Year	PM	Budget	Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2021	4%	$1,496,000	II $8,017	Non-Project	$37,964	$0	$86,427,268	Funded	$23,503
			III $520,195					Unmet	$0
			IV $889,962	Project	$0				
			V $15,648						
			Total $1,433,822						
			Project $0						
2022	4%	$1,496,000	II $2,974	Non-Project	$42,493	$365	$93,782,273	Funded	$16,982
			III $160,898					Unmet	$0
			IV $1,261,120	Project	$0				
			V $10,293						
			Total $1,435,285						
			Project $0						
2023	5%	$1,496,000	II $0	Non-Project	$45,982	$611	$101,047,133	Funded	$28,207
			III $0					Unmet	$0
			IV $1,337,448	Project	$0				
			V $83,356						
			Total $1,420,804						
			Project $0						
2024	5%	$1,496,000	II $0	Non-Project	$57,404	$0	$108,200,657	Funded	$20,722
			III $285,293					Unmet	$0
			IV $1,103,369	Project	$0				
			V $26,769						
			Total $1,415,431						
			Project $0						
2025	0%	$150,000	II $0	Non-Project	$0	$0	$118,486,708	Funded	$302
			III $131,064					Unmet	$3,192,408
			IV $0	Project	$0				
			V $18,635						
			Total $149,699						
			Project $0						
2026	0%	$150,000	II $3,613	Non-Project	$0	$0	$129,387,989	Funded	$436
			III $124,422					Unmet	$47,659
			IV $0	Project	$0				
			V $21,531						
			Total $149,566						
			Project $0						
2027	0%	$150,000	II $12,812	Non-Project	$0	$0	$138,576,498	Funded	$1,969
			III $135,221					Unmet	$34,447
			IV $0	Project	$0				
			V $0						
			Total $148,033						
			Project $0						

Year	PM	Budget	Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2028	0%	$150,000	II	$0	Non-Project	$0	$0	$149,289,869	Funded	$1,203
			III	$112,566					Unmet	$94,863
			IV	$0	Project	$0				
			V	$36,231						
			Total	$148,797						
			Project	$0						
2029	0%	$150,000	II	$17,789	Non-Project	$0	$0	$159,491,347	Funded	$981
			III	$0					Unmet	$52,749
			IV	$0	Project	$0				
			V	$131,231						
			Total	$149,020						
			Project	$0						
2030	0%	$150,000	II	$9,690	Non-Project	$0	$0	$171,912,164	Funded	$2,183
			III	$93,536					Unmet	$4,498,396
			IV	$0	Project	$0				
			V	$44,594						
			Total	$147,820						
			Project	$0						
2031	0%	$150,000	II	$4,614	Non-Project	$0	$0	$187,751,945	Funded	$1,486
			III	$122,675					Unmet	$128,399
			IV	$0	Project	$0				
			V	$21,227						
			Total	$148,516						
			Project	$0						
2032	0%	$150,000	II	$0	Non-Project	$0	$0	$200,803,978	Funded	$1,810
			III	$131,654					Unmet	$69,731
			IV	$0	Project	$0				
			V	$16,537						
			Total	$148,191						
			Project	$0						
2033	0%	$150,000	II	$0	Non-Project	$0	$0	$216,429,259	Funded	$48
			III	$149,952					Unmet	$254,704
			IV	$0	Project	$0				
			V	$0						
			Total	$149,952						
			Project	$0						
2034	0%	$150,000	II	$0	Non-Project	$0	$0	$235,991,359	Funded	$314
			III	$118,599					Unmet	$173,457
			IV	$0	Project	$0				
			V	$31,088						
			Total	$149,687						
			Project	$0						

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	$870,425	$64,732	$37	$12,912
Collector	$14,487,290	$303,844	$88,109	$5,305,302
Other	$0	$0	$2,249	$19,980
Residential/Local	$554,790	$0	$74,572	$5,781,808
Grand Total:	$15,912,505	$368,576	$164,967	$11,120,002

Scenarios - Network Condition Summary

Interest: 5% Inflation: 5% Printed: 09/14/2015

Scenario: Scenario 9 - CSAC Funding
$1.496M/year

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2015	$1,496,000	0%	2022	$1,496,000	4%	2029	$150,000	0%
2016	$1,496,000	5%	2023	$1,496,000	5%	2030	$150,000	0%
2017	$1,496,000	2%	2024	$1,496,000	5%	2031	$150,000	0%
2018	$1,496,000	6%	2025	$150,000	0%	2032	$150,000	0%
2019	$1,496,000	4%	2026	$150,000	0%	2033	$150,000	0%
2020	$1,496,000	0%	2027	$150,000	0%	2034	$150,000	0%
2021	$1,496,000	4%	2028	$150,000	0%			

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2015	57	58	9.00	17.99
2016	54	56	9.32	18.64
2017	51	53	8.20	16.40
2018	48	51	16.57	33.13
2019	45	49	15.48	30.96
2020	42	46	5.76	11.52
2021	38	44	30.19	60.37
2022	35	42	19.26	38.52
2023	32	39	9.81	19.62
2024	29	38	17.67	35.33
2025	26	35	0.54	1.08
2026	24	33	0.68	1.35
2027	22	32	0.56	1.13
2028	19	30	0.54	1.09
2029	17	29	0.37	0.73
2030	16	27	0.37	0.73
2031	14	26	0.43	0.87
2032	13	24	0.48	0.96
2033	11	23	0.40	0.81
2034	10	22	0.32	0.65

Percent Network Area by Functional Class and Condition Category

Condition in base year 2015, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	0.2%	18.3%	10.5%	0.7%	29.7%
II / III	0.7%	19.7%	11.1%	0.0%	31.6%
IV	0.0%	12.7%	18.8%	0.0%	31.4%
V	0.0%	2.1%	5.2%	0.0%	7.3%
Total	0.9%	52.7%	45.7%	0.7%	100.0%

Condition in year 2015 after schedulable treatments applied.

Scenarios - Network Condition Summary

Interest: 5% Inflation: 5% Printed: 09/14/2015

Scenario: Scenario 9 - CSAC Funding
$1.496M/year

Condition	Arterial	Collector	Res/Loc	Other	Total
I	0.4%	20.6%	10.5%	0.7%	32.3%
II / III	0.5%	17.3%	11.1%	0.0%	29.0%
IV	0.0%	12.7%	18.8%	0.0%	31.4%
V	0.0%	2.1%	5.2%	0.0%	7.3%
Total	0.9%	52.7%	45.7%	0.7%	100.0%

Condition in year 2034 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	0.5%	5.0%	0.3%	0.0%	5.8%
II / III	0.4%	12.0%	4.6%	0.5%	17.5%
IV	0.0%	5.4%	8.8%	0.2%	14.5%
V	0.0%	30.3%	31.9%	0.0%	62.2%
Total	0.9%	52.7%	45.7%	0.7%	100.0%

APPENDIX D

Section Selected for Treatments

Scenario 2: Existing Budget ($150K/Yr)

Scenarios - Sections Selected for Treatment

Interest: 5.00% Inflation: 5.00% Printed: 07/27/2015

Scenario: Scenario 2 - Existing Budget

Year	Budget	% PM	Year	Budget	% PM	Year	Budget	% PM
2015	$150,000	0%	2016	$150,000	0%	2017	$150,000	0%
2018	$150,000	0%	2019	$150,000	0%	2020	$150,000	0%
2021	$150,000	0%	2022	$150,000	0%	2023	$150,000	0%
2024	$150,000	0%	2025	$150,000	0%	2026	$150,000	0%
2027	$150,000	0%	2028	$150,000	0%	2029	$150,000	0%
2030	$150,000	0%	2031	$150,000	0%	2032	$150,000	0%
2033	$150,000	0%	2034	$150,000	0%			

Year: 2015

Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment
OLD HIGHWAY 49	AMADOR CITY CITY LIMIT (West)	HWY 49	OLD49	200	3,168	32	101,376	5/5/2015	RMiA	AC	100	$146,432	34,107	5% LOCALIZED REPAIR WITH INLAYS
								Treatment Total				$146,432		
GREENLEAF LANE	PINE PARK LOOP	END	GREELN	100	211	20	4,220	6/19/2015	R	AC	76	$2,814	17,761	CHIP SEAL OR CAPE SEAL
								Treatment Total				$2,814		
				Year 2015 Area Total			105,596	Year 2015 Total				$149,246		

Year: 2016

Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment
JACKSON VALLEY ROAD	MM 78 6.0	6950 JACKSON VALLEY RD	JACKVRD	1300	3,789	25	94,725	4/27/2015	RMiC	AC	100	$132,615	29,311	5% LOCALIZED REPAIR WITH INLAYS
SHENANDOAH ROAD	BRIDGE	EL DORADO CO LINE	SHENRD	2000	406	30	12,180	4/29/2015	RMaC	AC	100	$17,052	27,409	5% LOCALIZED REPAIR WITH INLAYS
								Treatment Total				$149,667		
				Year 2016 Area Total			106,905	Year 2016 Total				$149,667		

Year: 2017

Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment
CHARLESTON ROAD	MM 11 1.5	ROAD NARROW	CHARRD	400	320	20	6,400	4/29/2015	R	AC	100	$15,288	16,449	1.5" AC OVERLAY WITH 10% DIGOUTS
EUREKA ROAD	SUTTER CREEK CITY LIMITS	OLD RIDGE RD (N side only)	EURERD	100	253	9	2,277	6/19/2015	R	AC	100	$5,440	16,449	1.5" AC OVERLAY WITH 10% DIGOUTS

** - Treatment from Project Selection

Scenarios Criteria:

Scenarios - Sections Selected for Treatment

Interest: 5.00% Inflation: 5.00% Printed: 07/27/2015

Scenario: Scenario 2 - Existing Budget

												Treatment Total	$20,728	
CURRAN ROAD	MM 88 2.5	MM 88 3.0	CURRRD	600	2,618	22	57,596	4/20/2015	RMi C	AC	100	$84,667	27,563	5% LOCALIZED REPAIR WITH INLAYS
RIDGE ROAD	MM22 7.0	SANDAR ROAD	RIDGRD	1500	1,256	24	30,144	4/15/2015	RMa C	AC	100	$44,312	27,225	5% LOCALIZED REPAIR WITH INLAYS
												Treatment Total	$128,979	
					Year 2017 Area Total		96,417					Year 2017 Total	$149,707	

Year: 2018

Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment
MICHIGAN BAR ROAD	MM 74 3.0	HWY 104	MICHRD	700	337	40	13,480	5/6/2015	RMa C	AC	100	$34,678	17,781	1.5" AC OVERLAY WITH 10% DIGOUTS
												Treatment Total	$34,678	
RIDGE ROAD	17200 RIDGE ROAD	ARDEN CT	RIDGRD	1300	2,911	24	69,864	4/15/2015	RMa C	AC	100	$107,836	26,525	5% LOCALIZED REPAIR WITH INLAYS
												Treatment Total	$107,836	
SUGAR PINE COURT	SUGAR PINE DR	CDS	SUGACT	100	211	22	6,991	4/20/2015	R	AC	71	$5,396	14,196	CHIP SEAL OR CAPE SEAL
												Treatment Total	$5,396	
					Year 2018 Area Total		90,335					Year 2018 Total	$147,910	

Year: 2019

Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment
ALPINE COURT	ALPINE DR	END	ALPICT	100	53	28	3,673	6/26/2015	R	AC	100	$9,674	14,919	1.5" AC OVERLAY WITH 10% DIGOUTS
TABEAUD ROAD	MM16 6.5	HWY 88	TABERD	1700	1,000	22	22,000	4/22/2015	RMa C	AC	100	$59,425	17,210	1.5" AC OVERLAY WITH 10% DIGOUTS
												Treatment Total	$69,099	
HOMESTEAD ROAD	HWY 88	END	HOMERD	100	2,429	19	46,151	6/19/2015	RMi C	AC	100	$74,796	25,321	5% LOCALIZED REPAIR WITH INLAYS
												Treatment Total	$74,796	
OAK TRAIL	SHENANDOAH RD	EMIGRANT TRAIL	OAKTR	100	475	10	4,750	4/23/2015	R	AC	75	$3,850	11,580	CHIP SEAL OR CAPE SEAL
												Treatment Total	$3,850	

** - Treatment from Project Selection

Scenarios Criteria:

Scenarios - Sections Selected for Treatment

Interest: 5.00% Inflation: 5.00% Printed: 07/27/2015

Scenario: Scenario 2 - Existing Budget

				Year 2019 Area Total			76,574					Year 2019 Total		$147,745	
Year: 2020															
Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment	
RIDGE ROAD	MM22 2.5	MM22 3.0	RIDGRD	600	2,699	32	86,368	4/15/2015	RMaC	AC	100	$146,974	23,374	5% LOCALIZED REPAIR WITH INLAYS	
										Treatment Total		$146,974			
FERN TRAIL	CYPRUS TRAIL	CYPRUS TRAIL	FERNTR	100	317	10	3,170	6/19/2015	R	AC	77	$2,698	11,138	CHIP SEAL OR CAPE SEAL	
										Treatment Total		$2,698			
				Year 2020 Area Total			89,538					Year 2020 Total		$149,672	
Year: 2021															
Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment	
KIRKWOOD MEADOWS DR	ALPINE CO. LINE	HWY 88	KIRKDR	100	211	56	11,816	4/28/2015	RMiC	AC	100	$35,188	15,104	1.5" AC OVERLAY WITH 10% DIGOUTS	
										Treatment Total		$35,188			
CURRAN ROAD	MM 88 3.5	CAMANCHE RD	CURRRD	800	2,583	23	59,409	4/20/2015	RMiC	AC	100	$106,152	22,720	5% LOCALIZED REPAIR WITH INLAYS	
										Treatment Total		$106,152			
GREENLEAF LANE	PINE PARK LOOP	END	GREELN	100	211	20	4,220	6/19/2015	R	AC	78	$3,771	13,649	CHIP SEAL OR CAPE SEAL	
KYLE COURT	IRISHTOWN ROAD	END	KYLECT	100	198	24	4,752	6/19/2015	R	AC	78	$4,246	10,600	CHIP SEAL OR CAPE SEAL	
										Treatment Total		$8,017			
				Year 2021 Area Total			80,197					Year 2021 Total		$149,357	
Year: 2022															
Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment	
ALPINE DRIVE	ALPINE COURT	END	ALPIDR	200	528	20	14,331	6/26/2015	R	AC	100	$43,692	12,888	1.5" AC OVERLAY WITH 10% DIGOUTS	
										Treatment Total		$43,692			
TIGER CREEK ROAD	HWY 88	END	TIGERD	100	2,007	28	56,196	4/23/2015	RMiC	AC	100	$105,432	21,360	5% LOCALIZED REPAIR WITH INLAYS	

** - Treatment from Project Selection

Scenarios Criteria:

Scenarios - Sections Selected for Treatment

Interest: 5.00% Inflation: 5.00% Printed: 07/27/2015

Scenario: Scenario 2 - Existing Budget

													Treatment Total		$105,432
				Year 2022 Area Total			70,527						Year 2022 Total		$149,124

Year: 2023

Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment
AMADOR CREEK ROAD	AMADOR CITY LIMIT	TURNER RD	AMADCRD	100	686	12	8,232	5/12/2015	R	AC	100	$26,352	12,274	1.5" AC OVERLAY WITH 10% DIGOUTS
												Treatment Total		$26,352
SUTTER CREEK ROAD	17000 SUTTER CREEK ROAD	PAVEMENT CHANGE	SUTTRD	1400	3,032	20	60,640	5/10/2015	RMiC	AC	100	$119,458	20,699	5% LOCALIZED REPAIR WITH INLAYS
												Treatment Total		$119,458
				Year 2023 Area Total			68,872					Year 2023 Total		$145,810

Year: 2024

Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment
BARTON COURT	BARTON RD	END	BARTCT	100	211	21	6,384	6/26/2015	R	AC	100	$21,458	11,690	1.5" AC OVERLAY WITH 10% DIGOUTS
CEDAR HEIGHTS DRIVE	SILVER DR	MADRONE LN	CEDADR	200	317	17	5,389	5/13/2015	R	AC	100	$18,114	11,690	1.5" AC OVERLAY WITH 10% DIGOUTS
RIVER LANE	RIVER TRAIL	END	RIVELN	100	158	10	1,580	4/29/2015	R	AC	100	$5,311	11,690	1.5" AC OVERLAY WITH 10% DIGOUTS
												Treatment Total		$44,883
SUTTER CREEK ROAD	MM12 10.5	MM12 11.0	SUTTRD	2300	2,680	18	48,240	5/10/2015	RMiC	AC	100	$99,782	19,737	5% LOCALIZED REPAIR WITH INLAYS
												Treatment Total		$99,782
OAK TRAIL	SHENANDOAH RD	EMIGRANT TRAIL	OAKTR	100	475	10	4,750	4/23/2015	R	AC	76	$4,913	9,115	CHIP SEAL OR CAPE SEAL
												Treatment Total		$4,913
				Year 2024 Area Total			66,343					Year 2024 Total		$149,578

Year: 2025

Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment
BEVERS WAY	WILLIAMS RD	END	BEVEWY	100	739	12	8,868	7/15/2015	R	AC	100	$31,298	11,133	1.5" AC OVERLAY WITH 10% DIGOUTS

Scenarios - Sections Selected for Treatment

Interest: 5.00% Inflation: 5.00% Printed: 07/27/2015

Scenario: Scenario 2 - Existing Budget

												Treatment Total	$31,298	
SUTTER CREEK ROAD	MM12 9.5	MM12 10.0	SUTTRD	2100	2,669	20	53,380	5/10/2015	RMi C	AC	100	$115,934	17,272	5% LOCALIZED REPAIR WITH INLAYS
												Treatment Total	$115,934	
				Year 2025 Area Total			62,248					Year 2025 Total	$147,232	

Year: 2026

Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment
COLLINGS ROAD	END GRAVEL	END	COLLRD	200	216	15	3,240	5/4/2015	R	AC	100	$12,007	10,603	1.5" AC OVERLAY WITH 10% DIGOUTS
												Treatment Total	$12,007	
JACKSON VALLEY ROAD	HWY 88	3421 JACKSON VALLEY RD	JACKVRD	200	2,321	26	60,346	4/27/2015	RMi C	AC	100	$137,617	16,837	5% LOCALIZED REPAIR WITH INLAYS
												Treatment Total	$137,617	
				Year 2026 Area Total			63,586					Year 2026 Total	$149,624	

Year: 2027

Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment
CEDAR LANE	EMIGRANT TRAIL	END	CEDALN	100	422	8	3,376	5/14/2015	R	AC	100	$13,137	10,098	1.5" AC OVERLAY WITH 10% DIGOUTS
												Treatment Total	$13,137	
SUTTER CREEK ROAD	MM12 11.0	MM12 11.5	SUTTRD	2400	2,728	20	54,560	5/10/2015	RMi C	AC	100	$130,643	16,325	5% LOCALIZED REPAIR WITH INLAYS
												Treatment Total	$130,643	
KYLE COURT	IRISHTOWN ROAD	END	KYLECT	100	198	24	4,752	6/19/2015	R	AC	77	$5,690	7,918	CHIP SEAL OR CAPE SEAL
												Treatment Total	$5,690	
				Year 2027 Area Total			62,688					Year 2027 Total	$149,470	

Year: 2028

Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment
CLIMAX ROAD	PIONEER DR	JUNE WAY	CLIMRD	200	2,353	24	56,472	6/29/2015	RMa C	AC	100	$141,982	16,079	5% LOCALIZED REPAIR WITH INLAYS

** - Treatment from Project Selection

Scenarios Criteria:

									Treatment Total				$141,982		
FERN AVENUE	CYPRUS TRAIL	CANYON AVE	FERNAV	100	264	10	2,640	6/19/2015	R	AC	74	$3,319	7,436	CHIP SEAL OR CAPE SEAL
FERN TRAIL	CYPRUS TRAIL	CYPRUS TRAIL	FERNTR	100	317	10	3,170	6/19/2015	R	AC	74	$3,986	7,435	CHIP SEAL OR CAPE SEAL
									Treatment Total				$7,305		
				Year 2028 Area Total			62,282		Year 2028 Total				$149,287		

Year: 2029

Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment
CHAPARRAL TRAIL	OAK AVE	MEADOW VISTA RD	CHAPTR	100	581	10	5,810	6/12/2015	R	AC	100	$24,925	9,159	1.5" AC OVERLAY WITH 10% DIGOUTS
									Treatment Total			$24,925		
STEINER ROAD	OAKSTREAM RD	PAVEMENT CHANGE AT 15 MPG SIGN	STEIRD	400	2,132	21	44,772	4/16/2015	RMiC	AC	100	$118,194	15,426	5% LOCALIZED REPAIR WITH INLAYS
									Treatment Total			$118,194		
GREENLEAF LANE	PINE PARK LOOP	END	GREELN	100	211	20	4,220	6/19/2015	R	AC	78	$5,571	9,220	CHIP SEAL OR CAPE SEAL
									Treatment Total			$5,571		
				Year 2029 Area Total			54,802		Year 2029 Total			$148,690		

Year: 2030

Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment
CLARK STREET	CHURCH ST	MAIN ST	CLARST	100	264	17	4,488	5/5/2015	R	AC	100	$20,216	8,723	1.5" AC OVERLAY WITH 10% DIGOUTS
									Treatment Total			$20,216		
RIDGE ROAD	MM22 7.0	SANDAR ROAD	RIDGRD	1500	1,256	24	30,144	4/15/2015	RMaC	AC	100	$83,557	10,782	5% LOCALIZED REPAIR WITH INLAYS
SHENANDOAH ROAD	BRIDGE	EL DORADO CO LINE	SHENRD	2000	406	30	12,180	4/29/2015	RMaC	AC	100	$33,762	11,428	5% LOCALIZED REPAIR WITH INLAYS
									Treatment Total			$117,319		
FREMONT COURT	FREMONT RD	END	FREMCT	100	211	26	6,991	6/29/2015	R	AC	77	$9,690	6,839	CHIP SEAL OR CAPE SEAL
									Treatment Total			$9,690		

Scenarios - Sections Selected for Treatment

Interest: 5.00% Inflation: 5.00% Printed: 07/27/2015

Scenario: Scenario 2 - Existing Budget

				Year 2030 Area Total			53,803					Year 2030 Total		$147,225	
Year: 2031															
Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment	
ALTA VISTA COURT	MEADOW DR	END	ALTACT	100	739	19	17,809	6/26/2015	R	AC	100	$84,229	8,308	1.5" AC OVERLAY WITH 10% DIGOUTS	
FERN LANE	PINE TRAIL	PINE TRAIL	FERNLN	100	370	10	3,700	6/19/2015	R	AC	100	$17,500	8,308	1.5" AC OVERLAY WITH 10% DIGOUTS	
										Treatment Total		$101,729			
MICHIGAN BAR ROAD	MM 74 3.0	HWY 104	MICHRD	700	337	40	13,480	5/6/2015	RMaC	AC	100	$39,234	10,269	5% LOCALIZED REPAIR WITH INLAYS	
										Treatment Total		$39,234			
FERN AVENUE	CYPRUS TRAIL	CANYON AVE	FERNAV	100	264	10	2,640	6/19/2015	R	AC	78	$3,842	6,517	CHIP SEAL OR CAPE SEAL	
FERN TRAIL	CYPRUS TRAIL	CYPRUS TRAIL	FERNTR	100	317	10	3,170	6/19/2015	R	AC	78	$4,614	6,516	CHIP SEAL OR CAPE SEAL	
										Treatment Total		$8,456			
				Year 2031 Area Total			40,799					Year 2031 Total		$149,419	
Year: 2032															
Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment	
HOMESTEAD ROAD	HWY 88	END	HOMERD	100	2,429	19	46,151	6/19/2015	RMiC	AC	100	$141,039	9,780	5% LOCALIZED REPAIR WITH INLAYS	
										Treatment Total		$141,039			
KYLE COURT	IRISHTOWN ROAD	END	KYLECT	100	198	24	4,752	6/19/2015	R	AC	78	$7,262	6,210	CHIP SEAL OR CAPE SEAL	
										Treatment Total		$7,262			
				Year 2032 Area Total			50,903					Year 2032 Total		$148,301	
Year: 2033															
Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment	
ANTELOPE COURT	RIDGE DR	END	ANTECT	100	581	20	14,405	6/26/2015	R	AC	100	$75,113	7,535	1.5" AC OVERLAY WITH 10% DIGOUTS	
										Treatment Total		$75,113			

** - Treatment from Project Selection

Scenarios Criteria:

Scenarios - Sections Selected for Treatment

Interest: 5.00% Inflation: 5.00% Printed: 07/27/2015

Scenario: Scenario 2 - Existing Budget

Year: 2033

Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment
TABEAUD ROAD	MM16 6.5	HWY 88	TABERD	1700	1,000	22	22,000	4/22/2015	RMaC	AC	100	$70,595	9,872	5% LOCALIZED REPAIR WITH INLAYS
								Treatment Total				$70,595		
				Year 2034 Area Total			36,405	Year 2034 Total				$145,708		

Year: 2034

Road Name	Begin Location	End Location	Street ID	Section	Length	Width	Area	Last Inspected	FC	Surf Type	PCI	Cost	Rating	Treatment
EUREKA ROAD	SUTTER CREEK CITY LIMITS	OLD RIDGE RD (N side only)	EURERD	100	253	9	2,277	6/19/2015	R	AC	77	$4,795	4,696	CHIP SEAL WITH 5% DIGOUTS
								Treatment Total				$4,795		
BROKEN OAK ROAD	SILVER DR	BARTON RD	BROKRD	100	528	25	13,200	5/13/2015	RMiC	AC	100	$74,124	8,002	1.5" AC OVERLAY WITH 10% DIGOUTS
EZELLA COURT	WOODFERN DR	END	EZELCT	100	106	26	5,678	6/29/2015	R	AC	100	$31,088	7,177	1.5" AC OVERLAY WITH 10% DIGOUTS
								Treatment Total				$105,212		
KIRKWOOD MEADOWS DR	ALPINE CO. LINE	HWY 88	KIRKDR	100	211	56	11,816	4/28/2015	RMiC	AC	100	$39,812	8,870	5% LOCALIZED REPAIR WITH INLAYS
								Treatment Total				$39,812		
				Year 2034 Area Total			32,971	Year 2034 Total				$149,819		
				Total Section Area:			1,371,791	Grand Total				$2,972,591		

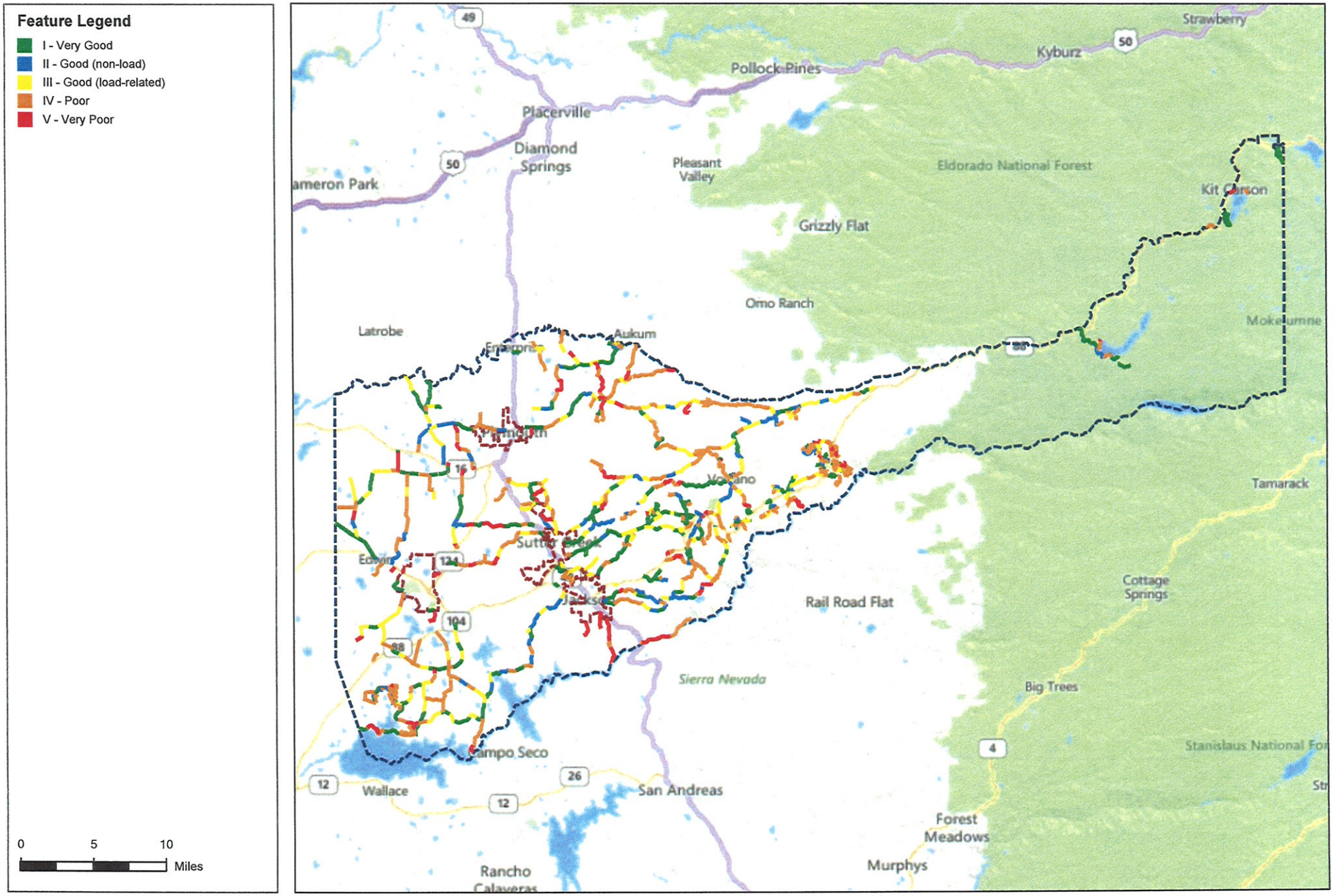
APPENDIX E

PCI Maps

Amador County

Current PCI Condition

Printed: 8/12/2015



Pavement Network Condition Projections

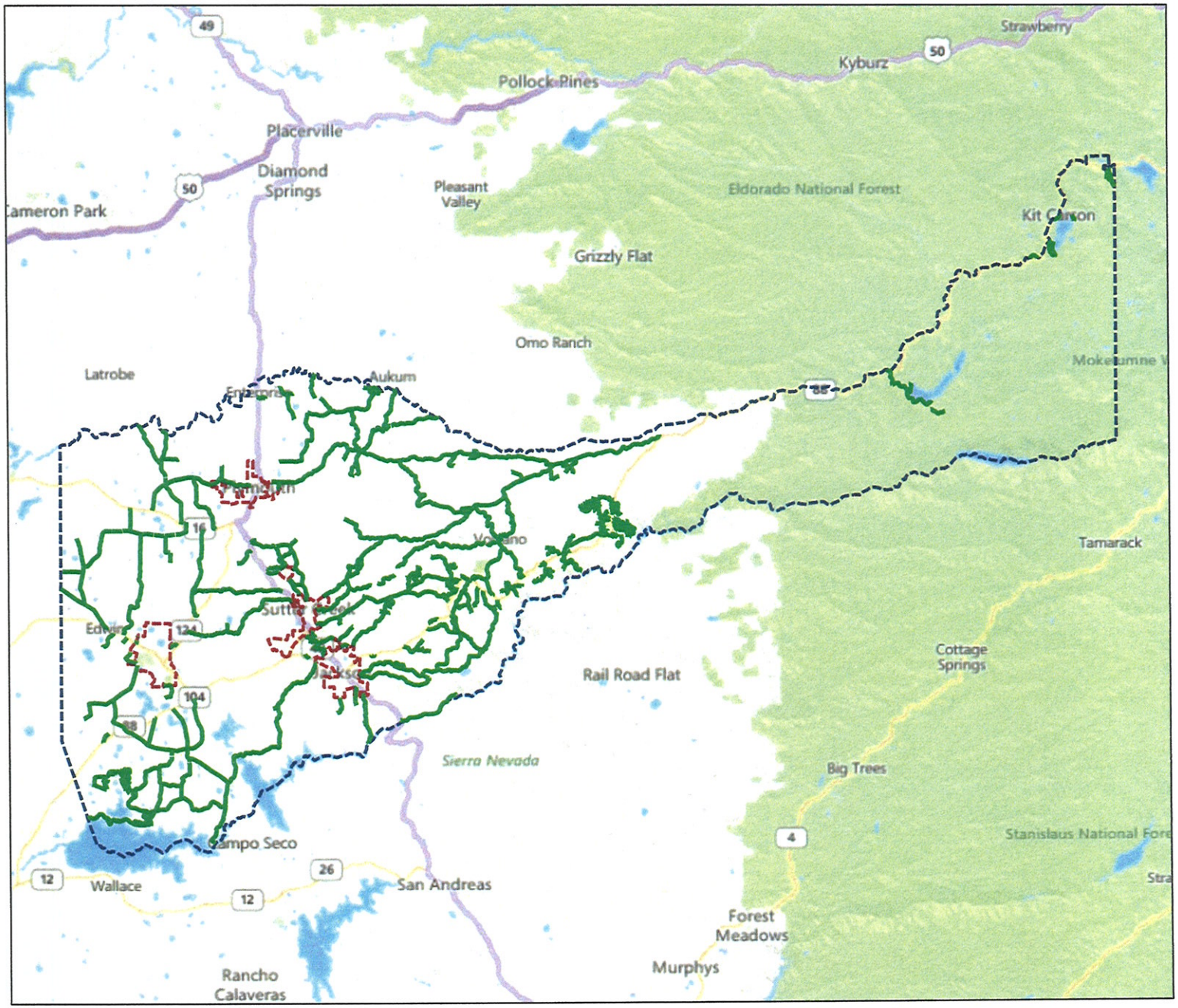
Amador County

Scenario PCI Condition

Scenario 1 - Unconstrained Budget - 2034 Project Period - Total Rehab: $9,584,795 - Printed: 8/13/2015

Feature Legend

I - Very Good



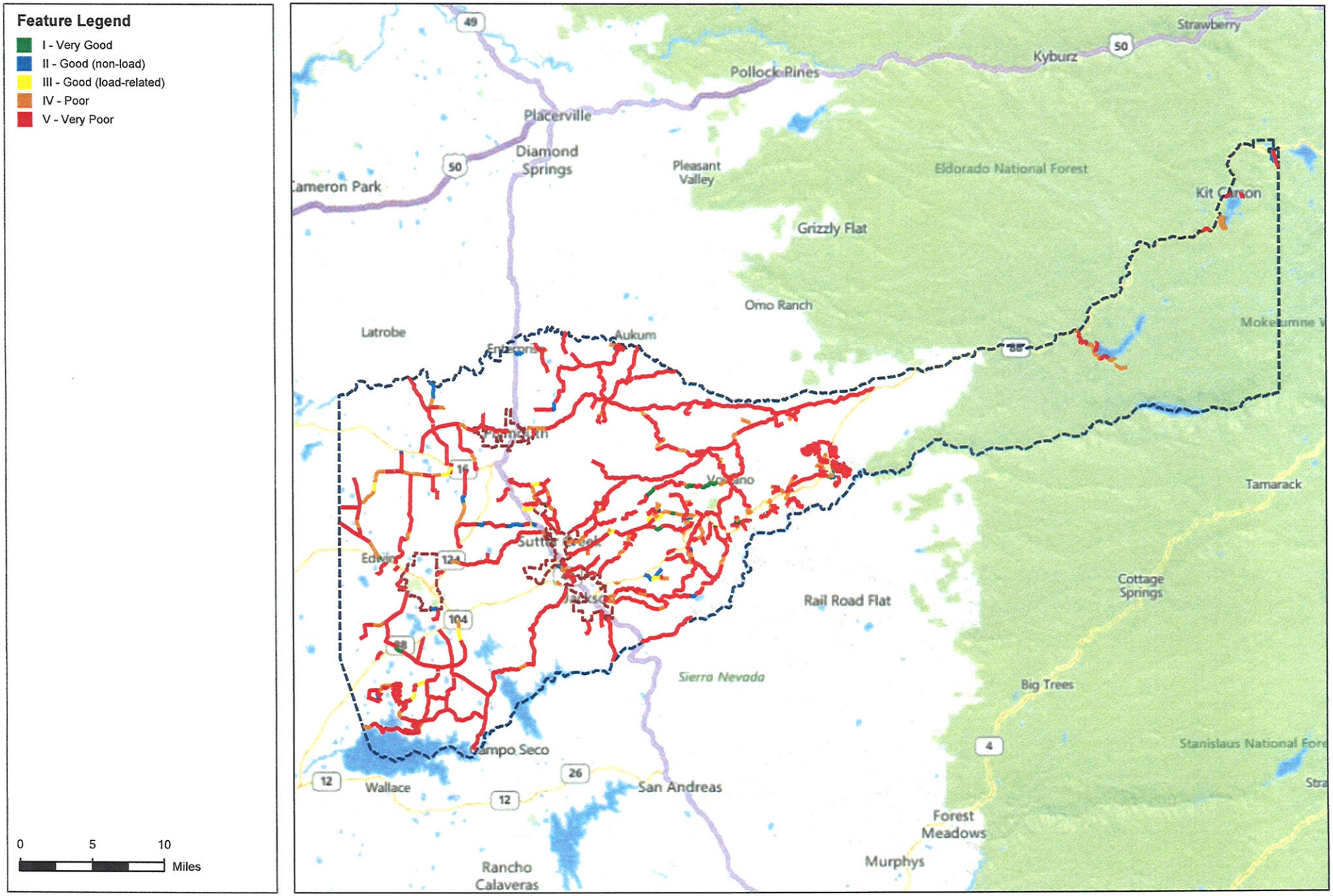
0 5 10 Miles

Scenario 2: Existing Budget ($150K/Yr)

Amador County

Scenario PCI Condition

Scenario 2 - Existing Budget - 2034 Project Period - Total Rehab: $149,819 - Printed: 8/13/2015

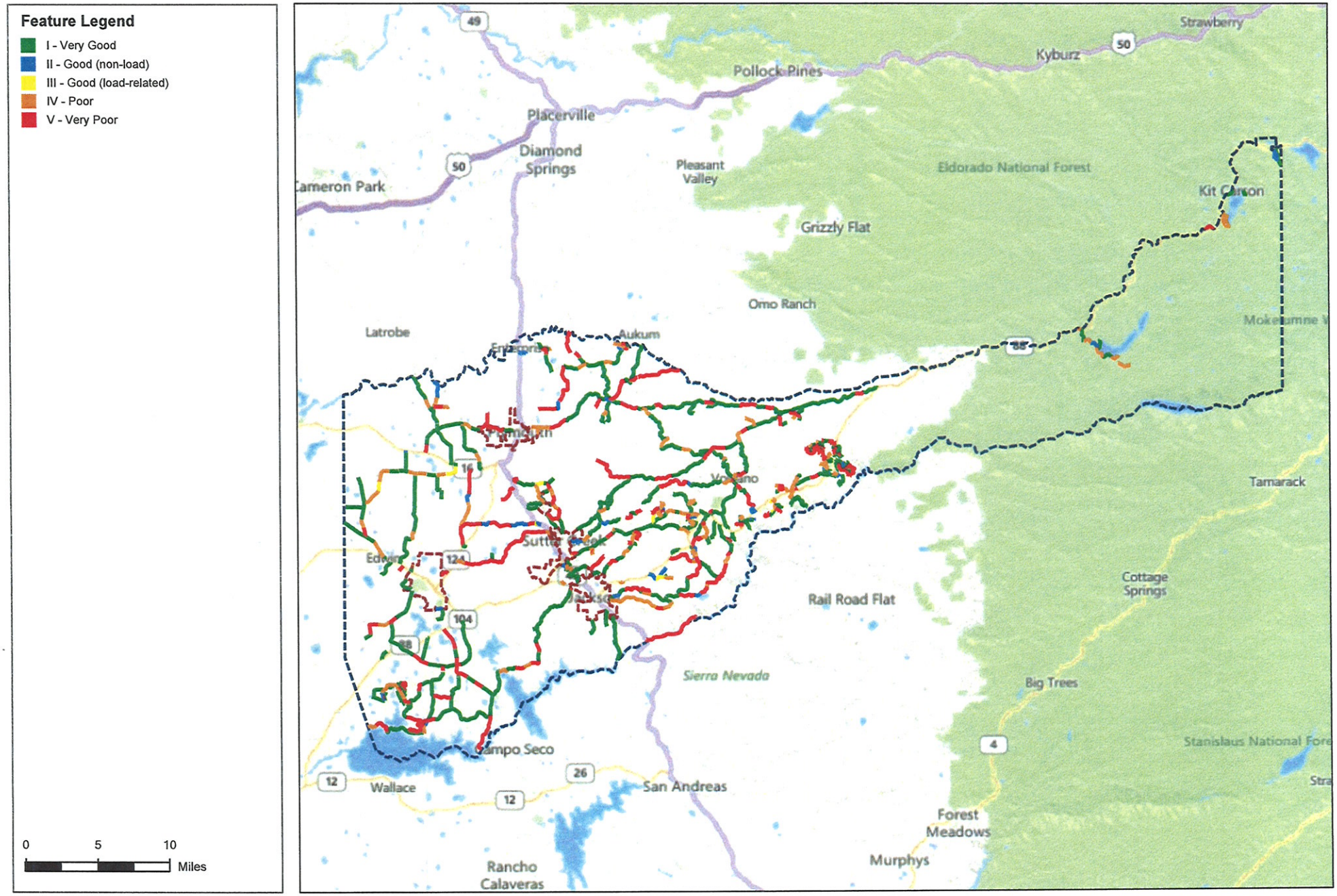


Scenario 3: **Maintain PCI at 57 ($98.9 Million)**

Amador County

Scenario PCI Condition

Scenario 3 - Maintain PCI at 57 - 2034 Project Period - Total Rehab: $8,815,769 - Printed: 8/13/2015

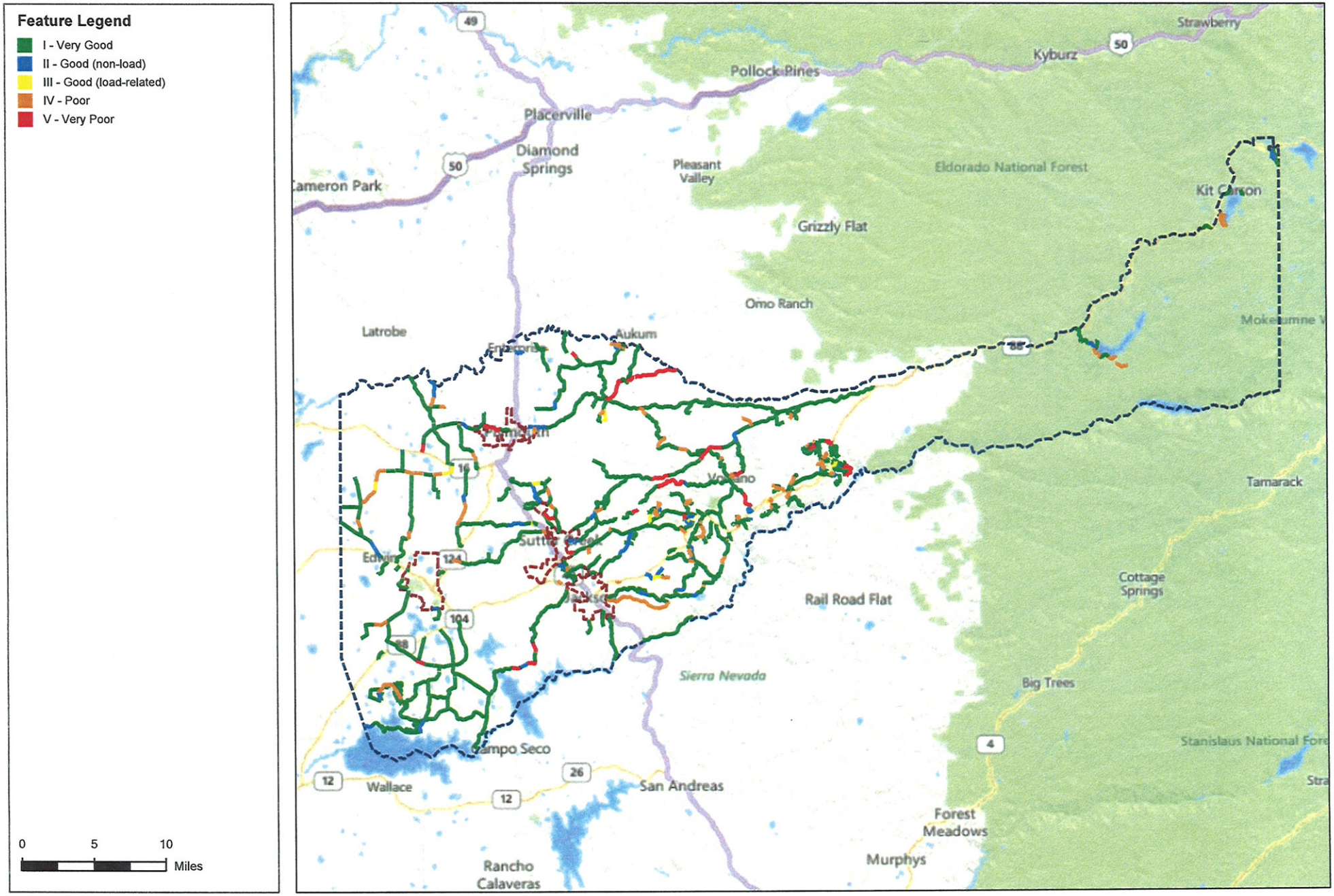


Scenario 4A: Improve PCI to 70 by 2024 ($127.3 Million)

Amador County

Scenario PCI Condition

Scenario 4A - Improve PCI to 70 by 2024 - 2034 Project Period - Total Rehab: $8,546,942 - Printed: 8/13/2015

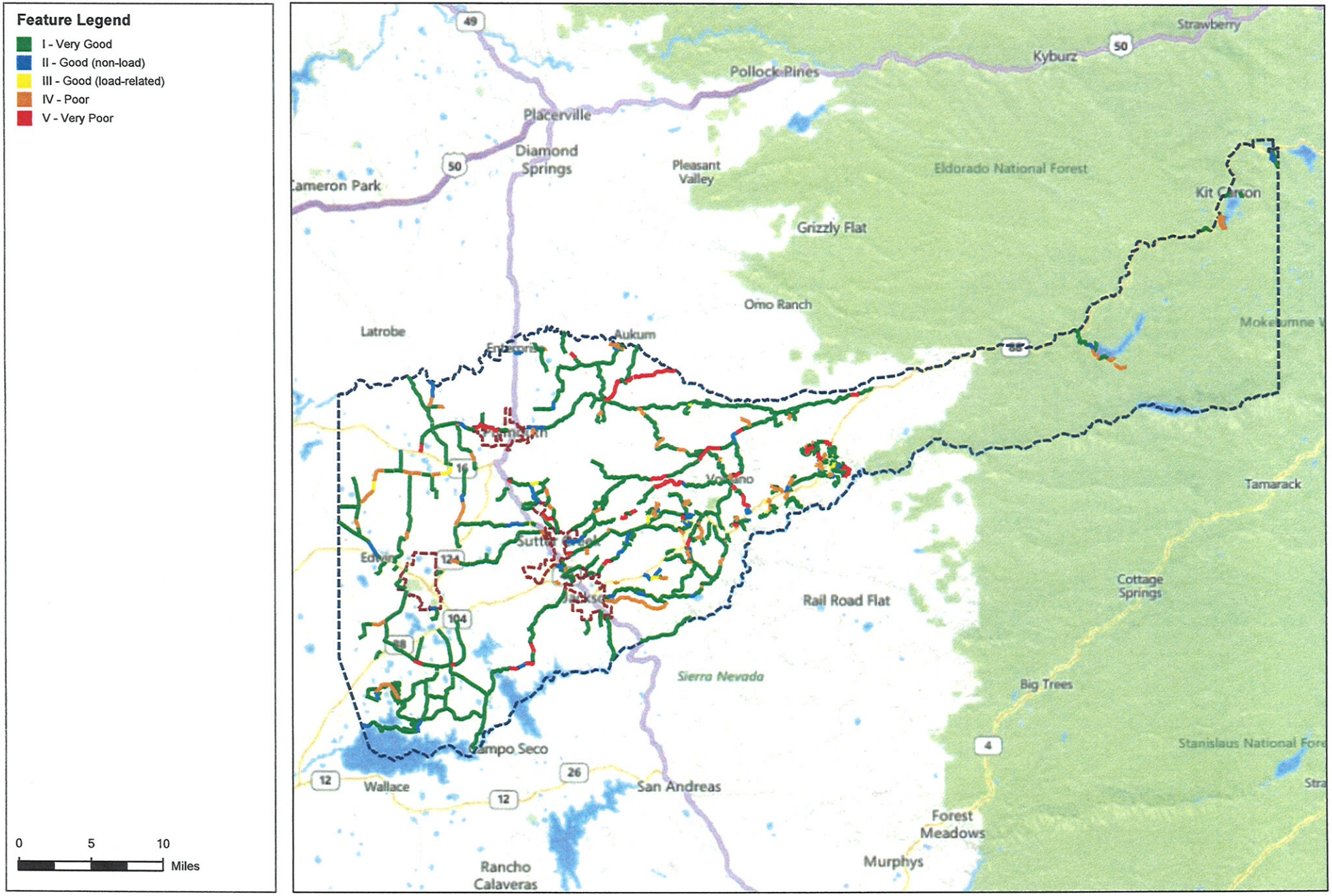


Scenario 4B: Improve PCI to 70 by 2034 ($129.4 Million)

Amador County

Scenario PCI Condition

Scenario 4B - Improve PCI to 70 by 2034 - 2034 Project Period - Total Rehab: $11,396,450 - Printed: 8/13/2015

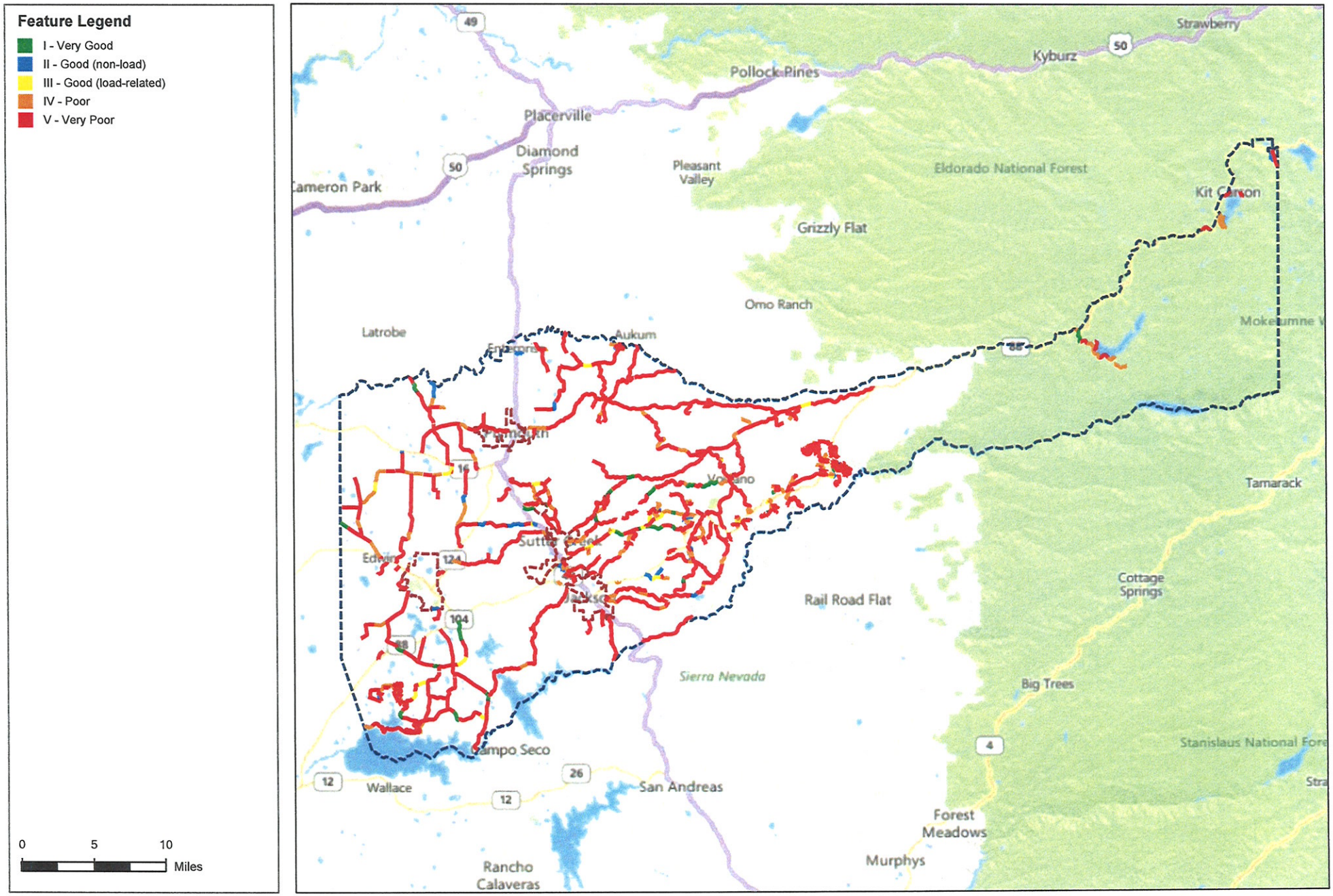


Scenario 5: **Funding Level $375K/Yr**

Amador County

Scenario PCI Condition

Scenario 5 - Funding Level $375k/yr - 2034 Project Period - Total Rehab: $367,281 - Printed: 8/13/2015

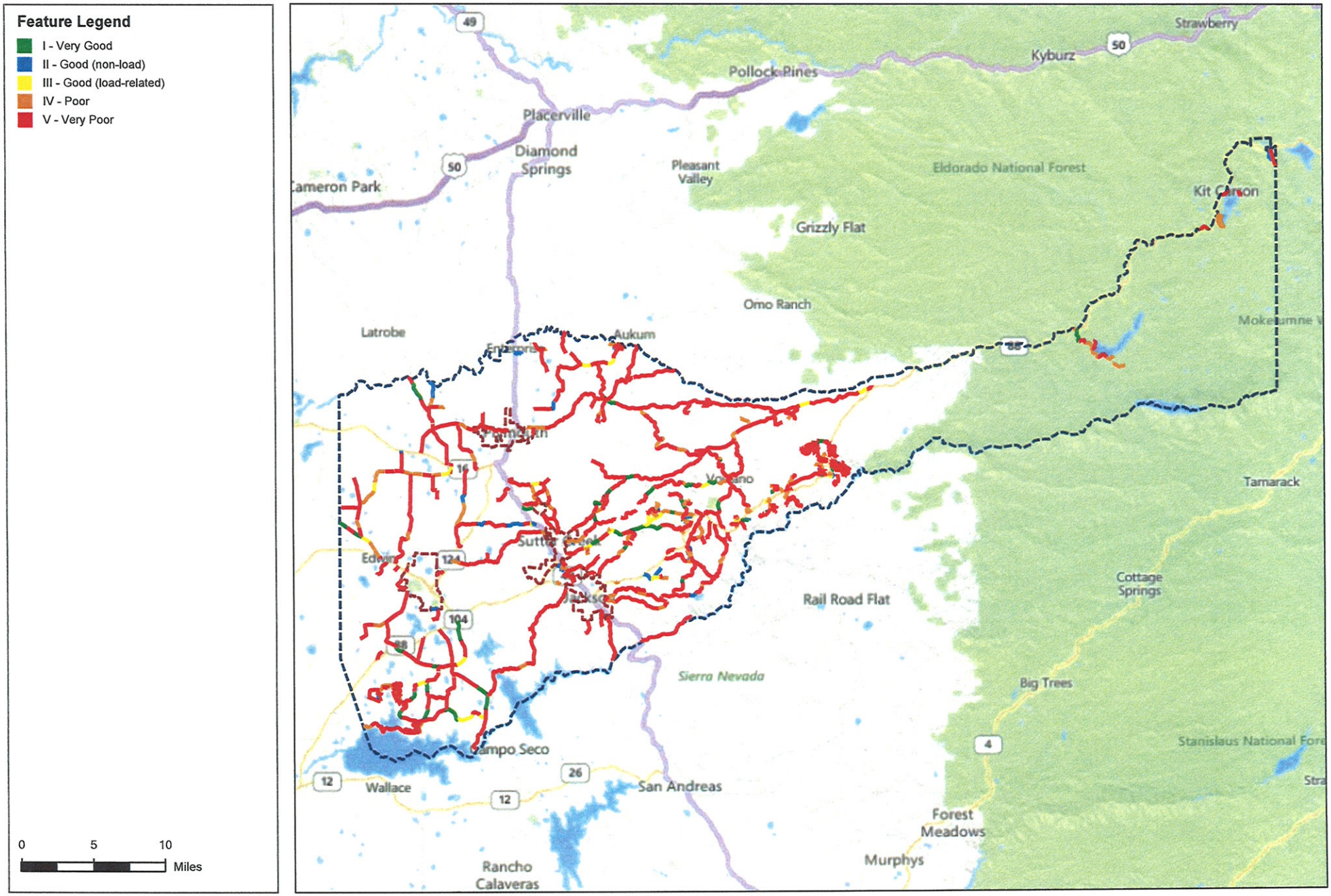


Scenario 6: Funding Level $600K/Yr

Amador County

Scenario PCI Condition

Scenario 6 - Funding Level $600k/yr - 2034 Project Period - Total Rehab: $584,870 - Printed: 8/13/2015



Amador County

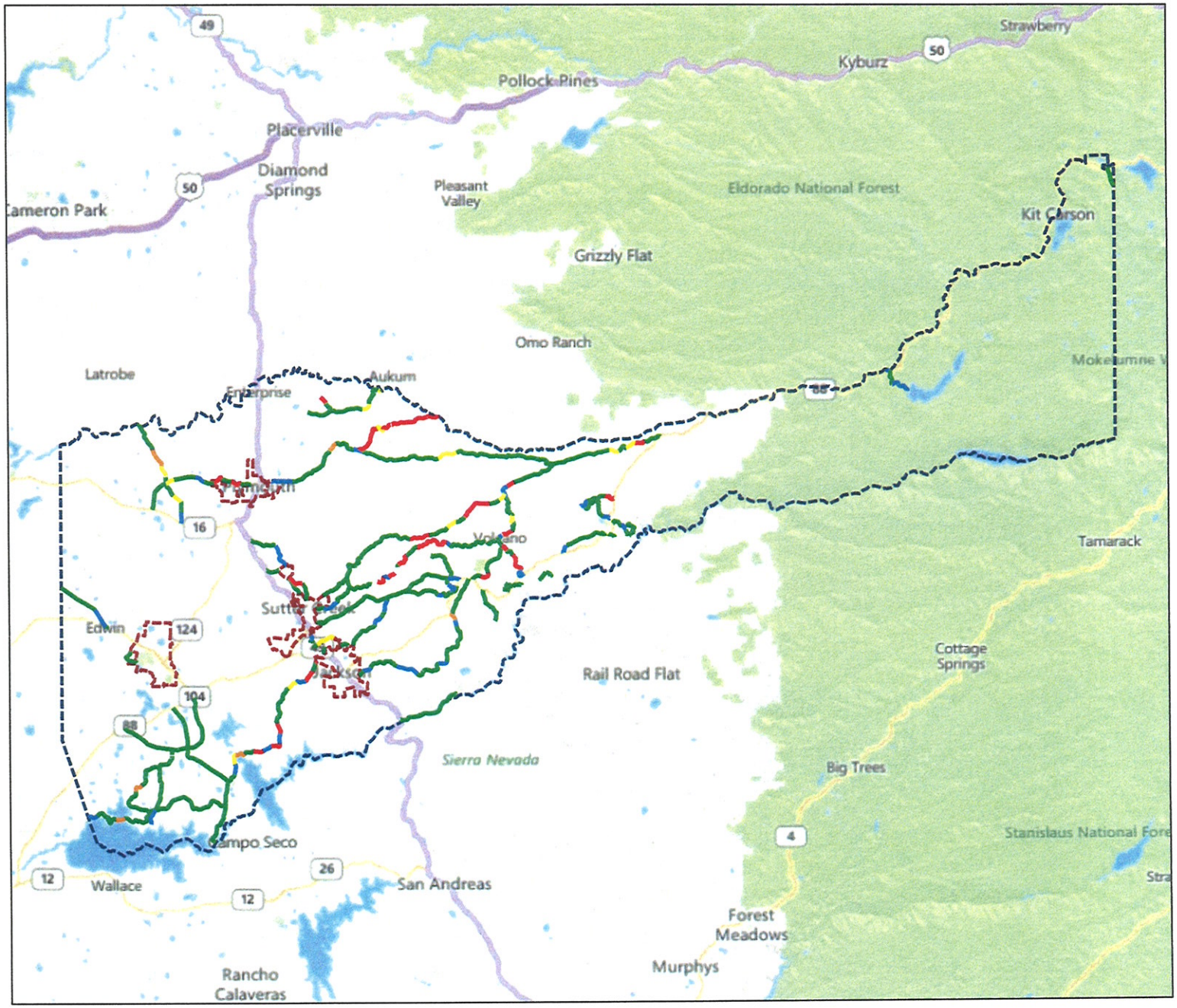
Scenario PCI Condition

Scenario 7A - Improve A/C PCI to 70 by 2024 - 2034 Project Period - Total Rehab: $4,732,684 - Printed: 8/13/2015

Feature Legend

- I - Very Good
- II - Good (non-load)
- III - Good (load-related)
- IV - Poor
- V - Very Poor

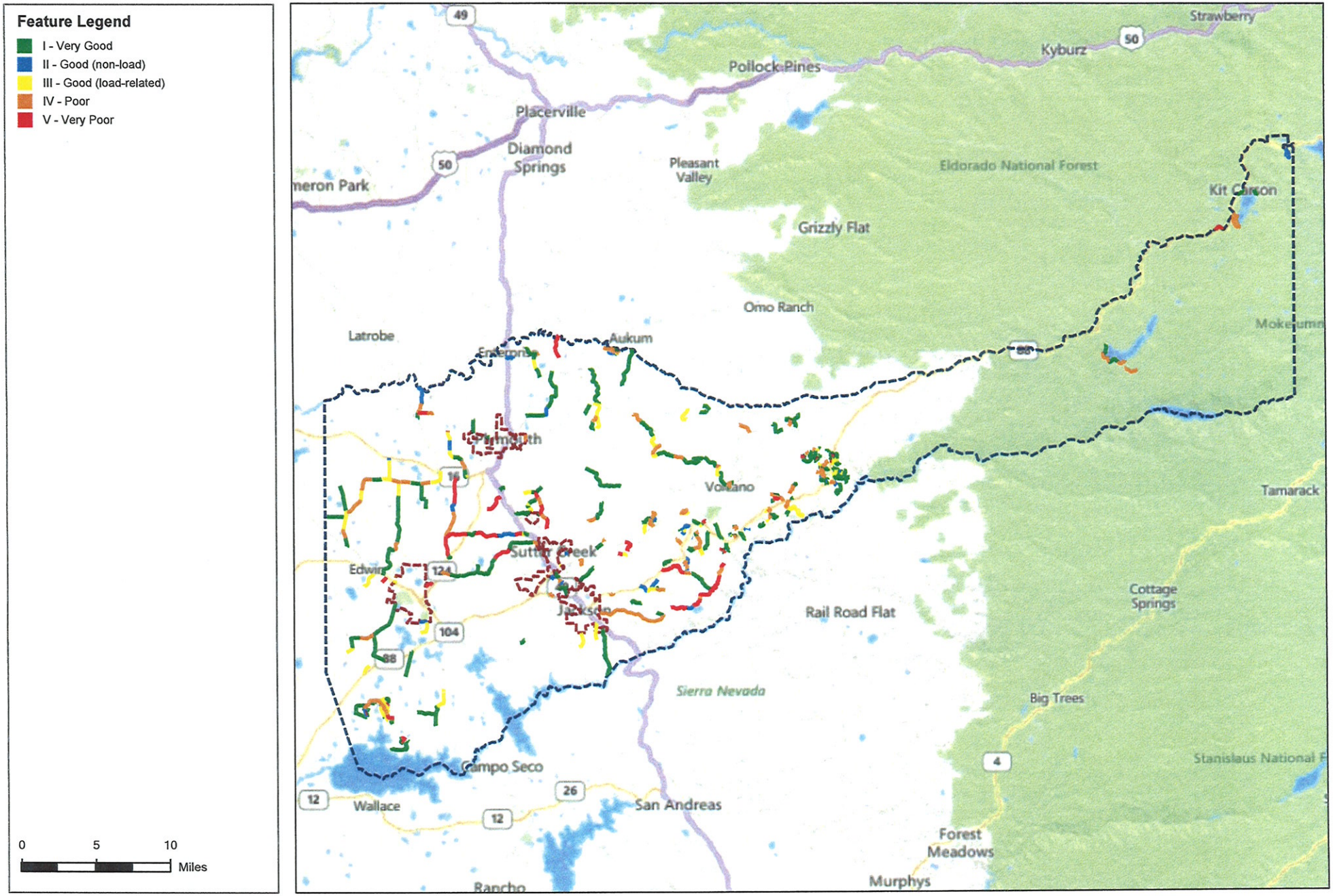
0 5 10 Miles



Amador County

Scenario PCI Condition

Scenario 7A - Improve R PCI to 60 by 2024 - 2034 Project Period - Total Rehab: $2,370,994 - Printed: 8/13/2015

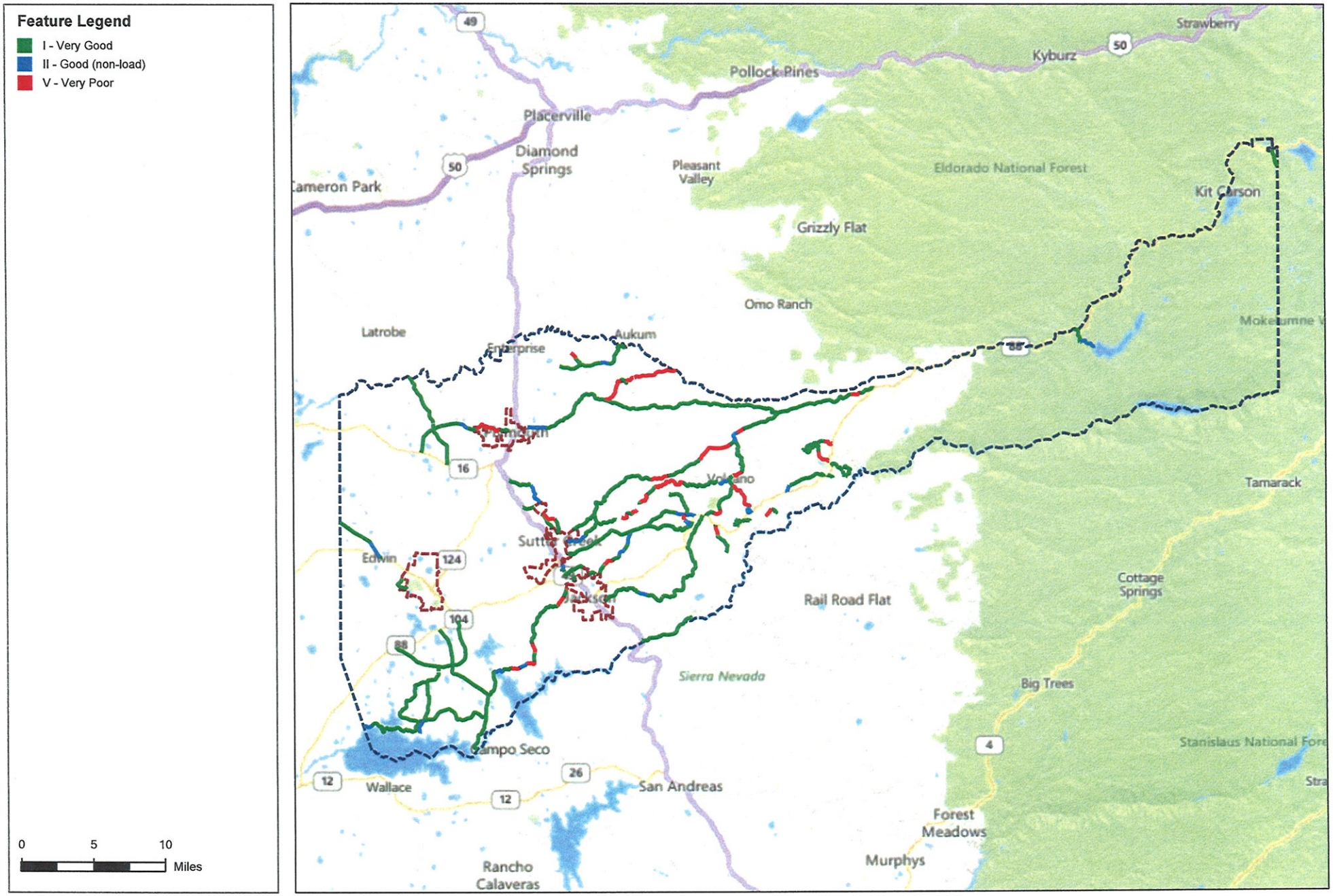


Scenario 7B: Improve PCI to 65 by 2034 ($119.3 Million)

Amador County

Scenario PCI Condition

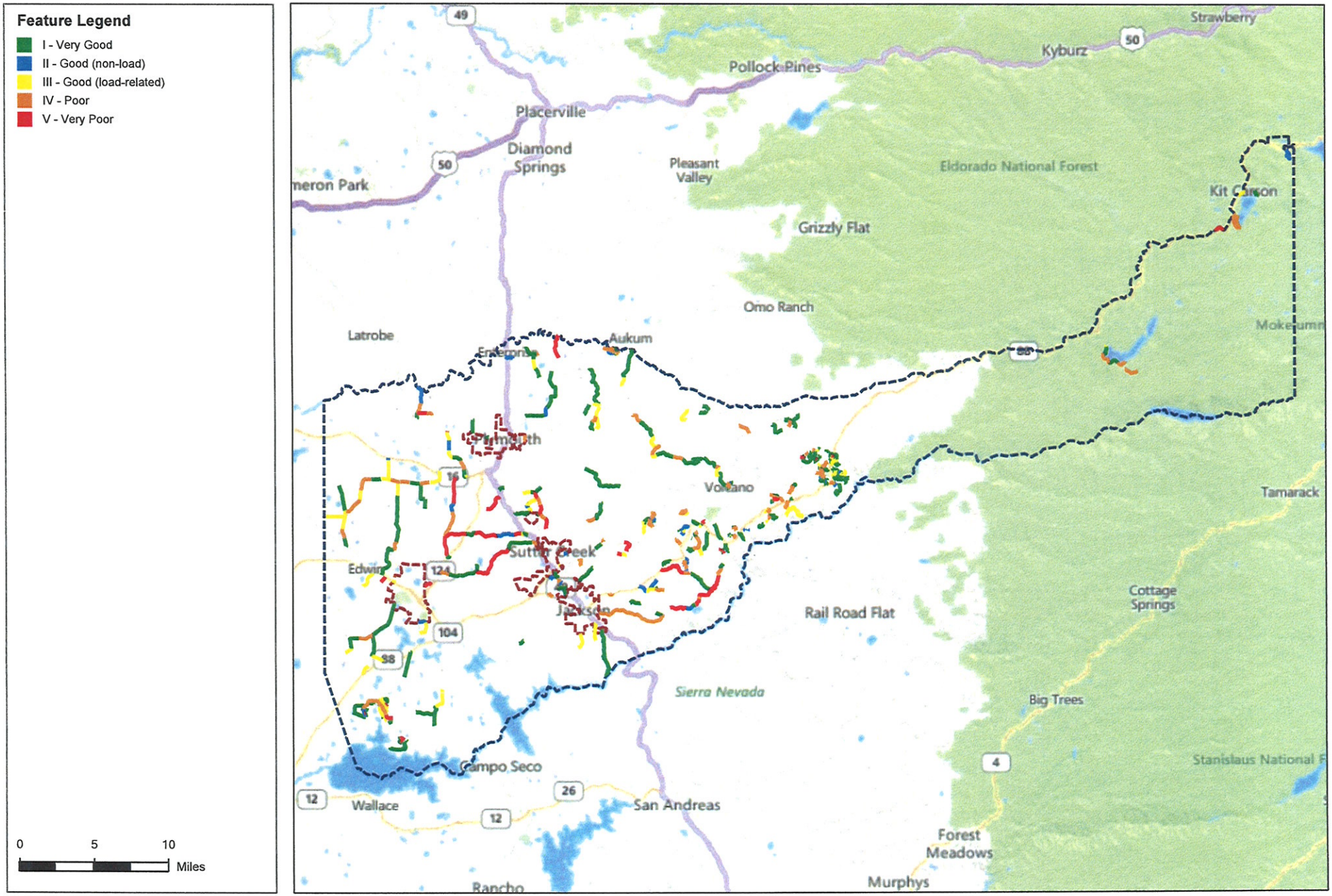
Scenario 7B - Improve A/C PCI to 70 by 2034 - 2034 Project Period - Total Rehab: $6,634,750 - Printed: 8/13/2015



Amador County

Scenario PCI Condition

Scenario 7B - Improve R PCI to 60 by 2034 - 2034 Project Period - Total Rehab: $2,849,317 - Printed: 8/13/2015



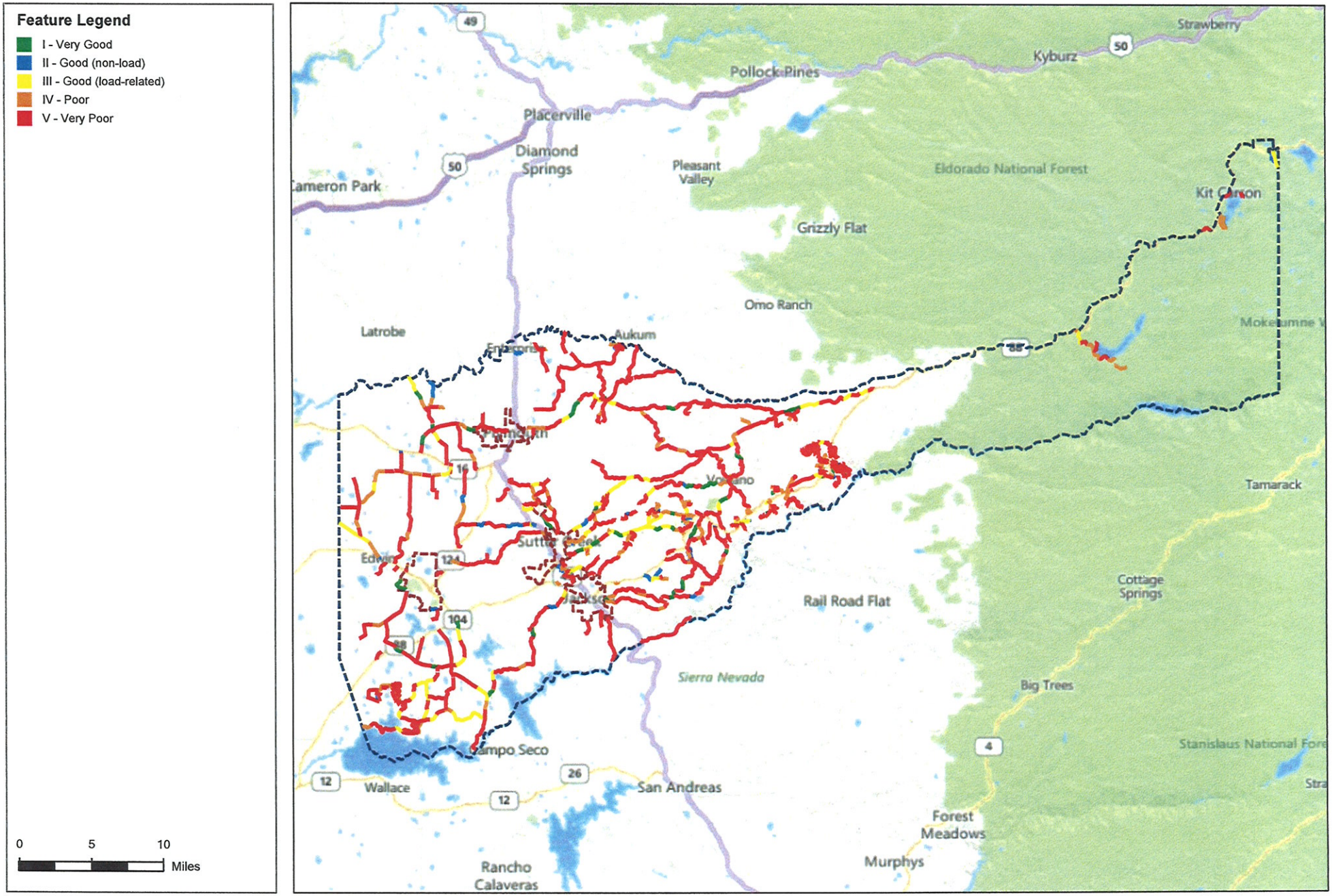
Scenario 8: Improve PCI to 80

Scenario 9: Additional State Funding $1.496M/Yr

Amador County

Scenario PCI Condition

Scenario 9 - CSAC Funding $1.496M/year - 2034 Project Period - Total Rehab: $149,687 - Printed: 9/14/2015



APPENDIX F

Pavement Preventive and Rehabilitation Strategy

Pavement Preventive and Rehabilitation Strategy

- Crack Sealing:
  Crack sealing on cracks greater than ¼-inch prior to pavement treatments allows future protection against infiltration of water into aggregate base and subgrade and therefore affords additional preservation of the pavement. However, in thin overlays and surface seals, excessive application of crack sealant and/or in-adequate curing of the crack sealant can result in future bumps or dips in the overlay and/or surface seal. If crack sealant is applied excessively it will bulk (or expand) when the hot mix asphalt or surface seal is placed on top and can produce a bump in the final paving surface. The crack sealant should not be allowed to collect on the pavement and should only be applied in the crack itself, and should be recessed a ⅛ to ¼ of an inch below the paving surface to allow room for it to expand.
  Adequate cure time (at least six months for conventional rubberized sealants) should also be allowed prior to any overlay or pavement treatment to allow for proper curing and hardening of crack sealing material. However, we understand for pavement surfaces that are to be milled, proper curing and hardening of conventional rubberized crack sealant will not be achievable. The County may elect to use a non-rubberized crack sealant (hot and cold applications) to shorten the cure time for the planned construction time frame.

- Slurry Seal:
  A slurry seal is a very common preventive maintenance treatment tool used to extend the life of good condition pavements. Slurry seals fill non-active cracks, seal raveled pavements, help seal and prevent against future moisture intrusion into the pavement base and subgrade, improve skid resistance, and provide a uniform surface texture with aesthetic appeal. It is the most commonly composed of a quick setting emulsion, well graded fine aggregate, mineral filler, and water. In California, polymer in latex form is usually added to the slurry. Slurry seals can usually be categorized into three types which depend on the maximum aggregate size in the mix. Type I slurry seals usually contain maximum aggregate size of 1/8 inch; Type II slurry seals usually contain maximum aggregate size of ¼ inch; and Type III slurry seals usually contain maximum aggregate size of 3/8 inch.

- Microsurfacing:
  Microsurfacing is a widely used tool for both pavement preservation and preventive maintenance. It is the best suited to address minor rutting, raveling, oxidation, bleeding, and loss of surface friction. It does not perform well if it is applied to structurally deficient pavements. This makes project selection the most important step in the microsurfacing design process with regard to impact on the final performance of the microsurfacing itself. It involves placing a mixture of dense-graded aggregate, asphalt emulsion (about 7% by weight), water, polymer additive (about 3 % by weight) and mineral fillers (about 1% of weight of total dry mix). The treatment may be as thin as ⅜ inch or it can fill wheel ruts up to 2 inches deep using multiple passes. Because the ingredients are similar to those of slurry seals, microsurfacing is sometimes referred to as a "polymer-modified slurry seal." One of the main benefits achieved

from microsurfacing over alternative pavement treatments results from the polymer-modified asphalt emulsion that chemically speeds evaporation of moisture. Rapid breaking of the mixture enables it to set in less than one hour in most instances, requires no rolling, and allows traffic to return to the roadway quickly.

- Rubberized Cape Seal:
  As a cost effective alternative to a thin overlay, for those roads that are generally in better condition with lower traffic volumes and lower quantities of base repairs, a rubberized cape seal may be a good alternative. A rubberized cape seal is composed of a slurry seal (or microsurfacing) placed over a rubberized chip seal. The slurry seal can increase the life of a chip seal by enhancing the binding of the chips and by protecting the surface. A rubberized cape seal also restores skid resistance on worn asphalt surfaces, helps better resist reflective cracking, seals fine cracks, and prevents water intermission into the base and subgrade. Cape Seals are also used where a chip seal is too rough and when a smooth finish is required e.g. on residential roads.

- Hot mix asphalt (HMA) Overlay:
  Hot mix asphalt (HMA) overlays are a widely used treatment that is readily maintained and most counties have well developed specifications. An overlay can generally be used on pavements in poor to fair condition with low to moderate structural deficiencies. The minimum recommended overlay thickness is 1.5 inches for residential and collector roads and 2 inches for arterial roads.

- Full Depth Reclamation (FDR):
  FDR is a reconstruction process that rebuilds worn out HMA pavements by recycling the existing roadway. Old existing HMA and aggregate base materials are pulverized and "mined" using a specialized machine called a reclaimer. Water is added to the pulverized material to reach the optimal moisture content for compaction and then a variety of materials, such as dry Portland cement, lime, fly ash, or asphalt emulsion are incorporated for stabilization. A reclaimer is used again to mix all of the materials. After shaping and grading, the new base is compacted to produce a strong, durable base for a new pavement surface. This method recycles the materials in-situ, and in general, there is no need to haul in aggregate or haul out old material for disposal. The construction vehicle movements are reduced and there is no need for detours since it can be done under traffic, making this process more convenient for local residents.
  This treatment can offer significant cost savings for the County over conventional roadway reconstruction techniques. Like any other paving product the quality of the final work product is highly dependent on the quality of the paving contractor. The technology has become more prevalent in California and has been used as a viable and cost effective pavement reconstruction alternative. The material thicknesses of the new section are also based on the design TI and subgrade R-Value. This method of recycling is normally performed to a depth of 4 to 12 inches.
  Full depth reclamation is recommended for pavements with deep rutting, load-associated cracks, non-load associated thermal cracks, reflection cracks, and pavements with maintenance

patches such as spray, skin, pothole, and deep hot mix. It is particularly advantageous for pavements having a base or subgrade problem.

- Cold In-place Recycling (CIR):
  CIR is in-place recycling technology that is a very cost effective alternative to traditional "mill and fill" pavement treatments. The technology involves milling of existing HMA, typically to a depth of 3 to 4 inches (but can involve complete removal of existing HMA to the top of the aggregate base), pulverizing and processing the milled HMA materials to specified material size, adding emulsion, mixing, and then placing and compacting the recycled material back onto to roadway. The recycled pavement surface typically then receives a thin HMA overlay (1.5 inches minimum) as a smooth wearing course.
  The technology is becoming more common due to its cost effectiveness, recycling benefits, lower energy requirements, and time efficiency, plus it provides a smoother interim driving surface as opposed to a rougher milled surface. Cost efficiency is gained by the use of existing HMA materials, less hauling and off-hauling, and time efficiency in placement. Longer pavement sections (generally at least 500,000 square feet [sf] of pavement area) that require deeper mill and fills (typically at least 3 inches) are generally good candidates for CIR with potentially significant cost savings. Also, the presence of significant fabric can make the CIR process very difficult, particularly during milling and processing. Although it can be done if fabric is present, it is not typically recommended. The use of cold in-place recycling can restore old pavement to the desired profile, eliminate existing wheel ruts, restore the crown and cross slope, and eliminate potholes, irregularities and rough areas. It can also eliminate transverse, reflective, and longitudinal cracks. Some of the major reasons for the increased use of cold in-place recycling are the increased scarcity of materials, particularly gravel and crushed rock, the method's high production rate and potential of cost savings, minimum traffic disruption, ability to retain original profile, reduction of environmental concerns, and a growing concern for depleting petroleum reserves.

- Conventional Reconstruction:
  Reconstruction with a new pavement section (either conventional HMA over aggregate base (AB) or full depth HMA) is composed of removing the existing HMA and AB and reconstructing a new pavement section.