

Streets Improvement Program Update

City of Ketchum, Idaho

June 17, 2024

Kimley»Horn



Presentation Outline

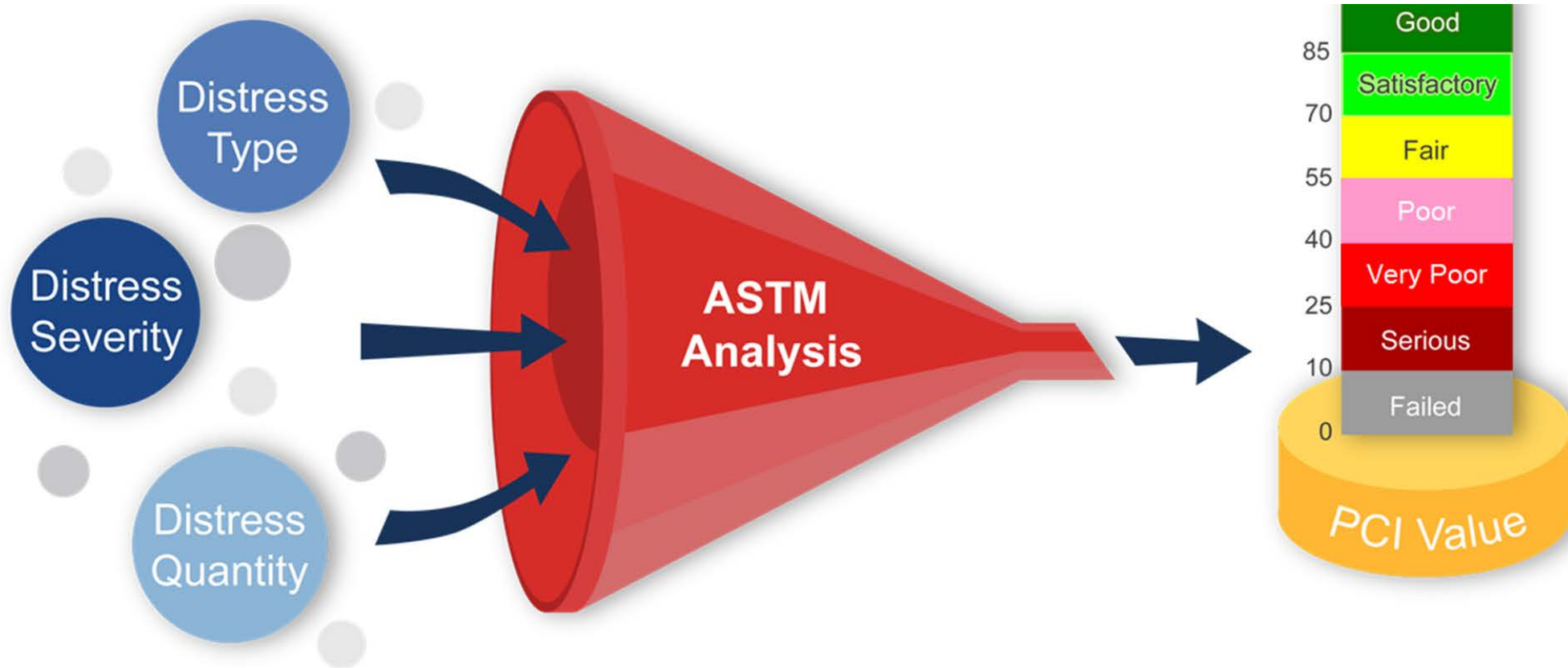
- Pavement Management Introduction
- Network Definition
- Phase 1 PCI Assessment Results
- Budget Scenario Results Example
- Multi-Year Project Plan Example



Pavement Management Basics

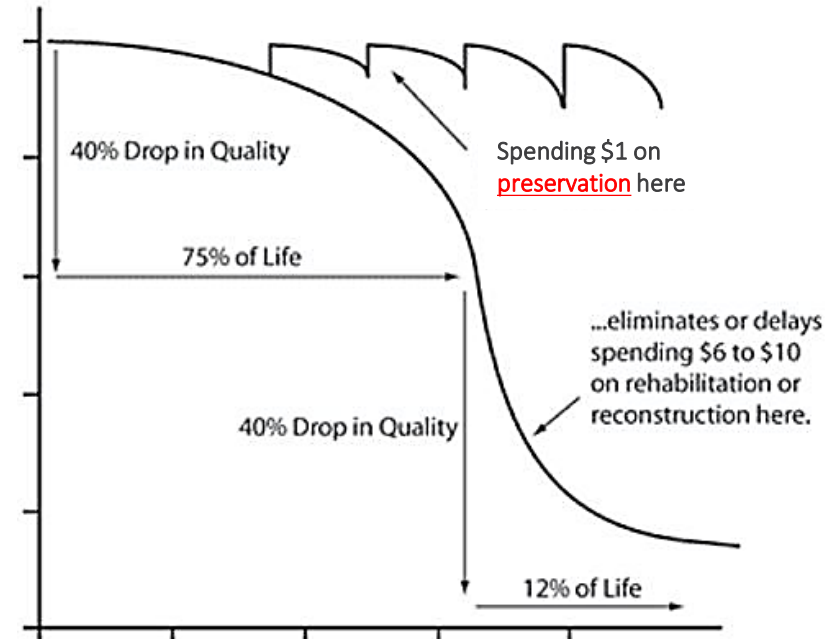
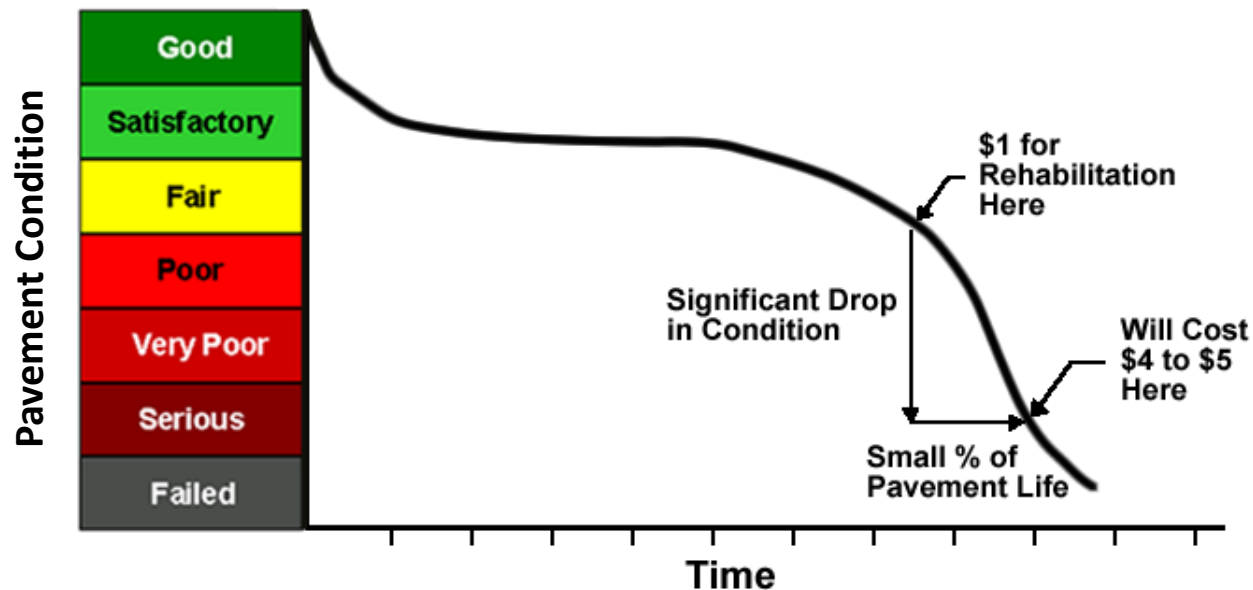


Pavement Management Basics



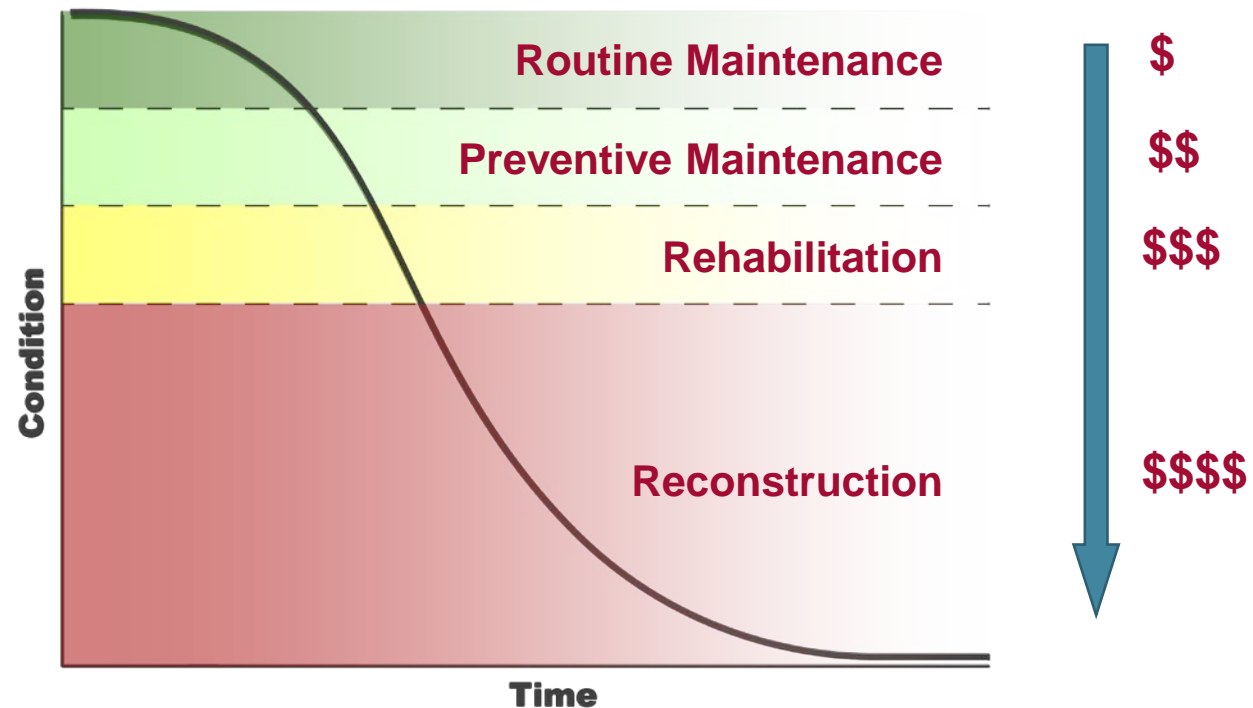
Pavement Deterioration

- Stay ahead of the curve
- Apply the right treatment at the right place at the right time

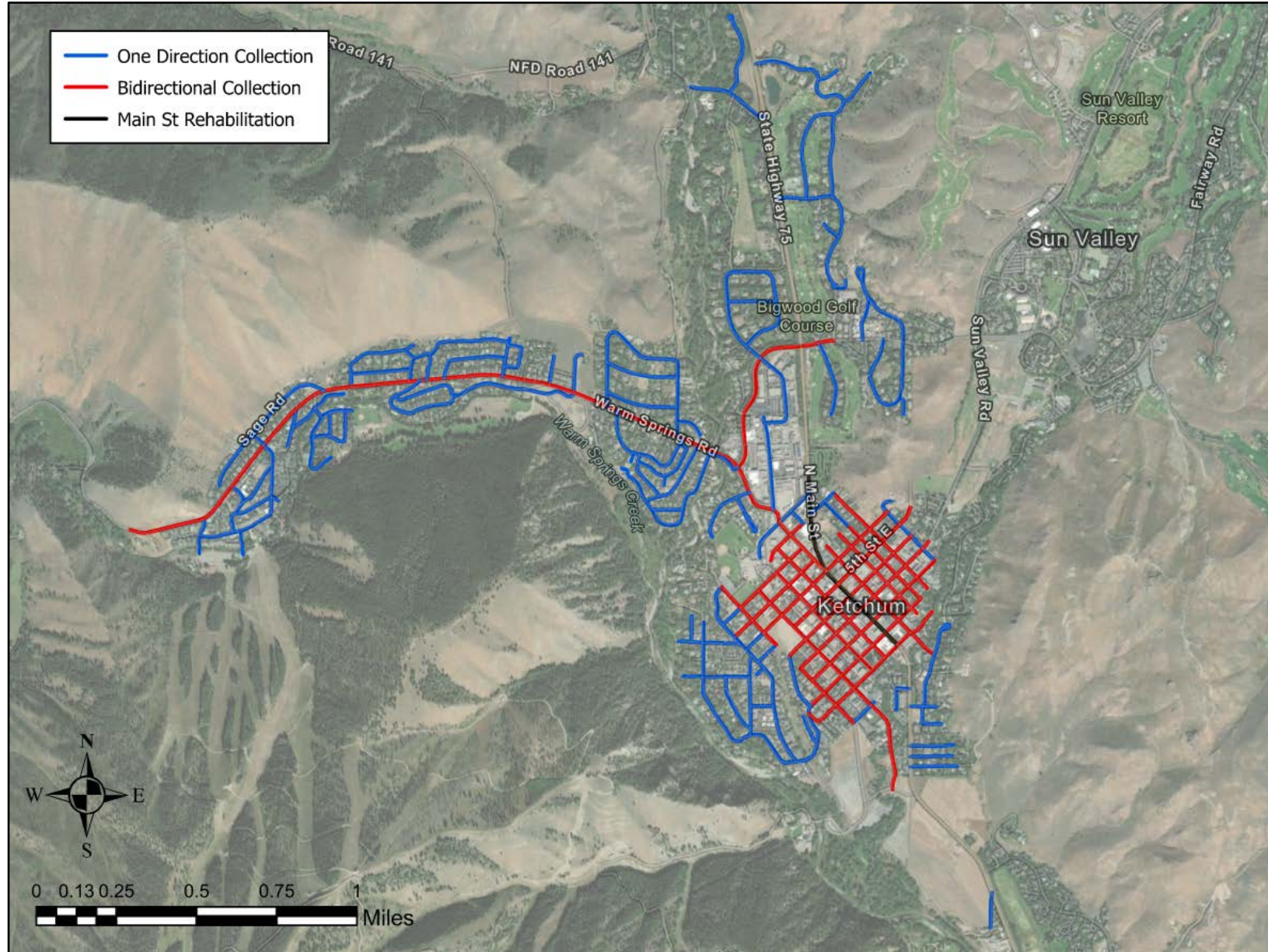


When Do I Need To Do Work?

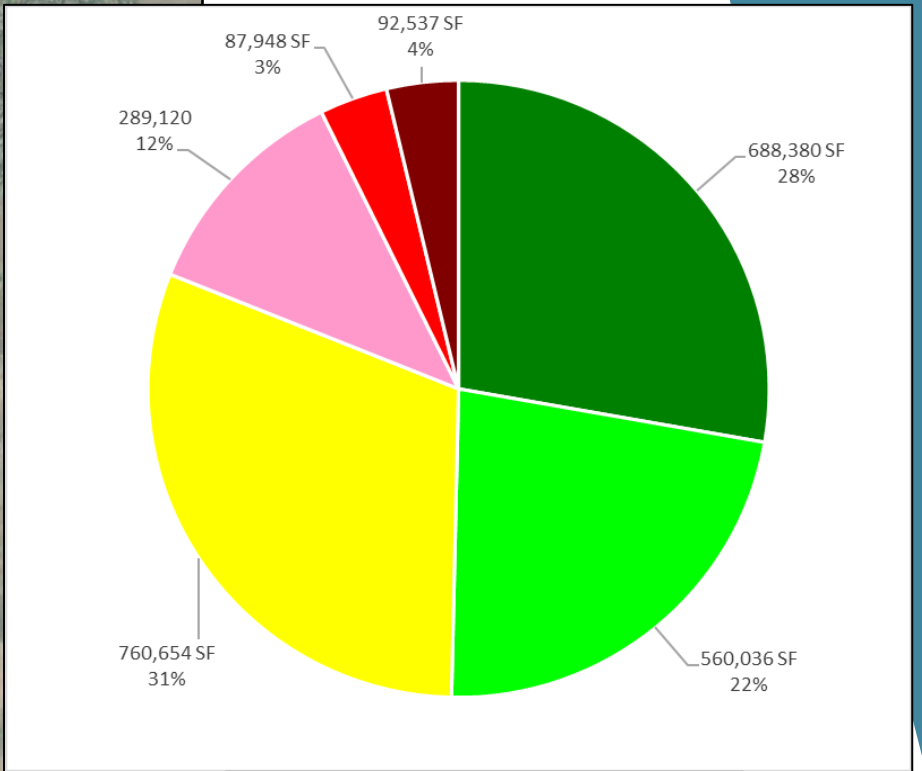
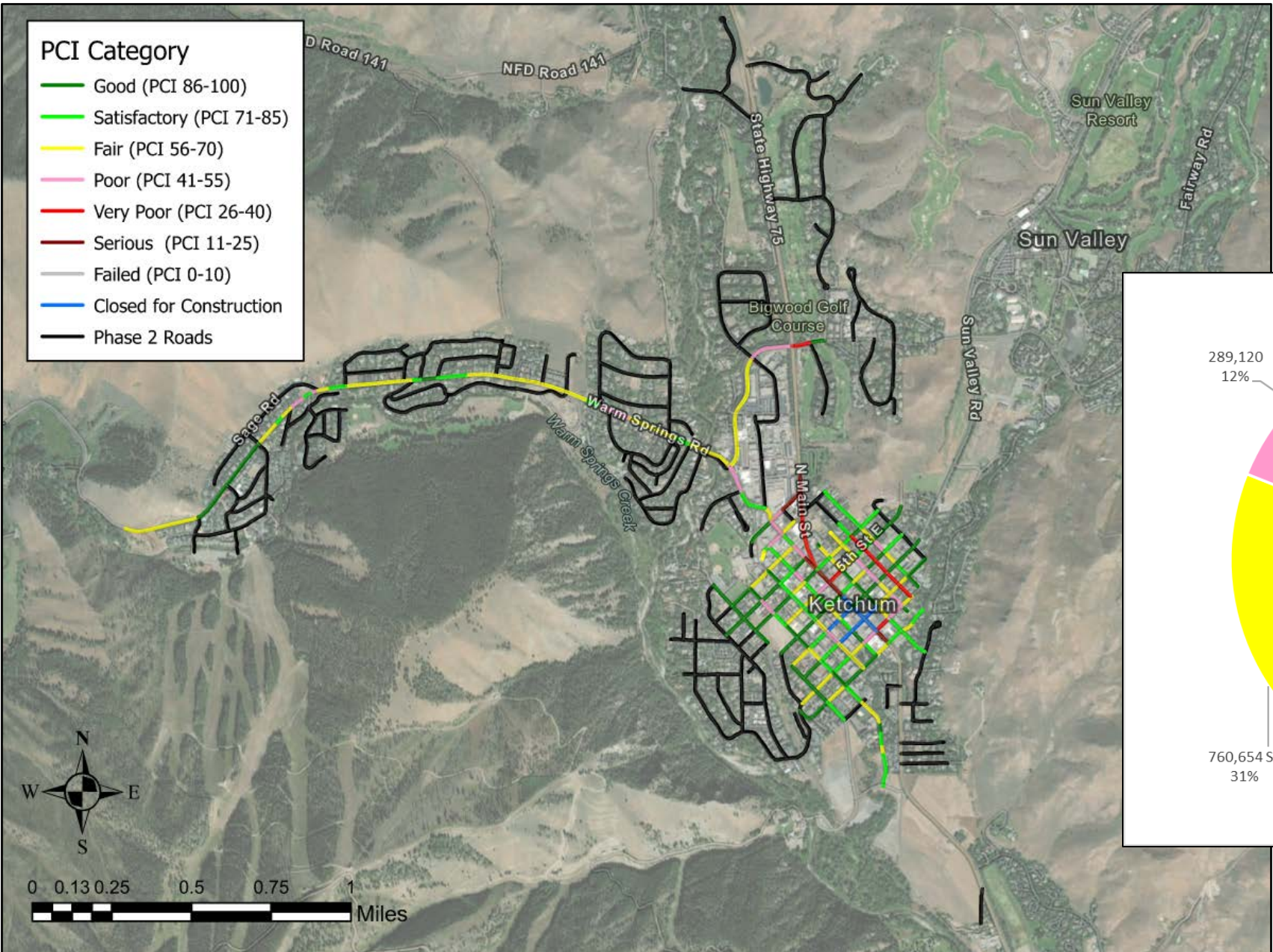
- Deterioration modeling
- Critical thresholds
- Prioritization strategies



Network Definition



Pavement Condition Index (PCI) Results – Phase 1



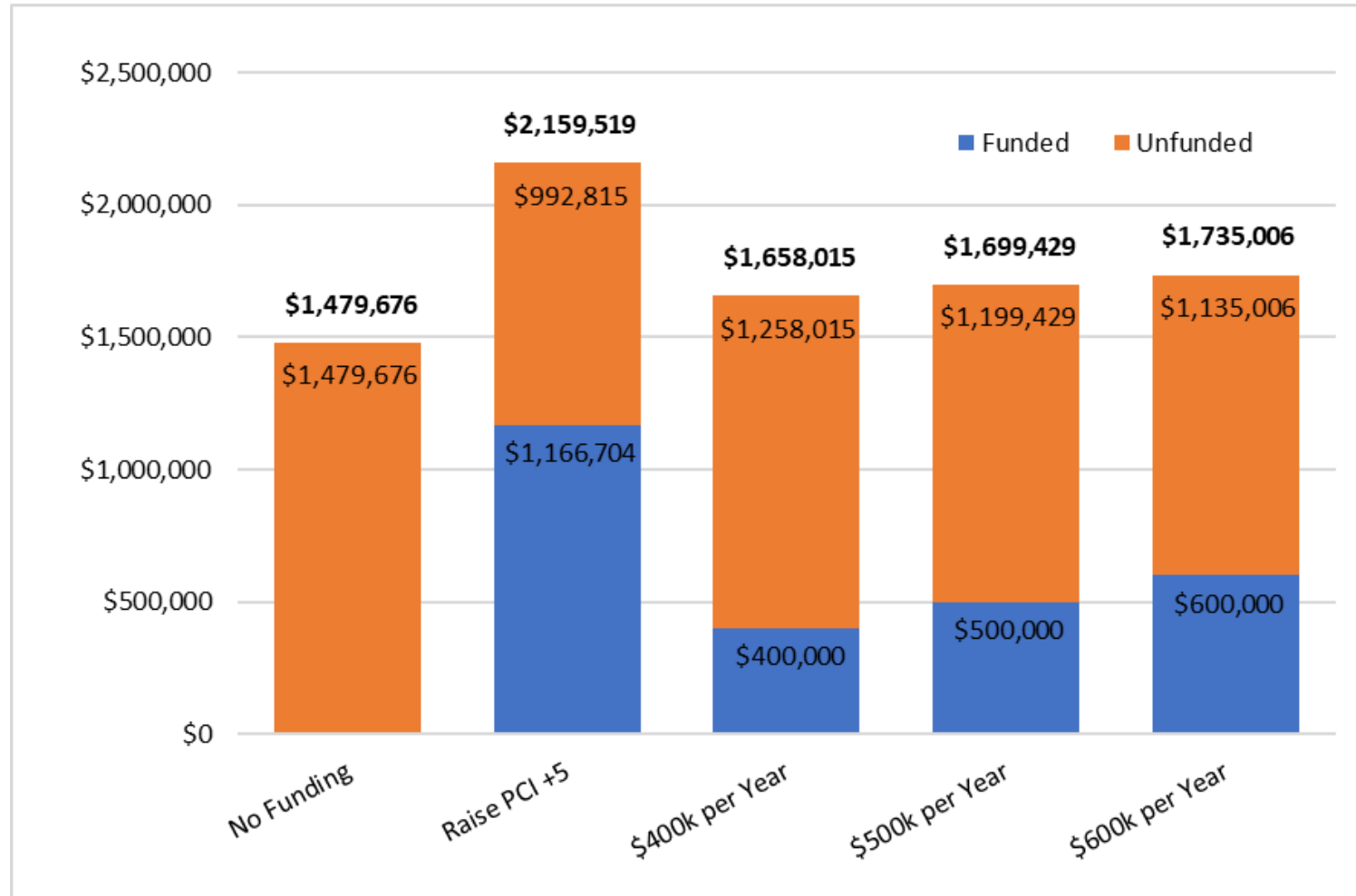
Area-Weighted Network
 PCI = 68.2 (Fair)

Maintenance Assignment Example

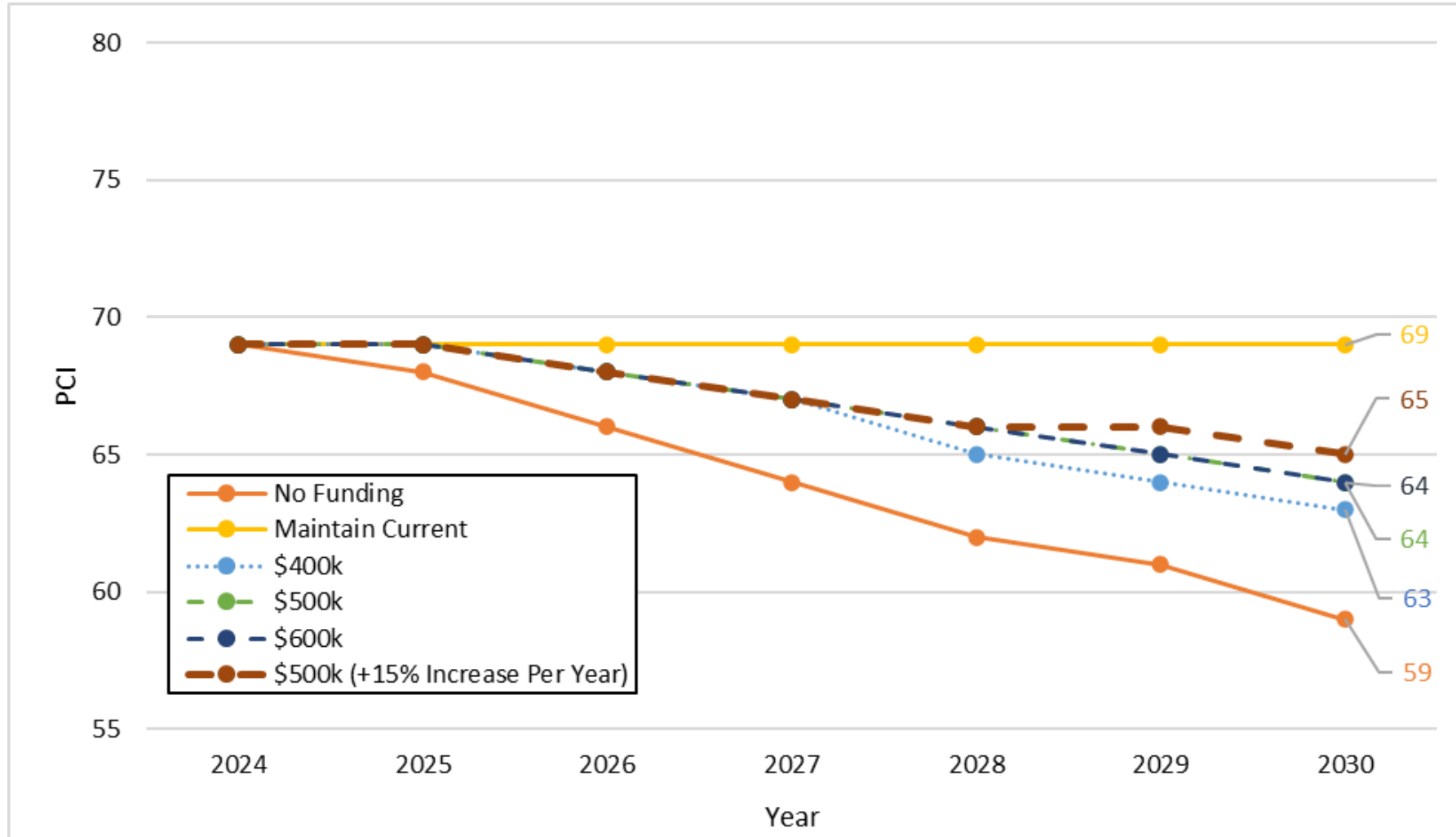
PCI Range	Repair Category	AC Recommended M&R Treatment	Cost (\$/SF)
90-100	Monitor	Monitor Conditions	\$ -
71-89	Preventive	Crack Seal + Slurry Seal	\$ 0.08
56-70	Minor Rehabilitation	Mill and Overlay	\$ 2.51
41-55	Major Rehabilitation	Mill and Overlay + Base Repair	\$ 4.28
0-40	Reconstruction	Full-Depth Reconstruction	\$ 8.85

Road Name	Section ID	Surface Type	Length (ft)	Area (SF)	PCI	Condition Category	Repair Category	Unit Cost (\$/SF)	Estimated Cost
Dillard Rd	024	AC	528	6,072	80	Satisfactory	Preventive	\$ 0.08	\$ 600
Dillard Rd	025	AC	528	6,072	70	Fair	Minor Rehabilitation	\$ 2.51	\$ 15,300
Dillard Rd	026	AC	492	5,654	74	Satisfactory	Preventive	\$ 0.08	\$ 500
Exit 9 EB	001	AC	407	10,578	44	Poor	Major Rehabilitation	\$ 4.28	\$ 45,300
Exit 9 EB	002	AC	528	13,728	75	Satisfactory	Preventive	\$ 0.08	\$ 1,200
Exit 9 EB	004	AC	341	8,864	37	Very Poor	Reconstruction	\$ 2.51	\$ 22,300
Exit 9 EB	005	AC	528	13,728	16	Serious	Reconstruction	\$ 2.51	\$ 34,500
Exit 9 WB	001	AC	267	6,954	61	Fair	Minor Rehabilitation	\$ 2.51	\$ 17,500
Exit 9 WB	002	AC	528	13,728	62	Fair	Minor Rehabilitation	\$ 2.51	\$ 34,500
Exit 9 WB	003	AC	528	13,728	37	Very Poor	Reconstruction	\$ 2.51	\$ 34,500
Folsom Blvd	001	AC	528	11,616	95	Good	Monitor	\$ -	\$ -
Folsom Blvd	002	AC	528	11,616	99	Good	Monitor	\$ -	\$ -
Folsom Blvd	003	AC	528	11,616	94	Good	Monitor	\$ -	\$ -

Budget Analysis Results Example



Budget Analysis Results Example

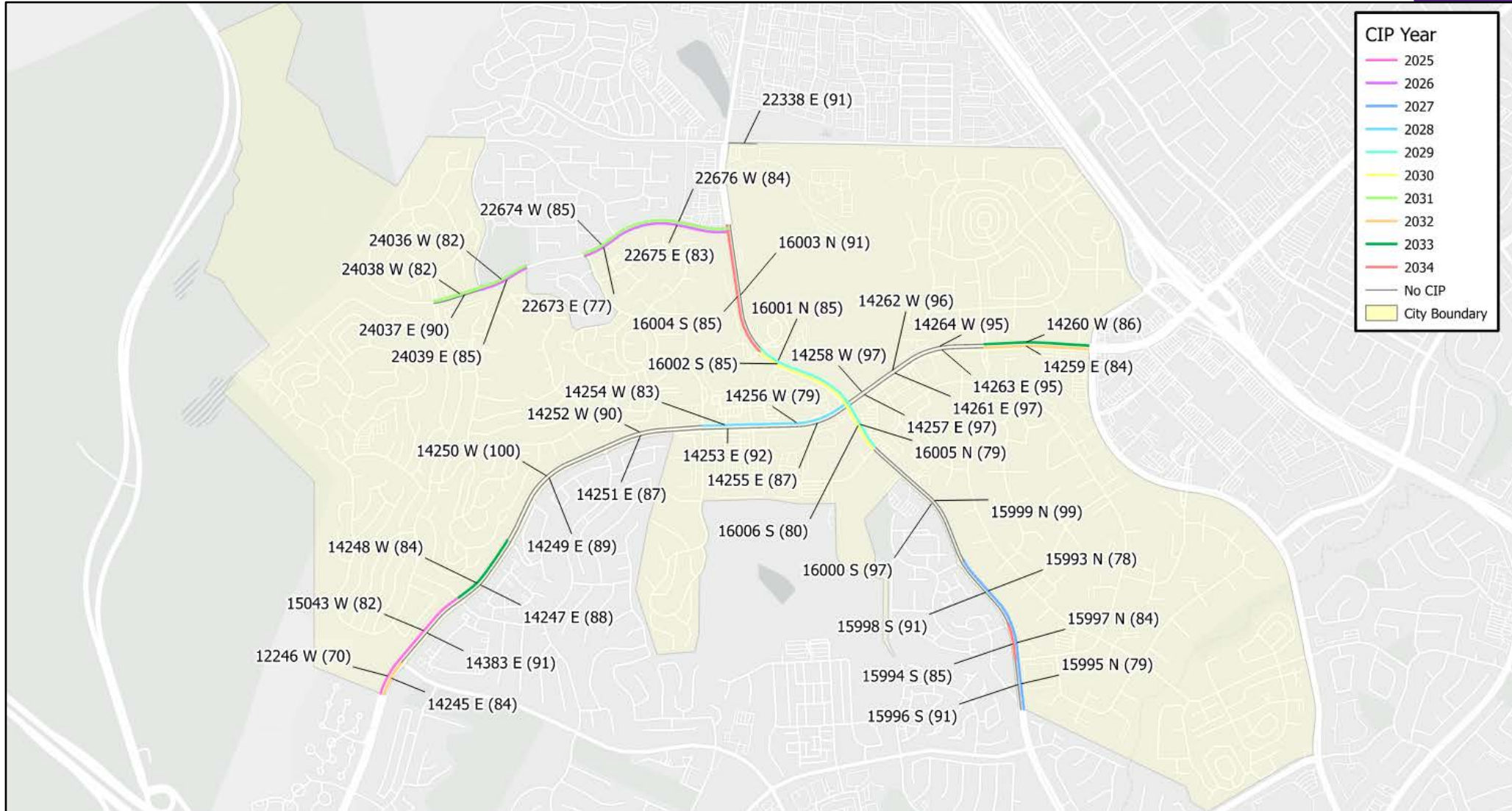


Multi-Year Plan Results Example

CIP Year	Street Name	Section ID	Length (ft)	Area (SF)	2023 PCI	Project PCI	Admin Cost	Constr. Cost	Total Cost
2025	EL TORO ROAD	12246 W	590	28,656	70	69	\$14,000	\$75,000	\$264,000
		15043 W	1,315	56,577	82	81	\$27,000	\$148,000	
2026	SANTA MARIA AVENUE	22673 E	552	16,240	77	75	\$8,000	\$42,000	\$259,000
		22675 E	1,712	48,180	83	81	\$23,000	\$126,000	
		24039 E	756	19,082	85	83	\$10,000	\$50,000	
2027	MOULTON PARKWAY	15993 N	1,210	50,614	78	76	\$25,000	\$132,000	\$329,000
		15995 N	755	29,808	79	77	\$15,000	\$78,000	
		15997 N	575	25,808	84	82	\$12,000	\$67,000	
2028	EL TORO ROAD	14256 W	1,495	64,885	79	76	\$32,000	\$170,000	\$305,000
		14254 W	750	33,150	83	80	\$16,000	\$87,000	
2029	MOULTON PARKWAY	16005 N	710	38,896	79	75	\$19,000	\$102,000	\$331,000
		16001 N	1,518	67,802	85	81	\$33,000	\$177,000	
2030	MOULTON PARKWAY	16006 S	720	32,690	80	76	\$16,000	\$85,000	\$325,000
		16002 S	1,515	72,426	85	81	\$35,000	\$189,000	
2031	SANTA MARIA AVENUE	24036 W	772	18,621	82	77	\$9,000	\$49,000	\$350,000
		24038 W	812	23,832	82	77	\$12,000	\$62,000	
		22676 W	1,732	49,952	84	79	\$25,000	\$131,000	
		22674 W	552	19,704	85	80	\$10,000	\$52,000	
2032	EL TORO ROAD	14245 E	580	25,368	84	78	\$12,000	\$66,000	\$276,000
		14259 E	1,585	63,918	84	78	\$31,000	\$167,000	
2033	EL TORO ROAD	14248 W	1,175	52,775	84	78	\$26,000	\$138,000	\$343,000
		14260 W	1,585	57,258	86	80	\$29,000	\$150,000	
2034	MOULTON PARKWAY	15994 S	555	25,063	85	78	\$12,000	\$66,000	\$336,000
		16004 S	1,995	83,152	85	78	\$41,000	\$217,000	

Example Multi-Year Plan Table

Multi-Year Plan Results Example



Example Multi-Year Plan Map