Wyoming DOT Story

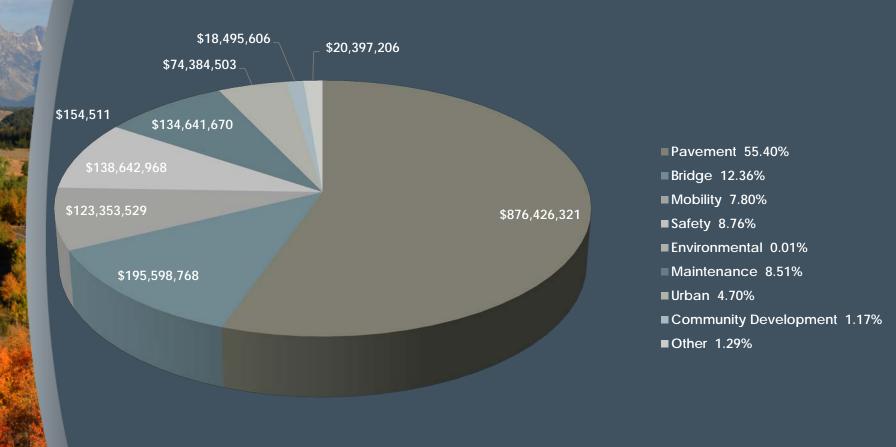
Martin Kidner State Planning Engineer martin.kidner@wyo.gov



MAP-21 and FAST Act Push

- Draft TAMP due April 2018
- Most federal targets must be set October 1, 2018
- Desire to set targets earlier
 - March for targets for TAMP
 - January investment plan done
 - December how to plan done
- STIP shows how projects affect the performance
- Long Range Transportation Plan documents measurements

Wyoming's Proposed STIP Expenditures Cost Breakdown by Asset Category Statewide Years 2018 - 2023



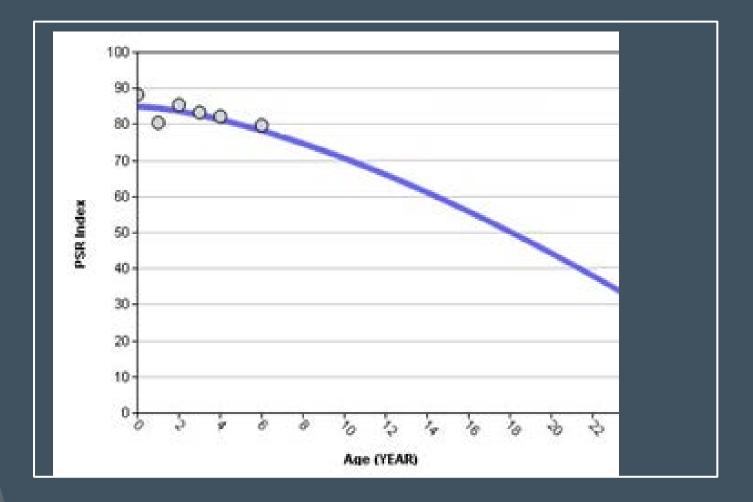


Target setting is cyclic

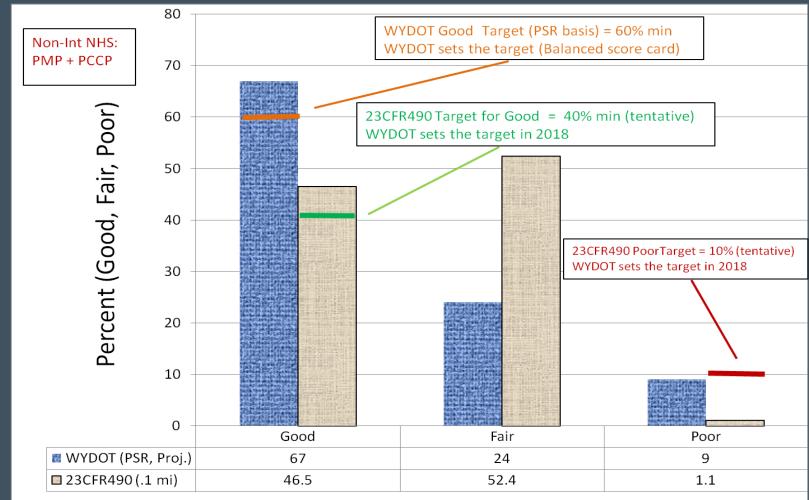
- Technical Methods
 - provide series of projections based on investment scenarios
- Business Process
 - Other transportation needs competing for funds



Our pavement models are still good, but....



Non Interstate Condition WYDOT and 23CFR490 Definitions for Good, Fair, Poor



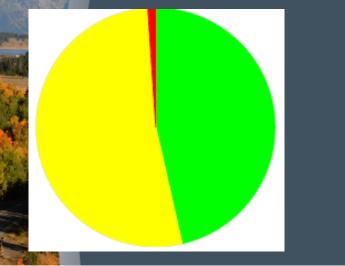
C23 CFR 490 - NATIONAL PERFORMANCE MANAGEMENT MEASURES



HPMS Report Card and Fact Book

Non –Interstate NHS

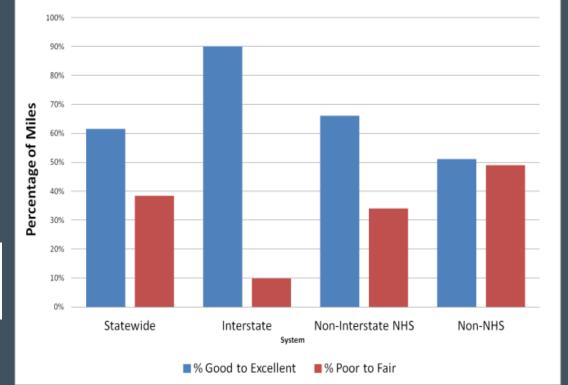
2016 data Submitted June 2017

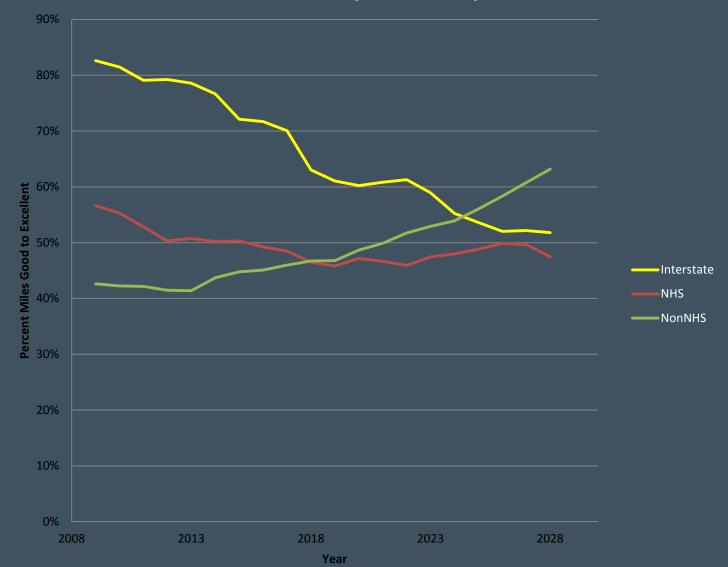


LANE MILES FULL EXTENT GOOD (46.48%) LANE MILES FULL EXTENT FAIR (52.45%) LANE MILES FULL EXTENT POOR (1.08%)

2016 Fact Book

Statewide Highway System Pavement Condition [Includes all surfacing improvements through 2015]





Interstate - 20% Systems Comparison

DEPARTMENT

Condition Projections 4% Inflation Rate



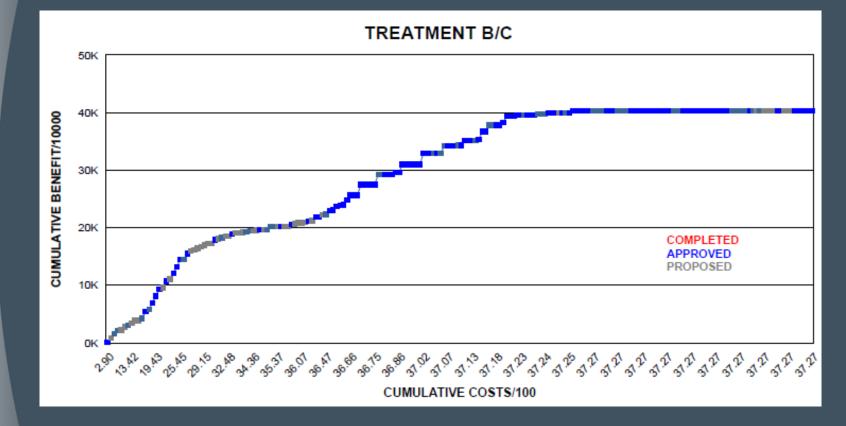


ANNUAL FATALITIES & 5 YEAR AVERAGE FATALITIES





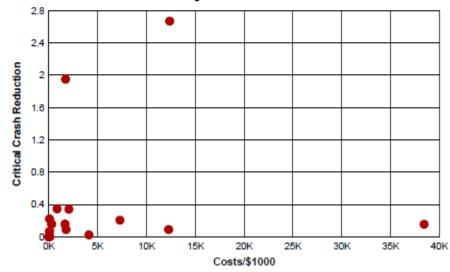
Understand the candidate treatments





DISTRICT 3	Critical Crash Reduction	Costs/\$1000
Treatment Type		
ADD DILEMMA ZONE PROTECTION	0.00	0
ADD RIGHT TURN LANE ACCEL - RURAL LONG	0.00	0
CENTER LINE RUMBLE STRIPES RURAL	1.95	1715
CHIP SEAL	0.34	2049
CORRECT SUPER - REBUILD CURVE - FOUR PCT	0.09	12273
DELINEATION	0.00	1
NO PASSING	0.22	73
RUNAWAY TRUCK RAMP	0.00	88
SAFETY GRADING	0.09	1762
SET OF SIGNS FOR CURVE	0.07	71
SNOW FENCE	0.21	7281
STRIPING - EPOXY PAINT	2.67	12380
ULTRAGUARD	0.01	14
UPGRADE GUARDRAIL	0.16	1660
UPGRADE WILD ANIMAL FENCE	0.35	846
VARIABLE SPEED LIMITS-INTERSTATE ONE DIRECTION	0.16	290
WIDEN SHOULDER - FOUR FEET - MED VOL - MED GRADING	0.16	38442
WILDLIFE CROSSING STRUCTURES	0.03	4100

It is about crash reduction!

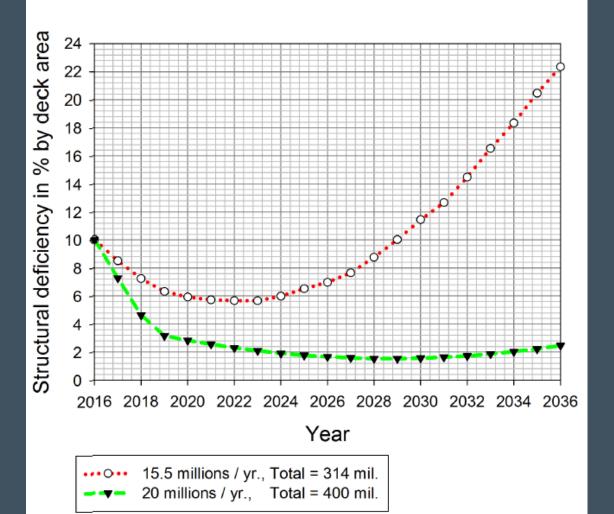


Safety Treatments



Bridge Funding Comparison

Structural Deficiency vs. Year (Using total unit cost)



District BMS Targets & Candidate List

		Distric	t 2 B						Distri	ct 2 Fiscal	Priscal Year 2021 BMS Candidates												
		Deck Treatment	N												Ŀ			Т					
-	-+	(NBI Item 58 - Deck)	Fund								E E	RATING	RATING	9	COND. RAIING								
	— H	Total	\$7.72								DATE	RAT	8	RATING	\$ R								
	≿ F	Protect (NBI 8 & 7)	\$								S		ġ	2			°		ē	5			
	≞ Ľ	Repair (NBI 6)	\$\$							ш	Ē	COND.	COND.	COND.		ਹ ਦੇ ਕੋ		i	, je	EA			
		Minor Rehab (NBI 5) Rehab (NBI 4)				L _		E E	щ	9	PE		<u>a</u>			Predicted	Deck		t Se	AF			
		Major Rehab (NBI 3)	\$ 5.6 \$ 2.12		E I	5		្រត្ត	ž	E	Ň.	NBI	R.	NBI			n Sa		L De ab \$ ires	5	<u>B</u>		
		Replace (NBI 2 & 1)	\$2.12 \$		SYSTEM LRS	FACILITY	đ	STRUCTURE	ΓΑΠΤΟΡΕ	LONGITUDE	LASTINSPECTION	DECK	SUPER NBI	SUB		2021 Deck	2021 Deck Rehab Strategy		2021 Deck Rehab \$ (Nearest \$5,000)	MAP-21 AREA (SF)	PROJECT	2	
	H	Total	\$6.4 ² 2	NHS		US 18	0.96		42.656575	-105.18528	3/9/2016			7 N		4	Rehab	Ś			N401017		
	⊊⊢	Protect (NBI 8 & 7)	\$ -																				
	≞ Ľ	Repair (NBI 6)	<u>\$</u> 2	NHS		I-25 SBL	39.24		41.544633	-104.89163	4/25/2016			5 N			Rehab	\$			B202010		
		Minor Rehab (NBI 5)	\$ 2	NHS		I-25 SBL	117.47		42.573764	-105.07145	5/14/2015			7 N		4	Rehab	\$			B202010		
		Rehab (NBI 4) Major Rehab (NBI 3)	\$4.6(2	NHS	ML25I	I-25 NBL	35.80		41.496011	-104.89765	4/21/2016			5 N		4	Rehab	\$			B202010		
· · · · ·		Replace (NBI 2 & 1)	\$1.8 \$2	NHS		I-25 NBL	43.66		41.604956	-104.86285	5/25/2016			7 N		4	Rehab	\$			B202010		
-	-	Total	\$ 2 \$5.34 2	NHS	ML20106B			BMA	42.855547	-106.29178	1/13/2017			6 N		4	Rehab	\$			B212002		
1	2	Protect (NBI 8 & 7)	ć 👘	NHS		I-25 SBL	137.41		42.737683	-105.3772	1/9/2017			7 N		4	Rehab	\$			B212002		
	۶Ŀ	Repair (NBI 6)	è Z	NHS		I-25 SBL	160.87	_	42.823964		12/30/2015			7 N		4	Rehab	\$	300,000		B212002		
		Minor Rehab (NBI 5)	\$ 2	NHS		I-25 SBL	172.12		42.837467	-106.01437	2/6/2015			6 N		4	Rehab	\$			B212002		
		Rehab (NBI 4)	\$ 3.7	NHS	ML25D	I-25 SBL	204.62		43.085311	-106.3371	2/12/2016			7 N		4	Rehab	\$			1254159	2021	
	2022	Major Rehab (NBI 3)	\$1.6	NHS		I-25 NBL	110.55		42.486883	-105.03302	4/1/2015			7 N		4	Rehab	\$			B212002		
	ł	Replace (NBI 2 & 1)	\$ 2	NHS	ML25I	I-25 NBL	137.41		42.737861	-105.37722	1/9/2017			7 N		4	Rehab	\$			B212002		
	_ 1	Total	\$8.07 ²	NHS		I-25 NBL	139.76		42.755725	-105.40793	9/21/2015			7 N		4	Rehab	\$			B212002		
		Protect (NBI 8 & 7)	\$ 2	NHS		I-25 NBL	204.62		43.085325	-106.33652	2/12/2016			7 N		4	Rehab	\$			1254159	2021	
		Repair (NBI 6)	\$ 2	NHS	ML251	I-25 NBL	247.53		43.636631	-106.59398	4/15/2015			7 N		4	Rehab	\$	360,000		0255095		
		Minor Rehab (NBI 5)	\$ 2	NHS		I-25 SBL	126.13		42.652933	-105.19904	4/28/2015			7 N	N	4	Rehab	\$			B222001		
		Rehab (NBI 4)	\$5.9 [,] 2	NHS	ML25D	I-25 SBL	188.34	DKW	42.856983	-106.32737	4/27/2015	5 (6	7 N	N	4	Rehab	Ş	1,395,000	22,706	1254161	2022	
11	ין א	Major Rehab (NBI 3)	\$2.1.2	NHS	ML25I	I-25 NBL	126.13	CZW	42.652972	-105.1988	4/27/2015	5 7	7	7 N	N	4	Rehab	\$	495,000	8,046	B222001	2022	
11-	I	Replace (NBI 2 & 1)	\$ 2	NHS		I-25 NBL	165.91	_	42.837153	-105.89332	3/28/2016		5	7 N	N	4	Rehab	\$			1253116		
		ding includes additiona	1 25% o 2	NHS	ML25I	I-25 NBL	188.34	AIJ	42.857075	-106.32726	4/29/2015	5 7	7	7 N	N	4	Rehab	\$	1,010,000	16,443	1254161	2022	
		lization costs.	2	NHS	ML21B	WYO 220	57.62	BUC	42.437297	-107.20731	1/5/2016	5	7	6 N	N	4	Rehab	\$	450,000	7,353	B232001	2023	
	Fund	ding and candidate list (costs ir 2	NHS	ML21B	WYO 220	62.73	BUD	42.489853	-107.13973	1/5/2016	5 (6	5 N	N	4	Rehab	\$	340,000	5,534	B232001	2023	
			2	NHS		I-25 SBL	45.21	DCT	41.626556	-104.85473	5/25/2016			7 N	N	4	Rehab	\$	355,000	5,807	B232001	2023	
			2	NHS	ML25D	I-25 SBL	50.66	DCY	41.702225	-104.83092	5/16/2016	5 3	5	7 N	N	4	Rehab	\$	355,000	5,807	B232001	2023	
9			2	NHS	ML25D	I-25 SBL	59.01	ADG	41.803517	-104.79664	5/18/2016	5 3	5	7 N	N	4	Rehab	\$	155,000	2,509	B232001	2023	
197			2	NHS	ML25D	I-25 SBL	64.04	ADI	41.856883	-104.86232	3/17/2016	5 3	5	6 N	N	4	Rehab	\$	275,000	4,483	B232001	2023	
			2	NHS	ML25D	I-25 SBL	68.45	ADL	41.904122	-104.91647	12/28/2016	5 3	5	5 N	N	4	Rehab	\$	210,000	3,450	B232001	2023	
1 A 1			2	NHS	ML25D	I-25 SBL	246.30	MLA	43.627939	-106.57218	4/15/2015	5	7	7 N	N	4	Rehab	\$	700,000	11,352	1255118	2023	
礼物			2	NHS	ML25I	I-25 NBL	45.21	DCS	41.626286	-104.85427	5/25/2016	5	7	7 N	N	4	Rehab	\$	355,000	5,807	B232001	2023	

BMS Report

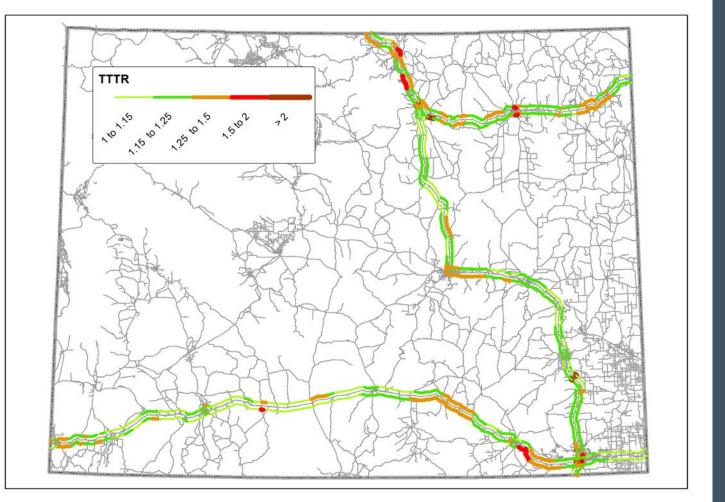
DISTRICT 2 BMS DECK REHAB TARGETS AS OF 04/24/2017

FY 2021

F1 2021																	
Deck Treatment			NH	IS			NON-NHS										
(NBI Item 58 - Deck)		rget		mmed	Programm	Ta	Target				nmed	Programmed - Target					
(NBI Itelli 56 - Deck)	Funding	Area (SF)	Funding	Area (SF)	Funding	Area (SF)	Funding	Funding Area (SF)		I	Funding	Area (SF)	Funding	Area (SF)			
Total	\$6.42 M	94,000	\$7.37 M	100,763	\$ 0.95 M	6,763	\$0.69 M		10,000	\$	0.80 M	10,906	10,906 \$0.11 M				
Protect (NBI 8 & 7)	\$-	-	\$-	-	\$-	-	\$ -		-	\$	-	-	\$ -	-			
Repair (NBI 6)	\$-	-	\$-	-	\$-	-	\$ -		-	\$	-	-	\$ -	-			
Minor Rehab (NBI 5)	\$-	-	\$0.44 M	11,352	\$ 0.44 M	\$-		-	\$	-	-	\$ -	-				
Rehab (NBI 4)	\$4.60 M	75,000	\$ 2.99 M	48,600	\$(1.61 M)	(26,400)	\$0.40 M		7,000	\$	0.45 M	7,290	\$0.05 M	290			
Major Rehab (NBI 3)	\$1.83 M	19,000	\$3.95 M	40,811	\$ 2.12 M	21,811	\$0.29 M		3,000	\$	0.35 M	3,615	\$0.06 M	615			
Replace (NBI 2 & 1)	\$-	-	\$-	-	\$ -	-	\$ -		-	\$	-	-	-				
PROJECT ID	STR	LRS	MP	SYSTEM	DECK	REHAB	AREA		BMS	ENGINEER'S		COMMENTS					
PROJECT ID	NO	ROUTE	IVIP		STRA	TEGY	(SF)	C	OST EST.	C	OST EST.			3			
0255095	AKA	ML25I	247.53	NHS	Rehab		5,822	\$	360,000								
0255095	AJV	ML25I	246.30	NHS	Minor Re	hab	11,352	\$	440,000								
1254159	AJA	ML25D	204.62	NHS	Rehab		5,811	\$	355,000								
1254159	AIZ	ML25I	204.62	NHS	Rehab		5,811	\$	355,000								
1254159	DOI	ML25I	210.41	NHS	Major Re	hab	6,169	\$	595,000								
B212002	AFJ	ML25I	110.55	NHS	Rehab		6,432	\$	395,000								
B212002	AFU	ML25D	137.41	NHS	Rehab		3,741	\$	230,000								
B212002	AFT	ML25I	137.41	NHS	Rehab		3,741	\$	230,000								
B212002	AGB	ML25I	139.76	NHS	Rehab		5,693	\$	350,000								
B212002	AGY	ML25D	160.87	NHS	Rehab		4,884	\$	300,000								
B212002	BMA	ML20106B	0.01	NHS	Rehab		4,140	\$	255,000								
B212002	AHM	ML25D	172.12	NHS	Rehab		2,523	\$	155,000								
B212002	CWZ	ML34B	187.83	NHS	Major Re	hab	34,643	\$	3,350,000								
B212002	ACQ	ML1118B	14.31	NON-NHS	Rehab		2,845	\$	175,000								
B212002	CUE	ML1610B	2.52	NON-NHS	Rehab		4,445	\$	275,000								
B212002	ADQ	ML1619B	2.45	NON-NHS	Major Re	hab	3,615	\$	350,000								

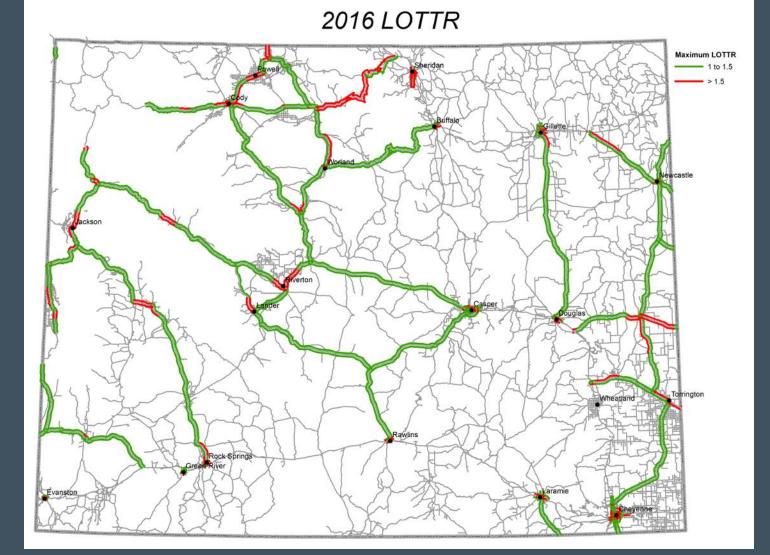








Congestion







Martin Kidner State Planning Engineer martin.kidner@wyo.gov

