ATTACHMENT A

$PM_{2.5}$ AND PM_{10} EMISSION CALCULATIONS

PM Emissions 2008 (pounds)

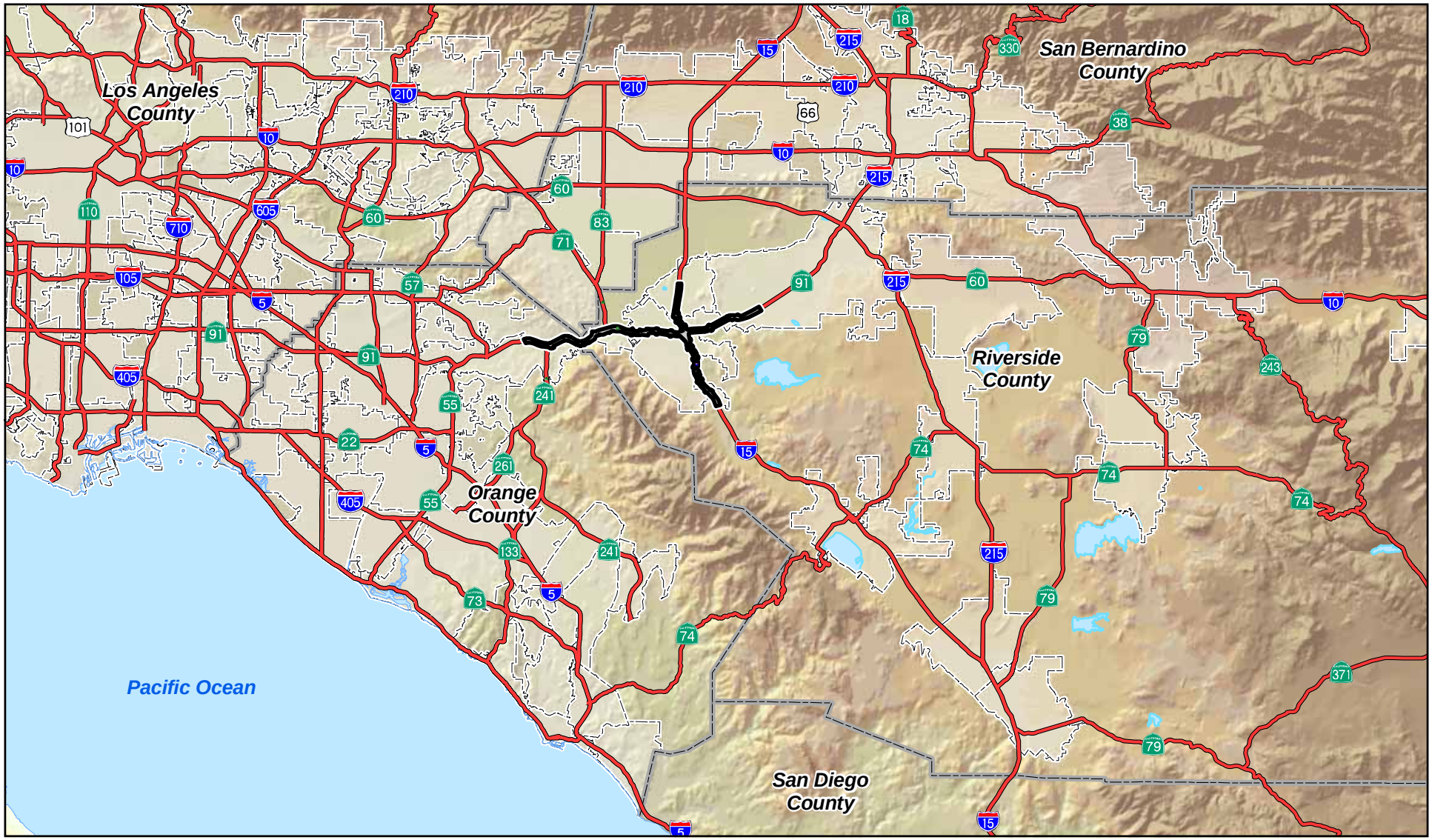
Emission	Existing	Alt 1	Alt 2
PM2.5 Exhaust	1068.913	0.000	0.000
PM2.5 Tire Wear	62.402	0.000	0.000
PM2.5 Brake Wear	126.748	0.000	0.000
PM2.5 Road Dust	4819.669	0.000	0.000
PM10 Exhaust	1165.028	0.000	0.000
PM10 Tire Wear	248.810	0.000	0.000
PM10 Brake Wear	326.986	0.000	0.000
PM10 Road Dust	53345.385	0.000	0.000
Total PM2.5	6077.733	0.000	0.000
Total PM10	55086.208	0.000	0.000

PM Emissions 2015 (pounds)

Emission	No Build	Alt 1	Alt 2
PM2.5 Exhaust	776.434	779.521	742.441
PM2.5 Tire Wear	78.296	79.258	77.632
PM2.5 Brake Wear	150.513	152.971	151.814
PM2.5 Road Dust	6368.466	6315.926	5759.169
PM10 Exhaust	1030.322	1029.371	963.791
PM10 Tire Wear	312.085	315.960	309.602
PM10 Brake Wear	407.813	413.825	408.595
PM10 Road Dust	68813.026	68892.971	64978.246
Total PM2.5	7373.709	7327.676	6731.055
Total PM10	70563.246	70652.128	66660.234

PM Emissions 2035 (pounds)

Emission	No Build	Alt 1	Alt 2
PM2.5 Exhaust	948.600	948.014	781.073
PM2.5 Tire Wear	96.025	96.270	96.262
PM2.5 Brake Wear	194.386	195.257	195.595
PM2.5 Road Dust	7670.667	7544.447	7405.963
PM10 Exhaust	1021.152	1020.394	843.607
PM10 Tire Wear	384.098	385.079	385.046
PM10 Brake Wear	501.223	503.616	504.626
PM10 Road Dust	83575.860	82935.537	82121.434
Total PM2.5	8909.677	8783.987	8478.892
Total PM10	85482.333	84844.625	83854.714



LEGEND

- SR-91 Study Area
- City Boundary
- County Boundary

0 5 10
Miles

FIGURE 1

SR-91 Corridor Improvement Project

Project Vicinity

12-Ora-91-R14.43/R18.91
08-Riv-91-R0.00/R13.04
08-Riv-15-35.64/45.14
EA 0F540

SOURCE: ESRI (2006); TBM (2007), PB (2008)

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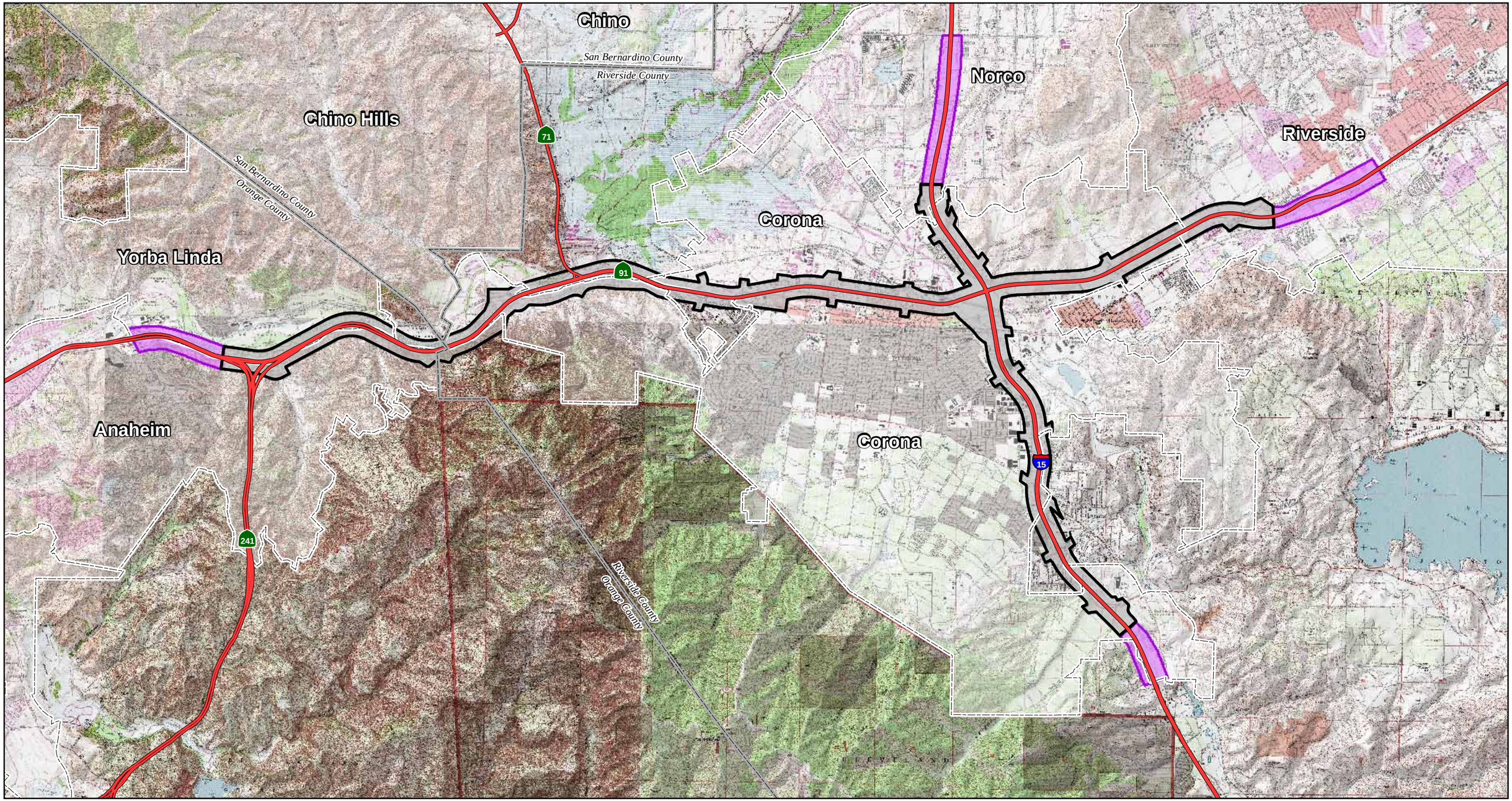

FIGURE 2

LEGEND

SR-91 Study Area

Advanced Signage Area

N

0 0.75 1.5 Miles

SR-91 Corridor Improvement Project

Project Location

12-Ora-91-R14.43/R18.91
08-Riv-91-R0.00/R13.04
08-Riv-15-35.64/45.14
EA 0F540

SOURCE: USGS 7.5' QUAD - BLACK STAR CANYON ('88), CORONA NORTH ('81), CORONA SOUTH ('88), PRADO DAM ('81), RIVERSIDE WEST ('81); CALIF.

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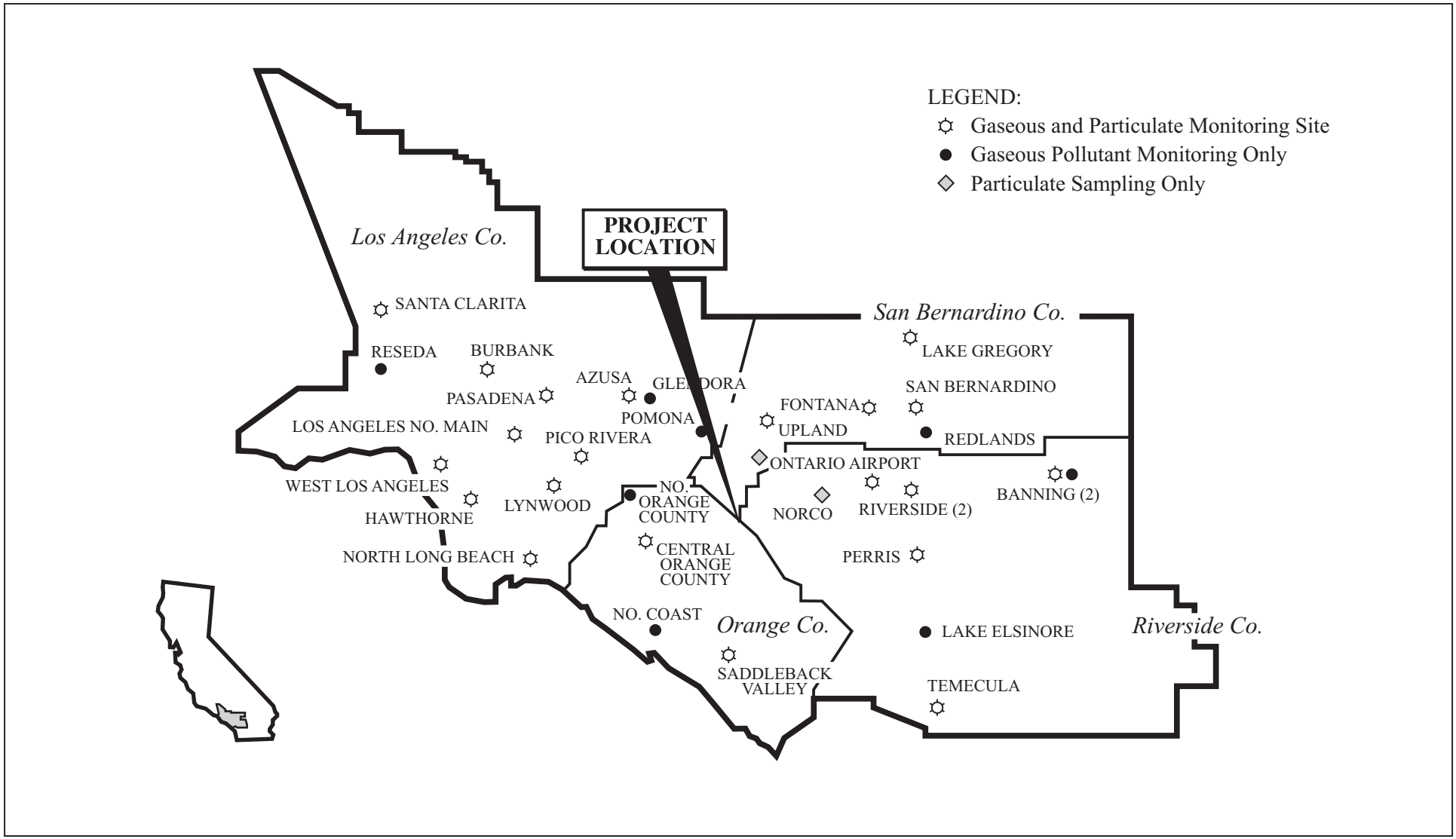

FIGURE 3

SR-91 Corridor Improvement Project

SCAQMD Air Monitoring Network
Within the South Coast Air Basin

PM 12-Ora-91-R14.43/R18.91
PM 08-Riv-91-R0.000/R13.04
PM 08-Riv-15-35.64/45.14
EA#0F5400

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