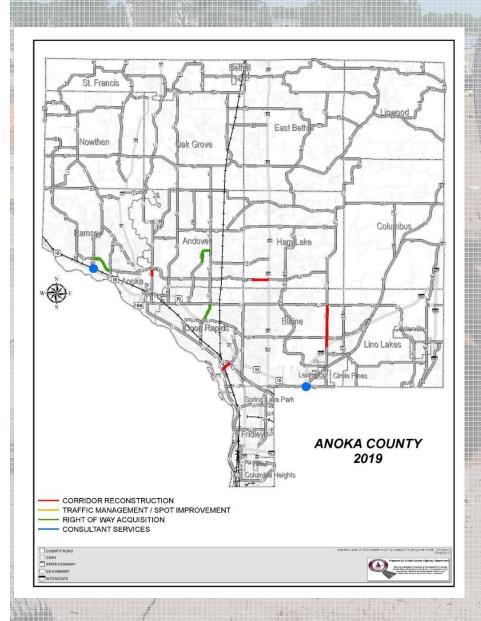
10/2016

Project #	Description	County	Federal	State	City/Town	Other	Total	Notes
2017								
Rehabilitation	n	\$9,000,000					\$9,250,000	
17-01-00	Overlays (Bituminous And Concrete)	\$7,500,000					\$7,500,000	
17-??-00	CR J Overlay	\$250,000				\$250,000		Other = Ramsey County
17-02-00	Crack Sealing	\$750,000				0200,000	\$750,000	outer - realisely county
17-07-00	Bridge Maintenance	\$300,000					\$300,000	********
17-09-00	Signal Painting	\$100,000					\$100,000	*****************
	RR Crossing Repairs	\$100,000						BNSF RR
Reconstructi	on Program (2955)	\$11,124,450			\$2,144,450		\$27,838,900	
	CSAH 14 at 9th Ave	\$1,350,000			\$150,000		\$1,500,000	
	CSAH 54 realignment south of CSAH 23	\$5,500,000			\$1,000,000		\$6,500,000	*****************
	CSAH 23 from I-35W to CSAH 17	\$1,135,000			\$115,000			Access Modifications
	CSAH 78 Railroad Grade Separation	\$2,139,450		\$12,600,000	\$879,450	\$1,970,000		Other = CTIB & BNSF
15-64-79	CR 79 from CSAH 7 to CSAH 9	\$1,000,000					\$1,000,000	
	CSAH 116 from Crane St. to Jefferson St. (Phase 2)	\$2,500,000					\$2,500,000	
	gement (2935)	\$702,400	\$381,600	\$63,000	\$63,000	\$0	\$1,024,000	
002-678-021	CSAH 78 Signal Interconnect	\$42,400	\$381,600				\$424,000	
0217-17	TH 610 at CR 3	\$60,000		\$63,000	\$63,000			MnDOT Signal Replacement
17-??-00	ATMS Interconnect (2935)	\$500,000					\$500,000	
17-??-00	FYA Conversions (2935)	\$100,000					\$100,000	
Infrastructure	e Improvement Programs	\$1,838,510					\$1,838,510	*************************
	TH 10 Improvements (2957)	\$1,000,000					\$1,000,000	
TB/Local	CR Turnbacks/Local Initiated Projects (2955)	\$500,000					\$500,000	
RTC	Annual Payment (2955)	\$338,510					\$338,510	*************
2017 CONSTI	RUCTION TOTALS	\$22,665,360	\$381,600	\$63,000	\$2,207,450	\$0	\$39,951,410	
ROW ACQUIS	SITION							
Unknown	CSAH 14 from Aberdeen to CSAH 52	\$500,000					\$500,000	
002-617-021	CSAH 17 and CSAH 18 (North Intersection)	\$250,000					\$250,000	********************
002-678-022	CSAH 78 from 139th Ave to CR 18	\$2,500,000					\$2,500,000	
002-678-023	CSAH 78 Railroad Grade Seperation	\$450,000		\$2,250,000	\$225,000	\$1,575,000		Other = CTIB
	Misc Acquisition	\$250,000					\$250,000	
2017 ROW A	QUISITION TOTALS	\$3,950,000	\$0	\$2,250,000	\$225,000	\$1,575,000	\$8,000,000	
CONSULTAN	IT SERVICES							
Unknown	CSAH 11 from CSAH 1 to CR 3	\$150,000					\$150,000	
VUIVRII	Misc Services	\$500,000					\$500,000	
2017 CONSU	LTANT SERVICES TOTALS	\$650,000	\$0	\$0	\$0	\$0	\$650,000	
PLANNING/S	TUDIES							
	Corridor Studies	\$250,000					\$250,000	
	Evironmental Studies	\$250,000					\$250,000	
2017 PLANNI	ING/STUDIES TOTALS	\$500,000	\$0	\$0	\$0	\$0	\$500,000	
							,	
2017 HIGHWA	AY PROGRAM TOTALS	\$27,765,360	\$381,600	\$2,313,000	\$2,432,450	\$1,575,000	\$49,101,410	



ANOKA COUNTY HIGHWAY DEPARTMENT 2018 Unfunded Highway Improvement Plan

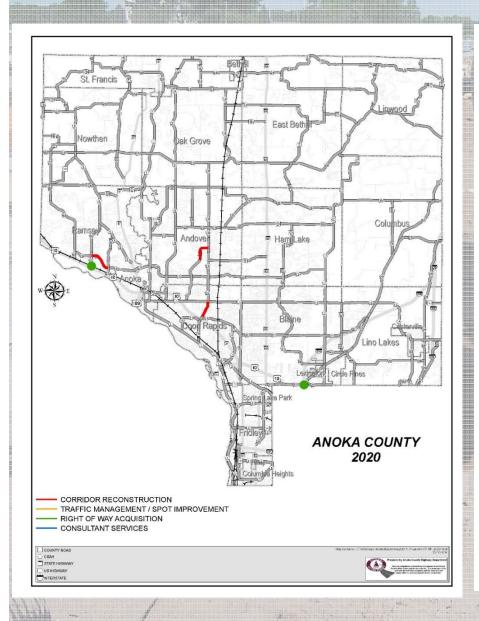
				FUND	ING			
Denie et #	Description.	Country	Federal	C1-4-	Cit. II.	Other	Total	Notes
Project # 2018	Description	County	Federal	State	City/Town	Other	Total	Notes
2010								
Rehabilitatio	1	\$9,750,000					\$9,750,000	
18-01-00	Overlays (Bituminous And Concrete)	\$8,500,000					\$8,500,000	
18-02-00	Crack Sealing	\$750,000					\$750,000	
18-07-00	Bridge Maintenance	\$300,000					\$300,000	
18-09-00	Signal Painting	\$100,000					\$100,000	
Unassigned	RR Crossing Repairs	\$100,000					\$100,000	BNSF RR
Reconstructi	on Program (2955)	\$7,097,200	\$8,374,800	\$0	\$1,600,000	\$0	\$17,072,000	
	CSAH 78 from 139th Ave to CR 18	\$3,500,000	\$7,500,000		\$1,000,000		\$12,000,000	
Unknown	CSAH 14 from Aberdeen to CSAH 52	\$3,500,000			\$500,000		\$4,000,000	
Unknown	CSAH 17 and CSAH 18 (North Intersection)	\$97,200	\$874,800		\$100,000		\$1,072,000	
Traffie Manag	gement (2935)	\$1,100,000	\$0	\$0	\$0	\$0	\$1,100,000	
18-77-00	ATMS Interconnect (2935)	\$500,000					\$500,000	
18-77-00	FYA Conversions (2935)	\$100,000					\$100,000	
	Misc Projects	\$500,000					\$500,000	
nfraetruetur	Improvement Programs	\$2,588,510					\$2,588,510	
IIII I I I I I I I I I I I I I I I I I	RR Grade Seperation Projects (2956)	\$750,000						For Future Project TBD
	TH 10 Improvements (2957)	\$1,000,000						For Future Project TBD
TB/Local	CR Turnbacks/Local Initiated Projects (2955)	\$500,000					\$500,000	
RTC	Annual Payment (2955)	\$338,510					\$338,510	
2018 CONST	RUCTION TOTALS	\$20,535,710	\$8,374,800	\$0	\$1,600,000	\$0	\$30,510,510	
		729229	7.7		.,,,		,,	
ROW ACQUI								
Unknown	CSAH 7 From 38th Ave. To 41st Ave.	\$1,500,000					\$1,500,000	
Unknown	CSAH 11 from CSAH 1 to CR 3	\$2,000,000				\$2,000,000		Other = CTIB
Unknown	CSAH 17 from F35W to CSAH 14	\$500,000					\$500,000	
Unknown	CSAH 116 from Jefferson to TH 65 Misc Acquisition	\$1,500,000					\$1,500,000	
	misc Acquisition	\$250,000					\$250,000	
2017 ROW A	QUISITION TOTALS	\$5,750,000	\$0	\$0	\$0	\$2,000,000	\$7,750,000	
CONSULTAN	T SERVICES				***************************************			
	Misc Services	\$500,000					\$500,000	
2018 CONSU	LTANT SERVICES TOTALS	\$500,000	\$0	\$0	\$0	\$0	\$500,000	
002-678-023								
PLANNINGIS	TUDIES							
	Corridor Studies	\$250,000					\$250,000	
	Evironmental Studies	\$250,000					\$250,000	
2018 PLANN	NG/STUDIES TOTALS	\$500,000	\$0	\$0	\$0	\$0	\$500,000	
				100				
2018 HIGHW	AY PROGRAM TOTALS	\$27,285,710	\$8,374,800	\$0	\$1,600,000	\$2,000,000	\$39,260,510	L



ANOKA COUNTY HIGHWAY DEPARTMENT 2019 Unfunded Highway Improvement Plan

BSHEQUE

Project #	Description	County	Federal	State	City/Town	Other	Total	Notes
2019	Description	County	reuerai	State	City/TOWII	Other	TOTAL	Notes
2019								
Rehabilitation		\$9,750,000					\$9,750,000	
19-01-00	Overlays (Bituminous And Concrete)	\$8,500,000					\$8,500,000	
19-02-00	Crack Sealing	\$750,000					\$750,000	
19-07-00	Bridge Maintenance	\$300,000					\$300,000	
19-09-00	Signal Painting	\$100,000					\$100,000	
Unassigned	RR Crossing Repairs	\$100,000					\$100,000	BNSF RR
Reconstruction	on Program (2955)	\$12,250,000	\$7,500,000	\$0	\$4,750,000	\$7,000,000	\$31,500,000	
Unknown	CSAH 7 From 38th Ave. To 41st Ave.	\$1,750,000			\$750,000		\$2,500,000	
Unknown	CSAH 11 from CSAH 1 to CR 3	\$4,000,000	\$7,500,000		\$2,000,000	\$7,000,000		Other = CTIB
Unknown	CSAH 17 from I-35W to CSAH 14	\$3,000,000			\$1,500,000		\$4,500,000	
Unknown	CSAH 116 from Jefferson to TH 65	\$3,500,000			\$500,000		\$4,000,000	
Traffic Manag	ement (2935)	\$1,100,000	\$0	\$0	\$0	\$0	\$1,100,000	
19-77-00	ATMS Interconnect (2935)	\$500,000					\$500,000	
19-77-00	FYA Conversions (2935)	\$100,000					\$100,000	
	Misc Projects	\$500,000					\$500,000	
Infrastructura	Improvement Programs	\$2,588,510					\$2,588,510	
TELESTICAL C	RR Grade Seperation Projects (2956)	\$750,000						For Future Project TBD
	TH 10 Improvements (2957)	\$1,000,000						For Future Project TBD
TB/Local	CR Tumbacks/Local Initiated Projects (2955)	\$500,000					\$500,000	
RTC	Annual Payment (2955)	\$338,510					\$338,510	*******************
2019 CONSTR	RUCTION TOTALS	\$25,688,510	\$7,500,000	\$0	\$4,750,000	\$7,000,000	\$44,938,510	
ROW ACQUIS	TON							
Inknown	CR 18 from Andover Blvd. to CSAH 78	\$2,000,000					\$2,000,000	
Unknown	CSAH 78 from CSAH 11 to CSAH 14	\$2,000,000				***********	\$2,000,000	
Unknown	CSAH 116 from CSAH 57 to CSAH 56	\$1,000,000					\$1,000,000	
	Misc Acquisition	\$250,000					\$250,000	
2016 DOW AD	DUISITION TOTALS	\$5,250,000	\$0	\$0	\$0	\$0	\$5,250,000	
LVIZ ROW AL	William TALVER	\$0,230,000	30	30	\$0	30	\$0,200,000	
CONSULTAN								
Unknown	I-35W @ CR J - North Entrance Ramp	\$800,000					\$800,000	
Unknown	CSAH 56 Railroad Grade Seperation	\$750,000			\$750,000		\$1,500,000	
	Misc Services	\$500,000					\$500,000	
2019 CONSU	TANT SERVICES TOTALS	\$2,050,000	\$0	\$0	\$750,000	\$0	\$2,800,000	
PLANNING/S'	TUDIES							
	Corridor Studies	\$250,000					\$250,000	***************************************
	Evironmental Studies	\$250,000					\$250,000	
2019 PLANNI	NG/STUDIES TOTALS	\$500,000	\$0	\$0	\$0	\$0	\$500,000	
						-		
2019 HIGHWA	Y PROGRAM TOTALS	\$33,488,510	\$7,500,000	\$0	\$5,500,000	\$7,000,000	\$53,488,510	



ANOKA COUNTY HIGHWAY DEPARTMENT 2020 Unfunded Highway Improvement Plan

SHIZHE

				FUND	DING			
Project #	Description	County	Federal	State	City/Town	Other	Total	Notes
2020								
Rehabilitatio	n	\$9,750,000					\$9,750,000	
20-01-00	Overlays (Bituminous And Concrete)	\$8,500,000					\$8,500,000	
20-02-00	Crack Sealing	\$750,000					\$750,000	
20-07-00	Bridge Maintenance	\$300,000					\$300,000	
20-09-00	Signal Painting	\$100,000					\$100,000	
Unassigned	RR Crossing Repairs	\$100,000					\$100,000	BNSF RR
Reconstructi	on Program (2955)	\$15,000,000	\$0	\$0	\$3,500,000	\$0	\$18,500,000	
Unknown	CR 18 from Andover Blvd. to CSAH 78	\$5,000,000			\$1,500,000		\$6,500,000	
Unknown	CSAH 78 from CSAH 11 to CSAH 14	\$4,000,000			\$1,000,000		\$5,000,000	
Unknown	CSAH 116 from CSAH 57 to CSAH 56	\$6,000,000			\$1,000,000		\$7,000,000	
Traffic Mana	gement (2935)	\$1,100,000	\$0	\$0	\$0	\$0	\$1,100,000	
20-??-00	ATMS Interconnect (2935)	\$500,000					\$500,000	
20-??-00	FYA Conversions (2935)	\$100,000					\$100,000	
	Misc Projects	\$500,000					\$500,000	
Infrastructur	e Improvement Programs	\$2,588,510					\$2,588,510	
	RR Grade Seperation Projects (2956)	\$750,000						For Future Project TBD
	TH 10 Improvements (2957)	\$1,000,000						For Future Project TBD
TB/Local	CR Turnbacks/Local Initiated Projects (2955)	\$500,000					\$500,000	
RTC	Annual Payment (2955)	\$338,510					\$338,510	
2020 CONST	RUCTION TOTALS	\$28,438,510	\$0	\$0	\$3,500,000	\$0	\$31,938,510	
ROW ACQUI								
Unknown	I-35W @ CR J - North Entrance Ramp	\$500,000					\$500,000	
Unknown	CSAH 56 Railroad Grade Seperation	\$3,000,000			\$2,000,000			Other = CTIB
	Hisc Acquisition	\$250,000					\$250,000	
2020 ROW A	QUISITION TOTALS	\$3,750,000	\$0	\$0	\$2,000,000	\$0	\$5,750,000	
CONSULTAN	IT SERVICES							
	Misc Services	\$500,000					\$500,000	
2020 CONSU	ILTANT SERVICES TOTALS	\$500,000	\$0	\$0	\$0	\$0	\$500,000	
PLANNINGIS	TUDIES							
	Corridor Studies	\$250,000					\$250,000	
	Evironmental Studies	\$250,000					\$250,000	
2020 PLANN	INGISTUDIES TOTALS	\$500,000	\$0	\$0	\$0	\$0	\$500,000	
2020 LICHIM	AY PROGRAM TOTALS	\$33,188,510	S0	\$0	\$5,500,000	\$0	\$38,688,510	

Questions

ACEC of Minnesota County Forecasting Seminar May 20, 2016

Douglas W. Fischer, PE
County Engineer
Anoka County Highway Department