



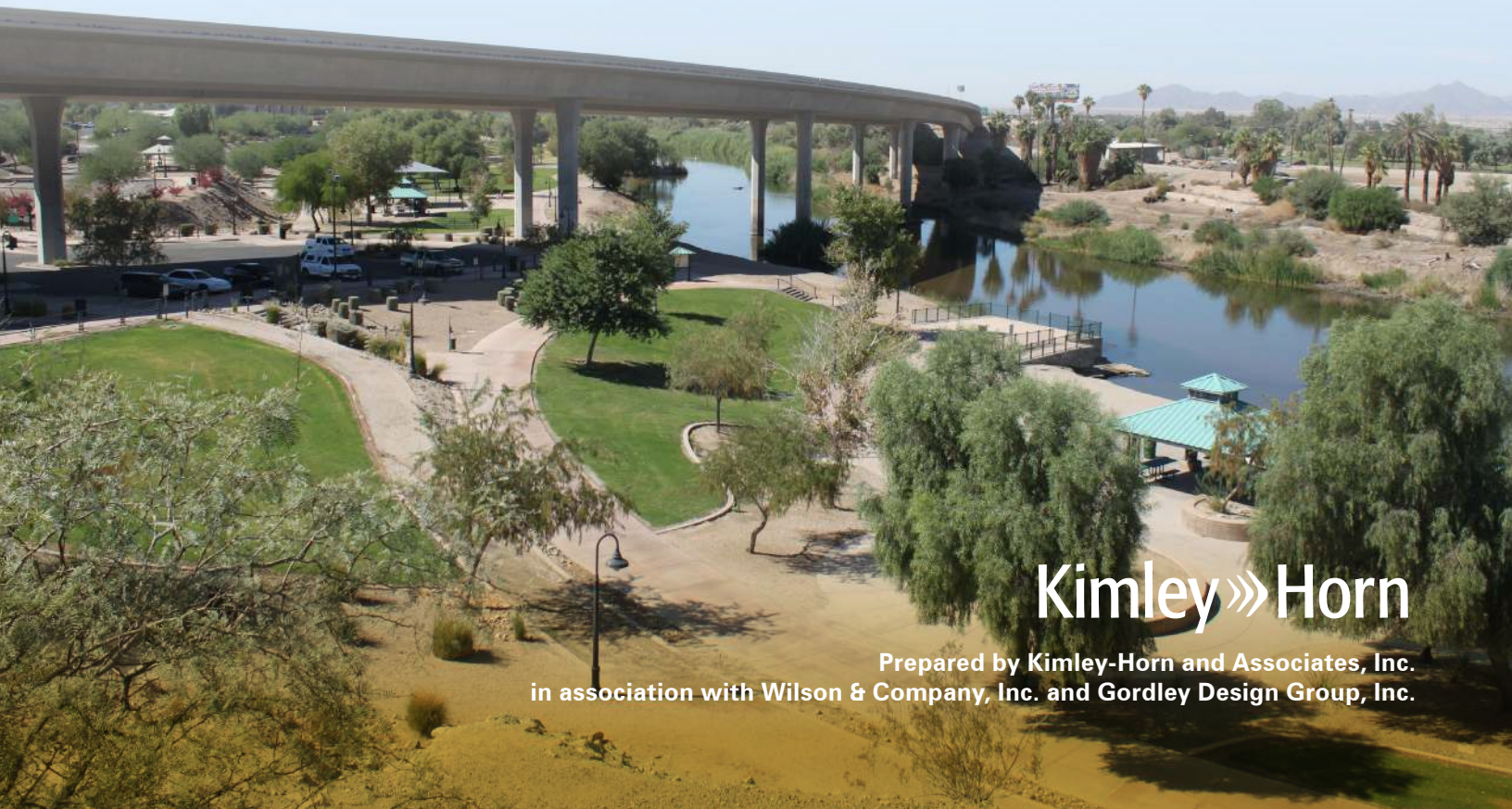
YMPO
2018-2041

Approved by the YMPO Executive Board, June 29, 2017

Regional Transportation Plan

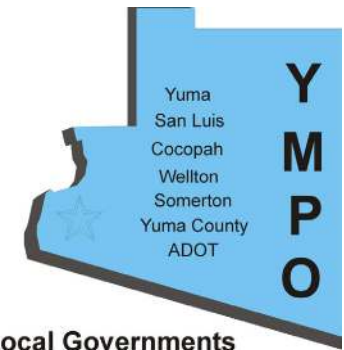
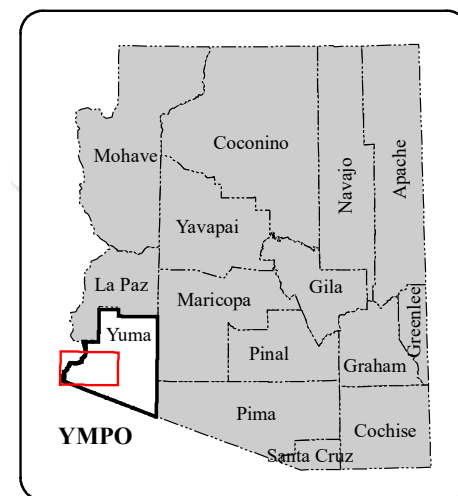
MOVING THE YUMA REGION FORWARD

AMENDMENT 1 – MARCH 2018

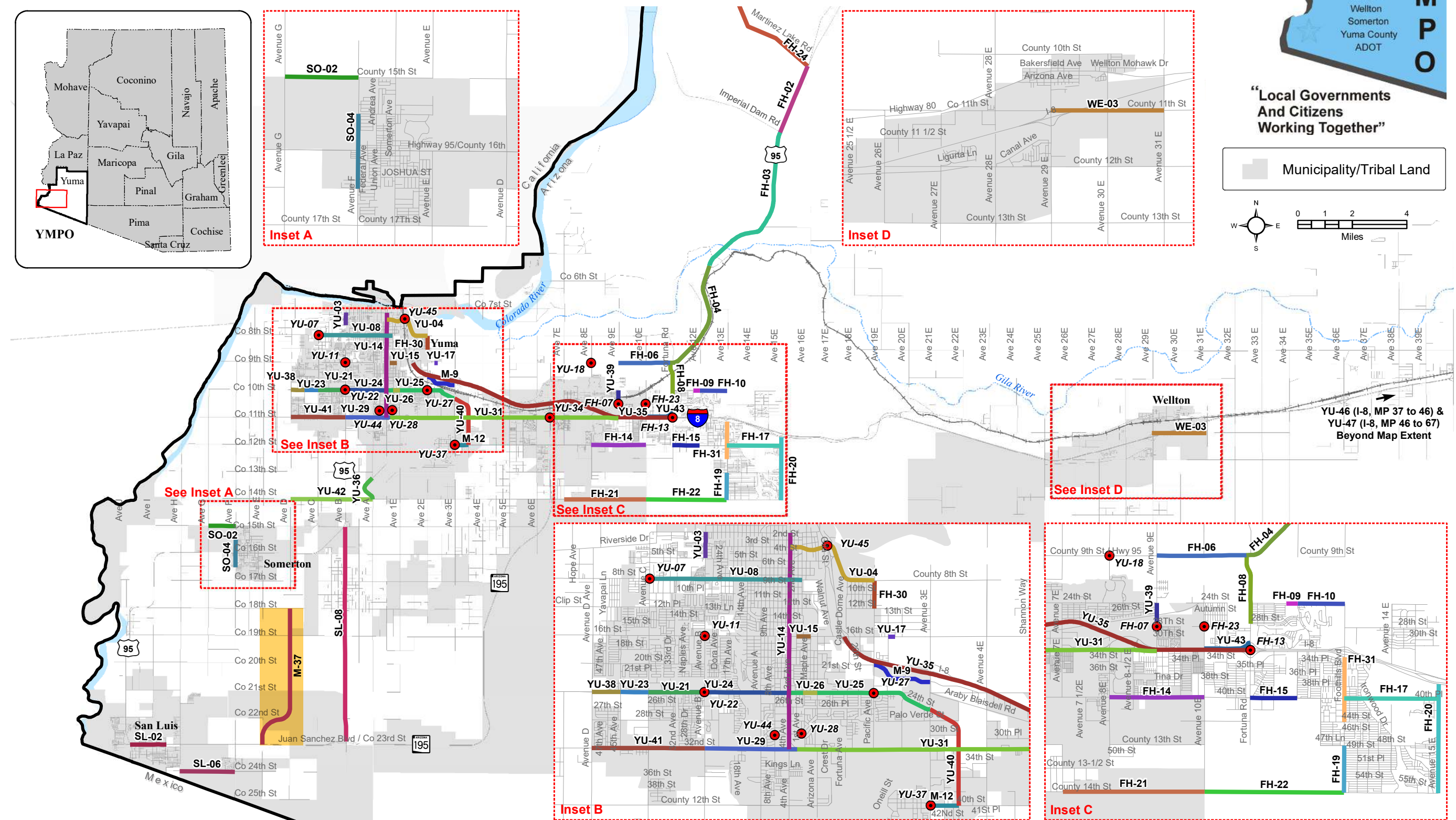
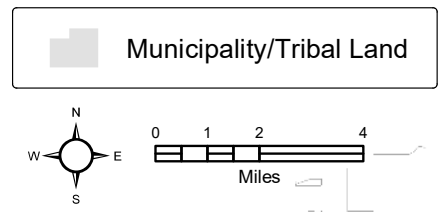


Kimley»Horn

Prepared by Kimley-Horn and Associates, Inc.
in association with Wilson & Company, Inc. and Gordley Design Group, Inc.



**“Local Governments
And Citizens
Working Together”**



Note: Colors are used to distinguish the starting and ending points of improvements

Figure 8.1 – Recommended Roadway Capital Improvement Projects, 2018-2041
(Source: Kimley-Horn)

Area-Project No.	Yuma County – Recommended Roadway Capital Projects						Cost (Million \$)	RTP Period						Factored Cost (Million \$)	RTP Period						Project Description
								1	2	3	4	5	UF		1	2	3	4	5	UF	
								\$ / Cost by Timeframe							Factored Cost by Timeframe						
								2018-2022	2023-2027	2028-2032	2033-2037	2038-2041	Unfunded		2018-2022	2023-2027	2028-2032	2033-2037	2038-2041	Unfunded	
	Project	Limits	Agency	Length (Miles)	Through Lanes																
SO-02	Co. 15th St. Safety and Hazard Elimination	Ave. G to Ave. F	YC/ COC	1.00	-	2	0.5	0.5	0.0	0.0	0.0	0.0	-	0.5	0.5	0.0	0.0	0.0	0.0	0.0	This project is a safety and hazard elimination project. This project is phased for the period 2018-2022.
SL-08	Ave. B Widening*	Co. 15th St. to SR 195	YC/SL	7.00	2	4	37.8	2.8	-	-	-	-	35.0	89.1	2.8	0.0	0.0	0.0	0.0	86.3	This project will widen Avenue B from two to four lanes from Co. 15th Street to SR 195. This project is phased for the period 2018-2022.
FH-15	Co. 12th St. Widening	Fortuna Rd. to Ave. 12E	YC	1.00	2	4	5.0	-	5.0	-	-	-	-	7.1	0.0	7.1	0.0	0.0	0.0	0.0	This project will widen Co. 12th Street from two to four lanes from Fortuna Road to Avenue 12E. This project is phased for the period 2023-2027.
FH-17	Co. 12th St. Road Extension	Foothills Blvd. to Ave. 15E	YC	1.50	0	2	6.7	0.0	6.7	0.0	0.0	0.0	-	9.5	0.0	9.5	0.0	0.0	0.0	0.0	This project will widen Co. 12th Street from two to four lanes from Foothills Boulevard to Avenue 15E. This project is phased for the period 2023-2027.
FH-09	24th St. Paving Dirt Road	Universe Ave. to Camino del Sol	YC	0.50	-	2	1.0	-	-	1.0	-	-	-	1.7	0.0	0.0	1.7	0.0	0.0	0.0	This project will pave 24th Street from Universe Avenue to Camino del Sol. This project is phased for the period 2028-2032.
FH-19	Foothills Blvd. Widening	Co. 13th St. to Co. 14th St.	YC	1.00	2	4	5.0	-	-	5.0	-	-	-	8.7	0.0	0.0	8.7	0.0	0.0	0.0	This project will widen Foothills Boulevard from two to four lanes from Co. 13th Street to Co. 14th Street. This project is phased for the period 2028-2032.
FH-08	Fortuna Rd. Widening	US 95 to 28th St.	YC	1.50	2/3	4	6.0	-	-	3.8	2.2	-	-	11.2	0.0	0.0	6.6	4.6	0.0	0.0	This project will widen Fortuna Road from two to four lanes from US 95 to 28th Street. This project is phased for multiple time periods (Phase 3: 2028-2032, Phase 4: 2033-2037).
YU-03	Ave. B Safety Improvements	1st St. to 5th St.	YC/ COY	0.50	-	-	0.5	-	-	-	0.5	-	-	1.1	0.0	0.0	0.0	1.1	0.0	0.0	This project provides safety improvements to Avenue B from 1st Street to 5th Street. This project is phased for the period 2033-2037.
FH-22	Co. 14th St. Paving Dirt Rd.	Ave. 10E to Ave. 13E	YC	3.00	-	2	6.0	-	-	-	6.0	-	-	12.6	0.0	0.0	0.0	12.6	0.0	0.0	This project will pave Co. 14th Street from Avenue 10E to Avenue 13E. This project is phased for the period 2033-2037.
FH-10	24th St. Paving Dirt Road	Camino del Sol to Foothills Blvd.	YC	1.30	-	2	2.6	-	-	-	2.6	-	-	5.5	0.0	0.0	0.0	5.5	0.0	0.0	This project will pave 24th Street from Camino del Sol to Foothills Boulevard. This project will be phased for the period 2033-2037.
FH-30	Pacific Avenue Widening	Co. 8th St to City 12th St	YC/ COY	0.50	2	4	2.0	0.0	2.0	0.0	0.0	0.0		2.8	0.0	2.8	0.0	0.0	0.0	0.0	This project will widen Pacific Avenue from County 8th St to City 12th St from 2 to 4 lanes. This project will be phased for the time period 2023-2027.
FH-20	Ave. 15E Widening	S. Frontage Rd. to Co. 14th St.	YC	2.50	2	4	12.5	-	-	-	-	12.5	-	30.8	0.0	0.0	0.0	0.0	30.8	0.0	This project will widen Avenue 15E from two to four lanes from S. Frontage Road to Co. 14th Street. This project will be phased for the period 2038-2041.
FH-24	Martinez Lake Rd. overlay	US 95 to MP 4.3	YC	4.30	2	2	1.8	1.8	0.0	0.0	0.0	0.0	-	1.8	1.8	0.0	0.0	0.0	0.0	0.0	This project will overlay Martinez Lake Road from US 95 to MP 4.3. This project will be phased for the period 2018-2022.
YU-42	Co. 14th St. Overlay	Ave. A to Ave. D	YC	3.00	2	2	1.3	1.3	-	-	-	-	-	1.3	1.3	0.0	0.0	0.0	0.0	0.0	This project will overlay Co.14th Street from Avenue A to Avenue D. This project will be phased for the period 2018-2022.
YU-43	North I-8 Frontage Rd.	Ave. 10E to 11 E	YC	1.00	2	4	5.0	5.0	-	-	-	-	-	5.0	5.0	0.0	0.0	0.0	0.0	0.0	This project will widen I-8 Frontage Road from two to four lanes from Avenue 10E to Avenue 11E. This project will be phased for the period 2018-2022.
FH-31	Foothill Blvd Mill and Overlay	S. Frontage Road to 44th St	YC	1.50	4	4	2.0	-	-	-	-	2.0	-	4.9	0.0	0.0	0.0	0.0	4.9	0.0	This project will overlay Foothills Blvd from the South Frontage Road to 44th Street. This project will be phased in the time period from 2038 to 2041.
M-37	Ave. E Extension	Co. 23rd St to Co. 19th St	YC	6.00	0	2	8.5	-	8.5	-	-	-	-	12.1	0.0	12.1	0.0	0.0	0.0	0.0	This project will construct a two-lane roadway on new alignment. This project will be constructed in the time period 2023-2027.

Total Cost (Million \$) **69.2** **11.4** **22.2** **9.8** **11.3** **14.5** **35.0** **119.4** **11.4** **31.5** **17.0** **23.8** **35.7** **86.3**

Table 8.3 – Yuma County Roadway Capital Improvement Projects, 2018-2041
(Source: Kimley-Horn)

*Note: An estimated \$35 million (\$86.3 Million factored cost) of this project is unfunded.

Comparison of Costs versus Revenues for Capital Projects

The FHWA/FTA Final Rule on metropolitan transportation planning and programming requires that revenue be reasonably available to cover the project costs of all recommended projects. This means the 2018-2041 RTP must be “fiscally constrained.”

Table 8.9 summarizes estimated project costs by jurisdiction, as compared to projected revenues. The RTP uses an inflation rate to reflect the year of expenditure based on FHWA guidance provided in the document Financial Planning and Fiscal Constraint for Transportation Plans and Programs (2013), which recommends using an inflation rate of four percent per year unless local data suggests a different inflation rate would be more appropriate. An inflation rate of four percent per year was used to estimate future project cost estimates, as reflected in the factored cost estimates previously shown in *Tables 8.2 through 8.8*.

Overall, there is estimated to be approximately \$43 million more in revenues than project costs. It was determined through discussion with the TAC that this estimated excess revenue could provide a cushion should implementation costs be higher than projected. If additional revenues become available projects can either be advanced or unfunded projects could potentially be implemented. Unfunded projects are summarized in the Appendix under separate cover.

YMPO Member Agency	Total RTP Funded Project Costs, (Million \$)	Total RTP Factored Projects Costs (Million \$)	Estimated Factored Roadway Capital Revenues and Costs by Timeframe					Unfunded Projects
			2018-2022	2023-2027	2028-2032	2033-2037	2038-2041	
City of Yuma	159.4	256.2	47.4	41.4	58.1	68.6	40.7	122.5
Yuma County	69.2	119.4	11.4	31.5	17.0	23.8	35.7	147.7
City of San Luis	8.8	10.5	4.8	5.7	0.0	0.0	0.0	37.5
City of Somerton	7.3	10.5	2.6	2.7	3.1	2.1	0.0	24.6
Town of Wellton	4.0	7.7	0.0	1.4	1.7	2.1	2.5	45.8
Cocopah Indian Tribe	1.3	2.1	0.3	0.4	0.4	0.5	0.5	4.3
Total Estimated Costs for Capital Improvements	241.4	394.3	66.5	71.0	80.3	97.1	79.4	403.4
Total Anticipated Available Revenue	N/A	\$437.4	60.9	69.6	96.1	110.5	100.4	N/A
Difference (Revenues minus capital expenditures)	N/A	\$43.2	(\$5.6)	(\$1.4)	\$15.8	\$13.4	\$21.0	N/A

Note: Costs in 2016 dollars

Table 8.9 – RTP Estimated Capital Expenditures versus Revenues by Time Period
(Source: Kimley-Horn)

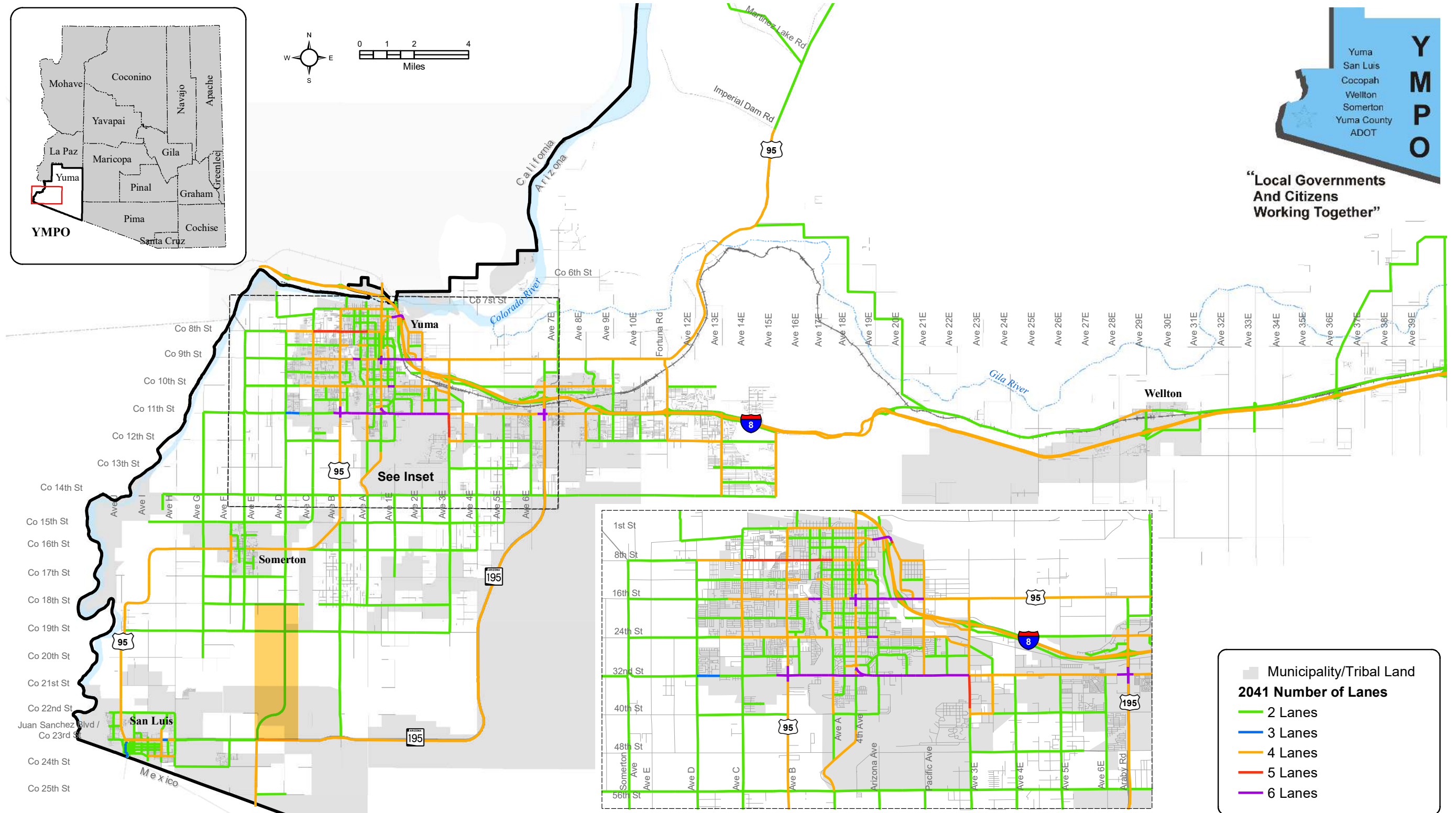


Figure 8.2 – 2041 “With Improvements” Number of Through Lanes
(Source: Kimley-Horn)

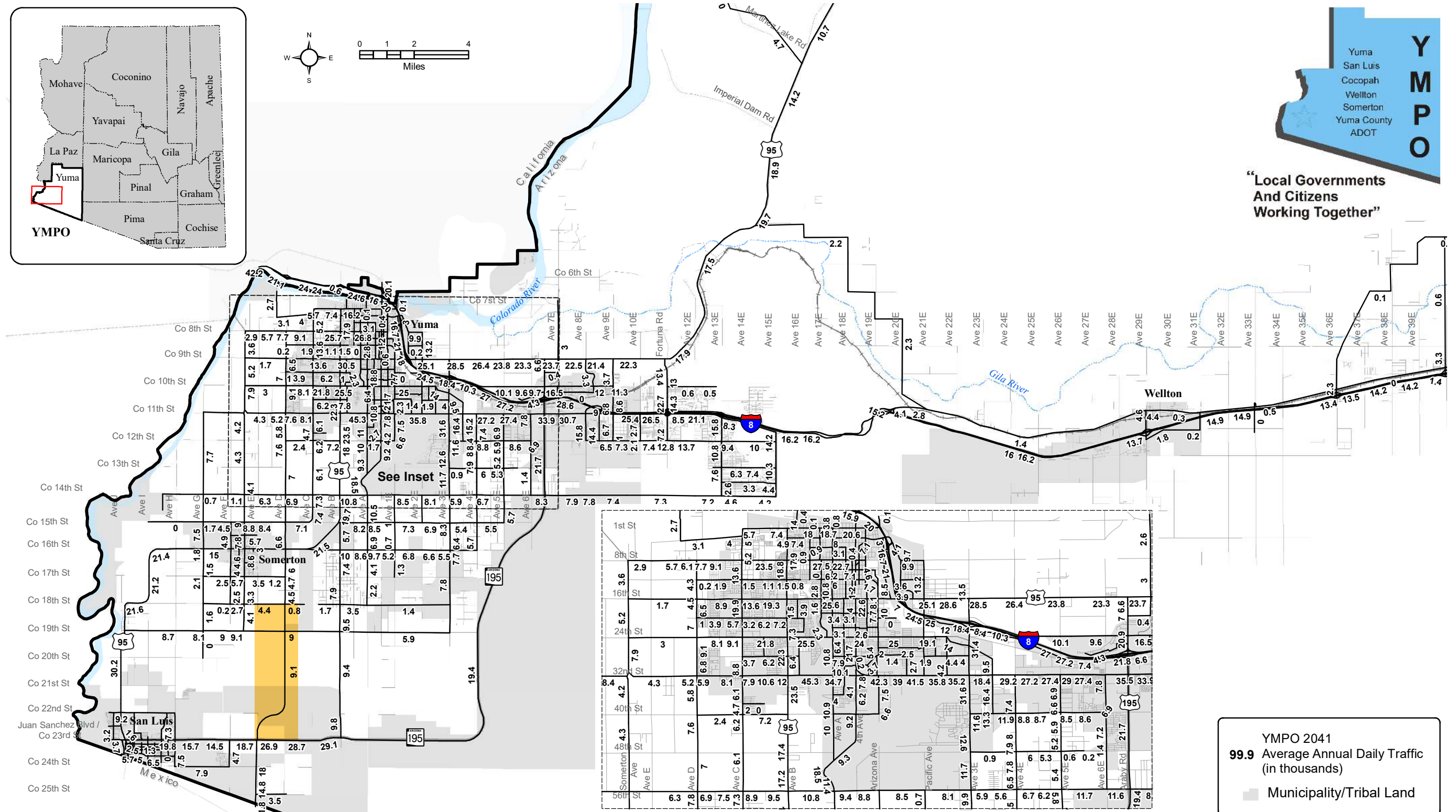
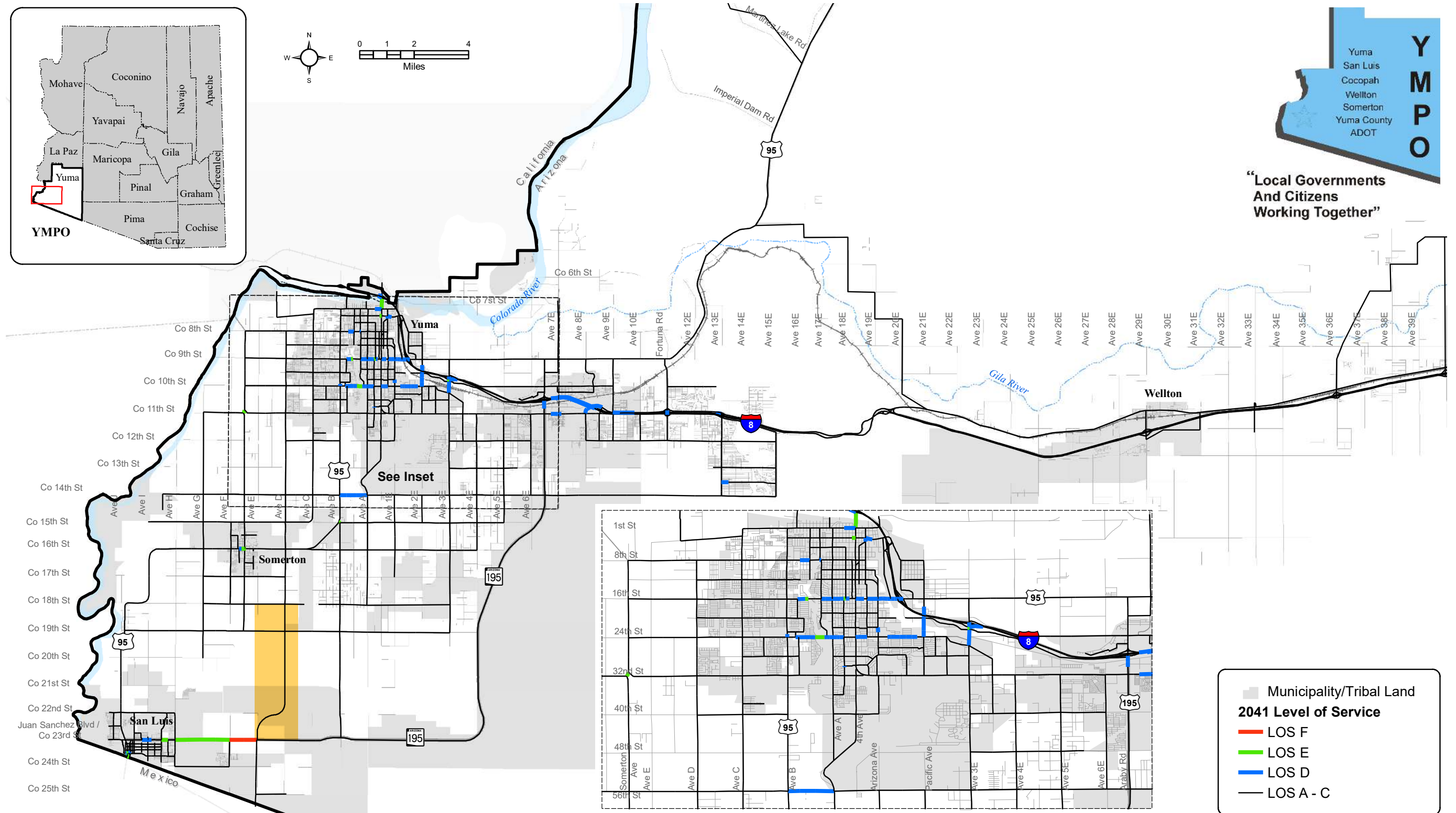


Figure 8.3 – 2041 “With Improvements” Traffic Volumes
(Source: Kimley-Horn)



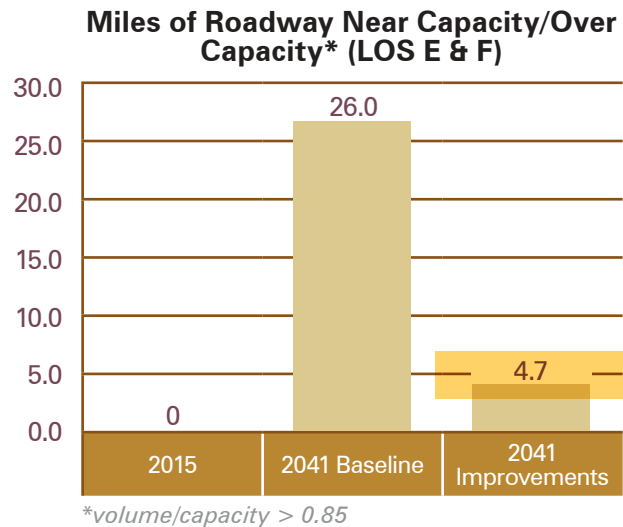


Figure 8.5 – Comparison of Lane Miles of Roadway Near Capacity or Over Capacity
(Source: Kimley-Horn)

Impact of Planned Roadway Improvements on Traffic and Congestion

YMPO's Travel Demand Model (TDM) was developed for the year 2041 "with improvements" to determine how the RTP roadway improvement projects are anticipated to affect regional traffic patterns, traffic volumes, and roadway network performance.

(Source: Yuma International Airport, Airport Master Plan, Draft Change 1, 2011, page 153 with additional revisions)

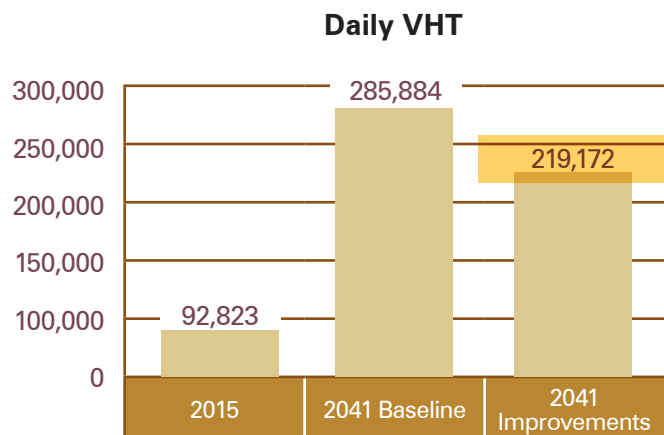


Figure 8.6 – Comparison of Daily Vehicle Hours of Travel
(Source: Kimley-Horn)

Results and Conclusions

Emissions estimates from MOVES and AP-42 were combined estimates of reductions from RACMs and newly paved roads to determine the overall impact of on-road mobile sources on PM₁₀ levels in the YMPO nonattainment area for the maintenance plan budget years of 2018, 2021, 2031 and 2041. The ADEQ Yuma PM Maintenance Plan (August 2006) establishes annual emissions maintenance budgets for use in conformity analyses. Results from this analysis are summarized in *Table 8.16*, along with comparisons to the established Motor Vehicle Emission Budgets (MVEBs).

Budget Year	PM ₁₀ Tons per Year	Maintenance Plan Budget Tons per Year*	Annual Reduction Tons per Year	Adjusted PM ₁₀ Tons per Year
2018	8,816.64	10,803	66.15	8,750.49
2021	8,946.03	10,803	403.15	8,542.88
2031	9,315.67	10,803	754.15	8,561.52
2041	9,770.40	10,803	1,139.15	8,631.25

*MVEBs were found adequate for use in conformity (75 FR 32295; effective June 27, 2007).

Table 8.16 – Motor Vehicle Emissions Budget Comparison
(Source: Kimley-Horn)

This air quality analysis documentation demonstrates conformity between the 2018-2022 Transportation Improvement Program, the 2018-2041 Regional Transportation Plan, and the State Implementation Plan.

The analysis indicates that the projected emissions levels based on projects contained in the YMPO RTP Update 2018-2041 meet the applicable conformity tests. Therefore, it is the determination of this analysis that this plan conforms under the PM₁₀ National Ambient Air Quality Standards.