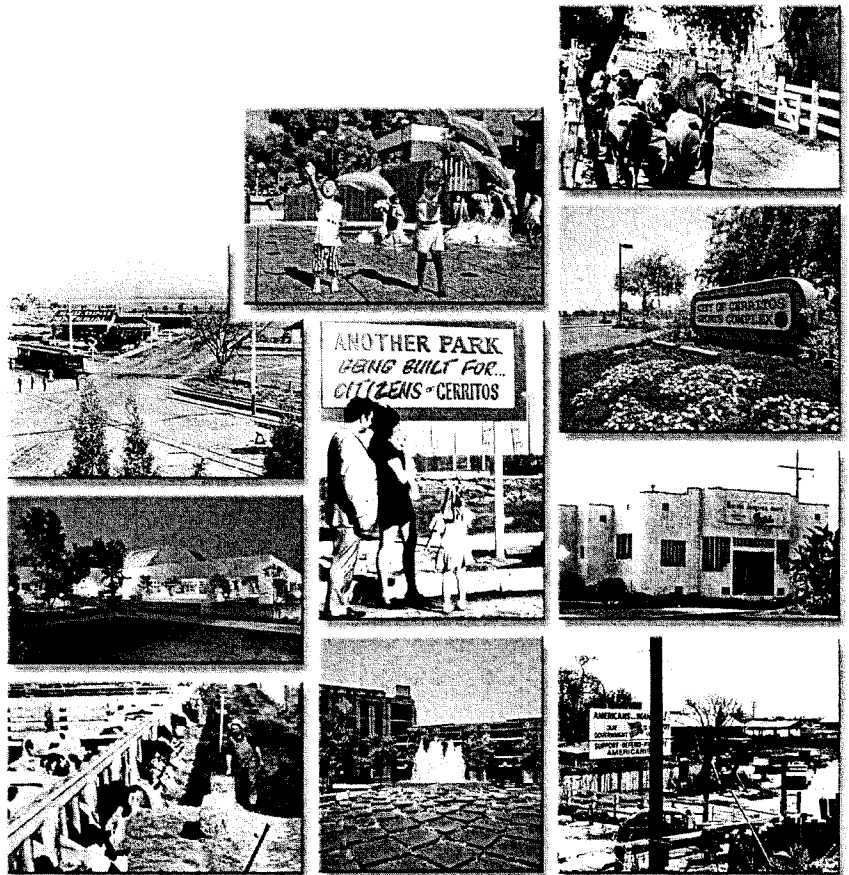


A CITY WITH VISION

CERRITOS
GENERAL PLAN & EIR

Appendix C
Air Quality Model Runs



**Cerritos General Plan Update Year 2020
Area Source Off-Site Energy Consumption Emissions**

Calculated per Table 9-8, *Screening Table for Estimating Area Source Operational Emissions - Energy Consumption* in the SCAQMD CEQA Handbook.

**Table 1
EMISSION FACTORS BY LAND USE**

Land Use	Unit of Measure	Emissions Factor (lbs/day)			
		ROG	NOx	CO	PM10
Single Family Residential	Dwelling Unit	0.00017	0.01916	0.00333	0.00067
Office	1,000 sq. ft.	0.00024	0.02773	0.00482	0.00096
Shopping Center	1,000 sq. ft.	0.00032	0.03718	0.00647	0.00129
Industrial	1,000 sq. ft.	0.00024	0.02773	0.00482	0.00096
Business Park	1,000 sq. ft.	0.00024	0.02773	0.00482	0.00096
Government Office Complex	1,000 sq. ft.	0.00024	0.02773	0.00482	0.00096
Elementary School	1,000 sq. ft.	0.00017	0.01985	0.00345	0.00069
High School	1,000 sq. ft.	0.00024	0.02773	0.00482	0.00096
Community College	1,000 sq. ft.	0.00032	0.03655	0.00636	0.00127

**Table 2
OFF-SITE ENERGY CONSUMPTION EMISSION FACTORS**

Land Use	Unit of Measure	Emissions Factor (lbs/day)			
		ROG	NOx	CO	PM10
Single Family Residential	15,871	0.0027	0.3041	0.0529	0.0106
Office	390,246	0.0937	10.8215	1.8810	0.3746
Shopping Center	9,263,992	2.9645	344.4352	59.9380	11.9505
Industrial	643,230	0.1544	17.8368	3.1004	0.6175
Business Park	11,778,472	2.8268	326.6170	56.7722	11.3073
Government Office Complex	137,666	0.0330	3.8175	0.6636	0.1322
Elementary School	5,270,345	0.8960	104.6163	18.1827	3.6365
High School	5,538,241	1.3292	153.5754	26.6943	5.3167
Community College	392,041	0.1255	14.3291	2.4934	0.4979
TOTAL		8.4258	976.3529	169.7785	33.8438

URBEMIS 2001 For Windows 6.2.2

File Name: H:\Pdata\00000100\10P\WPWIN\EddieT\URBEMIS\URBEMIS2001\Cerritos.
 Project Name: Cerritos General Plan Update 2020
 Project Location: South Coast Air Basin (Los Angeles area)

SUMMARY REPORT
 (Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS (lbs/day, unmitigated)	208.30	819.08	388.64	429.74	50.63
TOTALS (lbs/day, mitigated)	208.30	819.08	388.64	429.74	50.63

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS (lbs/day, unmitigated)	810.85	360.23	227.57	0.74	2.66
TOTALS (lbs/day, mitigated)	810.79	359.42	227.25	0.74	2.66

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS (ppd, unmitigated)	2,829.75	1,884.97	31,843.05	2,534.27	21.18
TOTALS (ppd, mitigated)	2,829.75	1,884.97	31,843.05	2,534.27	21.18

URBEMIS 2001 For Windows 6.2.2

File Name: H:\pdata\00000100\10P\WPWIN\EddieT\URBEMIS\URBEMIS2001\Cerritos.
 Project Name: Cerritos General Plan Update 2020
 Project Location: South Coast Air Basin (Los Angeles area)

SUMMARY REPORT
 (Pounds/Day - Winter)

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS (lbs/day, unmitigated)	208.30	819.08	388.64	429.74	50.63
TOTALS (lbs/day, mitigated)	208.30	819.08	388.64	429.74	50.63

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS (lbs/day, unmitigated)	803.33	358.32	148.07	0.67	0.00
TOTALS (lbs/day, mitigated)	803.28	357.51	147.75	0.66	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS (ppd, unmitigated)	2,750.13	3,095.71	35,387.03	2,534.27	18.15
TOTALS (ppd, mitigated)	2,750.13	3,095.71	35,387.03	2,534.27	18.15

URBEMIS 2001 For Windows 6.2.2

File Name: H:\Pdata\00000100\10P\WPWIN\EddieT\URBEMIS\URBEMIS2001\Cerritos.
 Project Name: Cerritos General Plan Update 2020
 Project Location: South Coast Air Basin (Los Angeles area)

SUMMARY REPORT
 (Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS (tpy, unmitigated)	23.85	102.38	48.58	53.72	6.33
TOTALS (tpy, mitigated)	23.85	102.38	48.58	53.72	6.33

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS (tpy, unmitigated)	147.28	65.56	34.18	0.13	0.24
TOTALS (tpy, mitigated)	147.24	65.42	34.12	0.13	0.24

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS (tpy, unmitigated)	511.59	417.66	6,026.95	462.50	3.68
TOTALS (tpy, mitigated)	511.59	417.66	6,026.95	462.50	3.68

URBEMIS 2001 For Windows 6.2.2

File Name: H:\Pdata\00000100\10P\WPWIN\EddieT\URBEMIS\URBEMIS2001\Cerritos.
 Project Name: Cerritos General Plan Update 2020
 Project Location: South Coast Air Basin (Los Angeles area)

DETAIL REPORT
 (Pounds/Day - Winter)

Total Land Use Area to be Developed (Estimated): 3805 acres
 Retail/Office/Institutional Square Footage: 22213616
 Single Family Units: 13275 Multi-family Units: 2596

CONSTRUCTION EMISSION ESTIMATES

Source	ROG	NOx	CO	PM10	SO2
Demolition	-	-	-	0.00	-
Site Grading	11.65	110.18	-	359.28	11.01
Const. Worker Trips	144.85	204.92	388.64	39.31	-
Stationary Equip	1.85	1.51	-	0.09	0.02
Mobile Equip. - Gas	0.00	0.00	-	0.00	0.00
Mobile Equip. - Diesel	31.68	502.48	-	31.06	39.60
Architectural Coatings	0.00	-	-	-	-
Asphalt Offgassing	18.27	-	-	-	-
TOTALS (lbs/day, unmitigated)	208.30	819.08	388.64	429.74	50.63

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	PM10	SO2
Natural Gas	26.88	358.32	148.07	0.67	-
Wood Stoves	0.00	0.00	0.00	0.00	0.00
Fireplaces	0.00	0.00	0.00	0.00	0.00
Landscaping - No winter emissions					
Consumer Prdcts	776.46	-	-	-	-
TOTALS (lbs/day, unmitigated)	803.33	358.32	148.07	0.67	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	PM10	SO2
Single family housing	716.18	827.12	9,550.23	691.97	4.96
Condo/townhouse general	79.72	92.06	1,063.01	77.02	0.55
Elementary school	32.37	35.35	403.31	28.49	0.20
Junior high school	11.99	13.36	151.88	10.83	0.08
High school	17.86	20.40	229.99	16.60	0.12
Junior college (2 yrs)	34.90	42.15	470.16	34.77	0.25
Regnl shop. center < 5700	276.73	279.87	3,201.10	218.33	1.57
Regnl shop. center > 5700	521.52	509.06	5,856.42	392.16	2.82
General office building	27.94	33.35	377.12	27.66	0.20
Office park	973.99	1,175.48	13,322.43	980.68	7.00
Government (civic center)	25.29	28.38	320.78	22.97	0.16
Industrial park	31.63	39.12	440.61	32.78	0.23
TOTAL EMISSIONS (lbs/day)	2,750.13	3,095.71	35,387.03	2,534.27	18.15

Includes correction for passby trips.

Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2020 Temperature (F): 40 Season: Winter

EMFAC Version: EMFAC2001 (10/2001)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	7.01 trips / dwelling units	13,275.00	93,057.75
Condo/townhouse general	3.99 trips / dwelling units	2,596.00	10,358.04
Elementary school	0.97 trips / students	5,409.00	5,246.73
Junior high school	0.97 trips / students	1,952.00	1,893.44
High school	0.56 trips / students	5,085.00	2,847.60
Junior college (2 yrs)	1.64 trips / students	3,200.00	5,248.00
Regnl shop. center < 5700	21.86 trips / 1000 sq. ft.	2,418.24	52,862.75
Regnl shop. center > 5700	15.08 trips / 1000 sq. ft.	6,845.75	103,233.92
General office building	9.68 trips / 1000 sq. ft.	390.25	3,777.58
Office park	10.46 trips / 1000 sq. ft.	11,778.47	123,202.82
Government (civic center)	30.00 trips / 1000 sq. ft.	137.67	4,129.98
Industrial park	6.13 trips / 1000 sq. ft.	643.24	3,943.06

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	61.40	4.70	94.50	0.80
Light Truck < 3,750 lbs	9.30	11.00	88.90	0.10
Light Truck 3,751- 5,750	16.70	1.80	97.60	0.60
Med Truck 5,751- 8,500	7.20	12.50	79.20	8.30
Lite-Heavy 8,501-10,000	1.10	18.20	72.70	9.10
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.10	9.10	27.30	63.60
Heavy-Heavy 33,001-60,000	0.70	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.00	0.00	0.00	100.00

Motorcycle	1.40	90.90	9.10	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	0.70	0.00	100.00	0.00

Travel Conditions

	Residential			Commercial		
	Home- Work	Home- Shop	Home- Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			

% of Trips - Commercial (by land use)

Elementary school	20.0	10.0	70.0
Junior high school	20.0	10.0	70.0
High school	10.0	5.0	85.0
Junior college (2 yrs)	5.0	2.5	92.5
Regnl shop. center < 570000 sf	2.0	1.0	97.0
Regnl shop. center > 570000 sf	2.0	1.0	97.0
General office building	35.0	17.5	47.5
Office park	48.0	24.0	28.0
Government (civic center)	10.0	5.0	85.0
Industrial park	41.5	20.8	37.8

Changes made to the default values for Construction

The architectural coating option switch changed from on to off.
The construction year changed from 2002 to 2020.
The demolition days required changed from 10 to 0.
The site grading max daily acreage estimate changed from to 35.
The site grading tracked loader total vehicles changed from to 4.
The site grading wheeled loader total vehicles changed from to 4.
The site grading motor grader total vehicles changed from to 4.
The worker construction year changed from 2002 to 2020.
The asphalt acres to be paved changed from 1 to 69.733769513315.
The stationary equipment equipment units changed from 2 to 11.
The mobile diesel fork lift 175 HP total vehicles changed from to 11.
The mobile diesel truck: off hwy total vehicles changed from to 11.
Changes made to the default values for Area

The wood stove option switch changed from on to off.
The fireplcase option switch changed from on to off.
The landscape year changed from 2002 to 2020.
Changes made to the default values for Operations

The operational emission year changed from 2002 to 2020.
The operational winter temperature changed from 50 to 40.
The operational winter selection item changed from 3 to 1.
The operational summer selection item changed from 8 to 7.
The home based work selection item changed from 8 to 7.
The home based shopping selection item changed from 9 to 8.
The home based other selection item changed from 9 to 8.
The commercial based commute selection item changed from 9 to 8.
The commercial based non-work selection item changed from 9 to 8.
The commercial based customer selection item changed from 9 to 8.
The double counting internal work trip limit changed from to 20683.158.
The double counting shopping trip limit changed from to 33803.0007652.
The double counting other trip limit changed from to 44468.7897.

URBEMIS 2001 For Windows 6.2.2

File Name: H:\Pdata\00000100\10P\WPWIN\EddieT\URBEMIS\URBEMIS2001\Cerritos.
 Project Name: Cerritos General Plan Update 2020
 Project Location: South Coast Air Basin (Los Angeles area)

DETAIL REPORT
 (Pounds/Day - Summer)

Total Land Use Area to be Developed (Estimated): 3805 acres
 Retail/Office/Institutional Square Footage: 22213616
 Single Family Units: 13275 Multi-family Units: 2596

CONSTRUCTION EMISSION ESTIMATES

Source	ROG	NOx	CO	PM10	SO2
Demolition	-	-	-	0.00	-
Site Grading	11.65	110.18	-	359.28	11.01
Const. Worker Trips	144.85	204.92	388.64	39.31	-
Stationary Equip	1.85	1.51	-	0.09	0.02
Mobile Equip. - Gas	0.00	0.00	-	0.00	0.00
Mobile Equip. - Diesel	31.68	502.48	-	31.06	39.60
Architectural Coatings	0.00	-	-	-	-
Asphalt Offgassing	18.27	-	-	-	-
TOTALS (lbs/day, unmitigated)	208.30	819.08	388.64	429.74	50.63

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	PM10	SO2
Natural Gas	26.88	358.32	148.07	0.67	-
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	7.52	1.91	79.50	0.07	2.66
Consumer Prdcts	776.46	-	-	-	-
TOTALS (lbs/day, unmitigated)	810.85	360.23	227.57	0.74	2.66

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	PM10	SO2
Single family housing	732.67	501.70	8,660.15	691.97	5.86
Condo/townhouse general	95.90	55.84	963.94	77.02	0.65
Elementary school	94.45	21.59	360.55	28.49	0.24
Junior high school	34.33	8.15	136.11	10.83	0.09
High school	79.04	12.44	205.80	16.60	0.14
Junior college (2 yrs)	68.08	25.62	422.71	34.77	0.29
Regnl shop. center < 5700	242.46	172.38	2,804.24	218.33	1.82
Regnl shop. center > 5700	485.41	314.44	5,102.83	392.16	3.27
General office building	26.86	20.23	342.39	27.66	0.23
Office park	916.17	711.60	12,155.79	980.68	8.14
Government (civic center)	21.29	17.32	286.38	22.97	0.19
Industrial park	33.09	23.66	402.15	32.78	0.27
TOTAL EMISSIONS (lbs/day)	2,829.75	1,884.97	31,843.05	2,534.27	21.18

Includes correction for passby trips.

Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2020 Temperature (F): 90 Season: Summer

EMFAC Version: EMFAC2001 (10/2001)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	7.01 trips / dwelling units	13,275.00	93,057.75
Condo/townhouse general	3.99 trips / dwelling units	2,596.00	10,358.04
Elementary school	0.97 trips / students	5,409.00	5,246.73
Junior high school	0.97 trips / students	1,952.00	1,893.44
High school	0.56 trips / students	5,085.00	2,847.60
Junior college (2 yrs)	1.64 trips / students	3,200.00	5,248.00
Regnl shop. center < 5700	21.86 trips / 1000 sq. ft.	2,418.24	52,862.75
Regnl shop. center > 5700	15.08 trips / 1000 sq. ft.	6,845.75	103,233.92
General office building	9.68 trips / 1000 sq. ft.	390.25	3,777.58
Office park	10.46 trips / 1000 sq. ft.	11,778.47	123,202.82
Government (civic center)	30.00 trips / 1000 sq. ft.	137.67	4,129.98
Industrial park	6.13 trips / 1000 sq. ft.	643.24	3,943.06

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	61.40	4.70	94.50	0.80
Light Truck < 3,750 lbs	9.30	11.00	88.90	0.10
Light Truck 3,751- 5,750	16.70	1.80	97.60	0.60
Med Truck 5,751- 8,500	7.20	12.50	79.20	8.30
Lite-Heavy 8,501-10,000	1.10	18.20	72.70	9.10
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.10	9.10	27.30	63.60
Heavy-Heavy 33,001-60,000	0.70	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.00	0.00	0.00	100.00

Motorcycle	1.40	90.90	9.10	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	0.70	0.00	100.00	0.00

Travel Conditions

	Residential			Commercial		
	Home- Work	Home- Shop	Home- Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			

% of Trips - Commercial (by land use)

Elementary school	20.0	10.0	70.0
Junior high school	20.0	10.0	70.0
High school	10.0	5.0	85.0
Junior college (2 yrs)	5.0	2.5	92.5
Regnl shop. center < 570000 sf	2.0	1.0	97.0
Regnl shop. center > 570000 sf	2.0	1.0	97.0
General office building	35.0	17.5	47.5
Office park	48.0	24.0	28.0
Government (civic center)	10.0	5.0	85.0
Industrial park	41.5	20.8	37.8

Changes made to the default values for Construction

The architectural coating option switch changed from on to off.
The construction year changed from 2002 to 2020.
The demolition days required changed from 10 to 0.
The site grading max daily acreage estimate changed from to 35.
The site grading tracked loader total vehicles changed from to 4.
The site grading wheeled loader total vehicles changed from to 4.
The site grading motor grader total vehicles changed from to 4.
The worker construction year changed from 2002 to 2020.
The asphalt acres to be paved changed from 1 to 69.733769513315.
The stationary equipment equipment units changed from 2 to 11.
The mobile diesel fork lift 175 HP total vehicles changed from to 11.
The mobile diesel truck: off hwy total vehicles changed from to 11.
Changes made to the default values for Area

The wood stove option switch changed from on to off.
The fireplcase option switch changed from on to off.
The landscape year changed from 2002 to 2020.
Changes made to the default values for Operations

The operational emission year changed from 2002 to 2020.
The operational winter temperature changed from 50 to 40.
The operational winter selection item changed from 3 to 1.
The operational summer selection item changed from 8 to 7.
The home based work selection item changed from 8 to 7.
The home based shopping selection item changed from 9 to 8.
The home based other selection item changed from 9 to 8.
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The double counting internal work trip limit changed from to 20683.158.
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The double counting other trip limit changed from to 44468.7897.

URBEMIS 2001 For Windows 6.2.2

File Name: H:\Pdata\00000100\10P\WPWIN\EddieT\URBEMIS\URBEMIS2001\Cerritos.
 Project Name: Cerritos General Plan Update 2020
 Project Location: South Coast Air Basin (Los Angeles area)

DETAIL REPORT
 (Tons/Year)

Total Land Use Area to be Developed (Estimated): 3805 acres

Retail/Office/Institutional Square Footage: 22213616

Single Family Units: 13275 Multi-family Units: 2596

CONSTRUCTION EMISSION ESTIMATES

Source	ROG	NOx	CO	PM10	SO2
Demolition	-	-	-	0.00	-
Site Grading	1.46	13.77	-	44.91	1.38
Const. Worker Trips	18.11	25.61	48.58	4.91	-
Stationary Equip	0.23	0.19	-	0.01	0.00
Mobile Equip. - Gas	0.00	0.00	-	0.00	0.00
Mobile Equip. - Diesel	3.96	62.81	-	3.88	4.95
Architectural Coatings	0.00	-	-	-	-
Asphalt Offgassing	0.09	-	-	-	-
TOTALS (tpy, unmitigated)	23.85	102.38	48.58	53.72	6.33

AREA SOURCE EMISSION ESTIMATES

Source	ROG	NOx	CO	PM10	SO2
Natural Gas	4.90	65.39	27.02	0.12	-
Wood Stoves	0.00	0.00	0.00	0.00	0.00
Fireplaces	0.00	0.00	0.00	0.00	0.00
Landscaping	0.68	0.17	7.16	0.01	0.24
Consumer Prdcts	141.70	-	-	-	-
TOTALS (tpy, unmitigated)	147.28	65.56	34.18	0.13	0.24

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	PM10	SO2
Single family housing	132.71	111.36	1,634.62	126.28	1.01
Condo/townhouse general	16.52	12.39	181.95	14.06	0.11
Elementary school	13.46	4.78	68.40	5.20	0.04
Junior high school	4.91	1.80	25.80	1.98	0.02
High school	10.70	2.75	39.03	3.03	0.02
Junior college (2 yrs)	10.41	5.68	80.03	6.35	0.05
Regnl shop. center < 5700	46.33	38.00	535.92	39.85	0.32
Regnl shop. center > 5700	90.78	69.23	977.11	71.57	0.57
General office building	4.97	4.49	64.60	5.05	0.04
Office park	170.72	158.09	2,289.40	178.97	1.42
Government (civic center)	4.13	3.83	54.36	4.19	0.03
Industrial park	5.95	5.26	75.73	5.98	0.05
TOTAL EMISSIONS (tons/year)	511.59	417.66	6,026.95	462.50	3.68

Includes correction for passby trips.

Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2020 Temperature (F): 90 Season: Annual

EMFAC Version: EMFAC2001 (10/2001)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	7.01 trips / dwelling units	13,275.00	93,057.75
Condo/townhouse general	3.99 trips / dwelling units	2,596.00	10,358.04
Elementary school	0.97 trips / students	5,409.00	5,246.73
Junior high school	0.97 trips / students	1,952.00	1,893.44
High school	0.56 trips / students	5,085.00	2,847.60
Junior college (2 yrs)	1.64 trips / students	3,200.00	5,248.00
Regnl shop. center < 5700	21.86 trips / 1000 sq. ft.	2,418.24	52,862.75
Regnl shop. center > 5700	15.08 trips / 1000 sq. ft.	6,845.75	103,233.92
General office building	9.68 trips / 1000 sq. ft.	390.25	3,777.58
Office park	10.46 trips / 1000 sq. ft.	11,778.47	123,202.82
Government (civic center)	30.00 trips / 1000 sq. ft.	137.67	4,129.98
Industrial park	6.13 trips / 1000 sq. ft.	643.24	3,943.06

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	61.40	4.70	94.50	0.80
Light Truck < 3,750 lbs	9.30	11.00	88.90	0.10
Light Truck 3,751- 5,750	16.70	1.80	97.60	0.60
Med Truck 5,751- 8,500	7.20	12.50	79.20	8.30
Lite-Heavy 8,501-10,000	1.10	18.20	72.70	9.10
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.10	9.10	27.30	63.60
Heavy-Heavy 33,001-60,000	0.70	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.00	0.00	0.00	100.00

Motorcycle	1.40	90.90	9.10	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	0.70	0.00	100.00	0.00

Travel Conditions

	Residential			Commercial		
	Home- Work	Home- Shop	Home- Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			

% of Trips - Commercial (by land use)

Elementary school	20.0	10.0	70.0
Junior high school	20.0	10.0	70.0
High school	10.0	5.0	85.0
Junior college (2 yrs)	5.0	2.5	92.5
Regnl shop. center < 570000 sf	2.0	1.0	97.0
Regnl shop. center > 570000 sf	2.0	1.0	97.0
General office building	35.0	17.5	47.5
Office park	48.0	24.0	28.0
Government (civic center)	10.0	5.0	85.0
Industrial park	41.5	20.8	37.8

Changes made to the default values for Construction

The architectural coating option switch changed from on to off.
The construction year changed from 2002 to 2020.
The demolition days required changed from 10 to 0.
The site grading max daily acreage estimate changed from to 35.
The site grading tracked loader total vehicles changed from to 4.
The site grading wheeled loader total vehicles changed from to 4.
The site grading motor grader total vehicles changed from to 4.
The worker construction year changed from 2002 to 2020.
The asphalt acres to be paved changed from 1 to 69.733769513315.
The stationary equipment equipment units changed from 2 to 11.
The mobile diesel fork lift 175 HP total vehicles changed from to 11.
The mobile diesel truck: off hwy total vehicles changed from to 11.
Changes made to the default values for Area

The wood stove option switch changed from on to off.
The fireplace option switch changed from on to off.
The landscape year changed from 2002 to 2020.
Changes made to the default values for Operations

The operational emission year changed from 2002 to 2020.
The operational winter temperature changed from 50 to 40.
The operational winter selection item changed from 3 to 1.
The operational summer selection item changed from 8 to 7.
The home based work selection item changed from 8 to 7.
The home based shopping selection item changed from 9 to 8.
The home based other selection item changed from 9 to 8.
The commercial based commute selection item changed from 9 to 8.
The commercial based non-work selection item changed from 9 to 8.
The commercial based customer selection item changed from 9 to 8.
The double counting internal work trip limit changed from to 20683.158.
The double counting shopping trip limit changed from to 33803.0007652.
The double counting other trip limit changed from to 44468.7897.

URBEMIS2001 Assumptions: City of Cerritos General Plan Update Year 2020: Date 09/26/02

Model Title: Cerritos.URB

LAND USES						
Year 2020 Amount (net increase over existing 2001 conditions)	Unit Type	URBEMIS-2001 Land Use Type	General Plan Land Use Category	Trip Rate With Proposed Density	% Emp. Trips	Notes
13,275	Dwelling Units	Single-family housing	Low Density	7.01	-	
2,596			Medium Density	3.99		
			Low, Med, High Density in non-res. zoned areas*			
390.246	1,000 sq. ft.	Office	Office/Prof. Commercial	9.68	35	
2,418.241	1,000 sq. ft.	Regional Shopping Center <570,000	Community Commercial	21.86	2	
6,845.751	1,000 sq. ft.	Regional Shopping Center >570,000	Regional Commercial	15.08	2	
643.230	1,000 sq. ft.	Industrial Park	Industrial/ Commercial	6.13	41.5	
11,778.472	1,000 sq. ft.	Office Park	Business Park	10.46	48	
137.666	1,000 sq. ft.	Govt. Civic Center	Public/ Quasi-Public	30	10	
5,409	students	Elementary School	Elementary School	0.97	20	
1,952	students	Junior High School	Junior High School	0.97	20	
5,085	students	High School	High School	0.56	10	
3,200	students	Junior College	Junior College (2 year)	1.64	5	

NOTE: There exist no reliable methods of quantifying the future scope and amounts of construction within the City. Two analytical approaches exist that may be utilized to respond to this issue. 1) The analysis for construction could be waived. 2) The analysis could be modeled using the URBEMIS2001 default settings in all construction subcategories.

CONSTRUCTION SOURCES:	
	Year 2020 Amount
Demolition	(URBEMIS2001 Default)
Grading	(URBEMIS2001 Default)
Equipment Exhaust	(URBEMIS2001 Default)
Fugitive Dust	(URBEMIS2001 Default)
Worker Trips	(URBEMIS2001 Default)
Asphalt	(URBEMIS2001 Default)
Stationary Equipment	(URBEMIS2001 Default)
Mobile Equipment	(URBEMIS2001 Default)
Architectural Coatings	off
Year	2020
Construction Mitigation: Note: Typical construction related mitigation measures	Water graded areas and unpaved roads twice daily Properly maintain grading and construction equipment Keep speeds on unpaved roads to less than 15 mph

AREA SOURCES	
Fuel Combustion:	Year 2020 Amount (URBEMIS2001 default)
Wood Stoves: and Fireplaces	Off: This amount is likely negligible for the area
Landscape Maintenance Equipment	Year 2020
Consumer Products	(URBEMIS2001 default)

OPERATIONAL SOURCES	
	Year 2020 Amount
Anticipated Fleet Mix: Note : The City may chose to generate its own traffic mix or utilize the URBEMIS2001 vehicle mix default. It is as follows: 61.4% auto 9.3% light truck <3,500 lbs 16.7 light truck 3,501 - 5,750 lbs 6.2% med. truck 5,751 - 8,500 lbs 1.1% lt. hvy. duty truck 8,501 - 10,000 lbs 1.3% lt. hvy. duty truck 10,001 - 14,000 lbs 1.1% med. heavy duty trucks 14,001 - 33,000 lbs. 0.7% hvy. hvy. duty truck 33,001 - 60,000 lbs 1.4% motorcycle 0.1% school bus 0.7% motor home	(URBEMIS2001 Default)
Year:	2020
Trip Characteristics:	All trips at 45 MPH (average speed) for 5 miles urban setting
Temperature Data:	40 to 90 degrees Fahrenheit
Variable Starts:	(URBEMIS2001 Default)
Paved or Unpaved Roads:	100% paved
Pass By Trips:	On