Appendix D:
Greenhouse Gases

Memo

455 Capitol Mall, Suite 300
Sacramento, CA 95814
916.444-7301

Date: January 26, 2018

To: Christopher Jordan (City of Elk Grove) and Jeff Henderson (Michael Baker International)

From: Honey Walters, Erik de Kok, and Hannah Kornfeld

Subject: City of Elk Grove Climate Action Plan Update
Revised Technical Memorandum: Greenhouse Gas Emissions Forecasts, Targets, and Reduction Measures

INTRODUCTION

In 2013, the City of Elk Grove (City) completed a Climate Action Plan (CAP), using 2005 as the emissions baseline year (City 2013). The 2013 CAP was originally designed to meet a 2020 target and provide California Environmental Quality Act (CEQA) streamlining benefits under Section 15183.5 of the CEQA Guidelines.

The City is currently updating the CAP concurrent with efforts to update the Elk Grove General Plan (GPU). The updated CAP must be consistent with new State legislation and guidance issued since the 2013 CAP was adopted. Ascent has completed several technical analyses required for the preparation of the CAP update, including: (1) updates to the 2013 GHG emissions inventory previously prepared by Michael Baker International (Michael Baker); (2) new greenhouse gas (GHG) emission forecasts for 2020, 2030, and 2050; (3) revised GHG emission reduction targets for the forecast years; and, (4) preliminary GHG reduction measures that would be required to achieve the 2020 and 2030 targets. This technical memorandum summarizes the results of our analyses, including methods, assumptions, emission factors, and data sources.

ORGANIZATION OF THIS MEMORANDUM

This memorandum consists of four main parts:

- **Section 1: GHG Emissions Inventory** summarizes the modified 2013 GHG emissions inventory, adding the wastewater sector, which was excluded from the previous 2013 inventory. The emissions inventory also includes an adjusted inventory that accounts for emissions associated with four study areas located beyond the city limits that could be annexed into the city in the future.

- **Section 2: GHG Emissions Forecasts** summarizes the forecasted GHG emissions under "business-as-usual" (BAU) and legislative-adjusted BAU scenarios. A BAU scenario is one in which no action is taken by local, State or federal agencies to reduce GHG emissions. A legislative-adjusted scenario is one in which BAU conditions are adjusted to reflect policy or regulatory actions enacted by State or federal agencies, but without considering any local actions to reduce GHG emissions.

- **Section 3: GHG Reduction Targets** identifies recommended GHG emission reduction targets for 2020 and 2030, and the longer-term goal for 2050, and shows the calculated gap between estimated GHG reductions under the forecast scenarios and the recommended emission reduction targets.

- **Section 4: GHG Reduction Measures** quantifies GHG emissions reductions that could be achieved by the preliminary draft GHG reduction measures, and evaluates the calculated gap between the estimated GHG reductions and the recommended targets.

1 EMISSION INVENTORY

1.1 2013 GREENHOUSE GAS EMISSIONS INVENTORY

The purpose of a GHG emissions inventory is to gain an understanding of the sources and levels of GHG emissions within a jurisdiction, as well as to establish a level of GHG emissions against which future GHG emissions can be compared. GHG emissions inventories for the City were prepared for the calendar years 2005 and 2013. A new communitywide 2013 inventory was prepared by Michael Baker and summarized in the GPU Background Conditions Report. The 2013 inventory is considered the baseline year for preparation of GHG emissions forecasts and GHG reduction targets that would be used in the CAP update.

Subsequent to publication of the GPU Background Conditions Report, Ascent modified the 2013 inventory. This is because wastewater-related emissions were excluded from the previous inventory, but were added to this updated version. Wastewater emissions were estimated using ICLEI's Local Government Operations Protocol Version 1.1. The modified 2013 GHG emissions inventory is summarized below in Table 1. GHG emissions in the 2013 inventory include communitywide emissions in the existing city limits in that year, which were approximately 918,790 metric tons of carbon dioxide equivalent ($MTCO_2e$). Major emissions sectors included residential and commercial/industrial building energy use, on-road vehicles, off-road vehicles, solid waste, and wastewater. The City's population in 2013 was 163,093; thus, baseline per capita emissions were 5.6 $MTCO_2e$.

Table 1 2013 City of Elk Grove Community Greenhouse Gas Inventory

Sector	2013 ($MTCO_2e$/year)	Percent of Total
On-Road Vehicles	430,340	47%
Off-Road Vehicles	93,340	10%
Transportation Sector Total	***523,680***	***57%***
Residential Energy	231,400	25%
Commercial/Industrial Energy	129,860	14%
Building Sector Total	***361,260***	***39%***
Solid Waste	26,260	3%
Wastewater	3,854	<1%
Water-Related	2,708	<1%
Agriculture	1,030	<1%
Total (All Sectors)	***918,790***	***100%***

Notes: Totals may not add due to rounding. $MTCO_2e$ = metric tons of carbon dioxide equivalent; GWP = Global Warming Potential

Source: Data compiled by Ascent Environmental in 2017.

The City's 2013 GHG inventory, summarized in Table 1, includes only GHG emissions associated with activities within the city limits. However, under the GPU, four study areas are identified that could result in expansion of the city limits in the future; thus, emissions associated with existing land uses in these study areas were added to the GHG emissions inventory for the CAP. Table 2 shows both the 2013 citywide GHG emissions within the city limits, as well as the existing emissions associated with each of the study areas in 2013. This revised inventory is used to project emissions for the target years 2020 and 2030, and the longer-term goal for 2050.

Table 2 2013 City of Elk Grove Community Greenhouse Gas Inventory and Study Areas

Sector	GHG Emissions ($MTCO_2e$/year)				
	Citywide 2013 Inventory	East Study Area	South Study Area	West Study Area	North Study Area
Residential Energy	231,400	140	160	80	193
Commercial/Industrial Energy	129,860	660	1,250	720	724
On-Road Vehicles	430,340	280	230	100	159
Off-Road Vehicles	93,340	10	0	0	485
Solid Waste	26,260	10	10	10	34
Water-Related and Wastewater	6,562	700	1,340	770	259
Agriculture	1,030	750	1,560	760	150
Total	**918,790**	**2,550**	**4,550**	**2,440**	**2,004**

Notes: Totals may not add due to rounding. $MTCO_2e$ = metric tons of carbon dioxide equivalent; GWP = Global Warming Potential

Source: Data compiled by Ascent Environmental in 2017.

2 EMISSIONS FORECASTS

2.1 GREENHOUSE GAS EMISSIONS FORECASTS TO 2020, 2030, AND 2050

Emission forecasts were calculated for two emissions scenarios, including (1) BAU conditions and (2) legislative-adjusted BAU conditions. The BAU forecast scenario accounts for future growth in emissions associated with future growth in the City, but with no future action by State or federal agencies. In contrast, the legislative-adjusted BAU forecast scenario accounts for future growth in emissions associated with growth in the City, along with legislative actions to reduce emissions due to State and federal regulations, programs, or other mandated actions. A summary of legislative reductions applied is provided below in Table 5. These forecast scenarios provide the City with the information needed to focus efforts on certain emission sectors and sources that have the most GHG reduction opportunities, considering what State and federal legislative reductions are already achieving or are expected to achieve in the future.

BAU forecasts described in this section for 2020, 2030, and 2050 are generally based on the State's GHG reduction target years established in key State legislation and policies, including Assembly Bill (AB) 32, Senate Bill (SB) 32, Executive Order (EO) B-30-15, and EO S-3-05; as well as the buildout year for the GPU (2035). The Statewide GHG reduction targets are as follows:

- 1990 levels by 2020 (AB 32);

- 40 percent below 1990 levels by 2030 (SB 32 and EO B-30-15); and,
- 80 percent below 1990 levels by 2050 (EO B-30-15 and S-3-05).

Estimated BAU emission forecasts were based on predicted growth in existing demographic forecasts, including population, jobs, and household growth between 2013 and 2050 for the City, as provided by City staff and in alignment with the Notice of Preparation for the GPU (City 2017). Growth rates for each forecast year vary for population, dwelling units, and jobs. Table 3 below shows the growth rates used to forecast BAU emissions for 2020, 2030, and 2050 for most sectors in the inventory.

Table 3 Growth Factors (%)

Factor	2013 to 2020	2020 to 2030	2030 to 2050
Population	32	35	33
Dwelling Units	10	21	33
Jobs	14	33	50
Vehicle Miles Traveled	49	31	47
Agricultural Acres	-29	-60	-77

Source: Data compiled by Ascent Environmental in 2017.

Annual vehicle miles traveled (VMT) growth projections were provided by Fehr & Peers based on travel demand modeling for baseline and future conditions under the proposed GPU. VMT projections were used to scale emissions from the on-road vehicle sector. Agricultural acreage changes were based on GPU growth assumptions. Table 4 shows baseline emissions in 2013 and BAU emission forecasts for 2020, 2030, and 2050.

Table 4 Business-As-Usual Forecasts ($MTCO_2e$/year)

Sector	2013	2020	2030	2050
Residential Energy	231,400	257,171	310,017	413,560
Commercial/Industrial Energy	129,860	147,685	196,037	293,532
On-Road Vehicles	430,340	645,542	844,317	1,241,867
Off-Road Vehicles	93,340	102,776	123,896	165,275
Solid Waste	26,260	36,181	39,817	47,781
Wastewater	3,854	4,283	5,163	6,888
Water-Related	2,708	3,010	3,628	4,840
Agriculture	1,030	2,585	1,061	299
Total	**918,790**	**1,199,232**	**1,523,936**	**2,174,042**

Notes: $MTCO_2e$/year = metric tons of carbon dioxide equivalent per year.

Source: Data compiled by Ascent Environmental in 2017.

By comparison with the BAU analysis, the City's GHG emissions, accounting for applicable legislative reductions, would decrease by 3 percent between 2020 and 2030 rather than increase by 27 percent without legislative reductions, as shown in Tables 4 and 5 and in Figure 1. Figure 1 also shows the emissions trend that would occur without anticipated legislative reductions and accounting for only growth in the City. Without the legislative reductions, emissions would be 36 percent higher in 2030 compared to the legislative-adjusted BAU forecasts. The legislative reductions applied to each GHG emissions sector are

summarized below in Table 6. The City's population projections for the target years were 181,257, 218,503, and 291,481 for 2020, 2030, and 2050, respectively. This equates to per capita emissions of 5.5 $MTCO_2e$, 4.5 $MTCO_2e$, and 4.3 $MTCO_2e$ in 2020, 2030, and 2050 under the legislative-adjusted BAU scenario, respectively.

Table 5 Legislative-Adjusted Business-As-Usual Forecasts ($MTCO_2e$/year)

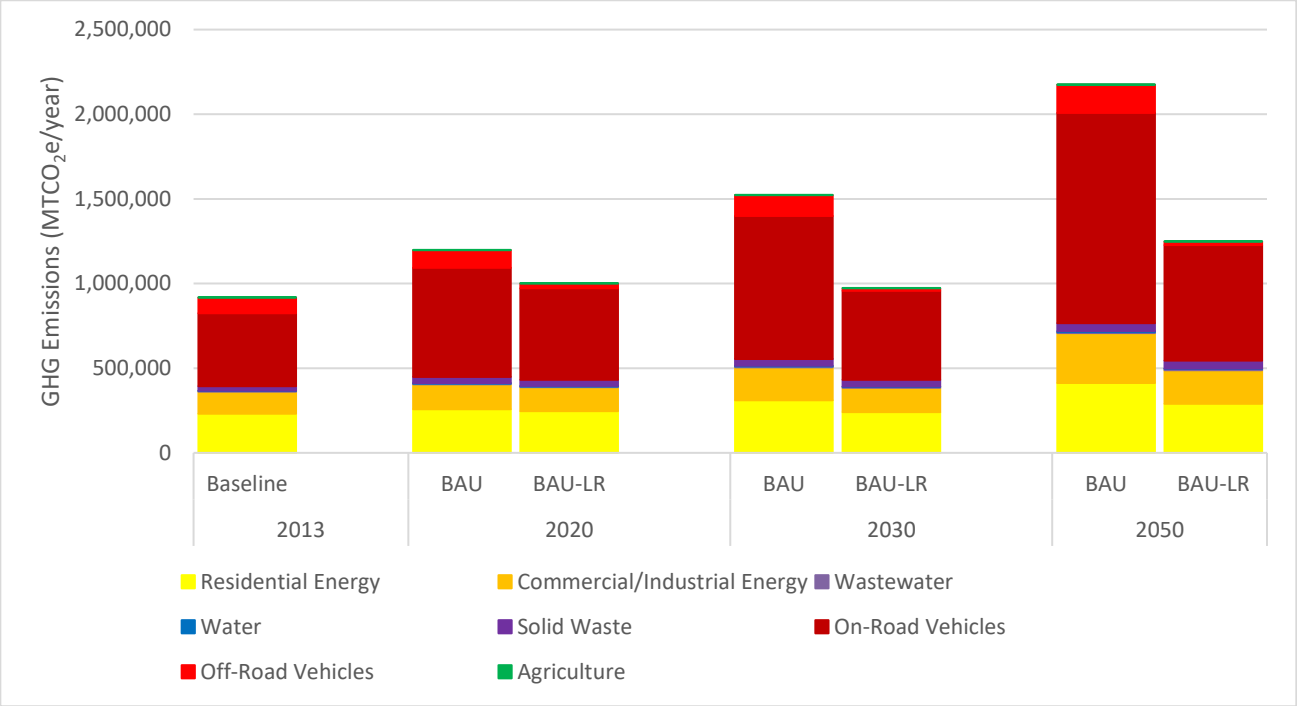
Sector	2013	2020	2030	2050
Residential Energy	231,400	245,995	240,585	289,705
Commercial/Industrial Energy	129,860	142,309	144,486	198,485
On-Road Vehicles	430,340	541,455	524,978	681,001
Off-Road Vehicles	93,340	27,206	14,685	20,648
Solid Waste	26,260	36,181	39,817	47,781
Wastewater	3,854	4,251	5,083	6,781
Water-Related	2,708	2,421	2,182	2,910
Agriculture	1,030	2,585	1,061	299
Total	**918,790**	**1,002,402**	**972,878**	**1,247,610**

Notes: BAU = business-as-usual; $MTCO_2e$/year = metric tons of carbon dioxide equivalent per year. Source: Data compiled by Ascent Environmental in 2017.

Table 6 Legislative Reductions Summary

Source	Legislative Reduction	Description	Sectors Applied
State	RPS	Requires California energy utilities to procure 33 percent of electricity from renewable sources by 2020.	Building Energy, Water
State	SB 350	Requires California energy utilities to procure 50 percent of electricity from renewable sources by 2030.	Building Energy, Water
State	California Building Efficiency Standards (Title 24, Part 6)	Requires all new buildings in California to comply with energy efficiency standards established by CEC.	Building Energy
State	AB 341	Requires California to achieve a 75 percent solid waste diversion target by 2020.	Solid Waste
State	Pavley Clean Car Standards	Establishes GHG emission reduction standards for model years 2009 through 2016 that are more stringent than federal CAFE standards.	On-Road Vehicles
State	Advanced Clean Car Standards	Establishes GHG emission reduction standards for model years 2017 through 2025 that are more stringent than federal CAFE standards.	On-Road Vehicles
State	SBX7-7	Requires a 20 percent reduction in per capita water usage by 2020.	Water, Wastewater
Federal	Fuel Efficiency Standards for Medium- and Heavy-Duty Vehicles	Establishes fuel efficiency standards for medium- and heavy-duty engines and vehicles.	On-Road Vehicles
Federal	EPA Off-Road Compression-Ignition Engine Standards	Establishes standards for phasing of EPA diesel engine tiers for off-road compression-ignition equipment.	Off-Road Vehicles

Notes: AB = Assembly Bill; CAFE = Corporate Average Fuel Economy; CEC = California Energy Commission; EPA = Environmental Protection Agency; GHG = greenhouse gas; RPS = Renewable Portfolio Standard; SB = Senate Bill; VMT = vehicle miles traveled. Source: Ascent Environmental 2017.



Notes: BAU = Business-As-Usual; BAU-LR = Business-As-Usual with Legislative Reductions; GHG = greenhouse gas; $MTCO_2e$/year = metric tons of carbon dioxide equivalent per year.

Figure 1 Business-As-Usual and Legislative-Adjusted Business-As-Usual Emissions Forecasts

Emission forecasts under the legislative-adjusted BAU forecast scenario are detailed for each sector and discussed below.

2.1.1 Building Energy

Emissions from future electricity and natural gas use were estimated by multiplying anticipated energy use with forecasted emission factors. Future energy use was forecasted in three parts. First, energy use was scaled by growth factors detailed in Table 3. Second, energy emission factors were adjusted to reflect California's Renewables Portfolio Standard (RPS) targets. Electricity emission factors are anticipated to decline based on current regulations, while natural gas emission factors stay constant. Third, energy intensity factors were adjusted to reflect increased stringency expected under California's Title 24 building energy efficiency standards (i.e., 2013 standards which became effective in 2014, and 2016 standards which became effective in 2017), which are expected to achieve decreases in electricity and natural gas consumption in new construction. The assumptions to energy efficiency and future electricity emission factors are described below. Table 7 summarizes the legislative factors used to scale building use by energy type.

Table 7 Building Energy Emissions Forecast Methods and Legislative Reductions by Source

Energy Type	Forecast Methods	
	Scale Factor	Applied Legislative Reductions
Electricity	Scaled by population growth for residential building energy; scaled by job growth for commercial/industrial building energy.	RPS achieved to date and scheduled targets (i.e., 33 percent renewable by 2020, 50 percent renewable by 2030) applied to SMUD's emission factors. Accounts for 2008 to 2013 and 2013 to 2016 Title 24 energy efficiency gains in new construction.
Natural Gas	Scaled by population growth for residential building energy; scaled by job growth for commercial/industrial building energy.	Accounts for 2008 to 2013 and 2013 to 2016 Title 24 energy efficiency gains in new construction.

Notes: RPS = Renewable Portfolio Standard; SMUD = Sacramento Municipal Utility District.

Source: Ascent Environmental 2017.

RESIDENTIAL BUILDING ENERGY

Between 2013 and 2030, electricity and natural gas emissions from residential buildings would increase by 9 percent from 231,400 to 240,585 $MTCO_2e$ per year with legislative adjustments and considering overall population growth of 34 percent over the same time. Table 8 shows the baseline and legislative-adjusted BAU forecasted emissions from the residential building energy sector by energy type for 2013, 2020, 2030, and 2050.

Table 8 Residential Building Energy Legislative-Adjusted Business-As-Usual Emissions Forecasts (2013-2050) ($MTCO_2e$/year)

Energy Type	2013	2020	2030	2050
Electricity	113,180	120,665	100,676	121,231
Natural Gas	118,220	125,330	139,909	168,474
Total Residential Building Energy Emissions	**231,400**	**245,995**	**240,585**	**289,705**

Notes: Totals may not add due to rounding. $MTCO_2e$ = metric tons of carbon dioxide equivalent.
Source: Data compiled by Ascent Environmental in 2017.

COMMERCIAL AND INDUSTRIAL BUILDING ENERGY

Between 2013 and 2030, electricity and natural gas emissions from commercial and industrial buildings would increase by 20 percent from 129,860 to 144,486 $MTCO_2e$ per year with legislative adjustments and considering job growth of 51 percent over the same time. Table 9 shows the baseline and legislative-adjusted BAU forecasted emissions for the commercial and industrial building energy sector by energy type for 2013, 2020, 2030, and 2050.

Table 9 Commercial and Industrial Building Energy Legislative-Adjusted Business-As-Usual Emissions Forecasts (2013-2050) ($MTCO_2e$/year)

Energy Type	2013	2020	2030	2050
Electricity	88,680	97,398	89,456	123,050
Natural Gas	41,180	44,911	55,030	75,436
Total Commercial and Industrial Building Energy Emissions	**129,860**	**142,309**	**144,486**	**198,485**

Notes: Totals may not add due to rounding.
$MTCO_2e$ = metric tons of carbon dioxide equivalent.
Source: Data compiled by Ascent Environmental in 2017.

ELECTRICITY EMISSION FACTORS

Emissions from the building energy sector would see gradual declines through 2030 without additional City action, despite growth, due to State measures already in place. After 2030, growth in the City would outpace the reductions in emissions due to current State measures. Electricity emission factors for carbon dioxide (CO_2) are based on Sacramento Municipal Utility District (SMUD) reported for 2014 provided by SMUD directly (SMUD 2016). Electricity emission factors for methane (CH_4) and nitrous oxide (N_2O) were obtained from the U.S. Environmental Protection Agency's (EPA's) Emissions & Generation Resource Integrated Database (eGRID) 2012 GHG Annual Output Emission Rates (EPA 2015).

California utility providers, including SMUD, are scheduled to reach a 33 percent renewable electricity generation mix by 2020 and 50 percent by 2030, pursuant to statewide implementation of the RPS pursuant to SB 350. SMUD's 2020 emission factor is 529.47 pounds of CO_2 per megawatt hour (lb CO_2/MWh), the 2030 emission factor is 395.13 lb CO_2/MWh. It was assumed the 2030 emission factor would stay constant through forecast year 2050, as no relevant legislation has been adopted for this year. CH_4 and N_2O electricity emission factors in future years are assumed to stay constant.

ENERGY EFFICIENCY

The State's Title 24 Building Energy Efficiency Standards apply to both new construction and existing buildings. The 2016 Title 24 standards went into effect January 2017. The California Energy Commission (CEC) estimates that new residential buildings built to the 2016 standards would be 28 percent more efficient than residential buildings built to the previous standards (CEC 2015). CEC estimates that new non-residential built to the 2016 standards would be 5 percent more efficient than non-residential buildings built to the previous standards (CEC 2015).

Forecasts of future building energy accounts for Title 24 Building Energy Efficiency Standards. It is assumed that all new construction taking place between 2020 and 2050 would have energy efficiencies 28 percent better energy usage rates for residential buildings and 5 percent better energy usage rates for non-residential buildings.

2.1.2 Water and Wastewater

Between 2013 and 2030, water- and wastewater-related emissions from the City would increase by 20 percent from 6,562 to 7,265 $MTCO_2e$ per year, with legislative adjustments and considering population growth of 34 percent over the same time. This change reflects an increase in water consumption and wastewater generation with lower electricity factors related to the 2020 and 2030 RPS targets, consistent

with SB 350 legislative actions described above, as well as a 20 percent water efficiency reduction, consistent with SBX7-7. Table 10 summarizes the legislative reductions used to forecast water and wastewater emissions.

Table 10 Water and Wastewater Forecast Methods and Legislative Reductions by Source

Source	Forecast Methods	
	Scale Factor	Applied Legislative Reductions
Water Consumption	Scaled by population growth.	Assumes electricity use for pumping, conveyance, and treatment follow the 2020 and 2030 RPS schedule. Assumes 20 percent reduction in water-related energy due to 20 percent reduction in water usage per requirements of SBX7-7.
Wastewater Treatment	Scaled by population growth.	Assumes electricity use for pumping, conveyance, and treatment follow the 2020 and 2030 RPS schedule. Assumes 20 percent reduction in wastewater-related energy due to 20 percent reduction in water usage per requirements of SBX7-7.

Notes: RPS = Renewable Portfolio Standard.
Source: Ascent Environmental 2017.

Table 11 shows the baseline and legislative-adjusted BAU forecasted emissions from water- and wastewater-related sources for 2013, 2020, 2030, and 2050. Population growth rates and electricity emission factors are detailed in Table 3 and Section 1.2.1.

Table 11 Water and Wastewater Legislative-Adjusted Business-As-Usual Emissions Forecasts (2013-2050) ($MTCO_2e$/year)

Activity	2013	2020	2030	2050
Water-Related	2,708	2,421	2,182	2,910
Wastewater Treatment	3,854	4,251	5,083	6,781
Total Water and Wastewater Emissions	**6,562**	**6,672**	**7,265**	**9,691**

Notes: Totals may not add due to rounding.
$MTCO_2e$ = metric tons of carbon dioxide equivalent.
Source: Data compiled by Ascent Environmental in 2017.

2.1.3 Solid Waste

Between 2013 and 2030, solid waste emissions generated from the City would increase by 56 percent from 26,260 to 39,817 $MTCO_2e$ per year, with legislative adjustments applied and considering population growth of 34 percent over the same time. Table 12 summarizes the legislative reductions used to forecast emissions from the solid waste sector.

Table 12 Solid Waste Forecast Methods and Legislative Reductions by Source

Source	Forecast Methods	
	Scale Factor	Applied Legislative Reductions
Landfill Disposal	Scaled by population growth.	Assumes California's 75 percent waste diversion goal would be achieved by 2020.

Source: Ascent Environmental 2017.

The forecasts shown in Table 13 below account for the CH_4 and CO_2 emissions from waste decay generated annually. With respect to solid waste generation, the California Department of Resources Recycling and Recovery (CalRecycle) established a target pursuant to AB 341 (Chapter 476, Statutes of 2011) to achieve a statewide waste diversion of 75 percent by 2020, which is equivalent to a disposal rate of 2.7 pounds of waste per resident per day. The City's waste disposal tonnage, disposal rates, and disposal targets are reported to CalRecycle by year. These data show that the City has already achieved a disposal rate in terms of waste per resident that is lower than the target per capita disposal rate in 2013. Emission forecasts for this sector assume the City's disposal rate would remain constant through 2050.

Table 13 shows the baseline and legislative-adjusted BAU forecasted emissions from the solid waste sector for 2013, 2020, 2030, and 2050.

Table 13 Solid Waste Legislative-Adjusted Business-As-Usual Emissions Forecasts (2013-2050) ($MTCO_2e$/year)

Activity	2013	2020	2030	2050
Municipal Solid Waste	22,570	25,084	30,238	40,337
Alternative Daily Cover	1,150	1,278	1,541	2,055
Landfill	2,540	9,819	8,039	5,389
Total Solid Waste Emissions	**26,260**	**36,181**	**39,817**	**47,781**

Notes: Totals may not add due to rounding.
$MTCO_2e$ = metric tons of carbon dioxide equivalent.
Source: Data compiled by Ascent Environmental in 2017.

2.1.4 Transportation

ON-ROAD VEHICLES

Between 2013 and 2030, GHG emissions from on-road vehicles would increase by approximately 36 percent from 430,340 to 524,978 $MTCO_2e$ per year, accounting for an increase in VMT of 94 percent, and future vehicle emission factors modeled in the California Air Resources Board's (CARB's) Emission Factor (EMFAC) 2014 model. With respect to the legislative adjustments included in this forecast, State and federal policies and associated regulations incorporated in the on-road vehicle sector include the Pavley Clean Car Standards, Advanced Clean Car Standards, and fuel efficiency standards for medium- and heavy-duty vehicles. These policies are already included in EMFAC's emission factor estimates and forecasts. It should be noted that the Low Carbon Fuel Standard was excluded in EMFAC 2014 forecasts because most of the emission benefits originate from upstream fuel production and do not directly reduce emissions in the City's GHG inventory or forecasts. Table 14 summarizes the legislative reductions used to forecast on-road vehicle emissions.

Table 14 On-Road Vehicles Forecast Methods and Legislative Reductions by Source

Source	Forecast Methods	
	Scale Factor	Applied Legislative Reductions
On-Road Fleet	Scaled by VMT estimates provided by Fehr & Peers.	EMFAC emission factor considerations include ACC, Pavley, and fuel efficiency standards for medium- and heavy-duty vehicles.

Notes: VMT = vehicle miles traveled; EMFAC = California Air Resources Board's EMisson FACtor model; ACC = Advanced Clean Cars; Pavley = Pavley Clean Car Standards.

Source: Ascent Environmental 2017.

Table 15 shows the baseline and legislative-adjusted BAU forecasted emissions from on-road vehicles for 2013, 2020, 2030, and 2050.

Table 15 On-Road Vehicles Legislative-Adjusted Business-As-Usual Emissions Forecasts (2013-2050) ($MTCO_2e$/year)

Source	2013	2020	2030	2050
On-Road Vehicles	430,340	541,455	524,978	681,001

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent.
Source: Data compiled by Ascent Environmental in 2017.

OFF-ROAD VEHICLES

Between 2013 and 2030, emissions associated with off-road vehicles used in the city would decrease by 81 percent from 93,340 to 14,685 $MTCO_2e$ per year, with legislative adjustments applied and considering building permit and dwelling unit growth of 33 percent over the same time. With respect to the legislative adjustments in the off-road vehicle sector, emission factors were used from CARB's OFFROAD 2007 model, which incorporates regulatory actions such as reformulated fuels and more stringent emission standards. Table 16 summarizes the legislative reductions used to forecast off-road vehicle emissions.

Table 16 Off-Road Vehicles Forecast Methods and Legislative Reductions by Source

Source	Forecast Methods	
	Scale Factor	Applied Legislative Reductions
Off-Road Fleet	Construction equipment scaled by building permit growth; landscape equipment scaled by dwelling unit growth.	OFFROAD emission factor considerations include EPA off-road compression-ignition engine standards implementation schedule.

Notes: OFFROAD = CARB's OFFROAD 2007 model; EPA = U.S. Environmental Protection Agency.

Source: Ascent Environmental 2017.

Table 17 shows the baseline and legislative-adjusted BAU forecasted emissions from the off-road vehicle sector for 2013, 2020, 2030, and 2050.

Table 17 Off-Road Vehicles Legislative-Adjusted Business-As-Usual Emissions Forecasts (2013-2050) ($MTCO_2e$/year)

Source	2013	2020	2030	2050
Off-Road Vehicles	93,340	27,206	14,685	20,648

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent.
Source: Data compiled by Ascent Environmental in 2017.

2.1.5 Agriculture

Between 2013 and 2030, emissions associated with the agriculture sector in the City would decrease by 71 percent from 4,250 to 299 $MTCO_2e$ per year. Forecasted emissions from the agricultural sector are based on the City's forecasted changes in land use from agricultural to other developed urban uses under the GPU, as well as estimated future agricultural activities that would continue under certain land use designations in the GPU. These forecasted changes in agricultural land use can be found in Table 8 of Attachment 1. Agricultural emissions are directly scaled by the anticipated change in acreages, shown in Table 18. Table 18 also shows the baseline and legislative-adjusted BAU forecasted emissions from the agricultural sector for 2013, 2020, 2030, and 2050.

Table 17 Agriculture Legislative-Adjusted Business-As-Usual Emissions Forecasts (2013-2050) ($MTCO_2e$/year)

Source	2013	2020	2030	2050
Agricultural Equipment	2,920	2,006	812	214
Livestock	300	8	3	1
Fertilizer	1,030	571	246	84
Total Agricultural Emissions	**4,250**	**2,585**	**1,061**	**299**
Percent Change from 2013 (%)	0	-29%	-71%	-92%

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent.
Source: Data compiled by Ascent Environmental in 2017.

2.1.6 Discussion

As discussed above and shown in Figure 1 and Table 5, the City's legislative-adjusted BAU emissions would increase by 9 percent between 2013 and 2020. This is a result of anticipated growth, despite reductions that would be achieved from numerous legislative reductions including:

- A greater renewable mix in California's electricity supply (33 percent by 2020);
- Building energy efficiency through compliance with 2016 Title 24 standards (28 percent energy reduction for residential, 5 percent for non-residential);
- Water consumption reduction of 20 percent by 2020 through compliance with SBX7-7;
- Reductions in on-road vehicle emission factors forecasted in EMFAC 2014;
- Reductions in off-road vehicle emission factors forecasted in OFFROAD 2007; and

- Maintaining waste diversion goal of 75 percent, pursuant to AB 341.

From 2020 to 2030, the City's legislative-adjusted BAU emissions would decrease by 3 percent. This is a result of anticipated growth, despite reductions that would be achieved from numerous legislative reductions including:

- A greater renewable mix in California's electricity supply (50 percent by 2030);
- Building energy efficiency through compliance with 2016 Title 24 standards (28 percent energy reduction for residential, 5 percent for non-residential);
- Maintaining water consumption reduction of 20 percent through compliance with SBX7-7;
- Reductions in on-road vehicle emission factors forecasted in EMFAC 2014;
- Reductions in off-road vehicle emission factors forecasted in OFFROAD 2007; and
- Maintaining waste diversion goal of 75 percent, pursuant to AB 341.

From 2030 to 2050, fewer new legislative actions are assumed to be in place due to lack of available information about potential State or federal actions beyond 2030. Thus, the City's potential continued growth would begin to overtake any reductions afforded by existing legislative reductions. The main legislative reductions beyond 2030 would come from SB 350's target of a minimum of 50 percent renewable mix for all electricity providers. Other minor additional reductions would be in forecasted improvements in vehicle fuel economy and increased VMT share of electric vehicles (10 percent by 2050), as estimated in the EMFAC 2014 model. Other previous legislative actions would continue to apply in the future, but would not outpace growth in population and jobs.

3 GREENHOUSE GAS EMISSION REDUCTION TARGETS

3.1 REDUCTION TARGETS

As directed in AB 32, SB 32, EO B-30-15, EO S-3-05, and CARB's 2017 Climate Change Scoping Plan (Scoping Plan), the State aims to reduce statewide annual GHG emissions to:

- 1990 levels by 2020 (per AB 32), which is equivalent to 10.6 $MTCO_2e$ per capita;
- 40 percent below 1990 levels by 2030 (per SB 32 and EO B-30-15), which is equivalent to 6 $MTCO_2e$ per capita; and
- 80 percent below 1990 levels by 2050 (per EO S-3-05), which is equivalent to 2 $MTCO_2e$ per capita.

Similarly, the City should continue to reduce communitywide emissions in proportion to the State's goals. Because the City's 1990 emission levels were not estimated, proportional per capita targets for the CAP Update were developed that express the level of GHG emissions reductions that would be needed locally between 2013 and future target years. These are in alignment with the State's recommended per capita targets (i.e., 6 $MTCO_2e$ by 2030 and 2 $MTCO_2e$ by 2050).

To determine the local per capita reductions needed for each target year, specific per capita targets were derived using the Scoping Plan guidance for developing local plan-level GHG targets. The statewide per capita targets reported in the Scoping Plan are framed as statewide 2030 targets that must be met on a statewide basis; however, this does not mean that the statewide per capita targets must be applied uniformly to every local jurisdiction. CARB notes that local per capita goals that determine a jurisdiction's contribution to meeting the overall statewide emissions target need to be "evidence-based and consistent with the framework used to develop statewide per capita targets" (CARB 2017:100).

The statewide per capita targets account for all emissions sectors in the State's GHG emissions inventory, statewide population forecasts recently prepared for 2030 and 2050, and all statewide reductions necessary to achieve the 2030 statewide target under SB 32 in all sectors. Consequently, the statewide emissions sectors and the total reductions achieved in these sectors through the Scoping Plan are not directly applicable to GHG emissions inventories for individual cities or counties. For example, the high global warming potential (GWP) sector is a highly-regulated source of GHG emissions; thus, it is excluded from the City's inventory and forecasts. Similarly, forestry-related emissions from timber-harvesting or similar activities in "natural and working lands" are not included in or applicable to the City. Thus, an adjustment to the State reductions achieved under the Scoping Plan to reflect applicable sectors for local GHG reduction planning and target-setting is necessary and appropriate.

All sectors that were included in the Scoping Plan are shown below in Table 19. For the purposes of target setting for the City, all nonapplicable sectors (e.g., agriculture, high GWP, natural working lands, cap-and-trade) were removed from the per capita target calculation. These include high-GWP emissions, agriculture, natural working lands, and the cap-and-trade program. These were excluded because high-GWP emissions and the cap-and-trade program are regulated at the State level, and emissions associated with agriculture and natural and working lands in the City are negligible and anticipated to decline. Using the 2020 and 2030 California Department of Finance population projections for the State, per capita emissions targets would be lower than what is stated in the Scoping Plan, as shown in Table 20.

This target setting approach is consistent with the California Supreme Court decision in *Center for Biological Diversity v. California Department of Fish and Wildlife and Newhall Land and Farming* (2015) 224 Cal.App.4th 1105, which determined that the approach of assessing a project's consistency with statewide emission reduction goals must include a "reasoned explanation based on substantial evidence" that links the project's emission to the statewide Scoping Plan reduction goals. For the purposes of this CAP, it is feasible to develop evidence-based targets with careful tailoring to consider only the relevant inventory sectors to the City from the Scoping Plan.

Thus, the following recommended GHG reduction targets would reduce the City's annual GHG emissions consistent with the framework used to develop the State's per capita targets:

- 7.6 $MTCO_2e$ per capita by 2020;
- 4.1 $MTCO_2e$ per capita by 2030; and
- 1.4 $MTCO_2e$ per capita by 2050.

Table 19 2017 Climate Change Scoping Plan Estimated Change in Emissions by Sector

GHG Emissions by Sector ($MMTCO_2e$)	1990	2020	2030[2]
Agriculture	26	36	24
Residential and Commercial	44	50	38
Electric Power	108	104	30
High GWP	3	31	8
Industrial	98	94	83
Recycling and Waste	7	9	8
Transportation	152	185	103
Natural Working Lands Net Sink[1]	-7	TBD	TBD
Cap-and-Trade	NA	78	34
Total	431	431	260

Notes: GHG=greenhouse gases; $MMTCO_2e$ = millions of metric tons of carbon dioxide equivalent; GWP = global warming potential; TBD = to be determined; NA = not applicable.
[1] Work is underway through 2017 to estimate the range of potential sequestration benefits from the natural and working lands sector.
[2] The 2030 values shown are from the lower end of the ranges reported in the 2017 Climate Change Scoping Plan, Table 3.
Source: CARB 2014; CARB 2017.

Table 20 2020, 2030, and 2050 Per Capita Target Adjustment

Source	2020	2030	2050
Scoping Plan Emissions Limit ($MMTCO_2e$)	431	260	NA
Statewide Population Forecast	40,791,999	44,019,846	NA
Statewide Per Capita Emissions Reduction Target ($MTCO_2e$)	10.6	6	2
Adjusted Scoping Plan Emissions Limit[1] ($MMTCO_2e$)	311	179	NA
Adjusted Per Capita Emissions Reduction Target ($MTCO_2e$)	7.6	4.1	1.4

Notes: $MMTCO_2e$ = millions of metric tons of carbon dioxide equivalent; $MTCO_2e$ = metric tons of carbon dioxide equivalent; NA = not available.
[1] Includes residential and commercial, electric power, recycling and waste, and transportation emissions sectors.
Source: Calculated by Ascent Environmental in 2017.

Based on the City's 2013 inventory shown in Table 2, the targets below aim to reduce annual City emissions to 1,384,355, 888,509, and 401,347 $MTCO_2e$ per year by 2020, 2030, and 2050, respectively. As shown in the legislative-adjusted BAU forecast in Table 4, the City would achieve the 2020 target through legislative reductions, but would still need to reduce annual emissions by 84,368 and 846,264 $MTCO_2e$ per year to achieve the 2030 target and 2050 goal, respectively.

The recommended targets, along with the estimated reductions required to achieve the targets, are summarized below in Table 21.

Table 21 Recommended Greenhouse Gas Emissions Reduction Targets: 2020, 2030, and 2050

Source	2013	2020	2030	2050
Baseline Emissions and Legislative-Adjusted BAU Forecast ($MTCO_2e$)	918,790	1,002,402	972,878	1,247,610
Population	163,093	181,257	218,503	102,765
Target Per Capita Emissions ($MTCO_2e$)	NA	7.6	4.1	1.4
Target Annual Emissions ($MTCO_2e$)	NA	1,384,355	888,509	401,347
Per Capita GHG Emissions with Legislative Reductions	NA	5.5	4.5	4.3
Reduction needed to meet Target ($MTCO_2e$)	NA	(381,953)[1]	84,368	846,264

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; NA = not applicable.
[1] Negative values indicate a surplus in GHG reductions.
Source: Calculated by Ascent Environmental in 2017.

Figure 2 below depicts the baseline and legislative-adjusted BAU GHG emission forecasts by sector, as distinguished by colored wedges. The sum of the wedges represents anticipated annual GHG emissions each year. Each wedge shows how an emissions sector is expected to contribute to the City's annual inventory over time. For example, the reduction in BAU residential building energy emissions (yellow) between 2020 and 2030 illustrates the effect of statewide renewable energy policies on this sector. The black line indicates the recommended GHG reduction targets for 2020 and 2030, and longer-term goal for 2050. The additional reductions needed to meet the 2030 target to close the expected "gap" between the expected legislative-adjusted BAU emission levels and the recommended targets are also apparent in Figure 2. With respect to emissions beyond 2030, current legislation, such as SB 350 and the federal CAFE standards, have specific targets and policies that only address activities up to the year 2030. While advances in new technologies and new State policy strategies may allow for additional significant in the future, legislative reductions that may occur past 2030 are currently unknown. Additionally, many of the State's strategies outlined in the 2017 Scoping Plan (recently approved by CARB in December 2017) either have not yet been implemented, or sufficient detail regarding the timing and estimated effectiveness of implementation is not yet available.

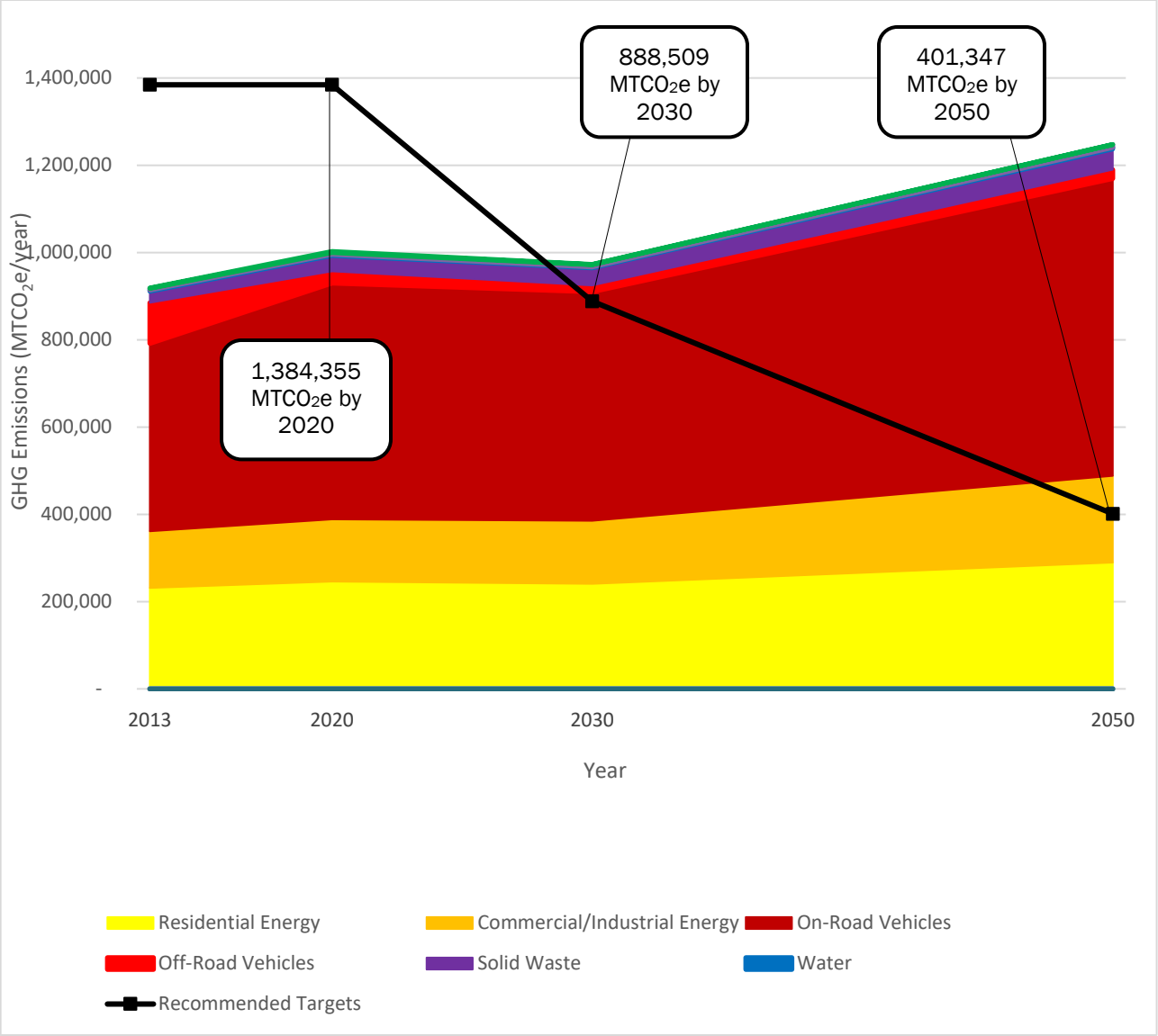


Figure 2 Legislative-Adjusted Business-As-Usual Forecast Emissions by Sector and Recommended Emission Reduction Targets: 2020, 2030, and 2050

A recent California Appellate Court decision, Cleveland National Forest Foundation v. San Diego Association of Governments (November 24, 2014) 231 Cal.App.4th 1056, examined whether EO S-3-05 should be viewed as having the equivalent force of a legislative mandate for specific emissions reductions. The case was reviewed by the California Supreme Court in January 2017 and a decision was released on July 13, 2017. The California Supreme Court ruled that SANDAG did not abuse its discretion by declining to adopt EO S-3-05 as a measure of significance for the specific GHG reduction target years, especially in analyzing the significance of impacts in 2050. Despite this, the California Supreme Court cautioned that future analyses may have greater capacity to analyze impacts through 2050 and would be required to perform those analyses if that capacity is achievable. Thus, while 2050 emission levels are forecast and a longer-term goal can be set for 2050, only 2020 and 2030 targets should be included in the CAP. The CAP may still analyze the longer-term trends in view of the State's longer-term 2050 goal, as 2050 goals were established in EOs B-30-15 and S-3-05 and referenced in the 2017 Scoping Plan (CARB 2017:99).

4 GREENHOUSE GAS REDUCTION MEASURES AND GAP ANALYSIS

GREENHOUSE GAS EMISSIONS REDUCTIONS

As discussed in Section 3 above, while legislative reductions would help to reduce future emissions and achieve the 2020 GHG reduction target, additional GHG reductions are needed to achieve the recommended GHG reduction targets and goals for 2030 and 2050. As a local government, the City can act to adopt or update land use plans, enforce or update ordinances, adjust municipal operations, encourage or influence residents and businesses by partnering with local organizations, and work with local and regional transportation planning or other agencies that provide services or maintain infrastructure that is not directly in the City's control. The City can effectively reduce emissions in some sectors where the City has jurisdictional control (e.g., municipal operations, land use changes, building or zoning codes), but in some cases the City has limited ability to influence reductions because the City has limited jurisdictional control (e.g., on-road transportation).

The 2017 Scoping Plan relies on local action to help achieve statewide GHG reduction targets. As stated in the Scoping Plan, "local efforts can deliver substantial additional GHG and criteria emissions reductions beyond what State policy alone can do, and these efforts will sometimes be more cost-effective and provide more co-benefits than relying exclusively on top-down statewide regulations to achieve the State's climate stabilization goals" (CARB 2017:97). Ascent reviewed and updated GHG reduction measures previously included in the City's 2013 CAP, and added new GHG reduction measures based on policies or programs assumed in the GPU, as well as new GHG reduction measures based on best practices and recommendations in the Scoping Plan.

GHG reductions associated with these recommended measures were calculated in a step-wise manner for the target years of 2020, 2030, and 2050. In other words, the GHG reductions (in $MTCO_2e$/year) are assessed during a snapshot of time in years 2020, 2030, and 2050. This is a simplified method of characterizing GHG reductions, which would more realistically occur on a continuous basis. However, a step-wise method is appropriate for a planning-level document because the City's GHG reduction targets and monitoring of CAP implementation progress would be tied to these future years.

Importantly, GHG emission reductions were quantified for measures wherever substantial evidence and reasonable assumptions were available to support calculations. Preliminary estimates of GHG emission reductions, along with an estimated emissions reduction "gap," are summarized below in Table 22 and illustrated in Figure 3. Descriptions, assumptions, and calculation methodology is detailed in Attachment 2.

The total estimated GHG emission reductions from all measures quantified is approximately 94,710 $MTCO_2e$ in 2020, 179,913 $MTCO_2e$ in 2030, and 470,508 $MTCO_2e$ in 2050. This would result in 4.8 and 3.4 $MTCO_2e$ per capita in 2020 and 2030, respectively. The total estimated reductions from all proposed GHG reduction measures would be sufficient to meet the 2020 and 2030 targets of 7.6 and 4.1 $MTCO_2e$ per capita, respectively.

The scale of reductions required to achieve the much more aggressive longer-term 2050 goal outlined earlier would require significant improvements in the availability and/or cost of near-zero and zero-emissions technology, as well as potential increased reductions from ongoing State and federal legislative actions that are currently unknown. Progress towards meeting potential future targets that could be set by the State or others would be part of the ongoing monitoring and updates to the CAP as new legislation or future updates to the State's Climate Change Scoping Plan are adopted. Ascent recommends that the City's CAP continue be updated at least every 5 years to periodically assess the City's progress toward meeting the GHG reduction targets and identify potential new or revised GHG measures that may be implemented as new technology and policy strategies become available.

Table 22 Summary of Greenhouse Gas Emissions Reduction Measures Performance

Measure Number	Measure Name	GHG Reductions ($MTCO_2e$/year)		
		2020	2030	2050
BE-1	Promote Energy Conservation	1,876	4,340	11,393
BE-2	Building Stock: Residential Appliances in Existing Development	4,487	10,134	19,250
BE-3	Building Stock: Non-Residential Appliances in Existing Development	912	2,116	5,642
BE-4	CALGreen Tier 1: New Construction	1,174	9,244	25,574
BE-5	Zero Net Energy: New Construction	0	29,930	163,902
BE-6	CALGreen Tier 1: Existing Buildings	3,972	8,511	34,043
BE-7	Solar PV in All Residential and Commercial Development	5,488	13,459	44,544
BE-8	SMUD Greenergy Off-Set Program for Electricity Use	12,193	19,846	33,167
BE-9	Increase Tree Planting	620	1,505	3,275
RC-1	Waste Reduction	5,272	10,169	16,957
RC-2	Reduce Organic Waste	3,208	6,791	9,731
TACM-1	Local Goods	4,388	7,008	9,935
TACM-2	Transit Oriented Development	3,189	6,963	14,613
TACM-3	Intra-City Transportation Demand Management	5,485	9,344	24,838
TACM-4	Pedestrian and Bicycle Travel	3,299	4,265	5,533
TACM-5	Affordable Housing	12,028	16,018	21,193
TACM-6	Vehicle Miles Traveled Reduction Policy (15%)	26,526	18,539	24,525
TACM-7	Traffic Calming Measures	274	292	828
TACM-8	Tier 4 Final Construction Equipment	0	644	892
TACM-9	Electric Vehicle Charging Stations	316	794	689
Total GHG Reductions from Proposed Measures		94,710	179,913	470,508
Total GHG Reductions Required to Meet the Targets		(381,953)	84,368	846,264
Per Capita GHG Emissions with Proposed Measures		4.8	3.4	2.4
Per Capita GHG Emissions Required to Meet the Targets		7.6	4.1	1.4
Remaining Gap (or Surplus)[1]		(476,663)	(95,545)	375,756

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; NA = not applicable.
[1] Negative values indicate that the target would be met with a surplus of annual GHG emissions reductions, due to the target being achieved. Positive values indicate a "gap" or deficit, because further reductions are needed to meet the target or goal.
Source: Data compiled by Ascent Environmental in 2017.

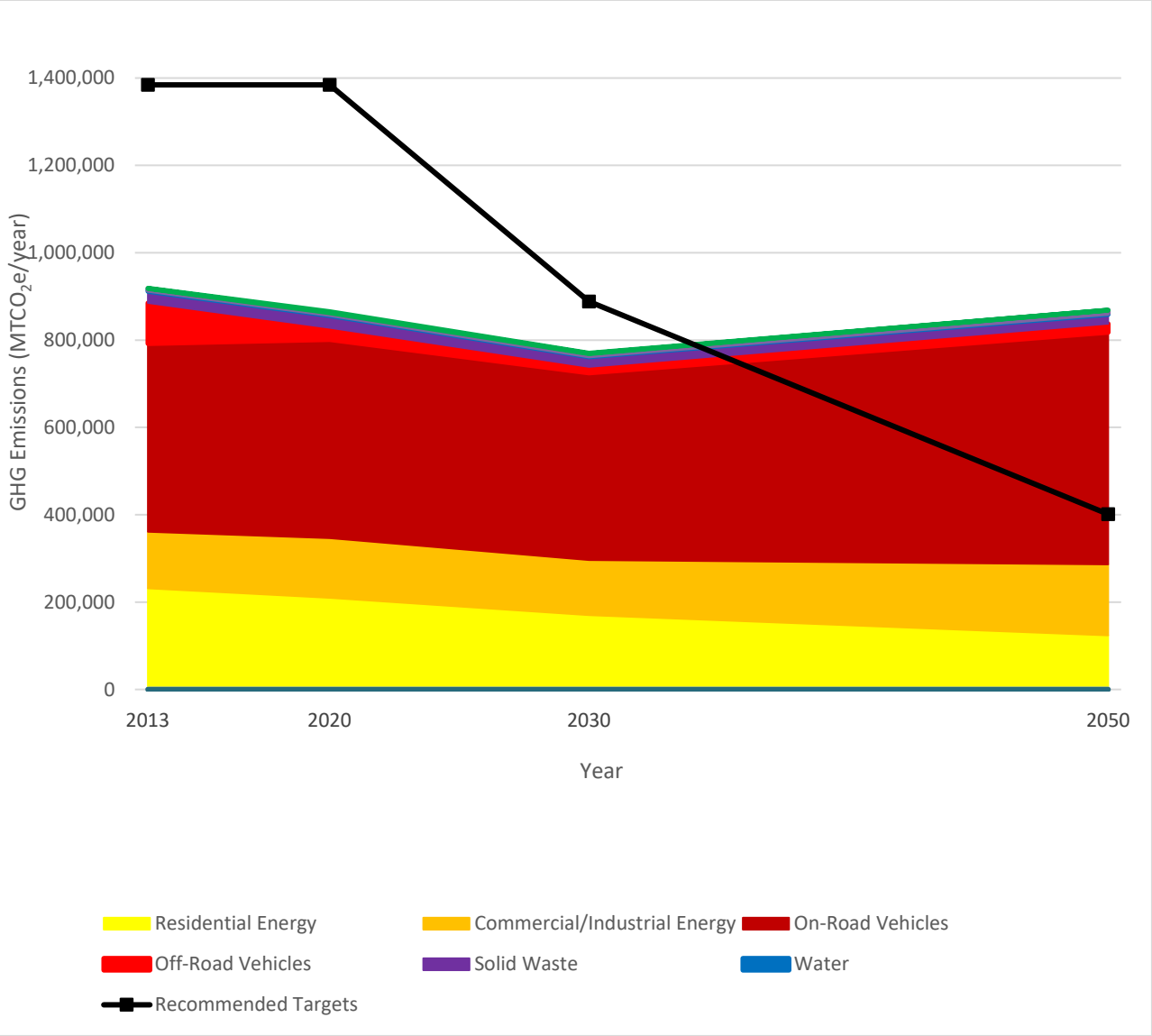


Figure 3 Projections of Greenhouse Gases by Sector with Implementation of Proposed GHG Reduction Measures and Recommended Targets: 2020, 2030, and 2050

REFERENCES

California Air Resources Board. 2017 (November). California's 2017 Climate Change Scoping Plan. Available: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed December 26, 2017.

_____. 2014 (May). 2020 BAU Emissions by Scoping Plan Category. Available: https://www.arb.ca.gov/cc/inventory/data/tables/2020_bau_forecast_by_scoping_category_2014-05-22.pdf. Accessed January 18, 2018.

California Energy Commission. 2015 (June). Building Energy Efficiency Standards for Residential and Nonresidential Buildings. Available http://www.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf. Accessed January 3, 2017.

CARB. *See* California Air Resources Board.

CEC. *See* California Energy Commission.

City. *See* City of Elk Grove.

City of Elk Grove. 2017 (June). Notice of Preparation of a Draft Environmental Impact Report for the City of Elk Grove General Plan Update. June 23, 2017. Elk Grove, CA.

_____. 2013 (March). City of Elk Grove Climate Action Plan. Adopted March 27, 2013. Elk Grove, CA.

EPA. *See* U.S. Environmental Protection Agency.

Sacramento Municipal Utility District. 2016. Greenhouse gas emissions reported to the Climate Registry. Personal communication from Martha Helek (SMUD) to Dimitri Antoniou (Ascent Environmental). Email June 28th, 2016.

SMUD. See Sacramento Municipal Utility District.

U.S. Environmental Protection Agency. 2015 (October). eGRID 2012 Summary Tables. Available: https://www.epa.gov/energy/egrid-2012-summary-tables. Accessed: June 19, 2016.

Attachment 1

Inventory and Forecast

Table 1. 2013 Baseline Inventory

Sector	Subsector	Source	2013 Activity Data	Unit	MT CO2e
Residential	Electricity	SMUD	471,810,070	kWh	113,180
Residential	Natural Gas	PG&E	22,211,400	therms	118,220
Nonresidential	Electricity Total	SMUD	369,671,147	kWh	88,678
Nonresidential	Streetlights & Traffic Lights	SMUD	8,906,969	kWh	
Nonresidential	Agriculture	SMUD	3,390,289	kWh	
Nonresidential	Buildings	SMUD	357,373,889	kWh	
Nonresidential	Natural Gas	PG&E	7,736,910	therms	41,180
Transportation	On-Road	SACOG	878,312,710	Annual VMT	430,340
Off-Road Equipment	Construction/Mining Equipment	CARB OFFROAD	463	Average homes constructed	90,850
Off-Road Equipment	Lawn/Garden Equipment	CARB OFFROAD	51,973	Dwelling units	2,490
Solid Waste	Municipal Solid Waste	CalRecycle	76,180	tons	22,570
Solid Waste	Alternative Daily Cover	CalRecycle	4,670	tons	1,150
Solid Waste	Landfill	2009 ICF Sacramento County Inventory	679,800	tons	2,540
Water	Indirect Water	SMUD	11,289,140	kWh	2,708
Wastewater	Indirect Wastewater	SMUD	624,450	kWh	150
Wastewater	Fugitive	ICLEI US Community Protocol WW.6.b			3,704
Agriculture	Agriculture Equipment	CARB OFFROAD	2,252	acres	660
Agriculture	Livestock	Sacramento County Agricultural Commission	271	grazing acres	80
Agriculture	Fertilizer	Sacramento County Agricultural Commission	1,749	acres	290
Total					918,790

Table 2. 2013 Study Area Emissions

	Emissions (MTCO2e)					
Sector	Study Area 1	Study Area 2	Study Area 3	Study Area 4	City	Total
Residential	140	160	80	193	231,400	231,973
Non-Residential	660	1,250	720	724	41,180	44,533
Transportation	280	230	100	159	430,340	431,109
Off-Road Equipment	10	-	-	485	93,340	93,835
Solid Waste	10	10	10	34	23,720	23,784
Landfill	-	-	-	-	2,540	2,540
Water/Wastewater	700	1,340	770	259	6,562	9,631
Agriculture	750	1,560	760	150	1,030	4,250
Total	2,550	4,550	2,440	2,004	918,790	930,334
Acres	1,772	3,675	1,914	534	23441	31336
	1.4	1.2	1.3	3.8	39.2	29.7

Assumptions		
Electricity per home	8,810	kWh/home
Natural gas per home	410	therms/home
Electricity per nonresidential sq ft	25.5	kWh/sq ft
Electricity per ag acre	1,600	kWh/acre
Natural gas per nonresidential sq ft	0.54	therms/sq ft
Residential VMT per home	7,190	VMT/home
Nonresidential VMT per job	16,290	VMT/job
Tons solid waste per person	0.43	tons/person
Water-related kWh per person	40	kWh/person
Ag water-related kWh per ag acre	1,720	kWh/acre
Wastewater-related kWh per person	3	kWh/person
Lawn and garden off-road equip per home	0.047	MTCO2e/home
Construction off-road equip per nonresidential sq ft	0.006	MTCO2e/sq ft
Fertilizer per fertilized acre	0.17	MTCO2e/acre
Livestock per livestock acre	0.04	MTCO2e/acre
Ag off-road equip per ag acre	0.313	MTCO2e/acre

Study Area 4 Calcs	
Population	145.35
Residential acreage	45
Nonresidential acreage	80494
Residential electricity (kWh)	396450
Residential natural gas (therms)	18450
Nonresidential electricity (kWh)	2052597
Nonresidential natural gas (therms)	43466.76
Total VMT	323550
Total solid waste tons	62.5005
Water-related (kWh)	5814
Wastewater-related (kWh)	436.05
Ag-related water (kWh)	1073280

Table 3. Scale Factors

Factor	2012	2013	2015	2020	2030	2035	2050	Percent Change
Agriculture Acres		9,699		6,846	2,769	731	643	
Dwelling Units		52,783		58,095	70,033	75,752	93,423	
Population		163,093		181,257	218,503	236,346	291,481	
Jobs		45,463		51,704	68,632	75,752	102,765	
Annual VMT		878,312,710	1,103,497,565	1,304,308,676.43	1,705,930,899.29	1,906,742,010.71	2,509,175,345	
Local VMT			206,622,120	264,263,806.43	379,547,179.29	437,188,865.71	610,113,925	
Building Permits		384		423	509	551	626	
Persons per HH		3.25						
Vacancy Rate		5.30%						
Acreage		31,238						
Sac County Population Projections						1,854,128	2,105,299	0.85%
Sac County Dwelling Units	903,451			951,495	1,109,396.33	1,188,347	1,425,199	
Residential Building Permits				6,006	15,790	15,790	15,790	
Single Family Houses	89.20%	47,082	<-- source: ACS 5-year estimate 2013					
Multi Family Houses	10.80%	5,701	<-- source: ACS 5-year estimate 2013					

Growth Rate	2013 to 2020	2020 to 2030	2030 to 2035	2035 to 2050
Agriculture Acres	-29%	-60%	-74%	-12%
Dwelling Units	10%	21%	8%	23%
Population	11%	21%	8%	23%
Jobs	14%	33%	10%	36%
VMT	49%	31%	12%	32%

Table 4. BAU Forecast

Sector	Subsector	Source	2020 Activity Data	Unit	MT CO2e	Scale Factor	2030 Activity Data	Unit	MT CO2e	Scale Factor	2035 Activity Data	Unit	MT CO2e	Scale Factor	2050 Activity Data	Unit	MT CO2e	Scale Factor
Residential	Electricity	SMUD	524,356,520	kWh	125,785	2020 pop	632,105,092	kWh	151,632	2030 pop	683,722,924	kWh	164,015	2035 pop	843,222,401	kWh	202,276	2050 pop
Residential	Natural Gas	PG&E	24,685,129	therms	131,386	2020 pop	29,757,608	therms	158,385	2030 pop	32,187,620	therms	171,318	2035 pop	39,696,376	therms	211,284	2050 pop
Nonresidential	Electricity Total	SMUD	420,418,296	kWh	100,852	2020 jobs	558,064,144	kWh	133,871	2030 jobs	615,958,664	kWh	147,759	2035 jobs	835,608,196	kWh	200,450	2050 jobs
Nonresidential	Streetlights & Traffic Lights	SMUD	10,129,686	kWh	2,430	2020 jobs	13,446,167	kWh	3,226	2030 jobs	14,841,095	kWh	3,560	2035 jobs	20,133,398	kWh	4,830	2050 jobs
Nonresidential	Agriculture	SMUD	3,855,696	kWh	925	2020 jobs	5,118,059	kWh	1,228	2030 jobs	5,649,015	kWh	1,355	2035 jobs	7,663,442	kWh	1,838	2050 jobs
Nonresidential	Buildings	SMUD	406,432,914	kWh	97,497	2020 jobs	539,499,918	kWh	129,418	2030 jobs	595,468,553	kWh	142,844	2035 jobs	807,811,357	kWh	193,782	2050 jobs
Nonresidential	Natural Gas	PG&E	8,799,006	therms	46,833	2020 jobs	11,679,819	therms	62,166	2030 jobs	12,891,503	therms	68,615	2035 jobs	17,488,585	therms	93,083	2050 jobs
Transportation	On-Road	SACOG	1,304,308,676	VMT	645,542	2020 VMT	1,705,930,899	VMT	844,317	2030 VMT	2,509,175,345	VMT	943,704	2035 VMT	2,509,175,345	VMT	1,241,867	2050 VMT
Off-Road Equipment	Construction/Mining Equipment	CARB OFFROAD			99,993	2020 building permits			120,541	2030 building permits			130,384	2035 building permits			160,799	2050 building permits
Off-Road Equipment	Lawn/Garden Equipment	CARB OFFROAD	58,095	du	2,783	2020 dwellings	70,033	du	3,355	2030 dwellings	75,752	du	3,629	2035 dwellings	93,423	du	4,476	2050 dwellings
Solid Waste	Municipal Solid Waste	CalRecycle	84,664	tons	25,084	2020 pop	102,062	tons	30,238	2030 pop	110,396	tons	32,707	2035 pop	136,149	tons	40,337	2050 pop
Solid Waste	Alternative Daily Cover	CalRecycle	5,190	tons	1,278	2020 pop	6,257	tons	1,541	2030 pop	6,768	tons	1,667	2035 pop	8,346	tons	2,055	2050 pop
Solid Waste	Landfill	2009 ICF Sacramento County Inventory	679,800	tons	9,819	2020 pop	679,800	tons	8038.68	2030 pop	679,800	tons	6581.94	2035 pop	679,800	tons	5388.61	2050 pop
Water	Indirect Water	SMUD	12,546,435	kWh	3,010	2020 pop	15,124,567	kWh	3,628	2030 pop	16,359,642	kWh	3,924	2035 pop	20,176,033	kWh	4,840	2050 pop
Wastewater	Indirect Wastewater	SMUD	693,996	kWh	166	2020 pop	836,604	kWh	201	2030 pop	904,921	kWh	217	2035 pop	1,116,022	kWh	268	2050 pop
Wastewater	Fugitive				4,117	2020 pop			4,962	2030 pop			5,368	2035 pop			6,620	2050 pop
Agriculture	Agriculture Equipment	CARB OFFROAD	6,845.35	acres	2,006		2,769.12	acres	812		731	acres	214		731	acres	214	
Agriculture	Livestock	Sacramento County Agricultural Commission	192.51	acres	8		80.98	acres	3		25.22	acres	1		25.22	acres	1	
Agriculture	Fertilizer	Sacramento County Agricultural Commission	3,228	acres	571		1,392	acres	246		473.75	acres	84		473.75	acres	84	
Total					1,199,232				1,523,936				1,680,189				2,174,042	

Notes

Landfills in Elk Grove are closed, no increase in tonnage disposed but continued emissions

Table 5. Legislative-Adjusted BAU Forecast

Sector	Subsector	Source	2020 Activity Data	Unit	MT CO2e	2030 Activity Data	Unit	MT CO2e	2035 Activity Data	Unit	MT CO2e	2050 Activity Data	Unit	MT CO2e
Residential	Electricity	SMUD	500,185,153	kWh	120,665	558,369,382	kWh	100,676	586,243,011	kWh	105,702	672,372,729	kWh	121,231
Residential	Natural Gas	PG&E	23,547,214	therms	125,330	26,286,352	therms	139,909	27,598,559	therms	146,893	31,653,287	therms	168,474
Nonresidential	Electricity Total	SMUD	403,738,227	kWh	97,398	496,141,294	kWh	89,456	535,006,478	kWh	96,463	682,459,457	kWh	123,050
Nonresidential	Streetlights & Traffic Lights	SMUD	10,129,686	kWh	2,444	13,446,167	kWh	2,424	14,841,095	kWh	2,676	20,133,398	kWh	3,630
Nonresidential	Agriculture	SMUD	3,855,696	kWh	930	5,118,059	kWh	923	5,649,015	kWh	1,019	7,663,442	kWh	1,382
Nonresidential	Buildings	SMUD	389,752,845	kWh	94,024	477,577,068	kWh	86,109	514,516,367	kWh	92,769	654,662,618	kWh	118,038
Nonresidential	Natural Gas	PG&E	8,437,893	therms	44,911	10,339,230	therms	55,030	11,138,941	therms	59,287	14,173,016	therms	75,436
Transportation	On-Road	SACOG	1,304,308,676	VMT	541,455	1,705,930,899	VMT	524,978	1,906,742,011	VMT	586,775	2,509,175,345	VMT	681,001
Off-Road Equipment	Construction/Mining Equipment	CARB OFFROAD			25,176			12,885			14,896			17,846
Off-Road Equipment	Lawn/Garden Equipment	CARB OFFROAD			2,030			1,800			2,562			2,802
Solid Waste	Municipal Solid Waste	CalRecycle	84,664	tons	25,084	102,062	tons	30,238	110,396	tons	32,707	136,149	tons	40,337
Solid Waste	Alternative Daily Cover	CalRecycle	5,190	tons	1,278	6,257	tons	1,541	6,768	tons	1,667	8,346	tons	2,055
Solid Waste	Landfill	2009 ICF Sacramento County Inventory	679,800	tons	9,819	679,800	tons	8,039	679,800	tons	6,582	679,800	tons	5,389
Water	Indirect Water	SMUD	10,037,148	kWh	2,421	12,099,653	kWh	2,182	13,087,714	kWh	2,360	16,140,827	kWh	2,910
Wastewater	Indirect Wastewater	SMUD	555,197	kWh	134	669,283	kWh	121	723,937	kWh	131	892,817	kWh	161
Wastewater	Fugitive				4,117			4,962			5,368			6,620
Agriculture	Agriculture Equipment	CARB OFFROAD	6,845	acres	2,006	2,769	acres	812	731	acres	214	731	acres	214
Agriculture	Livestock	Sacramento County Agricultural Commission	193	acres	8	81	acres	3	25	acres	1	25	acres	1
Agriculture	Fertilizer	Sacramento County Agricultural Commission	3,228	acres	571	1,392	acres	246	474	acres	84	474	acres	84
Total					1,002,402			972,878			1,061,691			1,247,610

Table 6. Assumptions

Global Warming Potentials (AR 5)	CO2	CH4	N2O
	1	28	265

Conversions	
MT/ton	0.907185
mt/g	0.000001

Baseline Elk Grove's Share	2013
Lawn & Garden	9.28%
Construction	28.33%
Ag Equipment	1.02%

Title 24	2020	2030	2040	2050
Percent reduction from 2013 levels due to new building energy efficiency standards in new construction (Residential).	46%	46%	46%	46%
Percent reduction from 2013 levels due to new building energy efficiency standards in new construction (Commercial).	34%	34%	34%	34%
State Renewable Energy Targets	33%	50%	50%	50%

Building Energy Efficiency Assumptions						
	2020	2030	2050			
Percent reduction from 2015 levels due to new building energy efficiency standards in new construction (Residential).*	28%	28%	28%			
Percent reduction from 2015 levels due to new building energy efficiency standards in new construction (Commercial).*	5%	5%	5%			
Residential	**%**	**Notes**	**Source**			
Energy efficiency improvement of 2016 code above 2013 code	28%	For lighting, heating, cooling, ventilation, and water heating only	*http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/2016_Building_Energy_Efficiency_Standards_FAQ.pdf*			
Commercial						
Energy efficiency improvement of 2016 code above 2013 code	5%		http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/2015-06-			

Wastewater Treatment

Source: ICLEI US Community Protocol Methods WW.6.b and WW.12 used (no process-specific info available, lagoon system used)

***Equation WW.6.(alt)* Alternate Methane Emissions from Lagoons**

Annual CH_4 emissions = $((P \times F_{ind\text{-}com}) \times BOD_5$ load $\times (1\text{-}FP) \times Bo \times MCF_a \times 365.25 \times 10^{-3}) \times GWP$

Where:

Description		Value
Annual CH_4 emissions	= Total annual CH_4 emitted by lagoon ($mtCO_2e$)	Result
P	= Population served by lagoon	User Input
$F_{ind\text{-}com}$	= Factor for significant industrial and commercial co-discharge waste (see definition above)	1.25

Description		Value
BOD_5 load	= Amount of BOD_5 treated per day (kg BOD_5/person/day)	0.090
F_P	= Fraction of BOD_5 removed in primary treatment	0.325
Bo	= Maximum CH_4 producing capacity for domestic wastewater (kg CH_4/kg BOD_5)	0.6
MCF_a	= CH_4 correction factor for anaerobic systems	0.8
365.25	= Conversion factor (day/year)	365.25
10^{-3}	= Conversion from kg to mt (mt/kg)	10^{-3}
GWP_{CH_4}	= Global Warming Potential; conversion from mt of CH_4 into mt of CO_2 equivalents	GWP[18]

Source: As listed in LGO protocol Equation 10.4 from EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2007, Chapter 8, 8-7 (2009); except F_P: Tchobanoglous, G., F.L. Burton, and H.D. Stensel, Wastewater Engineering: Treatment and Reuse, p. 396, 4th Edition (2003).

Waste Diversion Rate			
Statewide per capita target	2.7	75%	diversion
2013 Average per capita disposal rate	2.6	78%	

Table 7. Emission Factors

Sector	Subsector	Source	Units	2013	2020	2030	2035	2050	Source
Residential	Electricity	SMUD	$MTCO_2e/kWh$	0.000240	0.000241	0.00018	0.00018	0.00018	2013: Pers. Comm. Dimitri Antoniou, June 28, 2016 2020: based on 2009 PUP of SMUD at 29% renewables 2030/2050: assumed 50% renewable
Residential	Natural Gas	PG&E	$MTCO_2e/therm$	0.005322					
Nonresidential	Electricity	SMUD	$MTCO_2e/kWh$	0.000240	0.000241	0.00018	0.00018	0.00018	2013: Pers. Comm. Dimitri Antoniou, June 28, 2016 2020: based on 2009 PUP of SMUD at 29% renewables 2030/2050: assumed 50% renewable
Nonresidential	Natural Gas	PG&E	$MTCO_2e/therm$	0.005322					
Transportation	On-Road	CARB EMFAC	$MTCO_2e/VMT$	0.000490					
Off-Road Equipme	Construction/Mining Equipment	MBI 2013							
Off-Road Equipme	Lawn/Garden Equipment	MBI 2013	MTCO2e/du	0.047909491					
Solid Waste	Municipal Solid Waste	CARB Landfill Model	$MTCO_2e/ton$	0.296272					
Solid Waste	Alternative Daily Cover	CARB Landfill Model	$MTCO_2e/ton$	0.246253					
Solid Waste	Landfills								
Water	Indirect Water	SMUD	$MTCO_2e/kWh$	0.000240	0.00024124	0.00018	0.00018	0.00018	2013: Pers. Comm. Dimitri Antoniou, June 28, 2016 2020: based on 2009 PUP of SMUD at 29% renewables 2030/2050: assumed 50% renewable
Wastewater	Indirect Wastewater	SMUD	$MTCO_2e/kWh$	0.000240	0.00024124	0.00018	0.00018	0.00018	2013: Pers. Comm. Dimitri Antoniou, June 28, 2016 2020: based on 2009 PUP of SMUD at 29% renewables 2030/2050: assumed 50% renewable
Wastewater	Fugitive								
Agriculture	Agriculture Equipment	MBI 2013	MTCO2e/acre	0.293072824					
Agriculture	Livestock	MBI 2013	MTCO2e/acre	0.04					
Agriculture	Fertilizer	ICLEI US Community Protocol	$MTCO_2e/acre$	0.176829					
Agriculture	Water	MBI 2013	kWh/acre	1720					
Agriculture	Electricity	MBI 2013	kWh/acre	1600					
Transportation	VMT	MBI 2013	MTCO2e/VMT	0.000489965					
Building Energy	Electricity	eGRID 2012	MT CH4/kWh	1.41158E-08					
Building Energy	Electricity	eGRID 2012	MT N2O/kWh	2.57187E-09					

Table 8. Agriculture Acreage

				Acreage			
Row Labels	**2013**	**2013 Emissions**	**Sector**	**2020**	**2030**	**2035**	**2050**
City							
Agricultural							
Grazing	90.79			68.22	35.96	19.84	19.84
Hay	1,556.25			1169.26	616.42	340.00	340.00
Irrigated Pasture	387.34			291.02	153.42	84.62	84.62
Operations	25.25	290	Fertilizer	18.97	10.00	5.52	5.52
Row Crop	192.37	80	Enteric Fermentati	144.53	76.20	42.03	42.03
Previous Agricultural Total	2,115	660	Ag Equipment				
Updated City Total	**2,252**			**1,692**	**892**	**492**	**492**
Plan Area 1							
Agricultural							
Hay	580			404.94	154.31	28.99	28.99
Irrigated Pasture	756	170	Fertilizer	527.79	201.12	37.79	37.79
Vineyard	365	50	Enteric Fermentati	254.47	96.97	18.22	18.22
Agricultural Total	1,702	530	Ag Equipment				
Plan Area 1 Total	**1,702**			**1,187.21**	**452.40**	**85**	**85**
Plan Area 2							
Agricultural							
Hay	1,417			979.57	354.99	42.69	42.69
Irrigated Pasture	614			424.76	153.93	18.51	18.51
Operations	18			12.38	4.49	0.54	0.54
Row Crop	102	460	Fertilizer	70.55	25.57	3.07	3.07
Vineyard	1,101	80	Enteric Fermentati	761.20	275.85	33.18	33.18
Agricultural Total	3,252	1,020	Ag Equipment				
Plan Area 2 Total	**3,252**			**2,248.46**	**814.82**	**98**	**98**
Plan Area 3							
Agricultural							
Grazing	180			124.29	45.02	5.39	5.386218608
Hay	491			339.44	122.95	14.71	14.71008447
Irrigated Pasture	1,098			759.18	274.99	32.90	32.89972428
Operations	25	100	Fertilizer	17.26	6.25	0.75	0.748043454
Row Crop	75	70	Enteric Fermentati	52.06	18.86	2.26	2.255929186
Agricultural Total	1,869	590	Ag Equipment				
Plan Area 3 Total	**1,869**			**1,292.23**	**468.08**	**56**	**56**
Plan Area 4							
Agricultural							
Irrigated Pasture	170			115.91	38.64	0	0
Hay	99			67.50	22.50	0	0
Operations	40	10	Fertilizer	27.27	9.09	0	0
Vineyard	315	20	Enteric Fermentati	214.77	71.59	0	0
Agricultural Total	624	120	Ag Equipment				
Plan Area 4 Total	**624**			**425.45**	**141.82**	**0**	**0**
Grand Total	**9,699**			**6,845**	**2,769**	**731**	**731**
				(0.29)	(0.71)	(0.92)	

Table 9. On-Road VMT From Traffic Study

2015

VMT by Speed Bin

Bin	CSPD	CSPD	PROJVMT_RTAC		
1	>0	<=5	267		
2	>5	<=10	884		
3	>10	<=15	6,288		
4	>15	<=20	192,162		
5	>20	<=25	101,690		
6	>25	<=30	166,568		
7	>30	<=35	311,414		
8	>35	<=40	467,870		
9	>40	<=45	554,051		
10	>45	<=50	184,672		
11	>50	<=55	384,665		
12	>55	<=60	491,524		
13	>60	<=65	120,035		
14	>65	<=70	41,191		
15	>70	<=75	0		
16	>75		0	Annual	
		Total	3,023,281		1,103,497,565
		II	566,088		206,622,120
		IX	1,230,807		
		XI	1,226,386		
		XX	54,776,923		

2036

VMT by Speed Bin

Bin	CSPD	CSPD	PROJVMT_RTAC		
1	>0	<=5	633		
2	>5	<=10	4,820		
3	>10	<=15	32,464		
4	>15	<=20	522,929		
5	>20	<=25	253,660		
6	>25	<=30	458,924		
7	>30	<=35	879,317		
8	>35	<=40	1,251,261		
9	>40	<=45	1,020,631		
10	>45	<=50	661,963		
11	>50	<=55	799,371		
12	>55	<=60	810,534		
13	>60	<=65	139,909		
14	>65	<=70	38,037		
15	>70	<=75	0		
16	>75		0	Annual	
		Total Daily	6,874,453		2,509,175,345
		II	1,671,545		610,113,925
		IX	2,604,795		
		XI	2,598,113		
		XX	68,468,704		

Table 10. VMT BAU

2020							
VMT	CO2 (g)	CO2 (MT)	CH4 (g)	CH4 (MT)	N2O (g)	N2O (MT)	CO2e (MT)
1304308676	632,138,406,004	632,138	50,072,897	50	45,287,759	45	645,542

2030							
VMT	CO2 (g)	CO2 (MT)	CH4 (g)	CH4 (MT)	N2O (g)	N2O (MT)	CO2e (MT)
1705930899	826,786,219,333	826,786	65,491,324	65	59,232,748	59	844,317

2035							
VMT	CO2 (g)	CO2 (MT)	CH4 (g)	CH4 (MT)	N2O (g)	N2O (MT)	CO2e (MT)
1906742011	924,110,125,998	924,110	73,200,537	73	66,205,243	66	943,704

2050							
VMT	CO2 (g)	CO2 (MT)	CH4 (g)	CH4 (MT)	N2O (g)	N2O (MT)	CO2e (MT)
2,509,175,345	1,216,081,845,991	1,216,082	96,328,177	96	87,122,727	87	1,241,867

1.00E-06 MT/g

Table 11. VMT - Legislative-Adjusted

2020							
VMT	CO2 (g)	CO2 (MT)	CH4 (g)	CH4 (MT)	N2O (g)	N2O (MT)	CO2e (MT)
1,304,308,676	535,066,984,575	535,067	25,720,772	26	21,388,287	21	541,455

2030							
VMT	CO2 (g)	CO2 (MT)	CH4 (g)	CH4 (MT)	N2O (g)	N2O (MT)	CO2e (MT)
1,705,930,899	521,114,306,502	521,114	17,823,250	18	12,698,055	13	524,978

2035							
VMT	CO2 (g)	CO2 (MT)	CH4 (g)	CH4 (MT)	N2O (g)	N2O (MT)	CO2e (MT)
1,906,742,011	582,456,499,855.01	582,456	19,921,287.55	20	14,192,787.19	14	586,775

2050							
VMT	CO2 (g)	CO2 (MT)	CH4 (g)	CH4 (MT)	N2O (g)	N2O (MT)	CO2e (MT)
2,509,175,345	677,148,417,543	677,148	18,011,791	18	12,633,254	13	681,001

1.00E-06 MT/g

Table 12. On-Road Vehicle Emission Factors

Year	CO2 (g/mi)	CH4 (g/mi)	N2O (g/mi)
2013	484.6539914	0.038390373	0.034721657
2020	410.2303345	0.019719851	0.016398179
2030	305.4721072	0.010447815	0.007443475
2040	275.2640092	0.007830538	0.005534158
2050	269.8689109	0.007178371	0.005034823

Table 13. Wastewater Treatment Emissions

Equation 10.3.2.2 Process N2O Emissions from WWTP without Nitrification/Denitrification

Amount	Unit	Description
163,093	people	2013 population
181,257	people	2020 population
218,503	people	2030 population
236,346	people	2035 population
291,481	people	2050 population
1.25	constant	co-discharge waste into sewer
3.2	g N2O/person/year	emission factor for nitrification/denitrification
265	GWP	N2O

Year	Annual N2O Process Emissions (MTCO2e/year)
2013	173
2020	192
2030	232
2040	251
2050	309

Equation 10.2 Stationary CH4 from Incomplete Combustion of Digester Gas

Amount	Unit	Description
163,093	people	2013 population
181,257	people	2020 population
218,503	people	2030 population
236,346	people	2035 population
291,481	people	2050 population
1	ft^3/person/day	cubic feet of digester gas produced per person per day
0.650	constant	fraction of methane in biogas
662.000	g/m^3	density of methane
0.99	constant	methane destruction efficiency
0.0283	constant	conversion from ft^3 to m^3
365.25	constant	conversion from days to year
0.000001	constant	conversion from g to metric tons
28	constant	global warming potential of methane for CO2e

Year	Annual Stationary CH4 Emissions (MTCO2e/year)
2013	203
2020	226
2030	272
2035	294
2050	363

Equation 10.10 Process N2O Emissions from Effluent Discharge

Amount	Unit	Description
163,093	people	2013 population
181,257	people	2020 population
218,503	people	2030 population
236,346	people	2035 population
291,481	people	2050 population
1.25	Constant	co-discharge waste into sewer
0.026	kg N/person/day	N per person served
0.050	kg N/kg BOD	nitrogen uptake for cell growth in aerobic system
0.005	kg N2O N/kg sewage-I	N2O effluent Emission Factor
0.09	kg BOD/person/day	BOD Load
1.57	Constant	molecular weight ratio N2O to N2
0	Constant	fraction of nitrogen removed from nitrification/denitrification
365	days/year	
0.001	metric ton/kg	
265	GWP	

Year	Annual Process N2O Emissions (MTCO2e/year)
2013	3,328
2020	3,699
2030	4,459
2035	4,823
2050	5,948

Year	Total Wastewater Treatment Emissions (MTCO2e/year)
2013	3,704
2020	4,117
2030	4,962
2035	5,368
2050	6,620

Table 14. OFFROAD Emissions 2020

Lawn and Garden Summary		
		Source
Total Lawn & Garden Emissions (MTCO2e)	33,254	
DU Elk Grove	58,095	Scale Factor
DU Sac County	951,495	SACOG 2016 RTP/SCS
Elk Grove % of Total	6.1%	
Elk Grove Emissions (MTCO2e)	2,030	

Construction Equipment Summary		
		Source
Total Const. Equipment Emissions (MTCO2e)	357,730	
Elk Grove Houses Constructed	422.64517	Scale Factor
Sac County Houses Constructed	6005.5	Extrapolated from SACOG RPT/SCS
Elk Grove % of Total	7.0%	
Elk Grove Emissions (MTCO2e)	25,176	

total ag -

CY	Season	AvgDays	Code	Equipment	Fuel	MaxHP	Class	C/R	Pre	Hand	Port	County	Air Basin	Air Dist.	Population	Activity	Consumpti	ROG Exhau	CO Exhaus	NOX Exhau	CO2 Exhau	SO2 Exhau	PM Exhaus	N2O Exhau	CH4 Exhau	Total Annual County (MTCO2e)
2020	Annual	Mon-Sun	2260002006	Tampers/R	G2	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	9.71E+01	4.84E+01	9.77E+00	6.19E-04	2.64E-02	4.82E-04	5.04E-02	2.08E-06	4.23E-04	7.56E-05	3.85E-05	20.78224233
2020	Annual	Mon-Sun	2260002009	Plate Comp	G2	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	8.33E+00	4.70E+00	9.48E-01	5.99E-05	2.56E-03	4.66E-05	4.90E-03	2.02E-07	4.11E-05	7.33E-06	3.72E-06	2.016249755
2020	Annual	Mon-Sun	2260004010	Lawn Mow	G2	15	Lawn and Ga	C	N	NHH	NP	Sacrament	SV	SAC	1.88E+03	1.18E+03	1.33E+02	1.50E-02	2.70E-01	4.04E-03	8.02E-01	3.30E-05	2.53E-03	1.04E-03	9.35E-04	357.085349
2020	Annual	Mon-Sun	2260004010	Lawn Mow	G2	15	Lawn and Ga	R	N	NHH	NP	Sacrament	SV	SAC	1.41E+04	5.99E+02	7.53E+01	8.54E-03	1.82E-01	1.92E-03	4.08E-01	1.68E-05	1.12E-03	4.92E-04	5.31E-04	186.3007878
2020	Annual	Mon-Sun	2260004020	Chainsaws	G2	2	Lawn and Ga	C	N	HH	NP	Sacrament	SV	SAC	3.36E+03	2.66E+03	1.59E+02	1.33E-01	2.40E-01	2.10E-03	6.50E-01	2.68E-05	3.78E-04	1.08E-03	8.26E-03	949.8886819
2020	Annual	Mon-Sun	2260004020	Chainsaws	G2	2	Lawn and Ga	R	N	HH	NP	Sacrament	SV	SAC	3.78E+04	5.08E+02	2.42E+01	8.90E-03	4.84E-02	4.09E-04	1.24E-01	5.10E-06	1.14E-04	2.07E-04	5.53E-04	91.4338104
2020	Annual	Mon-Sun	2260004020	Chainsaws	G2	15	Lawn and Ga	C	N	HH	NP	Sacrament	SV	SAC	2.37E+03	1.88E+03	2.71E+02	2.26E-01	4.09E-01	3.58E-03	1.11E+00	4.56E-05	6.44E-04	1.21E-03	1.41E-02	1611.880089
2020	Annual	Mon-Sun	2260004020	Chainsaws	G2	15	Lawn and Ga	R	N	HH	NP	Sacrament	SV	SAC	2.67E+04	3.58E+02	4.09E+01	1.47E-02	8.12E-02	6.93E-04	2.11E-01	8.68E-06	2.05E-04	2.33E-04	9.14E-04	152.1432445
2020	Annual	Mon-Sun	2260004021	Chainsaws	G2	15	Lawn and Ga	C	P	HH	NP	Sacrament	SV	SAC	2.95E+03	2.34E+03	3.37E+02	2.82E-01	5.09E-01	4.46E-03	1.38E+00	5.67E-05	8.02E-04	1.51E-03	1.75E-02	2006.229822
2020	Annual	Mon-Sun	2260004021	Chainsaws	G2	15	Lawn and Ga	R	P	HH	NP	Sacrament	SV	SAC	3.32E+04	4.45E+02	5.28E+01	2.05E-02	1.08E-01	8.21E-04	2.62E-01	1.08E-05	1.96E-04	2.82E-04	1.27E-03	201.3517007
2020	Annual	Mon-Sun	2260004025	Trimmers/I	G2	2	Lawn and Ga	C	N	HH	NP	Sacrament	SV	SAC	1.10E+04	3.65E+03	1.62E+02	8.73E-02	2.87E-01	2.52E-03	7.77E-01	3.20E-05	4.52E-04	1.37E-03	5.42E-03	745.8906157
2020	Annual	Mon-Sun	2260004025	Trimmers/I	G2	2	Lawn and Ga	R	N	HH	NP	Sacrament	SV	SAC	1.22E+05	7.20E+03	3.05E+02	1.37E-01	5.67E-01	4.97E-03	1.53E+00	6.31E-05	8.93E-04	2.71E-03	8.51E-03	1279.329564
2020	Annual	Mon-Sun	2260004030	Leaf Blowe	G2	2	Lawn and Ga	C	N	HH	P	Sacrament	SV	SAC	1.64E+04	8.81E+03	4.70E+02	3.24E-01	7.71E-01	6.76E-03	2.08E+00	8.59E-05	1.21E-03	3.51E-03	2.02E-02	2492.148438
2020	Annual	Mon-Sun	2260004030	Leaf Blowe	G2	2	Lawn and Ga	R	N	HH	P	Sacrament	SV	SAC	4.22E+04	5.55E+02	2.57E+01	9.38E-03	5.13E-02	4.34E-04	1.31E-01	5.41E-06	1.21E-04	2.23E-04	5.83E-04	96.71683244
2020	Annual	Mon-Sun	2260004050	Shredders	G2	15	Lawn and Ga	C	P	NHH	NP	Sacrament	SV	SAC	8.28E+01	3.08E+01	1.35E+01	7.59E-04	3.66E-02	5.92E-04	6.99E-02	2.88E-06	5.86E-04	6.82E-05	4.72E-05	27.91591803
2020	Annual	Mon-Sun	2260004050	Shredders	G2	15	Lawn and Ga	R	P	NHH	NP	Sacrament	SV	SAC	2.95E+03	7.27E+00	3.28E+00	3.02E-04	8.89E-03	1.17E-04	1.65E-02	6.80E-07	1.38E-04	1.46E-05	1.88E-05	7.249314121
2020	Annual	Mon-Sun	2260004070	Commercia	G2	15	Lawn and Ga	C	N	NHH	NP	Sacrament	SV	SAC	4.39E+01	9.62E+01	3.94E+01	1.77E-03	1.07E-01	1.34E-03	2.05E-01	8.44E-06	9.54E-05	1.80E-04	1.10E-04	79.16690349
2020	Annual	Mon-Sun	2260004070	Commercia	G2	25	Lawn and Ga	C	N	NHH	NP	Sacrament	SV	SAC	2.17E+01	4.75E+01	4.21E+01	1.84E-03	1.19E-01	1.42E-03	2.13E-01	8.79E-06	9.94E-05	1.33E-04	1.14E-04	81.91127482
2020	Annual	Mon-Sun	2260004075	Other Lawr	G2	2	Lawn and Ga	C	N	HH	NP	Sacrament	SV	SAC	1.85E+01	3.48E+00	1.95E-01	9.56E-05	3.54E-04	3.10E-06	9.57E-04	3.94E-08	5.57E-07	1.50E-06	5.94E-06	0.852161202
2020	Annual	Mon-Sun	2260004075	Other Lawr	G2	2	Lawn and Ga	R	N	HH	NP	Sacrament	SV	SAC	5.68E+02	6.69E+00	3.57E-01	1.27E-04	7.18E-04	6.07E-06	1.84E-03	7.57E-08	1.69E-06	2.91E-06	7.88E-06	1.326628843
2020	Annual	Mon-Sun	2260004075	Other Lawr	G2	15	Lawn and Ga	C	N	HH	NP	Sacrament	SV	SAC	8.07E+00	1.52E+00	4.23E-01	2.08E-04	7.70E-04	6.74E-06	2.08E-03	8.57E-08	1.21E-06	1.54E-06	1.29E-05	1.837948527
2020	Annual	Mon-Sun	2260004075	Other Lawr	G2	15	Lawn and Ga	R	N	HH	NP	Sacrament	SV	SAC	2.47E+02	2.91E+00	7.71E-01	2.67E-04	1.54E-03	1.32E-05	4.00E-03	1.65E-07	3.89E-06	2.98E-06	1.66E-05	2.810139971
2020	Annual	Mon-Sun	2265002003	Asphalt Pa	G4	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	2.12E+00	2.30E+00	1.33E+00	1.01E-04	3.82E-03	7.52E-05	6.46E-03	1.84E-07	5.42E-05	6.59E-06	5.71E-06	2.7024123
2020	Annual	Mon-Sun	2265002003	Asphalt Pa	G4	25	Construction	U	P	NHH	NP	Sacrament	SV	SAC	3.62E+00	3.93E+00	5.74E+00	4.46E-04	1.70E-02	2.91E-04	2.70E-02	6.85E-07	2.27E-04	1.74E-05	2.52E-05	11.32047168
2020	Annual	Mon-Sun	2265002003	Asphalt Pa	G4	50	Construction	U	P	NHH	NP	Sacrament	SV	SAC	2.80E+00	3.01E+00	6.98E+00	1.29E-04	7.58E-03	1.72E-04	5.50E-02	6.68E-07	4.21E-06	1.10E-05	7.31E-06	18.94679493
2020	Annual	Mon-Sun	2265002003	Asphalt Pa	G4	120	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.54E+00	1.66E+00	6.31E+00	6.88E-05	2.36E-03	1.72E-04	5.69E-02	5.50E-07	4.41E-06	7.63E-06	3.89E-06	19.25890226
2020	Annual	Mon-Sun	2265002006	Tampers/R	G4	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	4.48E+00	2.24E+00	1.08E+00	8.20E-05	3.10E-03	6.11E-05	5.24E-03	1.49E-07	4.39E-05	5.82E-06	4.64E-06	2.195489856
2020	Annual	Mon-Sun	2265002009	Plate Comp	G4	5	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.64E+02	8.12E+01	1.47E+01	2.09E-03	3.13E-02	9.46E-04	8.45E-02	2.92E-06	2.76E-05	1.34E-04	1.18E-04	39.624189
2020	Annual	Mon-Sun	2265002009	Plate Comp	G4	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.74E+02	9.85E+01	4.23E+01	3.20E-03	1.21E-01	2.38E-03	2.05E-01	5.85E-06	1.72E-03	2.40E-04	1.81E-04	86.05532339
2020	Annual	Mon-Sun	2265002015	Rollers	G4	5	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.83E+01	4.17E+00	1.12E+00	1.38E-04	2.63E-03	6.22E-05	6.12E-03	2.11E-07	1.99E-06	7.85E-06	7.80E-06	2.782515216
2020	Annual	Mon-Sun	2265002015	Rollers	G4	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	2.96E+01	2.52E+01	1.37E+01	1.03E-03	3.93E-02	7.70E-04	6.65E-02	1.90E-06	5.58E-04	6.96E-05	5.85E-05	27.80994219
2020	Annual	Mon-Sun	2265002015	Rollers	G4	25	Construction	U	P	NHH	NP	Sacrament	SV	SAC	2.00E+01	1.70E+01	2.01E+01	1.56E-03	5.95E-02	1.01E-03	9.48E-02	2.40E-06	7.95E-04	6.71E-05	8.80E-05	39.73860289
2020	Annual	Mon-Sun	2265002015	Rollers	G4	50	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.98E+00	3.36E+00	9.10E+00	2.20E-04	1.30E-02	2.86E-04	6.66E-02	8.10E-07	5.10E-06	1.50E-05	1.24E-05	23.28911066
2020	Annual	Mon-Sun	2265002015	Rollers	G4	120	Construction	U	P	NHH	NP	Sacrament	SV	SAC	3.71E+00	6.32E+00	2.87E+01	4.50E-04	1.52E-02	1.04E-03	2.51E-01	2.43E-06	1.94E-05	3.78E-05	2.54E-05	85.6995076
2020	Annual	Mon-Sun	2265002021	Paving Equ	G4	5	Construction	U	P	NHH	NP	Sacrament	SV	SAC	2.30E+02	1.07E+02	2.09E+01	2.95E-03	4.48E-02	1.33E-03	1.20E-01	4.14E-06	3.91E-05	1.83E-04	1.67E-04	56.01973507
2020	Annual	Mon-Sun	2265002021	Paving Equ	G4	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	3.89E+02	2.13E+02	1.23E+02	9.28E-03	3.53E-01	6.91E-03	5.96E-01	1.70E-05	5.00E-03	6.08E-04	5.25E-04	249.140365
2020	Annual	Mon-Sun	2265002021	Paving Equ	G4	25	Construction	U	P	NHH	NP	Sacrament	SV	SAC	8.65E+00	4.74E+00	6.19E+00	4.79E-04	1.83E-02	3.12E-04	2.92E-02	7.39E-07	2.44E-04	1.97E-05	2.71E-05	12.21470808
2020	Annual	Mon-Sun	2265002021	Paving Equ	G4	50	Construction	U	P	NHH	NP	Sacrament	SV	SAC	7.66E+00	3.68E+00	8.22E+00	9.66E-05	6.13E-03	1.46E-04	6.93E-02	8.43E-07	5.31E-06	1.14E-05	5.47E-06	23.53699708
2020	Annual	Mon-Sun	2265002021	Paving Equ	G4	120	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.98E+00	9.48E-01	3.39E+00	1.86E-05	7.42E-04	4.83E-05	3.15E-02	3.04E-07	2.44E-06	3.17E-06	1.05E-06	10.55501192
2020	Annual	Mon-Sun	2265002024	Surfacing E	G4	5	Construction	U	P	NHH	NP	Sacrament	SV	SAC	4.22E+01	2.32E+01	4.63E+00	6.74E-04	9.70E-03	3.05E-04	2.69E-02	9.28E-07	8.76E-06	4.08E-05	3.81E-05	12.62280164
2020	Annual	Mon-Sun	2265002024	Surfacing E	G4	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.26E+02	1.73E+02	6.63E+01	5.20E-03	1.90E-01	3.87E-03	3.21E-01	9.16E-06	2.69E-03	4.05E-04	2.94E-04	135.9417492
2020	Annual	Mon-Sun	2265002024	Surfacing E	G4	25	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.72E+00	2.37E+00	2.22E+00	1.78E-04	6.56E-03	1.16E-04	1.04E-02	2.65E-07	8.75E-05	8.43E-06	1.01E-05	4.421515808
2020	Annual	Mon-Sun	2265002027	Signal Boar	G4	5	Construction	U	P	NHH	NP	Sacrament	SV	SAC	5.22E-01	1.86E-01	6.00E-02	7.80E-06	1.37E-04	3.52E-06	3.34E-04	1.15E-08	1.09E-07	3.98E-07	4.41E-07	0.153134419
2020	Annual	Mon-Sun	2265002027	Signal Boar	G4	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	3.71E+00	2.89E+00	1.71E+00	1.29E-04	4.92E-03	9.57E-05	8.32E-03	2.37E-07	6.97E-05	8.34E-06	7.27E-06	3.470208172
2020	Annual	Mon-Sun	2265002030	Trenchers	G4	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	3.43E+01	4.09E+01	2.63E+01	2.02E-03	7.55E-02	1.50E-03	1.28E-01	3.64E-06	1.07E-03	1.25E-04	1.14E-04	53.44633997
2020	Annual	Mon-Sun	2265002030	Trenchers	G4	25	Construction	U	P	NHH	NP	Sacrament	SV	SAC	2.66E+01	3.17E+01	4.41E+01	3.47E-03	1.30E-01	2.26E-03	2.08E-01	5.26E-06	1.74E-03	1.38E-04	1.96E-04	87.27026292
2020	Annual	Mon-Sun	2265002030	Trenchers	G4	50	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.80E+01	1.98E+01	4.36E+01	9.02E-04	5.02E-02	1.27E-03	3.39E-01	4.12E-06	2.59E-05	7.61E-05	5.10E-05	117.3391444
2020	Annual	Mon-Sun	2265002030	Trenchers	G4	120	Construction	U	P	NHH	NP	Sacrament	SV	SAC	5.96E+00	6.58E+00	2.73E+01	3.49E-04	1.12E-02	9.08E-04	2.45E-01	2.36E-06	1.89E-05	3.51E-05	1.97E-05	83.02224561
2020	Annual	Mon-Sun	2265002033	Bore/Drill I	G4	15	Construction	U	P	NHH	P	Sacrament	SV	SAC	9.82E-01	3.34E-01	2.57E-01	1.91E-05	7.38E-04	1.42E-05	1.25E-03	3.56E-08	1.05E-05	1.10E-06	1.08E-06	0.518436554
2020	Annual	Mon-Sun	2265002033	Bore/Drill I	G4	25	Construction	U	P	NHH	P	Sacrament	SV	SAC	4.88E+00	1.66E+00	2.37E+00	1.81E-04	7.01E-03	1.18E-04	1.12E-02	2.83E-07	9.36E-05	7.18E-06	1.02E-05	4.659597884
2020	Annual	Mon-Sun	2265002033	Bore/Drill I	G4	50	Construction	U	P	NHH	P	Sacrament	SV	SAC	8.69E-01	2.55E-01	6.59E-01	1.00E-05	4.78E-04	1.69E-05	5.57E-03	6.77E-08	4.26E-07	9.90E-07	5.67E-07	1.901887372
2020	Annual	Mon-Sun	2265002033	Bore/Drill I	G4	120	Construction	U	P	NHH	P	Sacrament	SV	SAC	3.99E+00	1.17E+00	7.52E+00	6.47E-05	1.79E-03	2.17E-04	6.95E-02	6.71E-07	5.38E-06	7.02E-06	3.66E-06	23.3918366
2020	Annual	Mon-Sun	2265002033	Bore/Drill I	G4	175	Construction	U	P	NHH	P	Sacrament	SV	SAC	9.88E-01	2.90E-01	2.61E+00	1.42E-05	7.76E-04	8.47E-05	2.39E-02	2.38E-07	1.91E-06	2.21E-06	8.03E-07	8.020601564
2020	Annual	Mon-Sun	2265002039	Concrete/I	G4	5	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.80E+01	6.42E+00	1.70E+00	2.21E-04	3.88E-03	9.98E-05	9.48E-03	3.27E-07	3.09E-06	1.24E-05	1.25E-05	4.351512142
2020	Annual	Mon-Sun	2265002039	Concrete/I	G4	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	8.10E+01	6.88E+01	4.71E+01	3.55E-03	1.35E-01	2.65E-03	2.29E-01	6.52E-06	1.92E-03	2.15E-04	2.01E-04	95.39029471
2020	Annual	Mon-Sun	2265002039	Concrete/I	G4	25	Construction	U	P	NHH	NP	Sacrament	SV	SAC	2.53E+01	2.15E+01	2.87E+01	2.22E-03	8.49E-02	1.45E-03	1.35E-01	3.43E-06	1.13E-03	9.06E-05	1.25E-04	56.62100761
2020	Annual	Mon-Sun	2265002039	Concrete/I	G4	50	Construction	U	P	NHH	NP	Sacrament	SV	SAC	3.24E+00	5.42E+00	1.50E+01	1.57E-04	1.06E-02	2.32E-04	1.28E-01	1.55E-06	9.78E-06	1.79E-05	8.87E-06	43.23400452
2020	Annual	Mon-Sun	2265002039	Concrete/I	G4	120	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.86E+00	3.11E+00	1.46E+01	6.45E-05	2.89E-03	1.48E-04	1.36E-01	1.32E-06	1.06E-05	1.09E-05	3.65E-06	45.61512035
2020	Annual	Mon-Sun	2265002042	Cement an	G4	5	Construction	U	P	NHH	NP	Sacrament	SV	SAC	3.27E+02	8.25E+01	2.08E+01	2.66E-03	4.78E-02	1.20E-03	1.15E-01	3.98E-06	3.76E-05	1.53E-04	1.51E-04	52.78472846
2020	Annual	Mon-Sun	2265002042	Cement an	G4	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	5.54E+02	1.40E+02	6.55E+01	5.55E-03	1.90E-01	3.66E-03	3.12E-01	8.90E-06	2.62E-03	3.55E-04	3.14E-04	134.2429788
2020	Annual	Mon-Sun	2265002042	Cement an	G4	25	Construction	U	P	NHH	NP	Sacrament	SV	SAC	2.33E+00	5.88E-01	8.83E-01	7.48E-05	2.63E-03	4.42E-05	4.11E-03	1.04E-07	3.44E-05	2.62E-06	4.23E-06	1.755339263
2020	Annual	Mon-Sun	2265002045	Cranes	G4	50	Construction	U	P	NHH	P	Sacrament	SV	SAC	9.88E-01	1.12E+00	2.18E+00	4.56E-05	2.55E-03	6.40E-05	1.69E-02	2.05E-07	1.29E-06	4.05E-06	2.58E-06	5.851123381
2020	Annual	Mon-Sun	2265002045	Cranes	G4	120	Construction	U	P	NHH	P	Sacrament	SV	SAC	1.98E+00	2.25E+00	7.46E+00	9.66E-05	3.11E-03	2.49E-04	6.67E-02	6.45E-07	5.17E-06	1.07E-05	5.46E-06	22.67710188
2020	Annual	Mon-Sun	2265002045	Cranes	G4	175	Construction	U	P	NHH	P	Sacrament	SV	SAC	7.90E-02	8.99E-02	4.82E-01	4.09E-06	1.58E-04	1.88E-05	4.39E-03	4.36E-08	3.49E-07	5.94E-07	2.31E-07	1.477972315
2020	Annual	Mon-Sun	2265002054	Crushing/P	G4	15	Construction	U	P	NHH	P	Sacrament	SV	SAC	8.90E-01	7.05E-01	5.26E-01	3.95E-05	1.51E-03	2.94E-05	2.55E-03	7.28E-08	2.14E-05	2.30E-06	2.23E-06	1.062706633
2020	Annual	Mon-Sun	2265002054	Crushing/P	G4	25	Construction	U	P	NHH	P	Sacrament	SV	SAC	5.83E-01	4.62E-01	6.31E-01	4.86E-05	1.87E-03	3.17E-05	2.97E-03	7.54E-08	2.49E-05	1.96E-06	2.75E-06	1.243960142
2020	Annual	Mon-Sun	2265002054	Crushing/P	G4	120	Construction	U	P	NHH	P	Sacrament	SV	SAC	1.15E+00	7.57E-01	5.79E+00	6.10E-05	1.83E-03	1.79E-04	5.27E-02	5.10E-07	4.09E-06	5.28E-06	3.45E-06	17.81463932
2020	Annual	Mon-Sun	2265002057	Rough Terr	G4	50	Construction	U	P	NHH	NP	Sacrament	SV	SAC	3.95E-01	4.47E-01	1.48E+00	3.08E-05	1.72E-03	4.33E-05	1.14E-02	1.39E-07	8.76E-07	2.14E-06	1.74E-06	3.959944479
2020	Annual	Mon-Sun	2265002057	Rough Terr	G4	120	Construction	U	P	NHH	NP	Sacrament	SV	SAC	5.61E+00	6.35E+00	3.25E+01	4.19E-04	1.35E-02	1.08E-03	2.90E-01	2.81E-06	2.25E-05	3.81E-05	2.37E-05	98.5980401
2020	Annual	Mon-Sun	2265002057	Rough Terr	G4	175	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.98E-01	2.24E-01	1.82E+00	1.55E-05	5.96E-04	7.12E-05	1.66E-02	1.65E-07	1.32E-06	1.85E-06	8.74E-07	5.595330955
2020	Annual	Mon-Sun	2265002060	Rubber Tire	G4	50	Construction	U	P	NHH	NP	Sacrament	SV	SAC	9.88E-01	1.39E+00	3.40E+00	7.26E-05	4.25E-03	9.43E-05	2.59E-02	3.14E-07	1.98E-06	5.50E-06	4.11E-06	8.973464077
2020	Annual	Mon-Sun	2265002060	Rubber Tire	G4	120	Construction	U	P	NHH	NP	Sacrament	SV	SAC	6.56E+00	9.21E+00	3.44E+01	4.56E-04	1.54E-02	1.09E-03	3.06E-01	2.95E-06	2.37E-05	4.58E-05	2.58E-05	103.8701331
2020	Annual	Mon-Sun	2265002066	Tractors/Lo	G4	120	Construction	U	P	NHH	NP	Sacrament	SV	SAC	3.48E+00	8.29E+00	2.43E+01	2.07E-04	1.22E-02	4.86E-04	2.14E-01	2.07E-06	1.66E-05	3.13E-05	1.17E-05	72.20915392
2020	Annual	Mon-Sun	2265002072	Skid Steer I	G4	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.75E+00	1.53E+00	1.21E+00	9.28E-05	3.48E-03	6.91E-05	5.88E-03	1.68E-07	4.93E-05	5.21E-06	5.25E-06	2.455556826
2020	Annual	Mon-Sun	2265002072	Skid Steer I	G4	25	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.17E+02	1.02E+02	1.13E+02	8.89E-03	3.35E-01	5.79E-03	5.34E-01	1.35E-05	4.47E-03	3.93E-04	5.03E-04	224.4168068
2020	Annual	Mon-Sun	2265002072	Skid Steer I	G4	50	Construction	U	P	NHH	NP	Sacrament	SV	SAC	2.69E+01	2.29E+01	4.38E+01	4.82E-04	3.43E-02	6.88E-04	3.67E-01	4.46E-06	2.81E-05	6.27E-05	2.72E-05	124.4915539
2020	Annual	Mon-Sun	2265002072	Skid Steer I	G4	120	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.61E+01	1.37E+01	5.85E+01	2.77E-04	1.32E-02	6.38E-04	5.43E-01	5.24E-06	4.20E-05	4.73E-05	1.57E-05	181.5157003
2020	Annual	Mon-Sun	2265002078	Dumpers/T	G4	5	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.67E+01	6.82E+00	9.11E-01	1.33E-04	1.90E-03	6.01E-05	5.29E-03	1.83E-07	1.73E-06	9.71E-06	7.53E-06	2.503569445
2020	Annual	Mon-Sun	2265002078	Dumpers/T	G4	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	3.56E+01	1.45E+01	5.30E+00	4.38E-04	1.53E-02	3.00E-04	2.54E-02	7.24E-07	2.13E-04	3.26E-05	2.48E-05	10.88698209

2020	Annual	Mon-Sun	2265002078	Dumpers/T	G4	25	Construction	U	P	NHH	NP	Sacrament	SV	SAC	6.60E+00	2.69E+00	2.13E+00	1.77E-04	6.32E-03	1.08E-04	9.94E-03	2.52E-07	8.33E-05	8.61E-06	1.00E-05	4.250571467
2020	Annual	Mon-Sun	2265002078	Dumpers/T	G4	120	Construction	U	P	NHH	NP	Sacrament	SV	SAC	7.11E-01	2.48E-01	6.20E-01	5.52E-06	1.55E-04	1.81E-05	5.72E-03	5.53E-08	4.43E-07	9.07E-07	3.12E-07	1.929990567
2020	Annual	Mon-Sun	2265002081	Other Cons	G4	175	Construction	U	P	NHH	NP	Sacrament	SV	SAC	2.77E+00	2.81E+00	1.54E+01	6.03E-05	4.66E-03	1.82E-04	1.41E-01	1.40E-06	1.13E-05	1.16E-05	3.41E-06	47.18174861
2020	Annual	Mon-Sun	2265004010	Lawn Mow	G4	5	Lawn and Ga	C	N	NHH	NP	Sacrament	SV	SAC	1.11E+04	6.96E+03	8.31E+02	9.92E-02	1.84E+00	2.53E-02	4.75E+00	1.64E-04	1.50E-02	6.15E-03	5.54E-03	2114.240534
2020	Annual	Mon-Sun	2265004010	Lawn Mow	G4	5	Lawn and Ga	R	N	NHH	NP	Sacrament	SV	SAC	1.76E+05	7.48E+03	9.93E+02	7.88E-02	2.66E+00	2.09E-02	5.10E+00	1.76E-04	1.22E-02	5.62E-03	4.40E-03	2127.207441
2020	Annual	Mon-Sun	2265004015	Tillers	G4	5	Lawn and Ga	C	N	NHH	NP	Sacrament	SV	SAC	1.15E+03	1.77E+02	2.49E+01	2.22E-03	6.25E-02	5.60E-04	1.34E-01	4.62E-06	3.53E-04	1.45E-04	1.26E-04	56.68407169
2020	Annual	Mon-Sun	2265004015	Tillers	G4	5	Lawn and Ga	R	N	NHH	NP	Sacrament	SV	SAC	4.48E+03	2.21E+02	3.20E+01	2.71E-03	8.33E-02	7.13E-04	1.67E-01	5.78E-06	4.17E-04	1.80E-04	1.53E-04	70.54801694
2020	Annual	Mon-Sun	2265004025	Trimmers/	G4	5	Lawn and Ga	C	P	NHH	NP	Sacrament	SV	SAC	2.03E+03	7.54E+02	2.31E+01	3.00E-03	5.25E-02	1.36E-03	1.29E-01	4.44E-06	4.19E-05	4.60E-04	1.70E-04	61.73601235
2020	Annual	Mon-Sun	2265004025	Trimmers/	G4	5	Lawn and Ga	R	P	NHH	NP	Sacrament	SV	SAC	9.46E+03	5.57E+02	1.80E+01	2.13E-03	4.49E-02	9.09E-04	9.49E-02	3.28E-06	4.89E-05	3.22E-04	1.20E-04	44.97207063
2020	Annual	Mon-Sun	2265004030	Leaf Blowe	G4	5	Lawn and Ga	C	N	NHH	P	Sacrament	SV	SAC	5.17E+02	8.80E+01	5.80E+00	4.30E-04	1.55E-02	1.07E-04	3.00E-02	1.04E-06	7.03E-05	4.34E-05	2.43E-05	12.46443204
2020	Annual	Mon-Sun	2265004030	Leaf Blowe	G4	5	Lawn and Ga	R	N	NHH	P	Sacrament	SV	SAC	4.44E+02	5.84E+00	4.12E-01	2.81E-05	1.19E-03	7.33E-06	1.99E-03	6.88E-08	3.97E-06	2.85E-06	1.59E-06	0.825690551
2020	Annual	Mon-Sun	2265004040	Rear Engin	G4	15	Lawn and Ga	C	N	NHH	NP	Sacrament	SV	SAC	6.09E+03	4.53E+03	1.49E+03	6.95E-02	4.33E+00	5.03E-02	7.33E+00	2.09E-04	3.40E-03	7.29E-03	3.93E-03	2838.474763
2020	Annual	Mon-Sun	2265004040	Rear Engin	G4	15	Lawn and Ga	R	N	NHH	NP	Sacrament	SV	SAC	5.34E+03	4.12E+02	1.36E+02	5.48E-03	3.95E-01	4.01E-03	6.68E-01	1.90E-05	2.66E-04	6.18E-04	3.10E-04	254.0089767
2020	Annual	Mon-Sun	2265004040	Rear Engin	G4	25	Lawn and Ga	C	N	NHH	NP	Sacrament	SV	SAC	2.78E+01	2.07E+01	1.33E+01	5.96E-04	3.97E-02	4.39E-04	6.33E-02	1.60E-06	2.94E-05	4.71E-05	3.37E-05	24.34980335
2020	Annual	Mon-Sun	2265004040	Rear Engin	G4	25	Lawn and Ga	R	N	NHH	NP	Sacrament	SV	SAC	2.40E+01	1.86E+00	1.19E+00	4.74E-05	3.56E-03	3.31E-05	5.67E-03	1.44E-07	2.26E-06	3.84E-06	2.68E-06	2.14950746
2020	Annual	Mon-Sun	2265004045	Front Mow	G4	15	Lawn and Ga	C	N	NHH	NP	Sacrament	SV	SAC	2.79E+02	2.07E+02	1.09E+02	5.08E-03	3.17E-01	3.68E-03	5.36E-01	1.53E-05	2.49E-04	4.29E-04	2.87E-04	206.7399649
2020	Annual	Mon-Sun	2265004045	Front Mow	G4	15	Lawn and Ga	R	N	NHH	NP	Sacrament	SV	SAC	9.02E+03	6.97E+02	3.66E+02	1.48E-02	1.07E+00	1.08E-02	1.80E+00	5.14E-05	7.19E-04	1.34E-03	8.36E-04	682.2783313
2020	Annual	Mon-Sun	2265004045	Front Mow	G4	25	Lawn and Ga	C	N	NHH	NP	Sacrament	SV	SAC	2.19E+02	1.62E+02	1.15E+02	5.17E-03	3.45E-01	3.81E-03	5.49E-01	1.39E-05	2.55E-04	3.90E-04	2.92E-04	211.1165258
2020	Annual	Mon-Sun	2265004045	Front Mow	G4	25	Lawn and Ga	R	N	NHH	NP	Sacrament	SV	SAC	7.07E+03	5.46E+02	3.86E+02	1.54E-02	1.16E+00	1.08E-02	1.84E+00	4.68E-05	7.36E-04	1.19E-03	8.73E-04	698.5277288
2020	Annual	Mon-Sun	2265004050	Shredders	G4	5	Lawn and Ga	C	P	NHH	NP	Sacrament	SV	SAC	2.19E+02	8.15E+01	2.21E+01	2.88E-03	5.04E-02	1.30E-03	1.23E-01	4.26E-06	4.02E-05	1.59E-04	1.63E-04	56.64252425
2020	Annual	Mon-Sun	2265004050	Shredders	G4	5	Lawn and Ga	R	P	NHH	NP	Sacrament	SV	SAC	8.15E+03	2.01E+01	6.50E+00	5.21E-04	1.93E-02	2.15E-04	3.04E-02	1.05E-06	2.17E-05	3.17E-05	2.95E-05	12.95798137
2020	Annual	Mon-Sun	2265004055	Lawn & Ga	G4	15	Lawn and Ga	C	N	NHH	NP	Sacrament	SV	SAC	1.12E+03	3.93E+02	2.49E+02	9.75E-03	7.26E-01	7.14E-03	1.23E+00	3.50E-05	4.82E-04	8.24E-04	5.51E-04	462.8028471
2020	Annual	Mon-Sun	2265004055	Lawn & Ga	G4	15	Lawn and Ga	R	N	NHH	NP	Sacrament	SV	SAC	7.25E+03	2.90E+02	1.84E+02	6.73E-03	5.36E-01	4.96E-03	9.06E-01	2.58E-05	3.30E-04	5.88E-04	3.81E-04	338.842102
2020	Annual	Mon-Sun	2265004055	Lawn & Ga	G4	25	Lawn and Ga	C	N	NHH	NP	Sacrament	SV	SAC	4.40E+02	1.55E+02	1.56E+02	6.05E-03	4.70E-01	4.22E-03	7.49E-01	1.90E-05	2.94E-04	4.03E-04	3.42E-04	281.6312757
2020	Annual	Mon-Sun	2265004055	Lawn & Ga	G4	25	Lawn and Ga	R	N	NHH	NP	Sacrament	SV	SAC	2.86E+03	1.14E+02	1.15E+02	4.24E-03	3.47E-01	2.87E-03	5.52E-01	1.40E-05	2.01E-04	2.84E-04	2.40E-04	206.5180977
2020	Annual	Mon-Sun	2265004055	Lawn & Ga	G4	50	Lawn and Ga	U	N	NHH	NP	Sacrament	SV	SAC	6.37E+00	1.81E+00	2.76E+00	3.31E-05	1.90E-03	6.40E-05	2.35E-02	2.86E-07	1.80E-06	5.26E-06	1.87E-06	7.994951654
2020	Annual	Mon-Sun	2265004060	Wood Split	G4	5	Lawn and Ga	C	N	NHH	NP	Sacrament	SV	SAC	3.75E+02	1.32E+02	3.86E+01	4.08E-03	9.00E-02	1.04E-03	2.16E-01	7.45E-06	6.33E-04	1.76E-04	2.31E-04	93.29014228
2020	Annual	Mon-Sun	2265004060	Wood Split	G4	5	Lawn and Ga	R	N	NHH	NP	Sacrament	SV	SAC	9.37E+03	2.82E+01	9.71E+00	5.52E-04	2.89E-02	1.49E-04	4.61E-02	1.59E-06	8.23E-05	2.97E-05	3.12E-05	18.2813536
2020	Annual	Mon-Sun	2265004065	Chippers/S	G4	15	Lawn and Ga	C	P	NHH	P	Sacrament	SV	SAC	5.28E+00	1.83E+01	1.54E+01	1.22E-03	4.46E-02	9.00E-04	7.42E-02	2.12E-06	6.22E-04	6.49E-05	6.79E-05	31.12632041
2020	Annual	Mon-Sun	2265004065	Chippers/S	G4	15	Lawn and Ga	R	P	NHH	P	Sacrament	SV	SAC	9.44E+00	4.27E-01	3.60E-01	2.30E-05	1.06E-03	1.51E-05	1.73E-03	4.94E-08	1.42E-05	1.27E-06	1.30E-06	0.699789804
2020	Annual	Mon-Sun	2265004065	Chippers/S	G4	25	Lawn and Ga	C	P	NHH	P	Sacrament	SV	SAC	3.00E+01	1.04E+02	1.48E+02	1.19E-02	4.40E-01	7.73E-03	6.89E-01	1.75E-05	5.78E-03	4.60E-04	6.66E-04	291.0034238
2020	Annual	Mon-Sun	2265004065	Chippers/S	G4	25	Lawn and Ga	R	P	NHH	P	Sacrament	SV	SAC	5.34E+01	2.41E+00	3.42E+00	2.18E-04	1.03E-02	1.28E-04	1.60E-02	4.07E-07	1.32E-04	8.96E-06	1.23E-05	6.479009286
2020	Annual	Mon-Sun	2265004070	Commercia	G4	15	Lawn and Ga	C	N	NHH	NP	Sacrament	SV	SAC	3.95E+02	8.66E+02	4.62E+02	2.61E-02	1.34E+00	1.87E-02	2.25E+00	6.43E-05	1.26E-03	1.99E-03	1.47E-03	893.7970503
2020	Annual	Mon-Sun	2265004070	Commercia	G4	25	Lawn and Ga	C	N	NHH	NP	Sacrament	SV	SAC	1.95E+02	4.27E+02	4.04E+02	2.15E-02	1.21E+00	1.66E-02	1.92E+00	4.86E-05	1.07E-03	1.34E-03	1.21E-03	754.054816
2020	Annual	Mon-Sun	2265004070	Commercia	G4	50	Lawn and Ga	U	N	NHH	NP	Sacrament	SV	SAC	7.85E+01	1.58E+02	2.64E+02	4.73E-03	3.96E-01	9.10E-03	1.91E+00	2.32E-05	1.46E-04	5.96E-04	2.67E-04	659.9347119
2020	Annual	Mon-Sun	2265004070	Commercia	G4	120	Lawn and Ga	U	N	NHH	NP	Sacrament	SV	SAC	5.19E-01	1.04E+00	2.55E+00	1.14E-05	6.19E-04	6.85E-05	2.36E-02	2.28E-07	1.83E-06	4.33E-06	6.46E-07	7.903544041
2020	Annual	Mon-Sun	2265004075	Other Lawn	G4	5	Lawn and Ga	C	N	NHH	NP	Sacrament	SV	SAC	3.47E+02	6.52E+01	1.34E+01	1.18E-03	3.36E-02	2.98E-04	7.16E-02	2.47E-06	1.88E-04	6.51E-05	6.70E-05	30.18828266
2020	Annual	Mon-Sun	2265004075	Other Lawn	G4	5	Lawn and Ga	R	N	NHH	NP	Sacrament	SV	SAC	1.06E+04	1.25E+02	2.85E+01	1.90E-03	8.29E-02	4.98E-04	1.38E-01	4.75E-06	2.71E-04	1.13E-04	1.08E-04	56.05126584
2020	Annual	Mon-Sun	2265004075	Other Lawn	G4	15	Lawn and Ga	C	N	NHH	NP	Sacrament	SV	SAC	1.54E+02	2.90E+01	1.29E+01	5.11E-04	3.76E-02	3.74E-04	6.36E-02	1.81E-06	2.52E-05	5.05E-05	2.89E-05	24.0644059
2020	Annual	Mon-Sun	2265004075	Other Lawn	G4	15	Lawn and Ga	R	N	NHH	NP	Sacrament	SV	SAC	4.72E+03	5.56E+01	2.50E+01	1.00E-03	7.35E-02	7.02E-04	1.22E-01	3.48E-06	4.21E-05	9.55E-05	5.68E-05	46.33471372
2020	Annual	Mon-Sun	2265004075	Other Lawn	G4	25	Lawn and Ga	C	N	NHH	NP	Sacrament	SV	SAC	3.26E+00	6.12E-01	5.97E-01	2.33E-05	1.79E-03	1.63E-05	2.86E-03	7.24E-08	1.13E-06	1.57E-06	1.32E-06	1.075766837
2020	Annual	Mon-Sun	2265004075	Other Lawn	G4	25	Lawn and Ga	R	N	NHH	NP	Sacrament	SV	SAC	1.00E+02	1.18E+00	1.16E+00	4.68E-05	3.51E-03	2.93E-05	5.52E-03	1.40E-07	1.90E-06	2.91E-06	2.65E-06	2.086915304
2020	Annual	Mon-Sun	2265004075	Other Lawn	G4	50	Lawn and Ga	U	N	NHH	NP	Sacrament	SV	SAC	2.36E-01	3.94E-02	8.27E-02	1.04E-06	5.30E-05	2.03E-06	7.11E-04	8.64E-09	5.44E-08	1.38E-07	5.87E-08	0.241745488
2020	Annual	Mon-Sun	2265004075	Other Lawn	G4	120	Lawn and Ga	U	N	NHH	NP	Sacrament	SV	SAC	5.66E-01	9.46E-02	5.13E-01	3.29E-06	1.01E-04	1.77E-05	4.78E-03	4.62E-08	3.70E-07	6.52E-07	1.86E-07	1.604586162
2020	Annual	Mon-Sun	2270002003	Pavers	D	25	Construction	U	P	NHH	NP	Sacrament	SV	SAC	8.28E-01	1.86E+00	1.58E+00	2.10E-05	7.15E-05	1.33E-04	1.74E-02	2.20E-07	5.13E-06	0.00E+00	1.89E-06	5.918195657
2020	Annual	Mon-Sun	2270002003	Pavers	D	50	Construction	U	P	NHH	NP	Sacrament	SV	SAC	4.81E+01	1.10E+02	1.42E+02	4.59E-03	1.67E-02	1.31E-02	1.53E+00	1.98E-05	1.01E-03	0.00E+00	4.14E-04	543.730309
2020	Annual	Mon-Sun	2270002003	Pavers	D	120	Construction	U	P	NHH	NP	Sacrament	SV	SAC	5.67E+01	1.29E+02	4.09E+02	5.90E-03	3.10E-02	3.54E-02	4.47E+00	5.24E-05	2.78E-03	0.00E+00	5.32E-04	1525.554224
2020	Annual	Mon-Sun	2270002003	Pavers	D	175	Construction	U	P	NHH	NP	Sacrament	SV	SAC	3.53E+01	8.03E+01	4.70E+02	4.90E-03	3.05E-02	3.29E-02	5.15E+00	5.79E-05	1.85E-03	0.00E+00	4.42E-04	1743.053295
2020	Annual	Mon-Sun	2270002003	Pavers	D	250	Construction	U	N	NHH	NP	Sacrament	SV	SAC	4.25E+00	9.68E+00	8.52E+01	6.83E-04	2.28E-03	5.39E-03	9.40E-01	1.06E-05	1.97E-04	0.00E+00	6.16E-05	316.5644532
2020	Annual	Mon-Sun	2270002003	Pavers	D	500	Construction	U	N	NHH	NP	Sacrament	SV	SAC	4.36E+00	9.93E+00	1.05E+02	7.91E-04	3.12E-03	5.94E-03	1.16E+00	1.14E-05	2.23E-04	0.00E+00	7.14E-05	389.3529366
2020	Annual	Mon-Sun	2270002009	Plate Comp	D	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.78E+01	2.92E+01	5.76E+00	7.33E-05	3.85E-04	4.59E-04	6.30E-02	9.80E-07	1.79E-05	0.00E+00	6.62E-06	21.44237934
2020	Annual	Mon-Sun	2270002015	Rollers	D	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	3.34E+01	6.36E+01	1.84E+01	2.34E-04	1.23E-03	1.46E-03	2.01E-01	3.13E-06	5.72E-05	0.00E+00	2.11E-05	68.3719679
2020	Annual	Mon-Sun	2270002015	Rollers	D	25	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.40E+01	2.66E+01	1.62E+01	2.14E-04	7.30E-04	1.35E-03	1.77E-01	2.25E-06	5.05E-05	0.00E+00	1.93E-05	60.42013935
2020	Annual	Mon-Sun	2270002015	Rollers	D	50	Construction	U	P	NHH	NP	Sacrament	SV	SAC	4.34E+01	8.34E+01	9.97E+01	2.27E-03	1.02E-02	8.49E-03	1.08E+00	1.40E-05	5.33E-04	0.00E+00	2.05E-04	376.2555498
2020	Annual	Mon-Sun	2270002015	Rollers	D	120	Construction	U	P	NHH	NP	Sacrament	SV	SAC	2.33E+02	4.48E+02	1.20E+03	1.29E-02	8.66E-02	8.51E-02	1.32E+01	1.55E-04	6.07E-03	0.00E+00	1.17E-03	4469.030763
2020	Annual	Mon-Sun	2270002015	Rollers	D	175	Construction	U	P	NHH	NP	Sacrament	SV	SAC	9.38E+01	1.80E+02	8.86E+02	6.98E-03	5.50E-02	4.80E-02	9.72E+00	1.09E-04	2.58E-03	0.00E+00	6.30E-04	3274.625118
2020	Annual	Mon-Sun	2270002015	Rollers	D	250	Construction	U	N	NHH	NP	Sacrament	SV	SAC	1.33E+01	2.55E+01	1.77E+02	1.07E-03	4.08E-03	8.41E-03	1.95E+00	2.20E-05	2.85E-04	0.00E+00	9.69E-05	654.949238
2020	Annual	Mon-Sun	2270002015	Rollers	D	500	Construction	U	N	NHH	NP	Sacrament	SV	SAC	9.33E+00	1.79E+01	1.77E+02	1.03E-03	4.12E-03	7.48E-03	1.96E+00	1.92E-05	2.68E-04	0.00E+00	9.29E-05	656.9346323
2020	Annual	Mon-Sun	2270002018	Scrapers	D	120	Construction	U	P	NHH	NP	Sacrament	SV	SAC	2.15E+00	6.54E+00	2.81E+01	3.99E-04	2.16E-03	2.35E-03	3.07E-01	3.60E-06	1.81E-04	0.00E+00	3.60E-05	104.6786147
2020	Annual	Mon-Sun	2270002018	Scrapers	D	175	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.97E+01	5.98E+01	4.04E+02	4.20E-03	2.67E-02	2.70E-02	4.43E+00	4.98E-05	1.51E-03	0.00E+00	3.79E-04	1498.657734
2020	Annual	Mon-Sun	2270002018	Scrapers	D	250	Construction	U	N	NHH	NP	Sacrament	SV	SAC	1.92E+01	5.83E+01	5.53E+02	4.44E-03	1.47E-02	3.32E-02	6.10E+00	6.87E-05	1.20E-03	0.00E+00	4.00E-04	2055.921373
2020	Annual	Mon-Sun	2270002018	Scrapers	D	500	Construction	U	N	NHH	NP	Sacrament	SV	SAC	5.29E+01	1.61E+02	2.34E+03	1.77E-02	6.77E-02	1.25E-01	2.58E+01	2.53E-04	4.69E-03	0.00E+00	1.60E-03	8676.755208
2020	Annual	Mon-Sun	2270002018	Scrapers	D	750	Construction	U	N	NHH	NP	Sacrament	SV	SAC	2.11E+00	6.42E+00	1.61E+02	1.23E-03	4.68E-03	8.88E-03	1.78E+00	1.79E-05	3.28E-04	0.00E+00	1.11E-04	599.4575947
2020	Annual	Mon-Sun	2270002021	Paving Equ	D	25	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.43E+00	3.26E+00	1.87E+00	2.48E-05	8.47E-05	1.57E-04	2.06E-02	2.61E-07	5.86E-06	0.00E+00	2.24E-06	7.009582104
2020	Annual	Mon-Sun	2270002021	Paving Equ	D	50	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.21E+00	2.78E+00	3.08E+00	9.79E-05	3.58E-04	2.84E-04	3.32E-02	4.29E-07	2.18E-05	0.00E+00	8.83E-06	11.77223047
2020	Annual	Mon-Sun	2270002021	Paving Equ	D	120	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.75E+01	4.00E+01	9.98E+01	1.42E-03	7.53E-03	8.58E-03	1.09E+00	1.28E-05	6.78E-04	0.00E+00	1.28E-04	372.1945885
2020	Annual	Mon-Sun	2270002021	Paving Equ	D	175	Construction	U	P	NHH	NP	Sacrament	SV	SAC	8.22E+00	1.88E+01	8.66E+01	8.91E-04	5.59E-03	6.04E-03	9.50E-01	1.07E-05	3.40E-04	0.00E+00	8.04E-05	321.5344455
2020	Annual	Mon-Sun	2270002021	Paving Equ	D	250	Construction	U	N	NHH	NP	Sacrament	SV	SAC	2.32E+00	5.30E+00	2.94E+01	2.29E-04	7.67E-04	1.84E-03	3.24E-01	3.65E-06	6.61E-05	0.00E+00	2.07E-05	109.122086
2020	Annual	Mon-Sun	2270002024	Surfacing E	D	50	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.10E+00	1.37E+00	8.85E-01	1.82E-05	8.13E-05	7.30E-05	9.62E-03	1.24E-07	4.33E-06	0.00E+00	1.64E-06	3.330485036
2020	Annual	Mon-Sun	2270002024	Surfacing E	D	120	Construction	U	P	NHH	NP	Sacrament	SV	SAC	2.21E-01	2.73E-01	7.94E-01	7.80E-06	5.50E-05	5.52E-05	8.70E-03	1.02E-07	3.72E-06	0.00E+00	7.04E-07	2.942605803
2020	Annual	Mon-Sun	2270002024	Surfacing E	D	175	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.66E-01	2.05E-01	7.99E-01	5.65E-06	4.77E-05	4.28E-05	8.78E-03	9.88E-08	2.16E-06	0.00E+00	5.10E-07	2.951070885
2020	Annual	Mon-Sun	2270002024	Surfacing E	D	250	Construction	U	N	NHH	NP	Sacrament	SV	SAC	3.31E-01	4.10E-01	2.50E+00	1.34E-05	5.64E-05	1.17E-04	2.76E-02	3.11E-07	3.86E-06	0.00E+00	1.21E-06	9.24547983
2020	Annual	Mon-Sun	2270002024	Surfacing E	D	500	Construction	U	N	NHH	NP	Sacrament	SV	SAC	2.76E+00	3.41E+00	3.42E+01	1.72E-04	8.06E-04	1.44E-03	3.77E-01	3.70E-06	4.92E-05	0.00E+00	1.55E-05	126.2830091
2020	Annual	Mon-Sun	2270002024	Surfacing E	D	750	Construction	U	N	NHH	NP	Sacrament	SV	SAC	4.04E-01	5.00E-01	7.84E+00	3.99E-05	1.85E-04	3.39E-04	8.67E-02	8.71E-07	1.15E-05	0.00E+00	3.60E-06	29.00983291
2020	Annual	Mon-Sun	2270002027	Signal Boar	D	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.55E+02	3.19E+02	9.00E+01	1.15E-03	6.01E-03	7.18E-03	9.85E-01	1.53E-05	2.80E-04	0.00E+00	1.03E-04	335.1290971
2020	Annual	Mon-Sun	2270002027	Signal Boar	D	50	Construction	U	P	NHH	NP	Sacrament	SV	SAC	7.73E-01	1.13E+00	1.88E+00	2.85E-05	1.60E-04	1.49E-04	2.05E-02	2.65E-07	7.43E-06	0.00E+00	2.57E-06	7.010707293
2020	Annual	Mon-Sun	2270002027	Signal Boar	D	120	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.26E+01	1.85E+01	6.77E+01	5.17E-04	4.58E-03	4.10E-03	7.43E-01	8.71E-06	2.45E-04	0.00E+00	4.66E-05	250.0635531
2020	Annual	Mon-Sun	2270002027	Signal Boar	D	175	Construction	U	P	NHH	NP	Sacrament	SV	SAC	7.84E+00	1.15E+01	8.08E+01	4.66E-04	4.75E-03	3.61E-03	8.88E-01	9.99E-06	1.73E-04	0.00E+00	4.21E-05	297.5770416
2020	Annual	Mon-Sun	2270002027	Signal Boar	D	250	Construction	U	N	NHH	NP	Sacrament	SV	SAC	1.66E+00	2.43E+00	2.80E+01	1.24E-04	5.78E-04	1.06E-03	3.10E-01	3.49E-06	3.23E-05	0.00E+00	1.12E-05	103.5456878
2020	Annual	Mon-Sun	2270002030	Trenchers	D	15	Construction	U	P	NHH	NP	Sacrament	SV	SAC	4.14E+00	7.01E+00	2.71E+00	3.45E-05	1.81E-04	2.16E-04	2.97E-02	4.62E-07	8.45E-06	0.00E+00	3.12E-06	10.09394536
2020	Annual	Mon-Sun	2270002030	Trenchers	D	25	Construction	U	P	NHH	NP	Sacrament	SV	SAC	4.36E+00	7.39E+00	1.11E+01	1.47E-04	5.00E-04	9.26E-04	1.21E-01	1.54E-06	3.46E-05	0.00E+00	1.32E-05	41.38849788
2020	Annual	Mon-Sun	2270002030	Trenchers	D	50	Construction	U	P	NHH	NP	Sacrament	SV	SAC	1.66E+02	2.86E+02	4.35E+02	1.42E-02	4.99E-02	4.00E-02	4.70E+00	6.07E-05	3.13E-03	0.00E+00	1.28E-03	1666.935376
2020	Annual	Mon-Sun	2270002030	Trenchers	D	120	Construction	U	P	NHH	NP	Sacrament	SV	SAC	2.25E+02	3.87E+02	1.15E+03	1.65E-02	8.59E-02	1.01E-01	1.25E+01	1.47E-04	7.92E-03	0.00E+00	1.49E-03	4283.895207
2020	Annual	Mon-Sun	2270002030	Trenchers	D	175	Construction	U	P	NHH	NP	Sacrament	SV	SAC	2.46E+01	4.23E+01	2.78E+02	2.86E-03	1.78E-02	2.00E-02	3.04E+00	3.43E-05	1.11E-03	0.00E+00	2.58E-04	1030.621367
2020	Annual	Mon-Sun	2270002030	Trenchers	D	250	Construction	U	N	NHH	NP	Sacrament	SV	SAC	2.21E+00	3.80E+00	3.83E+01	3.04E-04	1.04E-03	2.50E-03	4.23E-01	4.76E-06	9.26E-05	0.00E+00	2.74E-05	142.4416614
2020	Annual	Mon-Sun	2270002030	Trenchers	D	500	Construction	U	N	NHH	NP	Sacrament	SV	SAC	2.81E+00	4.84E+00	6.83E+01	5.06E-04	2.10E-03	4.00E-03	7.53E-01	7.39E-06	1.51E-04	0.00E+00	4.57E-05	253.3711701
2020	Annual	Mon-Sun	2270002030	Trenchers	D	750	Construction	U	N	NHH	NP	Sacrament	SV	SAC	8.08E-02	1.39E-01	3.70E+00	2.75E-05	1.14E-04	2.21E-04	4.08E-02	4.10E-07	8.26E-06	0.00E+00	2.48E-06	13.71314791
2020	Annual	Mon-Sun	2270002033	Bore/Drill I	D	15	Construction	U	P	NHH	P	Sacrament	SV	SAC	5.52E-01	1.23E+00	5.79E-01	7.38E-06	3.87E-05	4.62E-05	6.34E-03	9.87E-08	1.81E-06	0.00E+00	6.66E-07	2.158649905
2020	Annual	Mon-Sun	2270002033	Bore/Drill I	D	25	Construction	U	P	NHH	P	Sacrament	SV	SAC	1.66E+00	3.68E+00	2.68E+00	3.55E-05	1.21E-04	2.24E-04	2.94E-02	3.73E-07	8.37E-06	0.00E+00	3.20E-06	10.01814079
2020	Annual	Mon-Sun	2270002033	Bore/Drill I	D	50	Construction	U	P	NHH	P	Sacrament	SV	SAC	7.23E+00	1.66E+01	2.35E+01	1.63E-04	1.83E-03	1.46E-03	2.58E-01	3.33E-06	1.63E-05	0.00E+00	1.47E-05	86.63526257
2020	Annual	Mon-Sun	2270002033	Bore/Drill I	D	120	Construction	U	P	NHH	P	Sacrament	SV	SAC	2.22E+01	5.10E+01	1.79E+02	7.14E-04	1.19E-02	5.94E-03	1.97E+00	2.31E-05	1.01E-04	0.00E+00	6.44E-05	656.4383641
2020	Annual	Mon-Sun	2270002033	Bore/Drill I	D	175	Construction	U	P	NHH	P	Sacrament	SV	SAC	5.13E+00	1.18E+01	7.56E+01	2.37E-04	4.45E-03	1.10E-03	8.32E-01	9.36E-06	2.99E-05	0.00E+00	2.14E-05	277.283693
2020	Annual	Mon-Sun	2270002033	Bore/Drill I	D	250	Construction	U	N	NHH	P	Sacrament	SV	SAC	4.41E+00	1.02E+01	8.62E+01	2.41E-04	1.74E-03	8.20E-04	9.54E-01	1.07E-05	2.22E-05	0.00E+00	2.17E-05	317.7829462

2020	Annual	Mon-Sun	2270002033	Bore/Drill I	D	500	Construction U	N	NHH	P	Sacrament SV	SAC	9.82E+00	2.26E+01	3.18E+02	8.84E-04	6.22E-03	2.96E-03	3.51E+00	3.45E-05	8.14E-05	0.00E+00	7.98E-05	1170.185999
2020	Annual	Mon-Sun	2270002033	Bore/Drill I	D	750	Construction U	N	NHH	P	Sacrament SV	SAC	1.25E+00	2.88E+00	8.00E+01	2.23E-04	1.57E-03	7.48E-04	8.85E-01	8.90E-06	2.05E-05	0.00E+00	2.01E-05	294.7686306
2020	Annual	Mon-Sun	2270002033	Bore/Drill I	D	1000	Construction U	N	NHH	P	Sacrament SV	SAC	2.10E+00	4.83E+00	2.02E+02	5.89E-04	3.96E-03	9.61E-03	2.24E+00	2.25E-05	1.28E-04	0.00E+00	5.31E-05	745.664007
2020	Annual	Mon-Sun	2270002036	Excavators	D	25	Construction U	P	NHH	NP	Sacrament SV	SAC	2.04E+00	7.82E+00	5.85E+00	7.74E-05	2.64E-04	4.89E-04	6.42E-02	8.14E-07	1.83E-05	0.00E+00	6.99E-06	21.86878323
2020	Annual	Mon-Sun	2270002036	Excavators	D	50	Construction U	P	NHH	NP	Sacrament SV	SAC	7.69E+01	2.98E+02	3.43E+02	5.72E-03	3.64E-02	2.77E-02	3.73E+00	4.82E-05	1.20E-03	0.00E+00	5.16E-04	1279.390372
2020	Annual	Mon-Sun	2270002036	Excavators	D	120	Construction U	P	NHH	NP	Sacrament SV	SAC	2.09E+02	8.10E+02	2.72E+03	2.36E-02	2.01E-01	1.50E-01	2.98E+01	3.49E-04	8.31E-03	0.00E+00	2.13E-03	10049.2976
2020	Annual	Mon-Sun	2270002036	Excavators	D	175	Construction U	P	NHH	NP	Sacrament SV	SAC	4.03E+02	1.56E+03	7.98E+03	5.48E-02	5.18E-01	3.02E-01	8.76E+01	9.85E-04	1.52E-02	0.00E+00	4.95E-03	29436.00787
2020	Annual	Mon-Sun	2270002036	Excavators	D	250	Construction U	N	NHH	NP	Sacrament SV	SAC	1.64E+02	6.35E+02	4.56E+03	2.62E-02	1.04E-01	1.43E-01	5.04E+01	5.67E-04	4.87E-03	0.00E+00	2.37E-03	16885.61839
2020	Annual	Mon-Sun	2270002036	Excavators	D	500	Construction U	N	NHH	NP	Sacrament SV	SAC	1.18E+02	4.58E+02	4.84E+03	2.74E-02	1.05E-01	1.38E-01	5.35E+01	5.25E-04	5.01E-03	0.00E+00	2.47E-03	17937.9075
2020	Annual	Mon-Sun	2270002036	Excavators	D	750	Construction U	N	NHH	NP	Sacrament SV	SAC	6.33E-01	2.46E+00	4.30E+01	2.44E-04	9.33E-04	1.25E-03	4.75E-01	4.78E-06	4.48E-05	0.00E+00	2.20E-05	159.2674391
2020	Annual	Mon-Sun	2270002039	Concrete/I	D	25	Construction U	P	NHH	NP	Sacrament SV	SAC	2.21E-01	3.58E-01	2.69E-01	3.56E-06	1.21E-05	2.25E-05	2.95E-03	3.74E-08	8.40E-07	0.00E+00	3.21E-07	1.004875024
2020	Annual	Mon-Sun	2270002039	Concrete/I	D	50	Construction U	P	NHH	NP	Sacrament SV	SAC	1.93E+00	3.07E+00	4.25E+00	6.52E-05	3.71E-04	3.42E-04	4.64E-02	5.99E-07	1.73E-05	0.00E+00	5.88E-06	15.86671482
2020	Annual	Mon-Sun	2270002039	Concrete/I	D	120	Construction U	P	NHH	NP	Sacrament SV	SAC	3.37E+00	5.35E+00	1.81E+01	1.40E-04	1.23E-03	1.10E-03	1.98E-01	2.33E-06	6.67E-05	0.00E+00	1.27E-05	66.77913179
2020	Annual	Mon-Sun	2270002039	Concrete/I	D	175	Construction U	P	NHH	NP	Sacrament SV	SAC	1.10E-01	1.76E-01	1.28E+00	7.59E-06	7.60E-05	5.75E-05	1.40E-02	1.58E-07	2.83E-06	0.00E+00	6.85E-07	4.711721194
2020	Annual	Mon-Sun	2270002042	Cement an	D	15	Construction U	P	NHH	NP	Sacrament SV	SAC	2.82E+01	2.32E+01	6.69E+00	8.53E-05	4.47E-04	5.34E-04	7.32E-02	1.14E-06	2.09E-05	0.00E+00	7.69E-06	24.92757696
2020	Annual	Mon-Sun	2270002042	Cement an	D	25	Construction U	P	NHH	NP	Sacrament SV	SAC	2.54E+00	2.09E+00	1.67E+00	2.33E-05	7.73E-05	1.43E-04	1.83E-02	2.32E-07	6.06E-06	0.00E+00	2.10E-06	6.248970654
2020	Annual	Mon-Sun	2270002045	Cranes	D	50	Construction U	P	NHH	P	Sacrament SV	SAC	1.88E+00	6.58E+00	7.04E+00	1.75E-04	7.97E-04	6.23E-04	7.62E-02	9.85E-07	3.98E-05	0.00E+00	1.58E-05	26.62804014
2020	Annual	Mon-Sun	2270002045	Cranes	D	120	Construction U	P	NHH	P	Sacrament SV	SAC	2.06E+01	7.22E+01	1.65E+02	1.96E-03	1.24E-02	1.20E-02	1.81E+00	2.12E-05	8.68E-04	0.00E+00	1.77E-04	614.3551576
2020	Annual	Mon-Sun	2270002045	Cranes	D	175	Construction U	P	NHH	P	Sacrament SV	SAC	2.06E+01	7.22E+01	2.64E+02	2.34E-03	1.71E-02	1.47E-02	2.90E+00	3.26E-05	8.08E-04	0.00E+00	2.11E-04	977.9616321
2020	Annual	Mon-Sun	2270002045	Cranes	D	250	Construction U	N	NHH	P	Sacrament SV	SAC	3.99E+01	1.40E+02	7.10E+02	4.92E-03	1.70E-02	3.47E-02	7.84E+00	8.82E-05	1.19E-03	0.00E+00	4.44E-04	2635.080626
2020	Annual	Mon-Sun	2270002045	Cranes	D	500	Construction U	N	NHH	P	Sacrament SV	SAC	1.46E+01	5.13E+01	4.18E+02	2.79E-03	9.83E-03	1.81E-02	4.61E+00	4.53E-05	6.59E-04	0.00E+00	2.51E-04	1550.008679
2020	Annual	Mon-Sun	2270002045	Cranes	D	750	Construction U	N	NHH	P	Sacrament SV	SAC	2.63E+00	9.21E+00	1.26E+02	8.45E-04	2.97E-03	5.62E-03	1.39E+00	1.40E-05	2.02E-04	0.00E+00	7.63E-05	468.3310386
2020	Annual	Mon-Sun	2270002045	Cranes	D	9999	Construction U	N	NHH	P	Sacrament SV	SAC	3.30E+00	1.16E+01	5.08E+02	3.87E-03	1.27E-02	4.07E-02	5.60E+00	5.64E-05	1.04E-03	0.00E+00	3.49E-04	1886.463782
2020	Annual	Mon-Sun	2270002048	Graders	D	50	Construction U	P	NHH	NP	Sacrament SV	SAC	7.73E-01	2.00E+00	2.54E+00	5.66E-05	2.77E-04	2.16E-04	2.76E-02	3.56E-07	1.25E-05	0.00E+00	5.11E-06	9.579308286
2020	Annual	Mon-Sun	2270002048	Graders	D	120	Construction U	P	NHH	NP	Sacrament SV	SAC	5.15E+01	1.34E+02	4.58E+02	4.95E-03	3.40E-02	3.06E-02	5.01E+00	5.87E-05	2.09E-03	0.00E+00	4.46E-04	1697.458462
2020	Annual	Mon-Sun	2270002048	Graders	D	175	Construction U	P	NHH	NP	Sacrament SV	SAC	1.76E+02	4.57E+02	2.58E+03	2.10E-02	1.66E-01	1.29E-01	2.83E+01	3.18E-04	6.95E-03	0.00E+00	1.90E-03	9531.890011
2020	Annual	Mon-Sun	2270002048	Graders	D	250	Construction U	N	NHH	NP	Sacrament SV	SAC	1.09E+02	2.84E+02	2.21E+03	1.42E-02	5.21E-02	9.52E-02	2.44E+01	2.74E-04	3.26E-03	0.00E+00	1.28E-03	8183.324777
2020	Annual	Mon-Sun	2270002048	Graders	D	500	Construction U	N	NHH	NP	Sacrament SV	SAC	3.09E+00	8.02E+00	8.32E+01	5.14E-04	1.99E-03	3.20E-03	9.19E-01	9.02E-06	1.16E-04	0.00E+00	4.64E-05	308.4417031
2020	Annual	Mon-Sun	2270002048	Graders	D	750	Construction U	N	NHH	NP	Sacrament SV	SAC	4.04E-02	1.05E-01	2.30E+00	1.43E-05	5.50E-05	9.11E-05	2.54E-02	2.56E-07	3.25E-06	0.00E+00	1.29E-06	8.534824859
2020	Annual	Mon-Sun	2270002051	Off-Highwa	D	175	Construction U	P	NHH	NP	Sacrament SV	SAC	3.59E+00	1.95E+01	1.11E+02	8.14E-04	7.33E-03	4.44E-03	1.22E+00	1.37E-05	2.27E-04	0.00E+00	7.35E-05	409.4118907
2020	Annual	Mon-Sun	2270002051	Off-Highwa	D	250	Construction U	N	NHH	NP	Sacrament SV	SAC	2.65E+01	1.44E+02	1.08E+03	6.66E-03	2.52E-02	3.62E-02	1.20E+01	1.35E-04	1.24E-03	0.00E+00	6.01E-04	4014.690526
2020	Annual	Mon-Sun	2270002051	Off-Highwa	D	500	Construction U	N	NHH	NP	Sacrament SV	SAC	3.73E+01	2.03E+02	2.49E+03	1.50E-02	5.51E-02	7.56E-02	2.76E+01	2.70E-04	2.76E-03	0.00E+00	1.36E-03	9243.158386
2020	Annual	Mon-Sun	2270002051	Off-Highwa	D	750	Construction U	N	NHH	NP	Sacrament SV	SAC	8.47E+00	4.60E+01	9.19E+02	5.55E-03	2.03E-02	2.84E-02	1.01E+01	1.02E-04	1.03E-03	0.00E+00	5.01E-04	3404.173613
2020	Annual	Mon-Sun	2270002051	Off-Highwa	D	1000	Construction U	N	NHH	NP	Sacrament SV	SAC	3.97E+00	2.15E+01	6.09E+02	3.89E-03	1.39E-02	4.19E-02	6.72E+00	6.76E-05	9.72E-04	0.00E+00	3.51E-04	2257.330426
2020	Annual	Mon-Sun	2270002054	Crushing/P	D	50	Construction U	P	NHH	P	Sacrament SV	SAC	8.83E+00	2.31E+01	4.68E+01	8.49E-04	4.66E-03	3.89E-03	5.08E-01	6.57E-06	2.09E-04	0.00E+00	7.66E-05	175.0686487
2020	Annual	Mon-Sun	2270002054	Crushing/P	D	120	Construction U	P	NHH	P	Sacrament SV	SAC	2.49E+01	6.52E+01	2.47E+02	2.26E-03	1.77E-02	1.55E-02	2.71E+00	3.18E-05	9.86E-04	0.00E+00	2.03E-04	914.2070151
2020	Annual	Mon-Sun	2270002054	Crushing/P	D	175	Construction U	P	NHH	P	Sacrament SV	SAC	1.05E+01	2.76E+01	2.10E+02	1.49E-03	1.31E-02	9.71E-03	2.31E+00	2.60E-05	5.07E-04	0.00E+00	1.35E-04	775.505541
2020	Annual	Mon-Sun	2270002054	Crushing/P	D	250	Construction U	N	NHH	P	Sacrament SV	SAC	1.05E+00	2.75E+00	3.04E+01	1.71E-04	6.64E-04	1.19E-03	3.35E-01	3.77E-06	3.86E-05	0.00E+00	1.54E-05	112.4156982
2020	Annual	Mon-Sun	2270002054	Crushing/P	D	500	Construction U	N	NHH	P	Sacrament SV	SAC	5.90E+00	1.55E+01	2.61E+02	1.43E-03	5.48E-03	9.13E-03	2.89E+00	2.83E-05	3.21E-04	0.00E+00	1.29E-04	967.037907
2020	Annual	Mon-Sun	2270002054	Crushing/P	D	750	Construction U	N	NHH	P	Sacrament SV	SAC	6.73E-02	1.76E-01	4.69E+00	2.57E-05	9.84E-05	1.68E-04	5.19E-02	5.21E-07	5.77E-06	0.00E+00	2.31E-06	17.37672465
2020	Annual	Mon-Sun	2270002054	Crushing/P	D	9999	Construction U	N	NHH	P	Sacrament SV	SAC	6.73E-02	1.76E-01	1.04E+01	6.68E-05	2.34E-04	7.50E-04	1.15E-01	1.16E-06	1.81E-05	0.00E+00	6.03E-06	38.67050709
2020	Annual	Mon-Sun	2270002057	Rough Terr	D	50	Construction U	P	NHH	NP	Sacrament SV	SAC	6.13E+00	1.90E+01	2.95E+01	4.94E-04	3.01E-03	2.42E-03	3.21E-01	4.15E-06	1.16E-04	0.00E+00	4.46E-05	110.2281062
2020	Annual	Mon-Sun	2270002057	Rough Terr	D	120	Construction U	P	NHH	NP	Sacrament SV	SAC	2.93E+02	9.09E+02	2.59E+03	2.25E-02	1.88E-01	1.51E-01	2.84E+01	3.33E-04	8.94E-03	0.00E+00	2.03E-03	9569.499709
2020	Annual	Mon-Sun	2270002057	Rough Terr	D	175	Construction U	P	NHH	NP	Sacrament SV	SAC	3.76E+01	1.16E+02	6.62E+02	4.58E-03	4.21E-02	2.74E-02	7.27E+00	8.18E-05	1.43E-03	0.00E+00	4.13E-04	2442.44105
2020	Annual	Mon-Sun	2270002057	Rough Terr	D	250	Construction U	N	NHH	NP	Sacrament SV	SAC	2.10E+00	6.50E+00	5.02E+01	2.86E-04	1.12E-03	1.75E-03	5.54E-01	6.24E-06	5.91E-05	0.00E+00	2.58E-05	185.8647529
2020	Annual	Mon-Sun	2270002057	Rough Terr	D	500	Construction U	N	NHH	NP	Sacrament SV	SAC	1.38E+00	4.28E+00	4.96E+01	2.77E-04	1.05E-03	1.56E-03	5.48E-01	5.38E-06	5.66E-05	0.00E+00	2.50E-05	183.6434281
2020	Annual	Mon-Sun	2270002060	Rubber Tir	D	25	Construction U	P	NHH	NP	Sacrament SV	SAC	7.73E-01	2.03E+00	1.56E+00	2.07E-05	7.06E-05	1.31E-04	1.71E-02	2.18E-07	4.88E-06	0.00E+00	1.87E-06	5.84128886
2020	Annual	Mon-Sun	2270002060	Rubber Tir	D	50	Construction U	P	NHH	NP	Sacrament SV	SAC	1.50E+01	4.00E+01	5.73E+01	1.23E-03	6.15E-03	4.84E-03	6.22E-01	8.04E-06	2.74E-04	0.00E+00	1.11E-04	215.6504528
2020	Annual	Mon-Sun	2270002060	Rubber Tir	D	120	Construction U	P	NHH	NP	Sacrament SV	SAC	4.08E+02	1.09E+03	2.92E+03	3.06E-02	2.16E-01	1.92E-01	3.20E+01	3.75E-04	1.29E-02	0.00E+00	2.76E-03	10829.91998
2020	Annual	Mon-Sun	2270002060	Rubber Tir	D	175	Construction U	P	NHH	NP	Sacrament SV	SAC	2.30E+02	6.12E+02	2.96E+03	2.35E-02	1.90E-01	1.45E-01	3.25E+01	3.66E-04	7.77E-03	0.00E+00	2.12E-03	10954.82373
2020	Annual	Mon-Sun	2270002060	Rubber Tir	D	250	Construction U	N	NHH	NP	Sacrament SV	SAC	2.29E+02	6.09E+02	4.10E+03	2.58E-02	9.61E-02	1.73E-01	4.53E+01	5.10E-04	5.92E-03	0.00E+00	2.33E-03	15211.02261
2020	Annual	Mon-Sun	2270002060	Rubber Tir	D	500	Construction U	N	NHH	NP	Sacrament SV	SAC	9.52E+01	2.53E+02	2.72E+03	1.65E-02	6.35E-02	1.02E-01	3.00E+01	2.95E-04	3.69E-03	0.00E+00	1.49E-03	10066.15597
2020	Annual	Mon-Sun	2270002060	Rubber Tir	D	750	Construction U	N	NHH	NP	Sacrament SV	SAC	1.63E+00	4.34E+00	9.53E+01	5.81E-04	2.23E-03	3.67E-03	1.05E+00	1.06E-05	1.31E-04	0.00E+00	5.24E-05	352.9768577
2020	Annual	Mon-Sun	2270002060	Rubber Tir	D	1000	Construction U	N	NHH	NP	Sacrament SV	SAC	1.75E-01	4.66E-01	1.25E+01	8.10E-05	3.06E-04	9.31E-04	1.38E-01	1.39E-06	2.29E-05	0.00E+00	7.31E-06	46.37736806
2020	Annual	Mon-Sun	2270002063	Rubber Tir	D	175	Construction U	P	NHH	NP	Sacrament SV	SAC	5.52E-01	2.45E+00	1.45E+01	1.85E-04	9.93E-04	1.22E-03	1.58E-01	1.78E-06	6.89E-05	0.00E+00	1.67E-05	53.8748479
2020	Annual	Mon-Sun	2270002063	Rubber Tir	D	250	Construction U	N	NHH	NP	Sacrament SV	SAC	1.35E+01	6.00E+01	4.99E+02	5.10E-03	1.58E-02	3.87E-02	5.50E+00	6.18E-05	1.54E-03	0.00E+00	4.60E-04	1860.020264
2020	Annual	Mon-Sun	2270002063	Rubber Tir	D	500	Construction U	N	NHH	NP	Sacrament SV	SAC	2.08E+01	9.23E+01	1.11E+03	1.06E-02	4.27E-02	7.78E-02	1.22E+01	1.20E-04	3.10E-03	0.00E+00	9.53E-04	4125.627193
2020	Annual	Mon-Sun	2270002063	Rubber Tir	D	750	Construction U	N	NHH	NP	Sacrament SV	SAC	1.79E+00	7.94E+00	1.44E+02	1.37E-03	5.53E-03	1.03E-02	1.58E+00	1.59E-05	4.06E-04	0.00E+00	1.24E-04	534.7477125
2020	Annual	Mon-Sun	2270002063	Rubber Tir	D	1000	Construction U	N	NHH	NP	Sacrament SV	SAC	1.21E-01	5.37E-01	1.44E+01	1.46E-04	6.04E-04	1.48E-03	1.59E-01	1.60E-06	4.48E-05	0.00E+00	1.32E-05	53.71870217
2020	Annual	Mon-Sun	2270002066	Tractors/Lo	D	25	Construction U	P	NHH	NP	Sacrament SV	SAC	1.56E+01	4.02E+01	2.90E+01	3.84E-04	1.31E-03	2.43E-03	3.19E-01	4.04E-06	9.14E-05	0.00E+00	3.47E-05	108.523897
2020	Annual	Mon-Sun	2270002066	Tractors/Lo	D	50	Construction U	P	NHH	NP	Sacrament SV	SAC	9.30E+01	2.45E+02	3.41E+02	4.98E-03	3.37E-02	2.66E-02	3.71E+00	4.80E-05	1.06E-03	0.00E+00	4.50E-04	1268.024516
2020	Annual	Mon-Sun	2270002066	Tractors/Lo	D	120	Construction U	P	NHH	NP	Sacrament SV	SAC	1.24E+03	3.27E+03	7.72E+03	5.98E-02	5.56E-01	4.03E-01	8.46E+01	9.92E-04	2.11E-02	0.00E+00	5.40E-03	28484.62995
2020	Annual	Mon-Sun	2270002066	Tractors/Lo	D	175	Construction U	P	NHH	NP	Sacrament SV	SAC	9.28E+01	2.44E+02	1.13E+03	6.97E-03	7.13E-02	3.93E-02	1.24E+01	1.39E-04	1.94E-03	0.00E+00	6.29E-04	4152.435474
2020	Annual	Mon-Sun	2270002066	Tractors/Lo	D	250	Construction U	N	NHH	NP	Sacrament SV	SAC	3.00E+01	7.90E+01	6.14E+02	3.20E-03	1.36E-02	1.75E-02	6.78E+00	7.63E-05	5.95E-04	0.00E+00	2.89E-04	2270.018729
2020	Annual	Mon-Sun	2270002066	Tractors/Lo	D	500	Construction U	N	NHH	NP	Sacrament SV	SAC	4.85E+01	1.28E+02	1.99E+03	1.02E-02	4.23E-02	5.18E-02	2.20E+01	2.47E-04	1.87E-03	0.00E+00	9.22E-04	7355.574908
2020	Annual	Mon-Sun	2270002066	Tractors/Lo	D	750	Construction U	N	NHH	NP	Sacrament SV	SAC	8.15E+00	2.14E+01	5.01E+02	2.58E-03	1.07E-02	1.33E-02	5.54E+00	6.23E-05	4.75E-04	0.00E+00	2.33E-04	1855.197156
2020	Annual	Mon-Sun	2270002069	Crawler Tra	D	50	Construction U	P	NHH	NP	Sacrament SV	SAC	7.73E-01	2.20E+00	2.53E+00	7.71E-05	3.05E-04	2.31E-04	2.73E-02	3.53E-07	1.65E-05	0.00E+00	6.96E-06	9.655210165
2020	Annual	Mon-Sun	2270002069	Crawler Tra	D	120	Construction U	P	NHH	NP	Sacrament SV	SAC	4.38E+02	1.25E+03	3.75E+03	5.20E-02	2.88E-01	3.06E-01	4.10E+01	4.81E-04	2.32E-02	0.00E+00	4.69E-03	13985.47461
2020	Annual	Mon-Sun	2270002069	Crawler Tra	D	175	Construction U	P	NHH	NP	Sacrament SV	SAC	1.48E+02	4.22E+02	2.33E+03	2.37E-02	1.54E-01	1.51E-01	2.55E+01	2.87E-04	8.44E-03	0.00E+00	2.14E-03	8646.882501
2020	Annual	Mon-Sun	2270002069	Crawler Tra	D	250	Construction U	N	NHH	NP	Sacrament SV	SAC	1.27E+02	3.63E+02	2.73E+03	2.15E-02	7.18E-02	1.58E-01	3.01E+01	3.39E-04	5.72E-03	0.00E+00	1.94E-03	10135.81905
2020	Annual	Mon-Sun	2270002069	Crawler Tra	D	500	Construction U	N	NHH	NP	Sacrament SV	SAC	8.74E+01	2.49E+02	2.92E+03	2.18E-02	8.27E-02	1.51E-01	3.22E+01	3.16E-04	5.66E-03	0.00E+00	1.97E-03	10828.87559
2020	Annual	Mon-Sun	2270002069	Crawler Tra	D	750	Construction U	N	NHH	NP	Sacrament SV	SAC	1.08E+00	3.06E+00	6.45E+01	4.85E-04	1.83E-03	3.43E-03	7.11E-01	7.15E-06	1.27E-04	0.00E+00	4.38E-05	239.3914893
2020	Annual	Mon-Sun	2270002069	Crawler Tra	D	1000	Construction U	N	NHH	NP	Sacrament SV	SAC	1.08E+00	3.06E+00	9.13E+01	7.39E-04	2.82E-03	7.97E-03	1.01E+00	1.01E-05	2.18E-04	0.00E+00	6.67E-05	339.1183698
2020	Annual	Mon-Sun	2270002072	Skid Steer I	D	25	Construction U	P	NHH	NP	Sacrament SV	SAC	1.06E+02	2.42E+02	1.52E+02	2.07E-03	6.96E-03	1.30E-02	1.67E+00	2.12E-05	5.27E-04	0.00E+00	1.87E-04	569.3014486
2020	Annual	Mon-Sun	2270002072	Skid Steer I	D	50	Construction U	P	NHH	NP	Sacrament SV	SAC	9.61E+02	2.24E+03	2.61E+03	2.58E-02	2.24E-01	1.85E-01	2.85E+01	3.69E-04	4.83E-03	0.00E+00	2.32E-03	9654.992026
2020	Annual	Mon-Sun	2270002072	Skid Steer I	D	120	Construction U	P	NHH	NP	Sacrament SV	SAC	5.04E+02	1.17E+03	2.28E+03	1.28E-02	1.57E-01	9.66E-02	2.51E+01	2.94E-04	3.76E-03	0.00E+00	1.15E-03	8399.278141
2020	Annual	Mon-Sun	2270002075	Off-Highwa	D	120	Construction U	P	NHH	NP	Sacrament SV	SAC	5.52E-02	1.68E-01	7.20E-01	1.22E-05	5.69E-05	7.07E-05	7.86E-03	9.22E-08	5.68E-06	0.00E+00	1.10E-06	2.699576603
2020	Annual	Mon-Sun	2270002075	Off-Highwa	D	175	Construction U	P	NHH	NP	Sacrament SV	SAC	6.75E+01	2.05E+02	1.22E+03	1.50E-02	8.23E-02	9.99E-02	1.34E+01	1.50E-04	5.63E-03	0.00E+00	1.35E-03	4547.048847
2020	Annual	Mon-Sun	2270002075	Off-Highwa	D	250	Construction U	N	NHH	NP	Sacrament SV	SAC	6.38E+01	1.94E+02	1.15E+03	1.11E-02	3.50E-02	8.59E-02	1.26E+01	1.42E-04	3.38E-03	0.00E+00	1.00E-03	4274.043926
2020	Annual	Mon-Sun	2270002075	Off-Highwa	D	750	Construction U	N	NHH	NP	Sacrament SV	SAC	6.76E+00	2.06E+01	5.30E+02	4.81E-03	1.93E-02	3.66E-02	5.84E+00	5.87E-05	1.43E-03	0.00E+00	4.34E-04	1970.356341
2020	Annual	Mon-Sun	2270002075	Off-Highwa	D	1000	Construction U	N	NHH	NP	Sacrament SV	SAC	7.14E-01	2.17E+00	8.02E+01	7.72E-04	3.19E-03	8.04E-03	8.82E-01	8.87E-06	2.40E-04	0.00E+00	6.97E-05	298.2205157
2020	Annual	Mon-Sun	2270002078	Dumpers/T	D	25	Construction U	P	NHH	NP	Sacrament SV	SAC	1.32E+00	2.40E+00	8.34E-01	1.11E-05	3.77E-05	6.99E-05	9.16E-03	1.16E-07	2.66E-06	0.00E+00	9.97E-07	3.11970257
2020	Annual	Mon-Sun	2270002081	Other Cons	D	15	Construction U	P	NHH	NP	Sacrament SV	SAC	1.83E+01	3.46E+01	1.59E+01	2.03E-04	1.07E-03	1.27E-03	1.75E-01	2.72E-06	4.97E-05	0.00E+00	1.83E-05	59.3908383
2020	Annual	Mon-Sun	2270002081	Other Cons	D	25	Construction U	P	NHH	NP	Sacrament SV	SAC	3.09E+00	5.85E+00	3.52E+00	4.66E-05	1.59E-04	2.94E-04	3.86E-02	4.90E-07	1.10E-05	0.00E+00	4.20E-06	13.15262962
2020	Annual	Mon-Sun	2270002081	Other Cons	D	50	Construction U	P	NHH	NP	Sacrament SV	SAC	4.75E+00	9.10E+00	1.17E+01	1.49E-04	1.03E-03	8.89E-04	1.27E-01	1.64E-06	3.56E-05	0.00E+00	1.35E-05	43.3013333
2020	Annual	Mon-Sun	2270002081	Other Cons	D	120	Construction U	P	NHH	NP	Sacrament SV	SAC	7.84E+00	1.50E+01	5.53E+01	3.76E-04	3.81E-03	2.88E-03	6.07E-01	7.12E-06	1.49E-04	0.00E+00	3.39E-05	203.8849137
2020	Annual	Mon-Sun	2270002081	Other Cons	D	175	Construction U	P	NHH	NP	Sacrament SV	SAC	1.08E+01	2.07E+01	1.00E+02	5.43E-04	6.07E-03	3.53E-03	1.10E+00	1.24E-05	1.70E-04	0.00E+00	4.90E-05	369.5993468
2020	Annual	Mon-Sun	2270002081	Other Cons	D	500	Construction U	N	NHH	NP	Sacrament SV	SAC	2.51E+01	4.81E+01	5.53E+02	2.43E-03	1.12E-02	1.46E-02	6.11E+00	6.00E-05	5.10E-04	0.00E+00	2.19E-04	2043.355639
2020	Annual	Mon-Sun	2270004030	Leaf Blowe	D	15	Lawn and Ga U	N	NHH	P	Sacrament SV	SAC	3.77E-01	1.24E-01	1.70E-02	1.93E-07	1.14E-06	1.36E-06	1.87E-04	2.90E-09	5.31E-08	0.00E+00	1.75E-08	0.063299776
2020	Annual	Mon-Sun	2270004030	Leaf Blowe	D	120	Lawn and Ga U	N	NHH	P	Sacrament SV	SAC	3.30E-01	1.09E-01	2.40E-01	1.26E-06	1.48E-05	1.37E-05	2.64E-03	3.10E-08	6.51E-07	0.00E+00	1.13E-07	0.883719581
2020	Annual	Mon-Sun	2270004030	Leaf Blowe	D	250	Lawn and Ga U	N	NHH	P	Sacrament SV	SAC	9.44E-02	3.10E-02	1.41E-01	4.01E-07	2.67E-06	5.04E-06	1.55E-03	1.75E-08	1.35E-07	0.00E+00	3.62E-08	0.5179113
2020	Annual	Mon-Sun	2270004055	Lawn & Ga	D	15	Lawn and Ga U	N	NHH	NP	Sacrament SV	SAC	9.11E+02	1.36E+03	5.75E+02	6.53E-03	3.85E-02	4.59E-02	6.30E+00	9.80E-05	1.79E-03	0.00E+00	5.90E-04	2138.105838
2020	Annual	Mon-Sun	2270004055	Lawn & Ga	D	25	Lawn and Ga U	N	NHH	NP	Sacrament SV	SAC	7.13E+02	1.06E+03	6.91E+02	9.15E-03	3.12E-02	5.78E-02	7.58E+00	9.62E-05	2.16E-03	0.00E+00	8.26E-04	2583.957161

2020	Annual	Mon-Sun	2270004065	Chippers/S	D	25	Lawn and Ga	U	P	NHH	P	Sacrament	SV	SAC	4.25E-01	5.41E-01	4.96E-01	6.56E-06	2.24E-05	4.15E-05	5.44E-03	6.90E-08	1.55E-06	0.00E+00	5.92E-07	1.85384342
2020	Annual	Mon-Sun	2270004065	Chippers/S	D	120	Lawn and Ga	U	P	NHH	P	Sacrament	SV	SAC	1.17E+01	1.49E+01	5.16E+01	3.81E-04	3.45E-03	3.16E-03	5.66E-01	6.64E-06	1.86E-04	0.00E+00	3.44E-05	190.3396464
2020	Annual	Mon-Sun	2270004065	Chippers/S	D	175	Lawn and Ga	U	P	NHH	P	Sacrament	SV	SAC	8.02E-01	1.02E+00	6.12E+00	3.41E-05	3.56E-04	2.78E-04	6.73E-02	7.57E-07	1.32E-05	0.00E+00	3.08E-06	22.54800804
2020	Annual	Mon-Sun	2270004065	Chippers/S	D	250	Lawn and Ga	U	N	NHH	P	Sacrament	SV	SAC	1.89E-01	2.40E-01	2.42E+00	1.05E-05	4.99E-05	9.44E-05	2.67E-02	3.01E-07	2.93E-06	0.00E+00	9.49E-07	8.928775765
2020	Annual	Mon-Sun	2270004065	Chippers/S	D	500	Lawn and Ga	U	N	NHH	P	Sacrament	SV	SAC	1.75E+00	2.22E+00	2.48E+01	1.04E-04	4.99E-04	8.71E-04	2.75E-01	2.69E-06	2.89E-05	0.00E+00	9.36E-06	91.73355951
2020	Annual	Mon-Sun	2270004065	Chippers/S	D	750	Lawn and Ga	U	N	NHH	P	Sacrament	SV	SAC	1.98E+00	2.52E+00	6.79E+01	2.86E-04	1.36E-03	2.43E-03	7.50E-01	7.54E-06	7.99E-05	0.00E+00	2.58E-05	250.7015507
2020	Annual	Mon-Sun	2270004065	Chippers/S	D	1000	Lawn and Ga	U	N	NHH	P	Sacrament	SV	SAC	3.77E+00	4.80E+00	1.84E+02	8.67E-04	3.90E-03	1.29E-02	2.03E+00	2.04E-05	2.88E-04	0.00E+00	7.82E-05	679.613056
2020	Annual	Mon-Sun	2270004070	Commercia	D	15	Lawn and Ga	U	N	NHH	NP	Sacrament	SV	SAC	2.29E+01	6.71E+01	2.95E+01	3.36E-04	1.98E-03	2.36E-03	3.24E-01	5.04E-06	9.22E-05	0.00E+00	3.03E-05	109.8039782
2020	Annual	Mon-Sun	2270004070	Commercia	D	25	Lawn and Ga	U	N	NHH	NP	Sacrament	SV	SAC	4.31E+02	1.26E+03	8.31E+02	1.10E-02	3.76E-02	6.96E-02	9.12E+00	1.16E-04	2.60E-03	0.00E+00	9.93E-04	3108.091693
2020	Annual	Mon-Sun	2270004075	Other Lawr	D	15	Lawn and Ga	U	N	NHH	NP	Sacrament	SV	SAC	3.30E-01	3.92E-01	2.18E-01	2.48E-06	1.46E-05	1.74E-05	2.39E-03	3.72E-08	6.82E-07	0.00E+00	2.24E-07	0.811914629
2020	Annual	Mon-Sun	2270004075	Other Lawr	D	25	Lawn and Ga	U	N	NHH	NP	Sacrament	SV	SAC	4.72E-02	5.60E-02	4.15E-02	5.50E-07	1.88E-06	3.47E-06	4.56E-04	5.78E-09	1.30E-07	0.00E+00	4.96E-08	0.155261314

Table 15. OFFROAD Emissions 2030

Lawn and Garden Summary - 2030		Source
Total Lawn & Garden Emissions (MTCO2e)	28,518	
DU Elk Grove	70,033	Scale Factor
DU Sac County	1,109,396	SACOG 2016 RTP/SCS
Elk Grove % of Total	6.3%	
Elk Grove Emissions (MTCO2e)	1,800.25	

Construction Equipment Summary - 2030		Source
Total Const. Equipment Emissions (MTCO2e)	399,321	
Elk Grove Houses Constructed	509	Scale Factor
Sac County Houses Constructed	15,790	Extrapolation from SACOG RTP/SCS
Elk Grove % of Total	3.2%	
Elk Grove Emissions (MTCO2e)	12,885	

total ag -

CY	Season	AvgDays	Code	Equipment	Fuel	MaxHP	Class	C/R	Pre	Hand	Port	County	Air Basin	Air Dist.	Population	Activity	Consumption	ROG Exhaust	CO Exhaust	NOX Exhaus	CO2 Exhaus	SO2 Exhaus	PM Exhaus	N2O Exhaus	CH4 Exhaus	Total Annual County (MTCO2e)
2030	Annual	Mon-Sun	2260002006	Tampers/R	G2	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.06E+02	5.29E+01	1.07E+01		6.73E-04	2.88E-02	5.25E-04	5.51E-02	2.27E-06	4.62E-04	8.24E-05	4.18E-05	19.40218005
2030	Annual	Mon-Sun	2260002009	Plate Comp	G2	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	9.10E+00	5.14E+00	1.04E+00		6.51E-05	2.80E-03	5.07E-05	5.35E-03	2.20E-07	4.49E-05	7.98E-06	4.05E-06	1.883487257
2030	Annual	Mon-Sun	2260004010	Lawn Mow	G2	15	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	2.14E+03	1.34E+03	1.52E+02		1.71E-02	3.08E-01	4.60E-03	9.13E-01	3.76E-05	2.88E-03	1.18E-03	1.07E-03	323.3036851
2030	Annual	Mon-Sun	2260004010	Lawn Mow	G2	15	Lawn and Ga	R	N	NHH	NP	Sacramento	SV	SAC	1.61E+04	6.82E+02	8.30E+01		6.83E-03	1.97E-01	1.84E-03	4.65E-01	1.92E-05	1.19E-03	5.23E-04	4.25E-04	162.7848282
2030	Annual	Mon-Sun	2260004020	Chainsaws	G2	2	Lawn and Ga	C	N	HH	NP	Sacramento	SV	SAC	3.83E+03	3.04E+03	1.81E+02		1.51E-01	2.74E-01	2.40E-03	7.40E-01	3.05E-05	4.31E-04	1.23E-03	9.41E-03	343.7847047
2030	Annual	Mon-Sun	2260004020	Chainsaws	G2	2	Lawn and Ga	R	N	HH	NP	Sacramento	SV	SAC	4.31E+04	5.79E+02	2.64E+01		8.42E-03	5.22E-02	4.59E-04	1.41E-01	5.81E-06	8.24E-05	2.34E-04	5.23E-04	53.73436376
2030	Annual	Mon-Sun	2260004020	Chainsaws	G2	15	Lawn and Ga	C	N	HH	NP	Sacramento	SV	SAC	2.70E+03	2.14E+03	3.08E+02		2.58E-01	4.66E-01	4.08E-03	1.26E+00	5.19E-05	7.34E-04	1.38E-03	1.60E-02	578.906566
2030	Annual	Mon-Sun	2260004020	Chainsaws	G2	15	Lawn and Ga	R	N	HH	NP	Sacramento	SV	SAC	3.04E+04	4.08E+02	4.50E+01		1.43E-02	8.89E-02	7.82E-04	2.40E-01	9.89E-06	1.40E-04	2.64E-04	8.91E-04	90.25817481
2030	Annual	Mon-Sun	2260004021	Chainsaws	G2	15	Lawn and Ga	C	P	HH	NP	Sacramento	SV	SAC	3.36E+03	2.66E+03	3.84E+02		3.21E-01	5.81E-01	5.08E-03	1.57E+00	6.46E-05	9.14E-04	1.72E-03	2.00E-02	720.5374394
2030	Annual	Mon-Sun	2260004021	Chainsaws	G2	15	Lawn and Ga	R	P	HH	NP	Sacramento	SV	SAC	3.78E+04	5.07E+02	5.63E+01		1.81E-02	1.12E-01	9.67E-04	2.99E-01	1.23E-05	1.74E-04	3.28E-04	1.12E-03	112.4736396
2030	Annual	Mon-Sun	2260004025	Trimmers/I	G2	2	Lawn and Ga	C	N	HH	NP	Sacramento	SV	SAC	1.25E+04	4.15E+03	1.84E+02		9.94E-02	3.27E-01	2.87E-03	8.85E-01	3.65E-05	5.15E-04	1.56E-03	6.18E-03	364.8643898
2030	Annual	Mon-Sun	2260004025	Trimmers/I	G2	2	Lawn and Ga	R	N	HH	NP	Sacramento	SV	SAC	1.39E+05	8.20E+03	3.48E+02		1.55E-01	6.46E-01	5.66E-03	1.75E+00	7.20E-05	1.02E-03	3.09E-03	9.66E-03	696.7501985
2030	Annual	Mon-Sun	2260004030	Leaf Blowe	G2	2	Lawn and Ga	C	N	HH	P	Sacramento	SV	SAC	1.87E+04	1.00E+04	5.35E+02		3.70E-01	8.79E-01	7.70E-03	2.38E+00	9.79E-05	1.38E-03	3.99E-03	2.30E-02	1036.769498
2030	Annual	Mon-Sun	2260004030	Leaf Blowe	G2	2	Lawn and Ga	R	N	HH	P	Sacramento	SV	SAC	4.81E+04	6.33E+02	2.80E+01		8.86E-03	5.54E-02	4.87E-04	1.50E-01	6.17E-06	8.74E-05	2.52E-04	5.50E-04	57.01336602
2030	Annual	Mon-Sun	2260004050	Shredders	G2	15	Lawn and Ga	C	P	NHH	NP	Sacramento	SV	SAC	9.43E+01	3.51E+01	1.54E+01		8.65E-04	4.17E-02	6.74E-04	7.97E-02	3.28E-06	6.68E-04	7.77E-05	5.37E-05	27.59375046
2030	Annual	Mon-Sun	2260004050	Shredders	G2	15	Lawn and Ga	R	P	NHH	NP	Sacramento	SV	SAC	3.36E+03	8.28E+00	3.62E+00		1.75E-04	9.85E-03	1.36E-04	1.88E-02	7.75E-07	1.58E-04	1.69E-05	1.09E-05	6.48689064
2030	Annual	Mon-Sun	2260004070	Commercia	G2	15	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	5.00E+01	1.10E+02	4.49E+01		2.02E-03	1.22E-01	1.53E-03	2.33E-01	9.61E-06	1.09E-04	2.05E-04	1.26E-04	80.35520882
2030	Annual	Mon-Sun	2260004070	Commercia	G2	25	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	2.47E+01	5.41E+01	4.80E+01		2.09E-03	1.35E-01	1.61E-03	2.43E-01	1.00E-05	1.13E-04	1.52E-04	1.30E-04	83.14175387
2030	Annual	Mon-Sun	2260004075	Other Lawr	G2	2	Lawn and Ga	C	N	HH	NP	Sacramento	SV	SAC	2.11E+01	3.97E+00	2.22E-01		1.09E-04	4.03E-04	3.53E-06	1.09E-03	4.49E-08	6.35E-07	1.71E-06	6.77E-06	0.439593625
2030	Annual	Mon-Sun	2260004075	Other Lawr	G2	2	Lawn and Ga	R	N	HH	NP	Sacramento	SV	SAC	6.48E+02	7.63E+00	3.90E-01		1.18E-04	7.75E-04	6.82E-06	2.09E-03	8.63E-08	1.22E-06	3.29E-06	7.35E-06	0.792135157
2030	Annual	Mon-Sun	2260004075	Other Lawr	G2	15	Lawn and Ga	C	N	HH	NP	Sacramento	SV	SAC	9.19E+00	1.73E+00	4.82E-01		2.37E-04	8.77E-04	7.68E-06	2.37E-03	9.77E-08	1.38E-06	1.76E-06	1.47E-05	0.93814664
2030	Annual	Mon-Sun	2260004075	Other Lawr	G2	15	Lawn and Ga	R	N	HH	NP	Sacramento	SV	SAC	2.82E+02	3.32E+00	8.49E-01		2.57E-04	1.69E-03	1.48E-05	4.56E-03	1.88E-07	2.66E-06	3.38E-06	1.60E-05	1.689230071
2030	Annual	Mon-Sun	2265002003	Asphalt Pa	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.31E+00	2.51E+00	1.46E+00		1.10E-04	4.18E-03	8.19E-05	7.06E-03	2.01E-07	5.92E-05	7.19E-06	6.22E-06	2.4625882
2030	Annual	Mon-Sun	2265002003	Asphalt Pa	G4	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.96E+00	4.29E+00	6.27E+00		4.86E-04	1.85E-02	3.17E-04	2.95E-02	7.48E-07	2.47E-04	1.90E-05	2.75E-05	10.20541915
2030	Annual	Mon-Sun	2265002003	Asphalt Pa	G4	50	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.80E+00	3.01E+00	7.04E+00		9.54E-05	8.02E-03	1.22E-04	5.50E-02	6.68E-07	4.21E-06	9.62E-06	5.39E-06	18.34298019
2030	Annual	Mon-Sun	2265002003	Asphalt Pa	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.54E+00	1.66E+00	6.29E+00		4.00E-05	2.28E-03	9.37E-05	5.69E-02	5.50E-07	4.41E-06	6.27E-06	2.26E-06	18.92599793
2030	Annual	Mon-Sun	2265002006	Tampers/R	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	4.89E+00	2.44E+00	1.18E+00		8.87E-05	3.38E-03	6.60E-05	5.72E-03	1.63E-07	4.80E-05	6.32E-06	5.01E-06	1.999966405
2030	Annual	Mon-Sun	2265002009	Plate Comp	G4	5	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.80E+02	8.87E+01	1.61E+01		2.28E-03	3.45E-02	1.03E-03	9.23E-02	3.19E-06	3.01E-05	1.46E-04	1.29E-04	33.12590985
2030	Annual	Mon-Sun	2265002009	Plate Comp	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.91E+02	1.08E+02	4.62E+01		3.48E-03	1.33E-01	2.59E-03	2.24E-01	6.39E-06	1.88E-03	2.62E-04	1.97E-04	78.490151
2030	Annual	Mon-Sun	2265002015	Rollers	G4	5	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.00E+01	4.55E+00	1.23E+00		1.48E-04	2.95E-03	6.68E-05	6.68E-03	2.31E-07	2.18E-06	8.50E-06	8.37E-06	2.369302282
2030	Annual	Mon-Sun	2265002015	Rollers	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.24E+01	2.75E+01	1.50E+01		1.12E-03	4.30E-02	8.34E-04	7.27E-02	2.07E-06	6.09E-04	7.57E-05	6.34E-05	25.36224711
2030	Annual	Mon-Sun	2265002015	Rollers	G4	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.19E+01	1.86E+01	2.20E+01		1.69E-03	6.50E-02	1.10E-03	1.04E-01	2.63E-06	8.68E-04	7.30E-05	9.53E-05	35.86184694
2030	Annual	Mon-Sun	2265002015	Rollers	G4	50	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.98E+00	3.36E+00	9.38E+00		1.67E-04	1.48E-02	1.95E-04	6.66E-02	8.10E-07	5.10E-06	1.27E-05	9.43E-06	22.26409764
2030	Annual	Mon-Sun	2265002015	Rollers	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.71E+00	6.32E+00	2.87E+01		2.76E-04	1.60E-02	6.35E-04	2.51E-01	2.43E-06	1.94E-05	3.16E-05	1.56E-05	83.55484936
2030	Annual	Mon-Sun	2265002021	Paving Equ	G4	5	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.51E+02	1.17E+02	2.29E+01		3.20E-03	4.95E-02	1.45E-03	1.31E-01	4.52E-06	4.27E-05	2.00E-04	1.81E-04	46.88522823
2030	Annual	Mon-Sun	2265002021	Paving Equ	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	4.25E+02	2.33E+02	1.34E+02		1.01E-02	3.85E-01	7.52E-03	6.51E-01	1.86E-05	5.46E-03	6.63E-04	5.71E-04	227.153081
2030	Annual	Mon-Sun	2265002021	Paving Equ	G4	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	9.45E+00	5.18E+00	6.76E+00		5.22E-04	2.00E-02	3.40E-04	3.19E-02	8.07E-07	2.67E-04	2.15E-05	2.95E-05	11.01955379
2030	Annual	Mon-Sun	2265002021	Paving Equ	G4	50	Construction	U	P	NHH	NP	Sacramento	SV	SAC	7.66E+00	3.68E+00	8.21E+00		8.80E-05	6.11E-03	1.28E-04	6.93E-02	8.43E-07	5.31E-06	1.09E-05	4.98E-06	23.09890996
2030	Annual	Mon-Sun	2265002021	Paving Equ	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.98E+00	9.48E-01	3.39E+00		1.55E-05	7.16E-04	3.56E-05	3.15E-02	3.04E-07	2.44E-06	2.92E-06	8.75E-07	10.46845066
2030	Annual	Mon-Sun	2265002024	Surfacing E	G4	5	Construction	U	P	NHH	NP	Sacramento	SV	SAC	4.62E+01	2.53E+01	5.07E+00		7.34E-04	1.07E-02	3.31E-04	2.94E-02	1.01E-06	9.57E-06	4.45E-05	4.15E-05	10.51770852
2030	Annual	Mon-Sun	2265002024	Surfacing E	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.37E+02	1.89E+02	7.24E+01		5.68E-03	2.08E-01	4.23E-03	3.51E-01	1.00E-05	2.94E-03	4.43E-04	3.21E-04	123.3186425
2030	Annual	Mon-Sun	2265002024	Surfacing E	G4	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.88E+00	2.59E+00	2.43E+00		1.95E-04	7.17E-03	1.27E-04	1.14E-02	2.89E-07	9.56E-05	9.21E-06	1.10E-05	3.965608001
2030	Annual	Mon-Sun	2265002027	Signal Boar	G4	5	Construction	U	P	NHH	NP	Sacramento	SV	SAC	5.70E-01	2.03E-01	6.58E-02		8.46E-06	1.51E-04	3.82E-06	3.65E-04	1.26E-08	1.19E-07	4.33E-07	4.79E-07	0.129434583
2030	Annual	Mon-Sun	2265002027	Signal Boar	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	4.06E+00	3.16E+00	1.87E+00		1.39E-04	5.38E-03	1.04E-04	9.09E-03	2.59E-07	7.62E-05	9.06E-06	7.87E-06	3.166918411
2030	Annual	Mon-Sun	2265002030	Trenchers	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.75E+01	4.46E+01	2.88E+01		2.20E-03	8.25E-02	1.64E-03	1.39E-01	3.98E-06	1.17E-03	1.36E-04	1.25E-04	48.59420682
2030	Annual	Mon-Sun	2265002030	Trenchers	G4	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.91E+01	3.46E+01	4.82E+01		3.79E-03	1.42E-01	2.47E-03	2.27E-01	5.75E-06	1.90E-03	1.50E-04	2.14E-04	78.51098205
2030	Annual	Mon-Sun	2265002030	Trenchers	G4	50	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.80E+01	1.98E+01	4.44E+01		6.76E-04	5.54E-02	8.53E-04	3.39E-01	4.12E-06	2.59E-05	6.44E-05	3.82E-05	113.1082304
2030	Annual	Mon-Sun	2265002030	Trenchers	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	5.96E+00	6.58E+00	2.73E+01		2.10E-04	1.13E-02	4.94E-04	2.45E-01	2.36E-06	1.89E-05	2.81E-05	1.19E-05	81.33781807
2030	Annual	Mon-Sun	2265002033	Bore/Drill F	G4	15	Construction	U	P	NHH	P	Sacramento	SV	SAC	1.07E+00	3.65E-01	2.81E-01		2.03E-05	8.06E-04	1.51E-05	1.36E-03	3.89E-08	1.14E-05	1.18E-06	1.15E-06	0.473192119
2030	Annual	Mon-Sun	2265002033	Bore/Drill F	G4	25	Construction	U	P	NHH	P	Sacramento	SV	SAC	5.33E+00	1.81E+00	2.59E+00		1.91E-04	7.66E-03	1.25E-04	1.22E-02	3.09E-07	1.02E-04	7.71E-06	1.08E-05	4.210836691
2030	Annual	Mon-Sun	2265002033	Bore/Drill F	G4	50	Construction	U	P	NHH	P	Sacramento	SV	SAC	8.69E-01	2.55E-01	6.56E-01		7.29E-06	4.71E-04	1.10E-05	5.57E-03	6.77E-08	4.26E-07	8.34E-07	4.13E-07	1.854481083
2030	Annual	Mon-Sun	2265002033	Bore/Drill F	G4	120	Construction	U	P	NHH	P	Sacramento	SV	SAC	3.99E+00	1.17E+00	7.46E+00		3.71E-05	1.54E-03	9.28E-05	6.95E-02	6.71E-07	5.38E-06	5.10E-06	2.10E-06	23.07219355
2030	Annual	Mon-Sun	2265002033	Bore/Drill F	G4	175	Construction	U	P	NHH	P	Sacramento	SV	SAC	9.88E-01	2.90E-01	2.61E+00		9.59E-06	7.79E-04	3.54E-05	2.39E-02	2.38E-07	1.91E-06	1.58E-06	5.43E-07	7.949393597
2030	Annual	Mon-Sun	2265002039	Concrete/I	G4	5	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.97E+01	7.01E+00	1.87E+00		2.40E-04	4.29E-03	1.08E-04	1.04E-02	3.58E-07	3.38E-06	1.35E-05	1.36E-05	3.68050252
2030	Annual	Mon-Sun	2265002039	Concrete/I	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	8.85E+01	7.52E+01	5.15E+01		3.85E-03	1.48E-01	2.87E-03	2.50E-01	7.13E-06	2.10E-03	2.34E-04	2.18E-04	86.95491147
2030	Annual	Mon-Sun	2265002039	Concrete/I	G4	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.77E+01	2.35E+01	3.14E+01		2.40E-03	9.27E-02	1.57E-03	1.48E-01	3.74E-06	1.24E-03	9.85E-05	1.36E-04	51.0884235
2030	Annual	Mon-Sun	2265002039	Concrete/I	G4	50	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.24E+00	5.42E+00	1.50E+01		1.57E-04	1.06E-02	2.32E-04	1.28E-01	1.55E-06	9.78E-06	1.79E-05	8.87E-06	42.53761655
2030	Annual	Mon-Sun	2265002039	Concrete/I	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.86E+00	3.11E+00	1.46E+01		6.45E-05	2.89E-03	1.48E-04	1.36E-01	1.32E-06	1.06E-05	1.09E-05	3.65E-06	45.32893135
2030	Annual	Mon-Sun	2265002042	Cement an	G4	5	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.57E+02	9.01E+01	2.29E+01		2.86E-03	5.36E-02	1.29E-03	1.26E-01	4.35E-06	4.10E-05	1.66E-04	1.62E-04	44.71188223
2030	Annual	Mon-Sun	2265002042	Cement an	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	6.05E+02	1.53E+02	7.03E+01		5.30E-03	2.02E-01	3.94E-03	3.41E-01	9.73E-06	2.86E-03	3.86E-04	3.00E-04	119.3335319
2030	Annual	Mon-Sun	2265002042	Cement an	G4	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.55E+00	6.43E-01	9.53E-01		7.36E-05	2.82E-03	4.79E-05	4.49E-03	1.14E-07	3.76E-05	2.86E-06	4.16E-06	1.550824311
2030	Annual	Mon-Sun	2265002045	Cranes	G4	50	Construction	U	P	NHH	P	Sacramento	SV	SAC	9.88E-01	1.12E+00	2.22E+00		3.42E-05	2.82E-03	4.29E-05	1.69E-02	2.05E-07	1.29E-06	3.42E-06	1.93E-06	5.637082337
2030	Annual	Mon-Sun	2265002045	Cranes	G4	120	Construction	U	P	NHH	P	Sacramento	SV	SAC	1.98E+00	2.25E+00	7.45E+00		5.83E-05	3.14E-03	1.37E-04	6.67E-02	6.45E-07	5.17E-06	8.60E-06	3.30E-06	22.20884025
2030	Annual	Mon-Sun	2265002045	Cranes	G4	175	Construction	U	P	NHH	P	Sacramento	SV	SAC	7.90E-02	8.99E-02	4.82E-01		3.50E-06	1.59E-04	9.61E-06	4.39E-03	4.36E-08	3.49E-07	4.61E-07	1.98E-07	1.458290736
2030	Annual	Mon-Sun	2265002054	Crushing/P	G4	15	Construction	U	P	NHH	P	Sacramento	SV	SAC	9.72E-01	7.70E-01	5.75E-01		4.27E-05	1.65E-03	3.18E-05	2.79E-03	7.95E-08	2.34E-05	2.50E-06	2.42E-06	0.9692478
2030	Annual	Mon-Sun	2265002054	Crushing/P	G4	25	Construction	U	P	NHH	P	Sacramento	SV	SAC	6.37E-01	5.05E-01	6.89E-01		5.26E-05	2.04E-03	3.43E-05	3.25E-03	8.23E-08	2.72E-05	2.13E-06	2.97E-06	1.123191313
2030	Annual	Mon-Sun	2265002054	Crushing/P	G4	120	Construction	U	P	NHH	P	Sacramento	SV	SAC	1.15E+00	7.57E-01	5.76E+00		3.59E-05	1.74E-03	8.68E-05	5.27E-02	5.10E-07	4.09E-06	4.04E-06	2.03E-06	17.51945153
2030	Annual	Mon-Sun	2265002057	Rough Terr	G4	50	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.95E-01	4.47E-01	1.50E+00		2.31E-05	1.90E-03	2.90E-05	1.14E-02	1.39E-07	8.76E-07	1.81E-06	1.31E-06	3.816035337
2030	Annual	Mon-Sun	2265002057	Rough Terr	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	5.61E+00	6.35E+00	3.24E+01		2.53E-04	1.36E-02	5.94E-04	2.90E-01	2.81E-06	2.25E-05	3.05E-05	1.43E-05	96.58028843
2030	Annual	Mon-Sun	2265002057	Rough Terr	G4	175	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.98E-01	2.24E-01	1.83E+00		1.32E-05	6.03E-04	3.63E-05	1.66E-02	1.65E-07	1.32E-06	1.44E-06	7.46E-07	5.521754456
2030	Annual	Mon-Sun	2265002060	Rubber Tire	G4	50	Construction	U	P	NHH	NP	Sacramento	SV	SAC	9.88E-01	1.39E+00	3.47E+00		5.39E-05	4.74E-03	6.56E-05	2.59E-02	3.14E-07	1.98E-06	4.76E-06	3.05E-06	8.634637807
2030	Annual	Mon-Sun	2265002060	Rubber Tire	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	6.56E+00	9.21E+00	3.43E+01		2.68E-04	1.58E-02	6.27E-04	3.06E-01	2.95E-06	2.37E-05	3.79E-05	1.51E-05	101.6780252
2030	Annual	Mon-Sun	2265002066	Tractors/Lc	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.48E+00	8.29E+00	2.43E+01		1.93E-04	1.23E-02	4.53E-04	2.14E-01	2.07E-06	1.66E-05	3.07E-05	1.09E-05	71.27824054
2030	Annual	Mon-Sun	2265002072	Skid Steer l	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.91E+00	1.67E+00	1.32E+00		1.01E-04	3.80E-03	7.50E-05	6.42E-03	1.83E-07	5.38E-05	5.67E-06	5.70E-06	2.232399187
2030	Annual	Mon-Sun	2265002072	Skid Steer l	G4	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.28E+02	1.12E+02	1.24E+02		9.65E-03	3.66E-01	6.29E-03	5.83E-01	1.48E-05	4.89E-03	4.28E-04	5.46E-04	202.0290999
2030	Annual	Mon-Sun	2265002072	Skid Steer l	G4	50	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.69E+01	2.29E+01	4.38E+01		4.82E-04	3.43E-02	6.88E-04	3.67E-01	4.46E-06	2.81E-05	6.27E-05	2.72E-05	122.3541481
2030	Annual	Mon-Sun	2265002072	Skid Steer l	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.61E+01	1.37E+01	5.85E+01		2.77E-04	1.32E-02	6.39E-04	5.43E-01	5.24E-06	4.20E-05	4.73E-05	1.57E-05	180.2871593
2030	Annual	Mon-Sun	2265002078	Dumpers/T	G4	5	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.82E+01	7.45E+00	1.00E+00		1.44E-04	2.13E-03	6.49E-05	5.78E-03	2.00E-07	1.89E-06	1.05E-05	8.12E-06	2.088042212
2030	Annual	Mon-Sun	2265002078	Dumpers/T	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.89E+01	1.59E+01	5.72E+00		4.43E-04	1.64E-02	3.29E-04	2.77E-02	7.91E-07	2.33E-04	3.57E-05	2.50E-05	9.751304801
2030	Annual	Mon-Sun	2265002078	Dumpers/T	G4	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	7.21E+00	2.94E+00	2.31E+00		1.83E-04	6.81E-03	1.19E-04	1.09E-02	2.75E-07	9.10E-05	9.46E-06	1.03E-05	3.778711996
2030	Annual	Mon-Sun	2265002078	Dumpers/T	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	7.11E-01	2.48E-01	6.16E-01		3.18E-06	1.36E-04	7.91E-06	5.72E-03	5.53E-08	4.43E-07	6.65E-07	1.80E-07	1.90200829
2030	Annual	Mon-Sun	2265002081	Other Cons	G4	175	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.77E+00	2.81E+00	1.54E+01		6.03E-05	4.66E-03	1.82E-04	1.41E-01	1.40E-06	1.13E-05	1.16E-05	3.41E-06	46.9143319
2030	Annual	Mon-Sun	2265004010	Lawn Mow	G4	5	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	2.72E+04	7.93E+03	9.46E+02		1.13E-01	2.10E+00	2.88E-02	5.41E+00	3.27E-04	1.71E-03	7.01E-03	6.31E-03	1914.225374
2030	Annual	Mon-Sun	2265004010	Lawn Mow	G4	5	Lawn and Ga	R	N	NHH	NP	Sacramento	SV	SAC	2.01E+05	8.53E+03	1.13E+03		8.66E-02	3.01E+00	2.15E-02	5.81E+00	2.01E-04	1.39E-02	6.16E-03	4.83E-03	2026.773461
2030	Annual	Mon-Sun	2265004015	Tillers	G4	5	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	1.31E+03	2.01E+02	2.84E+01		2.53E-03	7.13E-02	6.37E-04	1.52E-01	5.27E-06	4.02E-04	1.65E-04	1.43E-04	53.35053593
2030	Annual	Mon-Sun	2265004015	Tillers	G4	5	Lawn and Ga	R	N	NHH	NP	Sacramento	SV	SAC	5.11E+03	2.52E+02	3.62E+01		2.95E-03	9.37E-02	7.39E-04	1.91E-01	6.59E-06	4.76E-04	1.98E-04	1.67E-04	66.53987523
2030	Annual	Mon-Sun	2265004025	Trimmers/I	G4	5	Lawn and Ga	C	P	NHH	NP	Sacramento	SV	SAC	2.31E+03	8.60E+02	2.

2030	Annual		Mon-Sun	2265004055	Lawn & Ga	G4	25	Lawn and Ga	R	N	NHH	NP		Sacramento	SV	SAC	3.26E+03		1.30E+02	1.31E+02		4.74E-03	3.95E-01	3.22E-03	6.29E-01	1.59E-05	2.29E-04	3.22E-04	2.68E-04	213.8209213
2030	Annual		Mon-Sun	2265004055	Lawn & Ga	G4	50	Lawn and Ga	U	N	NHH	NP		Sacramento	SV	SAC	7.26E+00		2.07E+00	3.13E+00		3.15E-05	2.10E-03	6.13E-05	2.68E-02	3.26E-07	2.05E-06	5.62E-06	1.78E-06	8.936559394
2030	Annual		Mon-Sun	2265004060	Wood Split	G4	5	Lawn and Ga	C	N	NHH	NP		Sacramento	SV	SAC	4.27E+02		1.50E+02	4.40E+01		4.65E-03	1.03E-01	1.18E-03	2.46E-01	8.49E-06	7.21E-04	2.01E-04	2.63E-04	85.66569691
2030	Annual		Mon-Sun	2265004060	Wood Split	G4	5	Lawn and Ga	R	N	NHH	NP		Sacramento	SV	SAC	1.07E+04		3.22E+01	1.09E+01		5.30E-04	3.21E-02	1.29E-04	5.25E-02	1.81E-06	9.38E-05	3.00E-05	3.00E-05	17.95483938
2030	Annual		Mon-Sun	2265004065	Chippers/S	G4	15	Lawn and Ga	C	P	NHH	P		Sacramento	SV	SAC	6.02E+00		2.08E+01	1.76E+01		1.38E-03	5.08E-02	1.03E-03	8.46E-02	2.41E-06	7.09E-04	7.40E-05	7.74E-05	29.39952495
2030	Annual		Mon-Sun	2265004065	Chippers/S	G4	15	Lawn and Ga	R	P	NHH	P		Sacramento	SV	SAC	1.08E+01		4.86E-01	4.04E-01		2.38E-05	1.17E-03	1.75E-05	1.97E-03	5.63E-08	1.65E-05	1.47E-06	1.35E-06	0.679725898
2030	Annual		Mon-Sun	2265004065	Chippers/S	G4	25	Lawn and Ga	C	P	NHH	P		Sacramento	SV	SAC	3.42E+01		1.18E+02	1.68E+02		1.36E-02	5.01E-01	8.81E-03	7.86E-01	1.99E-05	6.59E-03	5.24E-04	7.59E-04	272.0435073
2030	Annual		Mon-Sun	2265004065	Chippers/S	G4	25	Lawn and Ga	R	P	NHH	P		Sacramento	SV	SAC	6.09E+01		2.75E+00	3.86E+00		2.32E-04	1.15E-02	1.50E-04	1.83E-02	4.63E-07	1.53E-04	1.04E-05	1.31E-05	6.27166241
2030	Annual		Mon-Sun	2265004070	Commercia	G4	15	Lawn and Ga	C	N	NHH	NP		Sacramento	SV	SAC	4.50E+02		9.87E+02	5.27E+02		2.97E-02	1.53E+00	2.13E-02	2.57E+00	7.32E-05	1.44E-03	2.26E-03	1.67E-03	887.1030071
2030	Annual		Mon-Sun	2265004070	Commercia	G4	25	Lawn and Ga	C	N	NHH	NP		Sacramento	SV	SAC	2.22E+02		4.86E+02	4.61E+02		2.46E-02	1.38E+00	1.89E-02	2.19E+00	5.54E-05	1.22E-03	1.53E-03	1.38E-03	750.7287687
2030	Annual		Mon-Sun	2265004070	Commercia	G4	50	Lawn and Ga	U	N	NHH	NP		Sacramento	SV	SAC	8.95E+01		1.80E+02	3.01E+02		4.60E-03	4.57E-01	9.72E-03	2.17E+00	2.64E-05	1.66E-04	6.62E-04	2.60E-04	727.5866494
2030	Annual		Mon-Sun	2265004070	Commercia	G4	120	Lawn and Ga	U	N	NHH	NP		Sacramento	SV	SAC	5.91E-01		1.19E+00	2.90E+00		1.30E-05	7.05E-04	7.80E-05	2.69E-02	2.60E-07	2.08E-06	4.94E-06	7.36E-07	8.948707077
2030	Annual		Mon-Sun	2265004075	Other Lawr	G4	5	Lawn and Ga	C	N	NHH	NP		Sacramento	SV	SAC	3.95E+02		7.43E+01	1.52E+01		1.35E-03	3.83E-02	3.39E-04	8.16E-02	2.82E-06	2.14E-04	7.41E-05	7.63E-05	28.41010508
2030	Annual		Mon-Sun	2265004075	Other Lawr	G4	5	Lawn and Ga	R	N	NHH	NP		Sacramento	SV	SAC	1.21E+04		1.43E+02	3.18E+01		1.80E-03	9.11E-02	4.46E-04	1.57E-01	5.41E-06	3.08E-04	1.16E-04	1.02E-04	53.93254138
2030	Annual		Mon-Sun	2265004075	Other Lawr	G4	15	Lawn and Ga	C	N	NHH	NP		Sacramento	SV	SAC	1.76E+02		3.30E+01	1.47E+01		5.82E-04	4.29E-02	4.26E-04	7.25E-02	2.07E-06	2.68E-05	5.76E-05	3.29E-05	24.8381507
2030	Annual		Mon-Sun	2265004075	Other Lawr	G4	15	Lawn and Ga	R	N	NHH	NP		Sacramento	SV	SAC	5.38E+03		6.34E+01	2.82E+01		9.77E-04	8.24E-02	7.21E-04	1.39E-01	3.97E-06	4.80E-05	1.03E-04	5.53E-05	47.5802862
2030	Annual		Mon-Sun	2265004075	Other Lawr	G4	25	Lawn and Ga	C	N	NHH	NP		Sacramento	SV	SAC	3.71E+00		6.97E-01	6.80E-01		2.66E-05	2.04E-03	1.86E-05	3.25E-03	8.25E-08	1.29E-06	1.79E-06	1.50E-06	1.107966027
2030	Annual		Mon-Sun	2265004075	Other Lawr	G4	25	Lawn and Ga	R	N	NHH	NP		Sacramento	SV	SAC	1.14E+02		1.35E+00	1.31E+00		4.60E-05	3.95E-03	3.04E-05	6.29E-03	1.59E-07	2.17E-06	3.17E-06	2.60E-06	2.136348059
2030	Annual		Mon-Sun	2265004075	Other Lawr	G4	50	Lawn and Ga	U	N	NHH	NP		Sacramento	SV	SAC	2.69E-01		4.49E-02	9.36E-02		9.23E-07	5.75E-05	1.78E-06	8.10E-04	9.85E-09	6.20E-08	1.42E-07	5.22E-08	0.269961964
2030	Annual		Mon-Sun	2265004075	Other Lawr	G4	120	Lawn and Ga	U	N	NHH	NP		Sacramento	SV	SAC	6.45E-01		1.08E-01	5.81E-01		2.34E-06	9.65E-05	1.49E-05	5.45E-03	5.26E-08	4.22E-07	6.65E-07	1.32E-07	1.810394944
2030	Annual		Mon-Sun	2270002003	Pavers	D	25	Construction U		P	NHH	NP		Sacramento	SV	SAC	9.44E-01		2.12E+00	1.80E+00		2.39E-05	8.16E-05	1.51E-04	1.98E-02	2.51E-07	5.64E-06	0.00E+00	2.16E-06	6.578111159
2030	Annual		Mon-Sun	2270002003	Pavers	D	50	Construction U		P	NHH	NP		Sacramento	SV	SAC	5.49E+01		1.25E+02	1.60E+02		2.59E-03	1.65E-02	1.18E-02	1.74E+00	2.25E-05	4.12E-04	0.00E+00	2.34E-04	579.0500719
2030	Annual		Mon-Sun	2270002003	Pavers	D	120	Construction U		P	NHH	NP		Sacramento	SV	SAC	6.47E+01		1.47E+02	4.63E+02		3.65E-03	3.40E-02	2.21E-02	5.08E+00	5.96E-05	1.09E-03	0.00E+00	3.29E-04	1684.371042
2030	Annual		Mon-Sun	2270002003	Pavers	D	175	Construction U		P	NHH	NP		Sacramento	SV	SAC	4.02E+01		9.13E+01	5.33E+02		3.10E-03	3.43E-02	1.47E-02	5.85E+00	6.58E-05	7.67E-04	0.00E+00	2.80E-04	1940.134143
2030	Annual		Mon-Sun	2270002003	Pavers	D	250	Construction U		N	NHH	NP		Sacramento	SV	SAC	4.84E+00		1.10E+01	9.67E+01		4.89E-04	2.24E-03	2.35E-03	1.07E+00	1.20E-05	8.60E-05	0.00E+00	4.41E-05	354.1591466
2030	Annual		Mon-Sun	2270002003	Pavers	D	500	Construction U		N	NHH	NP		Sacramento	SV	SAC	4.97E+00		1.13E+01	1.19E+02		5.87E-04	2.73E-03	2.64E-03	1.32E+00	1.29E-05	1.00E-04	0.00E+00	5.30E-05	436.0175359
2030	Annual		Mon-Sun	2270002009	Plate Comp	D	15	Construction U		P	NHH	NP		Sacramento	SV	SAC	2.03E+01		3.33E+01	6.56E+00		8.36E-05	4.39E-04	5.24E-04	7.18E-02	1.12E-06	2.05E-05	0.00E+00	7.54E-06	23.85520518
2030	Annual		Mon-Sun	2270002015	Rollers	D	15	Construction U		P	NHH	NP		Sacramento	SV	SAC	3.81E+01		7.25E+01	2.09E+01		2.67E-04	1.40E-03	1.67E-03	2.29E-01	3.56E-06	6.52E-05	0.00E+00	2.41E-05	76.06559683
2030	Annual		Mon-Sun	2270002015	Rollers	D	25	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.59E+01		3.03E+01	1.84E+01		2.44E-04	8.33E-04	1.54E-03	2.02E-01	2.57E-06	5.76E-05	0.00E+00	2.20E-05	67.16002283
2030	Annual		Mon-Sun	2270002015	Rollers	D	50	Construction U		P	NHH	NP		Sacramento	SV	SAC	4.95E+01		9.48E+01	1.13E+02		1.27E-03	1.04E-02	7.54E-03	1.23E+00	1.59E-05	1.60E-04	0.00E+00	1.15E-04	408.6394294
2030	Annual		Mon-Sun	2270002015	Rollers	D	120	Construction U		P	NHH	NP		Sacramento	SV	SAC	2.66E+02		5.09E+02	1.37E+03		7.92E-03	9.61E-02	5.15E-02	1.50E+01	1.76E-04	1.76E-03	0.00E+00	7.15E-04	4974.095454
2030	Annual		Mon-Sun	2270002015	Rollers	D	175	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.07E+02		2.05E+02	1.01E+03		4.35E-03	6.23E-02	1.77E-02	1.11E+01	1.24E-04	8.20E-04	0.00E+00	3.93E-04	3665.852844
2030	Annual		Mon-Sun	2270002015	Rollers	D	250	Construction U		N	NHH	NP		Sacramento	SV	SAC	1.52E+01		2.90E+01	2.01E+02		7.64E-04	4.30E-03	2.92E-03	2.22E+00	2.50E-05	9.60E-05	0.00E+00	6.89E-05	736.0038549
2030	Annual		Mon-Sun	2270002015	Rollers	D	500	Construction U		N	NHH	NP		Sacramento	SV	SAC	1.06E+01		2.04E+01	2.02E+02		7.58E-04	4.14E-03	2.74E-03	2.23E+00	2.19E-05	9.37E-05	0.00E+00	6.84E-05	738.6582912
2030	Annual		Mon-Sun	2270002018	Scrapers	D	120	Construction U		P	NHH	NP		Sacramento	SV	SAC	2.45E+00		7.43E+00	3.18E+01		2.52E-04	2.37E-03	1.46E-03	3.48E-01	4.09E-06	6.84E-05	0.00E+00	2.27E-05	115.5562985
2030	Annual		Mon-Sun	2270002018	Scrapers	D	175	Construction U		P	NHH	NP		Sacramento	SV	SAC	2.25E+01		6.80E+01	4.58E+02		2.67E-03	3.00E-02	1.17E-02	5.03E+00	5.66E-05	6.05E-04	0.00E+00	2.41E-04	1667.234293
2030	Annual		Mon-Sun	2270002018	Scrapers	D	250	Construction U		N	NHH	NP		Sacramento	SV	SAC	2.19E+01		6.63E+01	6.28E+02		3.23E-03	1.47E-02	1.41E-02	6.93E+00	7.80E-05	5.16E-04	0.00E+00	2.91E-04	2298.690107
2030	Annual		Mon-Sun	2270002018	Scrapers	D	500	Construction U		N	NHH	NP		Sacramento	SV	SAC	6.03E+01		1.82E+02	2.65E+03		1.34E-02	6.11E-02	5.45E-02	2.93E+01	2.87E-04	2.07E-03	0.00E+00	1.21E-03	9709.973536
2030	Annual		Mon-Sun	2270002018	Scrapers	D	750	Construction U		N	NHH	NP		Sacramento	SV	SAC	2.41E+00		7.29E+00	1.83E+02		9.24E-04	4.22E-03	3.83E-03	2.02E+00	2.03E-05	1.44E-04	0.00E+00	8.34E-05	670.7968696
2030	Annual		Mon-Sun	2270002021	Paving Equ	D	25	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.64E+00		3.72E+00	2.14E+00		2.83E-05	9.66E-05	1.79E-04	2.35E-02	2.98E-07	6.68E-06	0.00E+00	2.55E-06	7.791504569
2030	Annual		Mon-Sun	2270002021	Paving Equ	D	50	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.38E+00		3.16E+00	3.47E+00		5.35E-05	3.53E-04	2.53E-04	3.78E-02	4.89E-07	8.43E-06	0.00E+00	4.82E-06	12.5615254
2030	Annual		Mon-Sun	2270002021	Paving Equ	D	120	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.99E+01		4.56E+01	1.13E+02		8.54E-04	8.24E-03	5.23E-03	1.24E+00	1.46E-05	2.50E-04	0.00E+00	7.71E-05	411.5246033
2030	Annual		Mon-Sun	2270002021	Paving Equ	D	175	Construction U		P	NHH	NP		Sacramento	SV	SAC	9.38E+00		2.14E+01	9.84E+01		5.53E-04	6.29E-03	2.60E-03	1.08E+00	1.22E-05	1.34E-04	0.00E+00	4.99E-05	358.392801
2030	Annual		Mon-Sun	2270002021	Paving Equ	D	250	Construction U		N	NHH	NP		Sacramento	SV	SAC	2.64E+00		6.04E+00	3.34E+01		1.63E-04	7.60E-04	7.64E-04	3.69E-01	4.15E-06	2.75E-05	0.00E+00	1.47E-05	122.269734
2030	Annual		Mon-Sun	2270002024	Surfacing E	D	50	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.26E+00		1.55E+00	1.00E+00		9.99E-06	8.27E-05	6.54E-05	1.09E-02	1.41E-07	1.46E-06	0.00E+00	9.02E-07	3.629364628
2030	Annual		Mon-Sun	2270002024	Surfacing E	D	120	Construction U		P	NHH	NP		Sacramento	SV	SAC	2.52E-01		3.10E-01	9.01E-01		4.61E-06	6.07E-05	3.41E-05	9.89E-03	1.16E-07	1.20E-06	0.00E+00	4.16E-07	3.277244381
2030	Annual		Mon-Sun	2270002024	Surfacing E	D	175	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.89E-01		2.33E-01	9.07E-01		3.46E-06	5.39E-05	1.65E-05	9.97E-03	1.12E-07	7.67E-07	0.00E+00	3.13E-07	3.305253062
2030	Annual		Mon-Sun	2270002024	Surfacing E	D	250	Construction U		N	NHH	NP		Sacramento	SV	SAC	3.78E-01		4.66E-01	2.84E+00		9.49E-06	5.88E-05	4.36E-05	3.14E-02	3.53E-07	1.47E-06	0.00E+00	8.57E-07	10.39298136
2030	Annual		Mon-Sun	2270002024	Surfacing E	D	500	Construction U		N	NHH	NP		Sacramento	SV	SAC	3.15E+00		3.88E+00	3.88E+01		1.28E-04	7.79E-04	5.57E-04	4.29E-01	4.21E-06	1.94E-05	0.00E+00	1.15E-05	142.0501897
2030	Annual		Mon-Sun	2270002024	Surfacing E	D	750	Construction U		N	NHH	NP		Sacramento	SV	SAC	4.61E-01		5.68E-01	8.90E+00		2.94E-05	1.79E-04	1.30E-04	9.85E-02	9.90E-07	4.48E-06	0.00E+00	2.65E-06	32.62837765
2030	Annual		Mon-Sun	2270002027	Signal Boar	D	15	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.77E+02		3.64E+02	1.03E+02		1.31E-03	6.86E-03	8.18E-03	1.12E+00	1.75E-05	3.20E-04	0.00E+00	1.18E-04	372.8398768
2030	Annual		Mon-Sun	2270002027	Signal Boar	D	50	Construction U		P	NHH	NP		Sacramento	SV	SAC	8.81E-01		1.29E+00	2.13E+00		1.62E-05	1.69E-04	1.31E-04	2.34E-02	3.02E-07	1.66E-06	0.00E+00	1.46E-06	7.749611829
2030	Annual		Mon-Sun	2270002027	Signal Boar	D	120	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.44E+01		2.11E+01	7.71E+01		3.18E-04	5.14E-03	2.47E-03	8.47E-01	9.94E-06	5.34E-05	0.00E+00	2.87E-05	280.7062825
2030	Annual		Mon-Sun	2270002027	Signal Boar	D	175	Construction U		P	NHH	NP		Sacramento	SV	SAC	8.93E+00		1.31E+01	9.20E+01		2.80E-04	5.43E-03	1.04E-03	1.01E+00	1.14E-05	4.37E-05	0.00E+00	2.53E-05	335.3049877
2030	Annual		Mon-Sun	2270002027	Signal Boar	D	250	Construction U		N	NHH	NP		Sacramento	SV	SAC	1.89E+00		2.77E+00	3.19E+01		9.05E-05	6.45E-04	3.06E-04	3.53E-01	3.97E-06	1.03E-05	0.00E+00	8.17E-06	117.0128939
2030	Annual		Mon-Sun	2270002030	Trenchers	D	15	Construction U		P	NHH	NP		Sacramento	SV	SAC	4.72E+00		8.00E+00	3.09E+00		3.94E-05	2.06E-04	2.47E-04	3.38E-02	5.26E-07	9.63E-06	0.00E+00	3.55E-06	11.22977691
2030	Annual		Mon-Sun	2270002030	Trenchers	D	25	Construction U		P	NHH	NP		Sacramento	SV	SAC	4.97E+00		8.42E+00	1.26E+01		1.67E-04	5.70E-04	1.06E-03	1.39E-01	1.76E-06	3.95E-05	0.00E+00	1.51E-05	46.00539118
2030	Annual		Mon-Sun	2270002030	Trenchers	D	50	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.89E+02		3.24E+02	4.90E+02		8.01E-03	4.89E-02	3.60E-02	5.33E+00	6.89E-05	1.36E-03	0.00E+00	7.22E-04	1772.763266
2030	Annual		Mon-Sun	2270002030	Trenchers	D	120	Construction U		P	NHH	NP		Sacramento	SV	SAC	2.56E+02		4.40E+02	1.30E+03		1.03E-02	9.39E-02	6.43E-02	1.42E+01	1.67E-04	3.34E-03	0.00E+00	9.29E-04	4726.870351
2030	Annual		Mon-Sun	2270002030	Trenchers	D	175	Construction U		P	NHH	NP		Sacramento	SV	SAC	2.81E+01		4.81E+01	3.15E+02		1.83E-03	1.99E-02	9.33E-03	3.46E+00	3.89E-05	4.91E-04	0.00E+00	1.66E-04	1146.602511
2030	Annual		Mon-Sun	2270002030	Trenchers	D	250	Construction U		N	NHH	NP		Sacramento	SV	SAC	2.52E+00		4.31E+00	4.35E+01		2.17E-04	1.00E-03	1.14E-03	4.80E-01	5.41E-06	4.21E-05	0.00E+00	1.96E-05	159.2607686
2030	Annual		Mon-Sun	2270002030	Trenchers	D	500	Construction U		N	NHH	NP		Sacramento	SV	SAC	3.21E+00		5.50E+00	7.74E+01		3.75E-04	1.82E-03	1.86E-03	8.55E-01	8.40E-06	7.03E-05	0.00E+00	3.38E-05	283.5856063
2030	Annual		Mon-Sun	2270002030	Trenchers	D	750	Construction U		N	NHH	NP		Sacramento	SV	SAC	9.21E-02		1.58E-01	4.19E+00		2.03E-05	9.85E-05	1.02E-04	4.63E-02	4.66E-07	3.84E-06	0.00E+00	1.84E-06	15.34743421
2030	Annual		Mon-Sun	2270002033	Bore/Drill F	D	15	Construction U		P	NHH	P		Sacramento	SV	SAC	6.29E-01		1.40E+00	6.61E-01		8.42E-06	4.42E-05	5.27E-05	7.23E-03	1.13E-07	2.06E-06	0.00E+00	7.60E-07	2.401554126
2030	Annual		Mon-Sun	2270002033	Bore/Drill F	D	25	Construction U		P	NHH	P		Sacramento	SV	SAC	1.89E+00		4.20E+00	3.05E+00		4.04E-05	1.38E-04	2.56E-04	3.35E-02	4.25E-07	9.55E-06	0.00E+00	3.65E-06	11.13566579
2030	Annual		Mon-Sun	2270002033	Bore/Drill F	D	50	Construction U		P	NHH	P		Sacramento	SV	SAC	8.24E+00		1.89E+01	2.68E+01		1.80E-04	2.08E-03	1.56E-03	2.93E-01	3.79E-06	6.98E-06	0.00E+00	1.62E-05	97.24610467
2030	Annual		Mon-Sun	2270002033	Bore/Drill F	D	120	Construction U		P	NHH	P		Sacramento	SV	SAC	2.53E+01		5.80E+01	2.04E+02		7.23E-04	1.35E-02	5.57E-03	2.24E+00	2.62E-05	5.04E-05	0.00E+00	6.53E-05	740.9843879
2030	Annual		Mon-Sun	2270002033	Bore/Drill F	D	175	Construction U		P	NHH	P		Sacramento	SV	SAC	5.85E+00		1.34E+01	8.60E+01		2.12E-04	5.06E-03	4.65E-04	9.46E-01	1.06E-05	1.76E-05	0.00E+00	1.91E-05	313.4979182
2030	Annual		Mon-Sun	2270002033	Bore/Drill F	D	250	Construction U		N	NHH	P		Sacramento	SV	SAC	5.03E+00		1.15E+01	9.81E+01		2.43E-04	1.98E-03	5.25E-04	1.09E+00	1.22E-05	1.92E-05	0.00E+00	2.19E-05	359.5670166
2030	Annual		Mon-Sun	2270002033	Bore/Drill F	D	500	Construction U		N	NHH	P		Sacramento	SV	SAC	1.12E+01		2.57E+01	3.61E+02		8.94E-04	7.08E-03	1.93E-03	4.00E+00	3.92E-05	7.06E-05	0.00E+00	8.06E-05	1324.06034
2030	Annual		Mon-Sun	2270002033	Bore/Drill F	D	750	Construction U		N	NHH	P		Sacramento	SV	SAC	1.43E+00		3.28E+00	9.10E+01		2.25E-04	1.78E-03	4.87E-04	1.01E+00	1.01E-05	1.78E-05	0.00E+00	2.03E-05	333.5287312
2030	Annual		Mon-Sun	2270002033	Bore/Drill F	D	1000	Construction U		N	NHH	P		Sacramento	SV	SAC	2.40E+00		5.49E+00	2.30E+02		5.70E-04	4.51E-03	1.06E-02	2.55E+00	2.56E-05	9.51E-05	0.00E+00	5.14E-05	843.4903342
2030	Annual		Mon-Sun	2270002036	Excavators	D	25	Construction U		P	NHH	NP		Sacramento	SV	SAC	2.33E+00		8.91E+00	6.67E+00		8.83E-05	3.01E-04	5.58E-04	7.32E-02	9.29E-07	2.08E-05	0.00E+00	7.97E-06	24.30824893
2030	Annual		Mon-Sun	2270002036	Excavators	D	50	Construction U		P	NHH	NP		Sacramento	SV	SAC	8.76E+01		3.39E+02	3.89E+02		4.50E-03	3.96E-02	2.53E-02	4.24E+00	5.48E-05	2.85E-04	0.00E+00	4.06E-04	1406.88022
2030	Annual		Mon-Sun	2270002036	Excavators	D	120	Construction U		P	NHH	NP		Sacramento	SV	SAC	2.38E+02		9.21E+02	3.09E+03		1.80E-02	2.27E-01	9.99E-02	3.39E+01	3.97E-04	2.06E-03	0.00E+00	1.62E-03	11228.73537
2030	Annual		Mon-Sun	2270002036	Excavators	D	175	Construction U		P	NHH	NP		Sacramento	SV	SAC	4.59E+02		1.78E+03	9.06E+03		3.75E-02	5.89E-01	9.22E-02	9.96E+01	1.12E-03	4.04E-03	0.00E+00	3.38E-03	33005.94108
2030	Annual		Mon-Sun	2270002036	Excavators	D	250	Construction U		N	NHH	NP		Sacramento	SV	SAC	1.87E+02		7.22E+02	5.18E+03		2.05E-02	1.15E-01	4.57E-02	5.73E+01	6.44E-04	1.64E-03	0.00E+00	1.85E-03	18979.49317
2030	Annual		Mon-Sun	2270002036	Excavators	D	500	Construction U		N	NHH	NP		Sacramento	SV	SAC	1.35E+02		5.21E+02	5.50E+03		2.17E-02	1.17E-01	4.64E-02	6.08E+01	5.97E-04	1.72E-03	0.00E+00	1.96E-03	20166.5206
2030	Annual		Mon-Sun	2270002036	Excavators	D	750	Construction U		N	NHH	NP		Sacramento	SV	SAC	7.22E-01		2.79E+00	4.89E+01		1.93E-04	1.04E-03	4.16E-04	5.40E-01	5.43E-06	1.54E-05	0.00E+00	1.74E-05	179.0510597
2030	Annual		Mon-Sun	2270002039	Concrete/I	D	25	Construction U		P	NHH	NP		Sacramento	SV	SAC	2.52E-01		4.09E-01	3.06E-01		4.06E-06	1.38E-05	2.56E-05	3.36E-03	4.27E-08	9.58E-07	0.00E+00	3.66E-07	1.116968604
2030	Annual		Mon-Sun	2270002039	Concrete/I	D	50	Construction U		P	NHH	NP		Sacramento	SV	SAC	2.20E+00		3.50E+00	4.83E+00		3.81E-05	3.91E-04	3.00E-04	5.29E-02	6.83E-07	3.87E-06	0.00E+00	3.44E-06	17.53339793
2030	Annual		Mon-Sun	2270002039	Concrete/I	D	120	Construction U		P	NHH	NP		Sacramento	SV	SAC	3.84E+00		6.10E+00	2.06E+01		8.81E-05	1.38E-03	6.63E-04	2.26E-01	2.65E-06	1.47E-05	0.00E+00	7.95E-06	74.94372954
2030	Annual		Mon-Sun	2270002039	Concrete/I	D	175	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.26E-01		2.00E-01	1.46E+00		4.61E-06	8.67E-05	1.66E-05	1.60E-02	1.80E-07	7.17E-07	0.00E+00	4.16E-07	5.30733819
2030	Annual		Mon-Sun	2270002042	Cement an	D	15	Construction U		P	NHH	NP		Sacramento	SV	SAC	3.22E+01		2.64E+01	7.63E+00		9.72E-05	5.10E-04	6.09E-04	8.35E-02	1.30E-06	2.38E-05	0.00E+00	8.77E-06	27.73258565
2030	Annual		Mon-Sun	2270002042	Cement an	D	25	Construction U		P	NHH	NP		Sacramento	SV	SAC	2.89E+00		2.38E+00	1.90E+00		2.52E-05	8.60E-05	1.59E-04	2.09E-02	2.65E-07	5.98E-06	0.00E+00	2.27E-06	6.935395453
2030	Annual		Mon-Sun	2270002045	Cranes	D	50	Construction U		P	NHH	P		Sacramento	SV	SAC	2.14E+00		7.49E+00	7.97E+00		1.05E-04	8.20E-04	5.50E-04	8.68E-02	1.12E-06	1.15E-05	0.00E+00	9.45E-06	28.83309509
2030	Annual		Mon-Sun	2270002045	Cranes	D	120	Construction U		P	NHH	P		Sacramento	SV	SAC	2.35E+01		8.22E+01	1.88E+02		1.25E-03	1.38E-02	7.21E-03	2.06E+00	2.42E-05	2.46E-04	0.00E+00	1.12E-04	683.0899578
2030	Annual		Mon-Sun	2270002045	Cranes	D	175	Construction U		P	NHH	P		Sacramento	SV	SAC	2.35E+01		8.22E+01	3.00E+02		1.47E-03	1.95E-02	5.33E-03	3.30E+00	3.71E-05	2.47E-04	0.00E+00	1.33E-04	1093.973286
2030	Annual		Mon-Sun	2270002045	Cranes	D	250	Construction U		N	NHH	P		Sacramento	SV	SAC	4.55E+01		1.59E+02	8.08E+02		3.53E-03	1.80E-02	1.18E-02	8.93E+00	1.00E-04	3.86E-04	0.00E+00	3.18E-04	2959.764587
2030

2030	Annual		Mon-Sun	2270002060	Rubber Tire	D	50	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.71E+01	4.54E+01	6.48E+01	7.88E-04	6.44E-03	4.35E-03	7.06E-01	9.12E-06	7.81E-05	0.00E+00	7.11E-05	234.3561022
2030	Annual		Mon-Sun	2270002060	Rubber Tire	D	120	Construction U		P	NHH	NP		Sacramento	SV	SAC	4.65E+02	1.23E+03	3.31E+03	2.03E-02	2.40E-01	1.20E-01	3.63E+01	4.26E-04	3.61E-03	0.00E+00	1.83E-03	12033.59281
2030	Annual		Mon-Sun	2270002060	Rubber Tire	D	175	Construction U		P	NHH	NP		Sacramento	SV	SAC	2.62E+02	6.95E+02	3.36E+03	1.51E-02	2.15E-01	5.12E-02	3.69E+01	4.15E-04	2.35E-03	0.00E+00	1.36E-03	12234.91389
2030	Annual		Mon-Sun	2270002060	Rubber Tire	D	250	Construction U		N	NHH	NP		Sacramento	SV	SAC	2.61E+02	6.91E+02	4.65E+03	1.90E-02	1.03E-01	5.93E-02	5.14E+01	5.79E-04	2.04E-03	0.00E+00	1.72E-03	17048.20131
2030	Annual		Mon-Sun	2270002060	Rubber Tire	D	500	Construction U		N	NHH	NP		Sacramento	SV	SAC	1.09E+02	2.88E+02	3.08E+03	1.25E-02	6.50E-02	3.71E-02	3.41E+01	3.34E-04	1.31E-03	0.00E+00	1.13E-03	11287.17595
2030	Annual		Mon-Sun	2270002060	Rubber Tire	D	750	Construction U		N	NHH	NP		Sacramento	SV	SAC	1.86E+00	4.92E+00	1.08E+02	4.39E-04	2.28E-03	1.32E-03	1.19E+00	1.20E-05	4.64E-05	0.00E+00	3.96E-05	395.7726662
2030	Annual		Mon-Sun	2270002060	Rubber Tire	D	1000	Construction U		N	NHH	NP		Sacramento	SV	SAC	2.00E-01	5.28E-01	1.42E+01	5.93E-05	3.03E-04	7.51E-04	1.57E-01	1.58E-06	1.08E-05	0.00E+00	5.35E-06	51.95910903
2030	Annual		Mon-Sun	2270002063	Rubber Tire	D	175	Construction U		P	NHH	NP		Sacramento	SV	SAC	6.29E-01	2.78E+00	1.64E+01	1.26E-04	1.11E-03	6.45E-04	1.80E-01	2.02E-06	3.54E-05	0.00E+00	1.14E-05	59.59885682
2030	Annual		Mon-Sun	2270002063	Rubber Tire	D	250	Construction U		N	NHH	NP		Sacramento	SV	SAC	1.54E+01	6.81E+01	5.65E+02	3.69E-03	1.45E-02	2.01E-02	6.24E+00	7.02E-05	7.62E-04	0.00E+00	3.33E-04	2068.689065
2030	Annual		Mon-Sun	2270002063	Rubber Tire	D	500	Construction U		N	NHH	NP		Sacramento	SV	SAC	2.37E+01	1.05E+02	1.26E+03	7.87E-03	3.42E-02	4.05E-02	1.39E+01	1.36E-04	1.56E-03	0.00E+00	7.10E-04	4594.908835
2030	Annual		Mon-Sun	2270002063	Rubber Tire	D	750	Construction U		N	NHH	NP		Sacramento	SV	SAC	2.04E+00	9.02E+00	1.63E+02	1.02E-03	4.43E-03	5.37E-03	1.80E+00	1.81E-05	2.05E-04	0.00E+00	9.23E-05	595.5354212
2030	Annual		Mon-Sun	2270002063	Rubber Tire	D	1000	Construction U		N	NHH	NP		Sacramento	SV	SAC	1.38E-01	6.09E-01	1.63E+01	1.07E-04	4.65E-04	1.17E-03	1.80E-01	1.81E-06	2.63E-05	0.00E+00	9.69E-06	59.75768551
2030	Annual		Mon-Sun	2270002066	Tractors/Lc	D	25	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.77E+01	4.58E+01	3.31E+01	4.38E-04	1.50E-03	2.77E-03	3.63E-01	4.61E-06	1.03E-04	0.00E+00	3.95E-05	120.6297423
2030	Annual		Mon-Sun	2270002066	Tractors/Lc	D	50	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.06E+02	2.78E+02	3.86E+02	4.00E-03	3.68E-02	2.44E-02	4.21E+00	5.44E-05	2.45E-04	0.00E+00	3.61E-04	1397.375575
2030	Annual		Mon-Sun	2270002066	Tractors/Lc	D	120	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.42E+03	3.71E+03	8.75E+03	4.60E-02	6.26E-01	2.74E-01	9.60E+01	1.13E-03	5.60E-03	0.00E+00	4.15E-03	31821.57759
2030	Annual		Mon-Sun	2270002066	Tractors/Lc	D	175	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.06E+02	2.77E+02	1.28E+03	4.77E-03	8.09E-02	1.20E-02	1.40E+01	1.58E-04	5.05E-04	0.00E+00	4.31E-04	4653.029848
2030	Annual		Mon-Sun	2270002066	Tractors/Lc	D	250	Construction U		N	NHH	NP		Sacramento	SV	SAC	3.42E+01	8.97E+01	6.96E+02	2.48E-03	1.51E-02	5.67E-03	7.69E+00	8.65E-05	2.00E-04	0.00E+00	2.24E-04	2549.012755
2030	Annual		Mon-Sun	2270002066	Tractors/Lc	D	500	Construction U		N	NHH	NP		Sacramento	SV	SAC	5.52E+01	1.45E+02	2.25E+03	8.02E-03	4.68E-02	1.77E-02	2.49E+01	2.80E-04	6.41E-04	0.00E+00	7.24E-04	8261.08583
2030	Annual		Mon-Sun	2270002066	Tractors/Lc	D	750	Construction U		N	NHH	NP		Sacramento	SV	SAC	9.29E+00	2.43E+01	5.69E+02	2.02E-03	1.18E-02	4.51E-03	6.29E+00	7.07E-05	1.62E-04	0.00E+00	1.83E-04	2083.542549
2030	Annual		Mon-Sun	2270002069	Crawler Tra	D	50	Construction U		P	NHH	NP		Sacramento	SV	SAC	8.81E-01	2.49E+00	2.85E+00	4.55E-05	3.05E-04	2.08E-04	3.10E-02	4.00E-07	6.36E-06	0.00E+00	4.10E-06	10.29187102
2030	Annual		Mon-Sun	2270002069	Crawler Tra	D	120	Construction U		P	NHH	NP		Sacramento	SV	SAC	5.00E+02	1.41E+03	4.24E+03	3.32E-02	3.17E-01	1.92E-01	4.65E+01	5.45E-04	8.68E-03	0.00E+00	3.00E-03	15416.23591
2030	Annual		Mon-Sun	2270002069	Crawler Tra	D	175	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.69E+02	4.78E+02	2.64E+03	1.51E-02	1.73E-01	6.46E-02	2.90E+01	3.26E-04	3.33E-03	0.00E+00	1.36E-03	9602.307749
2030	Annual		Mon-Sun	2270002069	Crawler Tra	D	250	Construction U		N	NHH	NP		Sacramento	SV	SAC	1.45E+02	4.11E+02	3.09E+03	1.57E-02	7.25E-02	6.64E-02	3.41E+01	3.84E-04	2.45E-03	0.00E+00	1.42E-03	11310.58657
2030	Annual		Mon-Sun	2270002069	Crawler Tra	D	500	Construction U		N	NHH	NP		Sacramento	SV	SAC	9.96E+01	2.82E+02	3.30E+03	1.65E-02	7.70E-02	6.54E-02	3.65E+01	3.58E-04	2.48E-03	0.00E+00	1.49E-03	12094.16671
2030	Annual		Mon-Sun	2270002069	Crawler Tra	D	750	Construction U		N	NHH	NP		Sacramento	SV	SAC	1.23E+00	3.47E+00	7.30E+01	3.65E-04	1.70E-03	1.47E-03	8.06E-01	8.11E-06	5.53E-05	0.00E+00	3.30E-05	267.3466275
2030	Annual		Mon-Sun	2270002069	Crawler Tra	D	1000	Construction U		N	NHH	NP		Sacramento	SV	SAC	1.23E+00	3.47E+00	1.03E+02	5.34E-04	2.46E-03	6.22E-03	1.14E+00	1.15E-05	1.14E-04	0.00E+00	4.82E-05	378.2614395
2030	Annual		Mon-Sun	2270002072	Skid Steer l	D	25	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.21E+02	2.76E+02	1.73E+02	2.30E-03	7.84E-03	1.45E-02	1.90E+00	2.42E-05	5.44E-04	0.00E+00	2.07E-04	632.3010744
2030	Annual		Mon-Sun	2270002072	Skid Steer l	D	50	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.10E+03	2.54E+03	2.97E+03	2.35E-02	2.50E-01	1.79E-01	3.24E+01	4.19E-04	1.08E-03	0.00E+00	2.12E-03	10760.07649
2030	Annual		Mon-Sun	2270002072	Skid Steer l	D	120	Construction U		P	NHH	NP		Sacramento	SV	SAC	5.74E+02	1.33E+03	2.59E+03	1.07E-02	1.77E-01	7.41E-02	2.85E+01	3.34E-04	8.59E-04	0.00E+00	9.68E-04	9439.184081
2030	Annual		Mon-Sun	2270002075	Off-Highwa	D	120	Construction U		P	NHH	NP		Sacramento	SV	SAC	6.29E-02	1.91E-01	8.16E-01	8.16E-06	6.20E-05	4.66E-05	8.93E-03	1.05E-07	2.77E-06	0.00E+00	7.37E-07	2.962308141
2030	Annual		Mon-Sun	2270002075	Off-Highwa	D	175	Construction U		P	NHH	NP		Sacramento	SV	SAC	7.70E+01	2.33E+02	1.38E+03	1.00E-02	9.18E-02	5.14E-02	1.52E+01	1.71E-04	2.80E-03	0.00E+00	9.04E-04	5037.317157
2030	Annual		Mon-Sun	2270002075	Off-Highwa	D	250	Construction U		N	NHH	NP		Sacramento	SV	SAC	7.27E+01	2.20E+02	1.30E+03	7.96E-03	3.25E-02	4.35E-02	1.44E+01	1.62E-04	1.63E-03	0.00E+00	7.19E-04	4760.101313
2030	Annual		Mon-Sun	2270002075	Off-Highwa	D	750	Construction U		N	NHH	NP		Sacramento	SV	SAC	7.71E+00	2.33E+01	6.00E+02	3.55E-03	1.58E-02	1.86E-02	6.63E+00	6.66E-05	7.05E-04	0.00E+00	3.20E-04	2197.186893
2030	Annual		Mon-Sun	2270002075	Off-Highwa	D	1000	Construction U		N	NHH	NP		Sacramento	SV	SAC	8.14E-01	2.46E+00	9.08E+01	5.61E-04	2.48E-03	6.30E-03	1.00E+00	1.01E-05	1.38E-04	0.00E+00	5.06E-05	332.1728072
2030	Annual		Mon-Sun	2270002078	Dumpers/T	D	25	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.51E+00	2.74E+00	9.51E-01	1.26E-05	4.30E-05	7.96E-05	1.04E-02	1.32E-07	2.97E-06	0.00E+00	1.14E-06	3.467661076
2030	Annual		Mon-Sun	2270002081	Other Cons	D	15	Construction U		P	NHH	NP		Sacramento	SV	SAC	2.08E+01	3.94E+01	1.82E+01	2.32E-04	1.21E-03	1.45E-03	1.99E-01	3.10E-06	5.67E-05	0.00E+00	2.09E-05	66.07384844
2030	Annual		Mon-Sun	2270002081	Other Cons	D	25	Construction U		P	NHH	NP		Sacramento	SV	SAC	3.52E+00	6.67E+00	4.01E+00	5.31E-05	1.81E-04	3.36E-04	4.40E-02	5.59E-07	1.25E-05	0.00E+00	4.79E-06	14.61980392
2030	Annual		Mon-Sun	2270002081	Other Cons	D	50	Construction U		P	NHH	NP		Sacramento	SV	SAC	5.41E+00	1.04E+01	1.32E+01	1.09E-04	1.12E-03	8.13E-04	1.45E-01	1.87E-06	7.82E-06	0.00E+00	9.88E-06	48.01225827
2030	Annual		Mon-Sun	2270002081	Other Cons	D	120	Construction U		P	NHH	NP		Sacramento	SV	SAC	8.93E+00	1.71E+01	6.29E+01	2.74E-04	4.30E-03	1.92E-03	6.90E-01	8.10E-06	3.34E-05	0.00E+00	2.47E-05	228.8122155
2030	Annual		Mon-Sun	2270002081	Other Cons	D	175	Construction U		P	NHH	NP		Sacramento	SV	SAC	1.23E+01	2.36E+01	1.14E+02	3.58E-04	6.91E-03	1.02E-03	1.26E+00	1.41E-05	4.31E-05	0.00E+00	3.23E-05	415.9212511
2030	Annual		Mon-Sun	2270002081	Other Cons	D	500	Construction U		N	NHH	NP		Sacramento	SV	SAC	2.86E+01	5.48E+01	6.29E+02	1.89E-03	1.26E-02	4.80E-03	6.95E+00	6.83E-05	1.75E-04	0.00E+00	1.71E-04	2304.514562
2030	Annual		Mon-Sun	2270004030	Leaf Blowe	D	15	Lawn and Ga	U	N	NHH	P		Sacramento	SV	SAC	4.30E-01	1.41E-01	1.94E-02	2.20E-07	1.30E-06	1.55E-06	2.13E-04	3.31E-09	6.06E-08	0.00E+00	1.99E-08	0.070572127
2030	Annual		Mon-Sun	2270004030	Leaf Blowe	D	120	Lawn and Ga	U	N	NHH	P		Sacramento	SV	SAC	3.76E-01	1.24E-01	2.73E-01	6.62E-07	1.66E-05	8.29E-06	3.01E-03	3.53E-08	1.39E-07	0.00E+00	5.98E-08	0.996246522
2030	Annual		Mon-Sun	2270004030	Leaf Blowe	D	250	Lawn and Ga	U	N	NHH	P		Sacramento	SV	SAC	1.08E-01	3.53E-02	1.60E-01	2.63E-07	2.95E-06	1.44E-06	1.77E-03	1.99E-08	4.32E-08	0.00E+00	2.38E-08	0.586784605
2030	Annual		Mon-Sun	2270004055	Lawn & Ga	D	15	Lawn and Ga	U	N	NHH	NP		Sacramento	SV	SAC	1.04E+03	1.55E+03	6.56E+02	7.45E-03	4.38E-02	5.23E-02	7.18E+00	1.12E-04	2.05E-03	0.00E+00	6.72E-04	2383.746858
2030	Annual		Mon-Sun	2270004055	Lawn & Ga	D	25	Lawn and Ga	U	N	NHH	NP		Sacramento	SV	SAC	8.12E+02	1.21E+03	7.87E+02	1.04E-02	3.56E-02	6.59E-02	8.64E+00	1.10E-04	2.46E-03	0.00E+00	9.41E-04	2870.709107
2030	Annual		Mon-Sun	2270004065	Chippers/S	D	25	Lawn and Ga	U	P	NHH	P		Sacramento	SV	SAC	4.84E-01	6.16E-01	5.65E-01	7.48E-06	2.55E-05	4.73E-05	6.20E-03	7.87E-08	1.77E-06	0.00E+00	6.75E-07	2.059572041
2030	Annual		Mon-Sun	2270004065	Chippers/S	D	120	Lawn and Ga	U	P	NHH	P		Sacramento	SV	SAC	1.33E+01	1.70E+01	5.87E+01	2.27E-04	3.86E-03	1.87E-03	6.45E-01	7.56E-06	4.08E-05	0.00E+00	2.05E-05	213.6519217
2030	Annual		Mon-Sun	2270004065	Chippers/S	D	175	Lawn and Ga	U	P	NHH	P		Sacramento	SV	SAC	9.14E-01	1.16E+00	6.97E+00	2.00E-05	4.06E-04	7.92E-05	7.67E-02	8.63E-07	3.34E-06	0.00E+00	1.80E-06	25.4031224
2030	Annual		Mon-Sun	2270004065	Chippers/S	D	250	Lawn and Ga	U	N	NHH	P		Sacramento	SV	SAC	2.15E-01	2.74E-01	2.75E+00	7.35E-06	5.49E-05	2.67E-05	3.04E-02	3.43E-07	8.97E-07	0.00E+00	6.63E-07	10.08604885
2030	Annual		Mon-Sun	2270004065	Chippers/S	D	500	Lawn and Ga	U	N	NHH	P		Sacramento	SV	SAC	1.99E+00	2.53E+00	2.83E+01	7.51E-05	5.49E-04	2.59E-04	3.13E-01	3.07E-06	9.09E-06	0.00E+00	6.78E-06	103.6618969
2030	Annual		Mon-Sun	2270004065	Chippers/S	D	750	Lawn and Ga	U	N	NHH	P		Sacramento	SV	SAC	2.26E+00	2.88E+00	7.73E+01	2.06E-04	1.50E-03	7.17E-04	8.55E-01	8.60E-06	2.50E-05	0.00E+00	1.85E-05	283.2804433
2030	Annual		Mon-Sun	2270004065	Chippers/S	D	1000	Lawn and Ga	U	N	NHH	P		Sacramento	SV	SAC	4.30E+00	5.47E+00	2.09E+02	5.68E-04	4.07E-03	1.02E-02	2.32E+00	2.33E-05	1.22E-04	0.00E+00	5.12E-05	767.1076429
2030	Annual		Mon-Sun	2270004070	Commercia	D	15	Lawn and Ga	U	N	NHH	NP		Sacramento	SV	SAC	2.61E+01	7.64E+01	3.37E+01	3.82E-04	2.25E-03	2.69E-03	3.69E-01	5.74E-06	1.05E-04	0.00E+00	3.45E-05	122.4190506
2030	Annual		Mon-Sun	2270004070	Commercia	D	25	Lawn and Ga	U	N	NHH	NP		Sacramento	SV	SAC	4.91E+02	1.44E+03	9.47E+02	1.25E-02	4.28E-02	7.93E-02	1.04E+01	1.32E-04	2.96E-03	0.00E+00	1.13E-03	3453.01074
2030	Annual		Mon-Sun	2270004075	Other Lawr	D	15	Lawn and Ga	U	N	NHH	NP		Sacramento	SV	SAC	3.76E-01	4.46E-01	2.49E-01	2.83E-06	1.66E-05	1.99E-05	2.73E-03	4.24E-08	7.77E-07	0.00E+00	2.55E-07	0.905193191
2030	Annual		Mon-Sun	2270004075	Other Lawr	D	25	Lawn and Ga	U	N	NHH	NP		Sacramento	SV	SAC	5.38E-02	6.38E-02	4.73E-02	6.27E-07	2.14E-06	3.96E-06	5.19E-04	6.59E-09	1.48E-07	0.00E+00	5.65E-08	0.172491313

Table 16. OFFROAD Emissions 2035

Lawn and Garden Summary - 2030		
		Source
Total Lawn	40,194	
DU Elk Gro	75,752	Scale Factor
DU Sac Cou	1,188,347	SACOG 2016 RTP/SCS
Elk Grove 9	6.4%	
Elk Grove E	2,562.16	

Construction Equipment Summary - 2030		
		Source
Total Const	426,800	
Elk Grove H	551	Scale Factor
Sac County	15,790	Extrapolation from SACOG RTP/SCS
Elk Grove 9	3.5%	
Elk Grove E	14,896	

CY	Season	AvgDays	Code	Equipment	Fuel	MaxHP	Class	C/R	Pre	Hand	Port	County	Air Basin	Air Dist.	Population	Activity	Consumpti	ROG Exhau	CO Exhaust	NOX Exhau	CO2 Exhau	SO2 Exhau	PM Exhaus	N2O Exhau	CH4 Exhau	Total Annual County (MTCO2e)
2035	Annual	Mon-Sun	2.26E+09	Other Lawr	G2	15	Lawn and (	R	N	HH	NP	Sacramento	SV	SAC	3.00E+02	3.53E+00	9.03E-01	2.73E-04	1.80E-03	1.57E-05	4.85E-03	2.00E-07	2.82E-06	3.59E-06	1.70E-05	3.129912839
2035	Annual	Mon-Sun	2.26E+09	Tampers/R	G2	15	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	9.70E+01	4.84E+01	9.76E+00	6.15E-04	2.64E-02	4.79E-04	5.04E-02	2.08E-06	4.22E-04	7.53E-05	3.82E-05	20.73883352
2035	Annual	Mon-Sun	2.26E+09	Plate Comp	G2	15	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	8.32E+00	4.70E+00	9.47E-01	5.96E-05	2.56E-03	4.64E-05	4.89E-03	2.02E-07	4.10E-05	7.31E-06	3.70E-06	2.012962998
2035	Annual	Mon-Sun	2.26E+09	Lawn Mow	G2	15	Lawn and (	C	N	NHH	NP	Sacramento	SV	SAC	2.28E+03	1.43E+03	1.61E+02	1.82E-02	3.28E-01	4.90E-03	9.72E-01	4.00E-05	3.07E-03	1.26E-03	1.13E-03	433.0362803
2035	Annual	Mon-Sun	2.26E+09	Lawn Mow	G2	15	Lawn and (	R	N	NHH	NP	Sacramento	SV	SAC	1.71E+04	7.26E+02	8.83E+01	7.24E-03	2.10E-01	1.91E-03	4.95E-01	2.04E-05	1.27E-03	5.52E-04	4.50E-04	208.4973751
2035	Annual	Mon-Sun	2.26E+09	Chainsaws	G2	2	Lawn and (	C	N	HH	NP	Sacramento	SV	SAC	4.08E+03	3.23E+03	1.93E+02	1.61E-01	2.91E-01	2.55E-03	7.88E-01	3.24E-05	4.59E-04	1.31E-03	1.00E-02	1151.932474
2035	Annual	Mon-Sun	2.26E+09	Chainsaws	G2	2	Lawn and (	R	N	HH	NP	Sacramento	SV	SAC	4.59E+04	6.16E+02	2.81E+01	8.95E-03	5.55E-02	4.86E-04	1.50E-01	6.18E-06	8.74E-05	2.49E-04	5.56E-04	100.8111272
2035	Annual	Mon-Sun	2.26E+09	Chainsaws	G2	15	Lawn and (	C	N	HH	NP	Sacramento	SV	SAC	2.87E+03	2.28E+03	3.28E+02	2.74E-01	4.96E-01	4.35E-03	1.34E+00	5.53E-05	7.81E-04	1.47E-03	1.71E-02	1954.731245
2035	Annual	Mon-Sun	2.26E+09	Chainsaws	G2	15	Lawn and (	R	N	HH	NP	Sacramento	SV	SAC	3.23E+04	4.34E+02	4.79E+01	1.52E-02	9.46E-02	8.28E-04	2.56E-01	1.05E-05	1.49E-04	2.81E-04	9.47E-04	170.3527086
2035	Annual	Mon-Sun	2.26E+09	Chainsaws	G2	15	Lawn and (	C	P	HH	NP	Sacramento	SV	SAC	3.58E+03	2.83E+03	4.08E+02	3.42E-01	6.18E-01	5.41E-03	1.67E+00	6.88E-05	9.72E-04	1.83E-03	2.12E-02	2432.959737
2035	Annual	Mon-Sun	2.26E+09	Chainsaws	G2	15	Lawn and (	R	P	HH	NP	Sacramento	SV	SAC	4.02E+04	5.40E+02	5.96E+01	1.90E-02	1.18E-01	1.03E-03	3.18E-01	1.31E-05	1.85E-04	3.49E-04	1.18E-03	212.0399439
2035	Annual	Mon-Sun	2.26E+09	Trimmers/I	G2	2	Lawn and (	C	N	HH	NP	Sacramento	SV	SAC	1.33E+04	4.42E+03	1.96E+02	1.06E-01	3.48E-01	3.05E-03	9.42E-01	3.88E-05	5.48E-04	1.66E-03	6.58E-03	904.4485255
2035	Annual	Mon-Sun	2.26E+09	Trimmers/I	G2	2	Lawn and (	R	N	HH	NP	Sacramento	SV	SAC	1.48E+05	8.73E+03	3.70E+02	1.65E-01	6.88E-01	6.02E-03	1.86E+00	7.66E-05	1.08E-03	3.28E-03	1.03E-02	1548.169321
2035	Annual	Mon-Sun	2.26E+09	Leaf Blowe	G2	2	Lawn and (	C	N	HH	P	Sacramento	SV	SAC	1.99E+04	1.07E+04	5.70E+02	3.93E-01	9.35E-01	8.19E-03	2.53E+00	1.04E-04	1.47E-03	4.25E-03	2.44E-02	3022.022574
2035	Annual	Mon-Sun	2.26E+09	Leaf Blowe	G2	2	Lawn and (	R	N	HH	P	Sacramento	SV	SAC	5.12E+04	6.73E+02	2.98E+01	9.41E-03	5.89E-02	5.16E-04	1.59E-01	6.56E-06	9.27E-05	2.68E-04	5.85E-04	106.548492
2035	Annual	Mon-Sun	2.26E+09	Shredders	G2	15	Lawn and (	C	P	NHH	NP	Sacramento	SV	SAC	1.00E+02	3.73E+01	1.64E+01	9.20E-04	4.43E-02	7.17E-04	8.48E-02	3.49E-06	7.11E-04	8.27E-05	5.72E-05	33.85371089
2035	Annual	Mon-Sun	2.26E+09	Shredders	G2	15	Lawn and (	R	P	NHH	NP	Sacramento	SV	SAC	3.57E+03	8.81E+00	3.85E+00	1.86E-04	1.05E-02	1.45E-04	2.00E-02	8.25E-07	1.68E-04	1.80E-05	1.16E-05	7.80996041
2035	Annual	Mon-Sun	2.26E+09	Commercia	G2	15	Lawn and (	C	N	NHH	NP	Sacramento	SV	SAC	5.32E+01	1.17E+02	4.77E+01	2.15E-03	1.30E-01	1.63E-03	2.48E-01	1.02E-05	1.16E-04	2.18E-04	1.34E-04	96.0065041
2035	Annual	Mon-Sun	2.26E+09	Commercia	G2	25	Lawn and (	C	N	NHH	NP	Sacramento	SV	SAC	2.63E+01	5.76E+01	5.11E+01	2.23E-03	1.44E-01	1.72E-03	2.59E-01	1.07E-05	1.21E-04	1.61E-04	1.38E-04	99.33460911
2035	Annual	Mon-Sun	2.26E+09	Other Lawr	G2	2	Lawn and (	C	N	HH	NP	Sacramento	SV	SAC	2.25E+01	4.23E+00	2.36E-01	1.16E-04	4.29E-04	3.76E-06	1.16E-03	4.78E-08	6.75E-07	1.82E-06	7.20E-06	1.033034364
2035	Annual	Mon-Sun	2.26E+09	Other Lawr	G2	2	Lawn and (	R	N	HH	NP	Sacramento	SV	SAC	6.89E+02	8.12E+00	4.15E-01	1.26E-04	8.25E-04	7.22E-06	2.23E-03	9.18E-08	1.30E-06	3.50E-06	7.80E-06	1.454950695
2035	Annual	Mon-Sun	2.26E+09	Other Lawr	G2	15	Lawn and (	C	N	HH	NP	Sacramento	SV	SAC	9.79E+00	1.84E+00	5.13E-01	2.52E-04	9.34E-04	8.18E-06	2.52E-03	1.04E-07	1.47E-06	1.87E-06	1.57E-05	2.228050078
2035	Annual	Mon-Sun	2.26E+09	Other Lawr	G2	15	Lawn and (	R	N	HH	NP	Sacramento	SV	SAC	3.00E+02	3.53E+00	9.03E-01	2.73E-04	1.80E-03	1.57E-05	4.85E-03	2.00E-07	2.82E-06	3.59E-06	1.70E-05	3.129912839
2035	Annual	Mon-Sun	2.27E+09	Asphalt Pa	G4	15	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	2.11E+00	2.30E+00	1.33E+00	1.01E-04	3.82E-03	7.49E-05	6.46E-03	1.84E-07	5.41E-05	6.57E-06	5.69E-06	2.698074637
2035	Annual	Mon-Sun	2.27E+09	Asphalt Pa	G4	25	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	3.62E+00	3.93E+00	5.73E+00	4.44E-04	1.69E-02	2.89E-04	2.70E-02	6.84E-07	2.26E-04	1.74E-05	2.51E-05	11.30211884
2035	Annual	Mon-Sun	2.27E+09	Asphalt Pa	G4	50	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	2.80E+00	3.01E+00	7.05E+00	9.54E-05	8.07E-03	1.20E-04	5.50E-02	6.68E-07	4.21E-06	9.58E-06	5.39E-06	18.76585827
2035	Annual	Mon-Sun	2.27E+09	Asphalt Pa	G4	120	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.54E+00	1.66E+00	6.29E+00	3.98E-05	2.30E-03	9.28E-05	5.69E-02	5.50E-07	4.41E-06	6.26E-06	2.25E-06	19.1026712
2035	Annual	Mon-Sun	2.27E+09	Tampers/R	G4	15	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	4.47E+00	2.23E+00	1.08E+00	7.99E-05	3.09E-03	5.95E-05	5.23E-03	1.49E-07	4.39E-05	5.73E-06	4.52E-06	2.182124179
2035	Annual	Mon-Sun	2.27E+09	Plate Comp	G4	5	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.64E+02	8.11E+01	1.47E+01	2.08E-03	3.16E-02	9.38E-04	8.44E-02	2.92E-06	2.75E-05	1.33E-04	1.18E-04	39.50980256
2035	Annual	Mon-Sun	2.27E+09	Plate Comp	G4	15	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.74E+02	9.84E+01	4.22E+01	3.17E-03	1.21E-01	2.36E-03	2.05E-01	5.84E-06	1.72E-03	2.39E-04	1.79E-04	85.8361274
2035	Annual	Mon-Sun	2.27E+09	Rollers	G4	5	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.83E+01	4.16E+00	1.12E+00	1.36E-04	2.69E-03	6.12E-05	6.11E-03	2.11E-07	1.99E-06	7.78E-06	7.67E-06	2.768650052
2035	Annual	Mon-Sun	2.27E+09	Rollers	G4	15	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	2.96E+01	2.52E+01	1.37E+01	1.03E-03	3.93E-02	7.64E-04	6.65E-02	1.90E-06	5.57E-04	6.93E-05	5.81E-05	27.74887457
2035	Annual	Mon-Sun	2.27E+09	Rollers	G4	25	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	2.00E+01	1.70E+01	2.01E+01	1.54E-03	5.95E-02	1.01E-03	9.47E-02	2.40E-06	7.94E-04	6.68E-05	8.74E-05	39.65000296
2035	Annual	Mon-Sun	2.27E+09	Rollers	G4	50	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.98E+00	3.36E+00	9.33E+00	1.53E-04	1.46E-02	1.76E-04	6.66E-02	8.10E-07	5.10E-06	1.23E-05	8.67E-06	22.9334826
2035	Annual	Mon-Sun	2.27E+09	Rollers	G4	120	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	3.71E+00	6.32E+00	2.86E+01	2.40E-04	1.55E-02	5.65E-04	2.51E-01	2.43E-06	1.94E-05	3.03E-05	1.36E-05	84.5886087
2035	Annual	Mon-Sun	2.27E+09	Paving Equ	G4	5	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	2.30E+02	1.07E+02	2.09E+01	2.92E-03	4.54E-02	1.32E-03	1.20E-01	4.13E-06	3.90E-05	1.82E-04	1.65E-04	55.84911813
2035	Annual	Mon-Sun	2.27E+09	Paving Equ	G4	15	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	3.89E+02	2.13E+02	1.23E+02	9.20E-03	3.52E-01	6.85E-03	5.96E-01	1.70E-05	4.99E-03	6.05E-04	5.20E-04	248.4903
2035	Annual	Mon-Sun	2.27E+09	Paving Equ	G4	25	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	8.64E+00	4.74E+00	6.18E+00	4.75E-04	1.83E-02	3.09E-04	2.91E-02	7.38E-07	2.44E-04	1.96E-05	2.69E-05	12.18228603
2035	Annual	Mon-Sun	2.27E+09	Paving Equ	G4	50	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	7.66E+00	3.68E+00	8.21E+00	8.78E-05	6.08E-03	1.28E-04	6.93E-02	8.43E-07	5.31E-06	1.09E-05	4.96E-06	23.48824081
2035	Annual	Mon-Sun	2.27E+09	Paving Equ	G4	120	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.98E+00	9.48E-01	3.39E+00	1.54E-05	7.11E-04	3.55E-05	3.15E-02	3.04E-07	2.44E-06	2.91E-06	8.72E-07	10.53680715
2035	Annual	Mon-Sun	2.27E+09	Surfacing E	G4	5	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	4.22E+01	2.31E+01	4.64E+00	6.70E-04	9.79E-03	3.03E-04	2.68E-02	9.27E-07	8.75E-06	4.07E-05	3.79E-05	12.5904173
2035	Annual	Mon-Sun	2.27E+09	Surfacing E	G4	15	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.25E+02	1.73E+02	6.62E+01	5.19E-03	1.90E-01	3.87E-03	3.21E-01	9.15E-06	2.69E-03	4.05E-04	2.94E-04	135.8043236
2035	Annual	Mon-Sun	2.27E+09	Surfacing E	G4	25	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.72E+00	2.37E+00	2.22E+00	1.78E-04	6.55E-03	1.16E-04	1.04E-02	2.64E-07	8.75E-05	8.43E-06	1.01E-05	4.417048393
2035	Annual	Mon-Sun	2.27E+09	Signal Boar	G4	5	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	5.21E-01	1.86E-01	6.02E-02	7.72E-06	1.39E-04	3.49E-06	3.34E-04	1.15E-08	1.09E-07	3.96E-07	4.37E-07	0.152621855
2035	Annual	Mon-Sun	2.27E+09	Signal Boar	G4	15	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	3.71E+00	2.89E+00	1.71E+00	1.28E-04	4.92E-03	9.49E-05	8.31E-03	2.37E-07	6.97E-05	8.30E-06	7.21E-06	3.462025894
2035	Annual	Mon-Sun	2.27E+09	Trenchers	G4	15	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	3.43E+01	4.08E+01	2.63E+01	2.01E-03	7.54E-02	1.50E-03	1.28E-01	3.64E-06	1.07E-03	1.25E-04	1.14E-04	53.37226932
2035	Annual	Mon-Sun	2.27E+09	Trenchers	G4	25	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	2.66E+01	3.16E+01	4.41E+01	3.46E-03	1.30E-01	2.26E-03	2.07E-01	5.26E-06	1.74E-03	1.37E-04	1.96E-04	87.14829719
2035	Annual	Mon-Sun	2.27E+09	Trenchers	G4	50	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.80E+01	1.98E+01	4.42E+01	6.25E-04	5.45E-02	7.76E-04	3.39E-01	4.12E-06	2.59E-05	6.22E-05	3.54E-05	115.8365138
2035	Annual	Mon-Sun	2.27E+09	Trenchers	G4	120	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	5.96E+00	6.58E+00	2.72E+01	1.84E-04	1.09E-02	4.30E-04	2.45E-01	2.36E-06	1.89E-05	2.69E-05	1.04E-05	82.12674047
2035	Annual	Mon-Sun	2.27E+09	Bore/Drill I	G4	15	Constructi	U	P	NHH	P	Sacramento	SV	SAC	9.81E-01	3.33E-01	2.57E-01	1.84E-05	7.37E-04	1.37E-05	1.25E-03	3.56E-08	1.05E-05	1.08E-06	1.04E-06	0.514324358
2035	Annual	Mon-Sun	2.27E+09	Bore/Drill I	G4	25	Constructi	U	P	NHH	P	Sacramento	SV	SAC	4.87E+00	1.66E+00	2.36E+00	1.74E-04	7.00E-03	1.13E-04	1.12E-02	2.83E-07	9.35E-05	7.03E-06	9.84E-06	4.621608581
2035	Annual	Mon-Sun	2.27E+09	Bore/Drill I	G4	50	Constructi	U	P	NHH	P	Sacramento	SV	SAC	8.69E-01	2.55E-01	6.55E-01	6.85E-06	4.63E-04	1.01E-05	5.57E-03	6.77E-08	4.26E-07	8.11E-07	3.88E-07	1.884449793
2035	Annual	Mon-Sun	2.27E+09	Bore/Drill I	G4	120	Constructi	U	P	NHH	P	Sacramento	SV	SAC	3.99E+00	1.17E+00	7.45E+00	3.29E-05	1.48E-03	7.62E-05	6.95E-02	6.71E-07	5.38E-06	4.83E-06	1.86E-06	23.21359844
2035	Annual	Mon-Sun	2.27E+09	Bore/Drill I	G4	175	Constructi	U	P	NHH	P	Sacramento	SV	SAC	9.88E-01	2.90E-01	2.61E+00	8.85E-06	7.78E-04	2.87E-05	2.39E-02	2.38E-07	1.91E-06	1.50E-06	5.01E-07	7.987498382
2035	Annual	Mon-Sun	2.27E+09	Concrete/I	G4	5	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.80E+01	6.41E+00	1.71E+00	2.19E-04	3.93E-03	9.89E-05	9.47E-03	3.27E-07	3.09E-06	1.23E-05	1.24E-05	4.336923426
2035	Annual	Mon-Sun	2.27E+09	Concrete/I	G4	15	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	8.09E+01	6.88E+01	4.71E+01	3.53E-03	1.35E-01	2.63E-03	2.29E-01	6.52E-06	1.92E-03	2.14E-04	2.00E-04	95.18129276
2035	Annual	Mon-Sun	2.27E+09	Concrete/I	G4	25	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	2.53E+01	2.15E+01	2.87E+01	2.20E-03	8.48E-02	1.44E-03	1.35E-01	3.42E-06	1.13E-03	9.02E-05	1.25E-04	56.49485748
2035	Annual	Mon-Sun	2.27E+09	Concrete/I	G4	50	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	3.24E+00	5.42E+00	1.50E+01	1.57E-04	1.06E-02	2.32E-04	1.28E-01	1.55E-06	9.78E-06	1.79E-05	8.87E-06	43.23400443
2035	Annual	Mon-Sun	2.27E+09	Concrete/I	G4	120	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.86E+00	3.11E+00	1.46E+01	6.45E-05	2.89E-03	1.48E-04	1.36E-01	1.32E-06	1.06E-05	1.09E-05	3.65E-06	45.61512035
2035	Annual	Mon-Sun	2.27E+09	Cement an	G4	5	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	3.27E+02	8.24E+01	2.09E+01	2.62E-03	4.88E-02	1.18E-03	1.15E-01	3.97E-06	3.75E-05	1.52E-04	1.48E-04	52.51854963
2035	Annual	Mon-Sun	2.27E+09	Cement an	G4	15	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	5.53E+02	1.40E+02	6.42E+01	4.65E-03	1.84E-01	3.46E-03	3.12E-01	8.90E-06	2.62E-03	3.45E-04	2.63E-04	129.5929738

2035	Annual	Mon-Sun	2.27E+09	Cement an	G4	25	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	2.33E+00	5.88E-01	8.70E-01	6.46E-05	2.58E-03	4.21E-05	4.10E-03	1.04E-07	3.44E-05	2.55E-06	3.65E-06	1.702905314
2035	Annual	Mon-Sun	2.27E+09	Cranes	G4	50	Constructi	U	P	NHH	P	Sacramento	SV	SAC	9.88E-01	1.12E+00	2.21E+00	3.16E-05	2.77E-03	3.90E-05	1.69E-02	2.05E-07	1.29E-06	3.31E-06	1.79E-06	5.774926352
2035	Annual	Mon-Sun	2.27E+09	Cranes	G4	120	Constructi	U	P	NHH	P	Sacramento	SV	SAC	1.98E+00	2.25E+00	7.43E+00	5.09E-05	3.04E-03	1.19E-04	6.67E-02	6.45E-07	5.17E-06	8.22E-06	2.88E-06	22.42734003
2035	Annual	Mon-Sun	2.27E+09	Cranes	G4	175	Constructi	U	P	NHH	P	Sacramento	SV	SAC	7.90E-02	8.99E-02	4.82E-01	3.31E-06	1.58E-04	8.17E-06	4.39E-03	4.36E-08	3.49E-07	4.38E-07	1.87E-07	1.472653163
2035	Annual	Mon-Sun	2.27E+09	Crushing/P	G4	15	Constructi	U	P	NHH	P	Sacramento	SV	SAC	8.89E-01	7.04E-01	5.25E-01	3.92E-05	1.51E-03	2.92E-05	2.55E-03	7.27E-08	2.14E-05	2.29E-06	2.22E-06	1.060240211
2035	Annual	Mon-Sun	2.27E+09	Crushing/P	G4	25	Constructi	U	P	NHH	P	Sacramento	SV	SAC	5.82E-01	4.61E-01	6.31E-01	4.82E-05	1.86E-03	3.14E-05	2.97E-03	7.53E-08	2.49E-05	1.95E-06	2.73E-06	1.241020281
2035	Annual	Mon-Sun	2.27E+09	Crushing/P	G4	120	Constructi	U	P	NHH	P	Sacramento	SV	SAC	1.15E+00	7.57E-01	5.75E+00	3.16E-05	1.68E-03	7.37E-05	5.27E-02	5.10E-07	4.09E-06	3.85E-06	1.79E-06	17.65569252
2035	Annual	Mon-Sun	2.27E+09	Rough Terr	G4	50	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	3.95E-01	4.47E-01	1.50E+00	2.14E-05	1.87E-03	2.64E-05	1.14E-02	1.39E-07	8.76E-07	1.75E-06	1.21E-06	3.909421506
2035	Annual	Mon-Sun	2.27E+09	Rough Terr	G4	120	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	5.61E+00	6.35E+00	3.23E+01	2.21E-04	1.32E-02	5.18E-04	2.90E-01	2.81E-06	2.25E-05	2.92E-05	1.25E-05	97.53155064
2035	Annual	Mon-Sun	2.27E+09	Rough Terr	G4	175	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.98E-01	2.24E-01	1.82E+00	1.25E-05	5.99E-04	3.09E-05	1.66E-02	1.65E-07	1.32E-06	1.36E-06	7.06E-07	5.576126341
2035	Annual	Mon-Sun	2.27E+09	Rubber Tir	G4	50	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	9.88E-01	1.39E+00	3.46E+00	5.18E-05	4.68E-03	6.17E-05	2.59E-02	3.14E-07	1.98E-06	4.66E-06	2.93E-06	8.862573546
2035	Annual	Mon-Sun	2.27E+09	Rubber Tir	G4	120	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	6.56E+00	9.21E+00	3.43E+01	2.51E-04	1.55E-02	5.87E-04	3.06E-01	2.95E-06	2.37E-05	3.71E-05	1.42E-05	102.7747352
2035	Annual	Mon-Sun	2.27E+09	Tractors/Lc	G4	120	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	3.48E+00	8.29E+00	2.43E+01	1.94E-04	1.24E-02	4.55E-04	2.14E-01	2.07E-06	1.66E-05	3.08E-05	1.10E-05	72.14006403
2035	Annual	Mon-Sun	2.27E+09	Skid Steer I	G4	15	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.75E+00	1.53E+00	1.21E+00	9.19E-05	3.47E-03	6.84E-05	5.87E-03	1.67E-07	4.92E-05	5.18E-06	5.20E-06	2.449254209
2035	Annual	Mon-Sun	2.27E+09	Skid Steer I	G4	25	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.17E+02	1.02E+02	1.13E+02	8.81E-03	3.35E-01	5.74E-03	5.33E-01	1.35E-05	4.47E-03	3.91E-04	4.98E-04	223.8282651
2035	Annual	Mon-Sun	2.27E+09	Skid Steer I	G4	50	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	2.69E+01	2.29E+01	4.38E+01	4.82E-04	3.43E-02	6.88E-04	3.67E-01	4.46E-06	2.81E-05	6.27E-05	2.72E-05	124.4919839
2035	Annual	Mon-Sun	2.27E+09	Skid Steer I	G4	120	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.61E+01	1.37E+01	5.85E+01	2.77E-04	1.32E-02	6.38E-04	5.43E-01	5.24E-06	4.20E-05	4.73E-05	1.57E-05	181.516017
2035	Annual	Mon-Sun	2.27E+09	Dumpers/T	G4	5	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.67E+01	6.81E+00	9.15E-01	1.32E-04	1.93E-03	5.95E-05	5.29E-03	1.83E-07	1.72E-06	9.65E-06	7.45E-06	2.494570317
2035	Annual	Mon-Sun	2.27E+09	Dumpers/T	G4	15	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	3.56E+01	1.45E+01	5.23E+00	3.92E-04	1.50E-02	2.92E-04	2.54E-02	7.23E-07	2.13E-04	3.21E-05	2.22E-05	10.64438377
2035	Annual	Mon-Sun	2.27E+09	Dumpers/T	G4	25	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	6.59E+00	2.69E+00	2.11E+00	1.62E-04	6.23E-03	1.06E-04	9.93E-03	2.52E-07	8.32E-05	8.50E-06	9.16E-06	4.170008875
2035	Annual	Mon-Sun	2.27E+09	Dumpers/T	G4	120	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	7.11E-01	2.48E-01	6.15E-01	2.82E-06	1.31E-04	6.53E-06	5.72E-03	5.53E-08	4.43E-07	6.30E-07	1.59E-07	1.914003003
2035	Annual	Mon-Sun	2.27E+09	Other Cons	G4	175	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	2.77E+00	2.81E+00	1.54E+01	6.03E-05	4.66E-03	1.82E-04	1.41E-01	1.40E-06	1.13E-05	1.16E-05	3.41E-06	47.18172637
2035	Annual	Mon-Sun	2.27E+09	Lawn Mow	G4	5	Lawn and (	C	N	NHH	NP	Sacramento	SV	SAC	1.35E+04	8.44E+03	1.01E+03	1.20E-01	2.23E+00	3.07E-02	5.76E+00	1.99E-04	1.82E-02	7.46E-03	6.71E-03	2563.933218
2035	Annual	Mon-Sun	2.27E+09	Lawn Mow	G4	5	Lawn and (	R	N	NHH	NP	Sacramento	SV	SAC	2.14E+05	9.08E+03	1.20E+03	9.19E-02	3.21E+00	2.28E-02	6.19E+00	2.14E-04	1.48E-02	6.54E-03	5.13E-03	2559.339864
2035	Annual	Mon-Sun	2.27E+09	Tillers	G4	5	Lawn and (	C	N	NHH	NP	Sacramento	SV	SAC	1.40E+03	2.14E+02	3.02E+01	2.69E-03	7.59E-02	6.78E-04	1.62E-01	5.60E-06	4.28E-04	1.76E-04	1.52E-04	68.72839757
2035	Annual	Mon-Sun	2.27E+09	Tillers	G4	5	Lawn and (	R	N	NHH	NP	Sacramento	SV	SAC	5.44E+03	2.68E+02	3.85E+01	3.13E-03	1.00E-01	7.84E-04	2.03E-01	7.01E-06	5.05E-04	2.10E-04	1.77E-04	84.71557072
2035	Annual	Mon-Sun	2.27E+09	Trimmers/I	G4	5	Lawn and (	C	P	NHH	NP	Sacramento	SV	SAC	2.46E+03	9.15E+02	2.80E+01	3.64E-03	6.37E-02	1.64E-03	1.56E-01	5.38E-06	5.08E-05	5.58E-04	2.06E-04	74.86345701
2035	Annual	Mon-Sun	2.27E+09	Trimmers/I	G4	5	Lawn and (	R	P	NHH	NP	Sacramento	SV	SAC	1.15E+04	6.75E+02	2.16E+01	2.46E-03	5.32E-02	1.11E-03	1.15E-01	3.97E-06	3.75E-05	3.92E-04	1.39E-04	53.94708412
2035	Annual	Mon-Sun	2.27E+09	Leaf Blowe	G4	5	Lawn and (	C	N	NHH	P	Sacramento	SV	SAC	6.27E+02	1.07E+02	7.03E+00	5.21E-04	1.88E-02	1.29E-04	3.64E-02	1.26E-06	8.53E-05	5.26E-05	2.95E-05	15.11485554
2035	Annual	Mon-Sun	2.27E+09	Leaf Blowe	G4	5	Lawn and (	R	N	NHH	P	Sacramento	SV	SAC	5.39E+02	7.09E+00	4.88E-01	2.80E-05	1.39E-03	6.81E-06	2.42E-03	8.34E-08	4.81E-06	3.09E-06	1.58E-06	0.967403264
2035	Annual	Mon-Sun	2.27E+09	Rear Engin	G4	15	Lawn and (	C	N	NHH	NP	Sacramento	SV	SAC	7.38E+03	5.49E+03	1.81E+03	8.42E-02	5.25E+00	6.10E-02	8.89E+00	2.53E-04	4.12E-03	8.85E-03	4.76E-03	3442.217042
2035	Annual	Mon-Sun	2.27E+09	Rear Engin	G4	15	Lawn and (	R	N	NHH	NP	Sacramento	SV	SAC	6.48E+03	5.00E+02	1.64E+02	6.53E-03	4.79E-01	4.78E-03	8.10E-01	2.31E-05	3.23E-04	7.43E-04	3.69E-04	307.4210057
2035	Annual	Mon-Sun	2.27E+09	Rear Engin	G4	25	Lawn and (	C	N	NHH	NP	Sacramento	SV	SAC	3.38E+01	2.51E+01	1.61E+01	7.23E-04	4.82E-02	5.32E-04	7.67E-02	1.95E-06	3.56E-05	5.71E-05	4.09E-05	29.5290275
2035	Annual	Mon-Sun	2.27E+09	Rear Engin	G4	25	Lawn and (	R	N	NHH	NP	Sacramento	SV	SAC	2.91E+01	2.25E+00	1.44E+00	5.64E-05	4.32E-03	3.96E-05	6.88E-03	1.74E-07	2.74E-06	4.62E-06	3.19E-06	2.600682301
2035	Annual	Mon-Sun	2.27E+09	Front Mow	G4	15	Lawn and (	C	N	NHH	NP	Sacramento	SV	SAC	3.38E+02	2.52E+02	1.32E+02	6.16E-03	3.85E-01	4.46E-03	6.50E-01	1.85E-05	3.02E-04	5.20E-04	3.49E-04	250.7134972
2035	Annual	Mon-Sun	2.27E+09	Front Mow	G4	15	Lawn and (	R	N	NHH	NP	Sacramento	SV	SAC	1.09E+04	8.45E+02	4.44E+02	1.76E-02	1.29E+00	1.29E-02	2.18E+00	6.23E-05	8.71E-04	1.61E-03	9.97E-04	825.7676267
2035	Annual	Mon-Sun	2.27E+09	Front Mow	G4	25	Lawn and (	C	N	NHH	NP	Sacramento	SV	SAC	2.65E+02	1.97E+02	1.40E+02	6.27E-03	4.18E-01	4.62E-03	6.66E-01	1.69E-05	3.09E-04	4.73E-04	3.55E-04	256.0212057
2035	Annual	Mon-Sun	2.27E+09	Front Mow	G4	25	Lawn and (	R	N	NHH	NP	Sacramento	SV	SAC	8.57E+03	6.62E+02	4.68E+02	1.83E-02	1.40E+00	1.29E-02	2.24E+00	5.67E-05	8.92E-04	1.44E-03	1.04E-03	845.1490279
2035	Annual	Mon-Sun	2.27E+09	Shredders	G4	5	Lawn and (	C	P	NHH	NP	Sacramento	SV	SAC	2.66E+02	9.88E+01	2.68E+01	3.49E-03	6.11E-02	1.58E-03	1.50E-01	5.17E-06	4.88E-05	1.93E-04	1.98E-04	68.68702901
2035	Annual	Mon-Sun	2.27E+09	Shredders	G4	5	Lawn and (	R	P	NHH	NP	Sacramento	SV	SAC	9.88E+03	2.44E+01	7.73E+00	5.85E-04	2.26E-02	2.64E-04	3.69E-02	1.27E-06	1.20E-05	3.88E-05	3.31E-05	15.48310588
2035	Annual	Mon-Sun	2.27E+09	Lawn & Ga	G4	15	Lawn and (	C	N	NHH	NP	Sacramento	SV	SAC	1.35E+03	4.77E+02	3.03E+02	1.18E-02	8.81E-01	8.65E-03	1.49E+00	4.25E-05	5.85E-04	9.99E-04	6.69E-04	561.2428996
2035	Annual	Mon-Sun	2.27E+09	Lawn & Ga	G4	15	Lawn and (	R	N	NHH	NP	Sacramento	SV	SAC	8.79E+03	3.52E+02	2.23E+02	8.03E-03	6.50E-01	5.92E-03	1.10E+00	3.13E-05	3.99E-04	7.07E-04	4.54E-04	410.201135
2035	Annual	Mon-Sun	2.27E+09	Lawn & Ga	G4	25	Lawn and (	C	N	NHH	NP	Sacramento	SV	SAC	5.34E+02	1.88E+02	1.90E+02	7.33E-03	5.70E-01	5.12E-03	9.08E-01	2.30E-05	3.56E-04	4.89E-04	4.15E-04	341.5356562
2035	Annual	Mon-Sun	2.27E+09	Lawn & Ga	G4	25	Lawn and (	R	N	NHH	NP	Sacramento	SV	SAC	3.47E+03	1.39E+02	1.40E+02	5.05E-03	4.20E-01	3.43E-03	6.70E-01	1.70E-05	2.43E-04	3.42E-04	2.86E-04	249.9588314
2035	Annual	Mon-Sun	2.27E+09	Lawn & Ga	G4	50	Lawn and (	U	N	NHH	NP	Sacramento	SV	SAC	7.73E+00	2.20E+00	3.33E+00	3.35E-05	2.24E-03	6.50E-05	2.85E-02	3.47E-07	2.18E-06	5.97E-06	1.89E-06	9.658824653
2035	Annual	Mon-Sun	2.27E+09	Wood Split	G4	5	Lawn and (	C	N	NHH	NP	Sacramento	SV	SAC	4.55E+02	1.60E+02	4.68E+01	4.95E-03	1.09E-01	1.26E-03	2.62E-01	9.03E-06	7.68E-04	2.14E-04	2.80E-04	113.1252978
2035	Annual	Mon-Sun	2.27E+09	Wood Split	G4	5	Lawn and (	R	N	NHH	NP	Sacramento	SV	SAC	1.14E+04	3.42E+01	1.16E+01	5.58E-04	3.41E-02	1.33E-04	5.59E-02	1.93E-06	9.98E-05	3.15E-05	3.15E-05	21.57574977
2035	Annual	Mon-Sun	2.27E+09	Chippers/S	G4	15	Lawn and (	C	P	NHH	P	Sacramento	SV	SAC	6.41E+00	2.22E+01	1.87E+01	1.47E-03	5.41E-02	1.09E-03	9.00E-02	2.57E-06	7.54E-04	7.87E-05	8.23E-05	37.74720182
2035	Annual	Mon-Sun	2.27E+09	Chippers/S	G4	15	Lawn and (	R	P	NHH	P	Sacramento	SV	SAC	1.14E+01	5.17E-01	4.30E-01	2.51E-05	1.24E-03	1.87E-05	2.10E-03	5.99E-08	1.76E-05	1.56E-06	1.42E-06	0.83481191
2035	Annual	Mon-Sun	2.27E+09	Chippers/S	G4	25	Lawn and (	C	P	NHH	P	Sacramento	SV	SAC	3.64E+01	1.26E+02	1.79E+02	1.45E-02	5.34E-01	9.38E-03	8.36E-01	2.12E-05	7.01E-03	5.57E-04	8.08E-04	352.9027739
2035	Annual	Mon-Sun	2.27E+09	Chippers/S	G4	25	Lawn and (	R	P	NHH	P	Sacramento	SV	SAC	6.48E+01	2.93E+00	4.10E+00	2.46E-04	1.22E-02	1.60E-04	1.95E-02	4.93E-07	1.63E-04	1.10E-05	1.39E-05	7.76488778
2035	Annual	Mon-Sun	2.27E+09	Commercia	G4	15	Lawn and (	C	N	NHH	NP	Sacramento	SV	SAC	4.79E+02	1.05E+03	5.60E+02	3.16E-02	1.63E+00	2.26E-02	2.73E+00	7.79E-05	1.53E-03	2.41E-03	1.78E-03	1083.916811
2035	Annual	Mon-Sun	2.27E+09	Commercia	G4	25	Lawn and (	C	N	NHH	NP	Sacramento	SV	SAC	2.36E+02	5.17E+02	4.90E+02	2.61E-02	1.47E+00	2.02E-02	2.33E+00	5.90E-05	1.30E-03	1.63E-03	1.47E-03	914.4500512
2035	Annual	Mon-Sun	2.27E+09	Commercia	G4	50	Lawn and (	U	N	NHH	NP	Sacramento	SV	SAC	9.52E+01	1.91E+02	3.20E+02	4.87E-03	4.82E-01	1.03E-02	2.31E+00	2.81E-05	1.77E-04	7.02E-04	2.75E-04	795.8325996
2035	Annual	Mon-Sun	2.27E+09	Commercia	G4	120	Lawn and (	U	N	NHH	NP	Sacramento	SV	SAC	6.29E-01	1.26E+00	3.09E+00	1.39E-05	7.50E-04	8.30E-05	2.86E-02	2.76E-07	2.21E-06	5.25E-06	7.83E-07	9.584679647
2035	Annual	Mon-Sun	2.27E+09	Other Lawr	G4	5	Lawn and (	C	N	NHH	NP	Sacramento	SV	SAC	4.21E+02	7.91E+01	1.62E+01	1.44E-03	4.07E-02	3.61E-04	8.68E-02	3.00E-06	2.28E-04	7.89E-05	8.12E-05	36.60474285
2035	Annual	Mon-Sun	2.27E+09	Other Lawr	G4	5	Lawn and (	R	N	NHH	NP	Sacramento	SV	SAC	1.29E+04	1.52E+02	3.38E+01	1.90E-03	9.68E-02	4.61E-04	1.67E-01	5.76E-06	3.28E-04	1.22E-04	1.07E-04	65.79161273
2035	Annual	Mon-Sun	2.27E+09	Other Lawr	G4	15	Lawn and (	C	N	NHH	NP	Sacramento	SV	SAC	1.87E+02	3.51E+01	1.57E+01	6.19E-04	4.56E-02	4.53E-04	7.71E-02	2.20E-06	3.06E-05	6.13E-05	3.50E-05	29.18210121
2035	Annual	Mon-Sun	2.27E+09	Other Lawr	G4	15	Lawn and (	R	N	NHH	NP	Sacramento	SV	SAC	5.73E+03	6.75E+01	3.00E+01	1.03E-03	8.76E-02	7.58E-04	1.48E-01	4.23E-06	5.11E-05	1.09E-04	5.80E-05	55.17247713
2035	Annual	Mon-Sun	2.27E+09	Other Lawr	G4	25	Lawn and (	C	N	NHH	NP	Sacramento	SV	SAC	3.95E+00	7.42E-01	7.24E-01	2.83E-05	2.17E-03	1.98E-05	3.46E-03	8.78E-08	1.37E-06	1.91E-06	1.60E-06	1.304552896
2035	Annual	Mon-Sun	2.27E+09	Other Lawr	G4	25	Lawn and (	R	N	NHH	NP	Sacramento	SV	SAC	1.22E+02	1.43E+00	1.40E+00	4.82E-05	4.20E-03	3.21E-05	6.69E-03	1.70E-07	2.31E-06	3.36E-06	2.73E-06	2.487035012
2035	Annual	Mon-Sun	2.27E+09	Other Lawr	G4	50	Lawn and (	U	N	NHH	NP	Sacramento	SV	SAC	2.86E-01	4.78E-02	9.96E-02	9.65E-07	6.09E-05	1.86E-06	8.62E-04	1.05E-08	6.60E-08	1.50E-07	5.46E-08	0.291556433
2035	Annual	Mon-Sun	2.27E+09	Other Lawr	G4	120	Lawn and (	U	N	NHH	NP	Sacramento	SV	SAC	6.87E-01	1.15E-01	6.18E-01	2.39E-06	1.01E-04	1.55E-05	5.79E-03	5.60E-08	4.49E-07	7.02E-07	1.35E-07	1.937125746
2035	Annual	Mon-Sun	2.27E+09	Pavers	D	25	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.00E+00	2.26E+00	1.91E+00	2.54E-05	8.66E-05	1.60E-04	2.10E-02	2.67E-07	5.99E-06	0.00E+00	2.29E-06	7.16195866
2035	Annual	Mon-Sun	2.27E+09	Pavers	D	50	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	5.82E+01	1.32E+02	1.69E+02	2.26E-03	1.71E-02	1.15E-02	1.85E+00	2.39E-05	2.50E-04	0.00E+00	2.04E-04	629.0674109
2035	Annual	Mon-Sun	2.27E+09	Pavers	D	120	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	6.87E+01	1.56E+02	4.91E+02	3.21E-03	3.57E-02	1.88E-02	5.38E+00	6.31E-05	6.63E-04	0.00E+00	2.89E-04	1806.66884
2035	Annual	Mon-Sun	2.27E+09	Pavers	D	175	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	4.27E+01	9.67E+01	5.64E+02	2.67E-03	3.62E-02	9.71E-03	6.20E+00	6.98E-05	4.77E-04	0.00E+00	2.41E-04	2073.907555
2035	Annual	Mon-Sun	2.27E+09	Pavers	D	250	Constructi	U	N	NHH	NP	Sacramento	SV	SAC	5.14E+00	1.17E+01	1.02E+02	4.41E-04	2.30E-03	1.54E-03	1.13E+00	1.27E-05	5.56E-05	0.00E+00	3.98E-05	378.2721444
2035	Annual	Mon-Sun	2.27E+09	Pavers	D	500	Constructi	U	N	NHH	NP	Sacramento	SV	SAC	5.28E+00	1.20E+01	1.26E+02	5.35E-04	2.73E-03	1.77E-03	1.39E+00	1.37E-05	6.57E-05	0.00E+00	4.83E-05	465.6593225
2035	Annual	Mon-Sun	2.27E+09	Plate Comp	D	15	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	2.15E+01	3.54E+01	6.97E+00	8.88E-05	4.66E-04	5.56E-04	7.62E-02	1.19E-06	2.17E-05	0.00E+00	8.01E-06	25.94971953
2035	Annual	Mon-Sun	2.27E+09	Rollers	D	15	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	4.04E+01	7.70E+01	2.22E+01	2.83E-04	1.48E-03	1.77E-03	2.43E-01	3.78E-06	6.93E-05	0.00E+00	2.55E-05	82.74426683
2035	Annual	Mon-Sun	2.27E+09	Rollers	D	25	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.69E+01	3.22E+01	1.96E+01	2.59E-04	8.84E-04	1.64E-03	2.15E-01	2.72E-06	6.11E-05	0.00E+00	2.34E-05	73.12090116
2035	Annual	Mon-Sun	2.27E+09	Rollers	D	50	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	5.26E+01	1.01E+02	1.20E+02	1.17E-03	1.08E-02	7.54E-03	1.31E+00	1.69E-05	8.98E-05	0.00E+00	1.05E-04	441.5094819
2035	Annual	Mon-Sun	2.27E+09	Rollers	D	120	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	2.82E+02	5.40E+02	1.45E+03	7.25E-03	1.02E-01	4.62E-02	1.59E+01	1.87E-04	1.00E-03	0.00E+00	6.54E-04	5325.865997
2035	Annual	Mon-Sun	2.27E+09	Rollers	D	175	Constructi	U	P	NHH	NP	Sacramento	SV	SAC	1.13E+02	2.17E+02	1.07E+03	3.80E-03	6.62E-02	1.08E-02	1.17E+01	1.32E-04	4.93E-04	0.00E+00	3.43E-04	3914.245973

2035	Annual	Mon-Sun	2.27E+09	Rollers	D	250	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	1.61E+01	3.08E+01	2.13E+02	7.18E-04	4.53E-03	1.93E-03	2.36E+00	2.65E-05	6.74E-05	0.00E+00	6.48E-05	785.6131143
2035	Annual	Mon-Sun	2.27E+09	Rollers	D	500	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	1.13E+01	2.16E+01	2.14E+02	7.17E-04	4.36E-03	1.84E-03	2.36E+00	2.32E-05	6.66E-05	0.00E+00	6.47E-05	788.4279703
2035	Annual	Mon-Sun	2.27E+09	Scrapers	D	120	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	2.60E+00	7.86E+00	3.37E+01	2.26E-04	2.49E-03	1.26E-03	3.69E-01	4.33E-06	4.17E-05	0.00E+00	2.04E-05	123.9447991
2035	Annual	Mon-Sun	2.27E+09	Scrapers	D	175	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	2.38E+01	7.20E+01	4.85E+02	2.35E-03	3.17E-02	7.73E-03	5.33E+00	5.99E-05	3.78E-04	0.00E+00	2.12E-04	1781.851469
2035	Annual	Mon-Sun	2.27E+09	Scrapers	D	250	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	2.32E+01	7.02E+01	6.65E+02	2.96E-03	1.52E-02	9.28E-03	7.34E+00	8.26E-05	3.38E-04	0.00E+00	2.67E-04	2454.948403
2035	Annual	Mon-Sun	2.27E+09	Scrapers	D	500	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	6.40E+01	1.93E+02	2.81E+03	1.24E-02	6.13E-02	3.68E-02	3.10E+01	3.04E-04	1.37E-03	0.00E+00	1.12E-03	10369.15737
2035	Annual	Mon-Sun	2.27E+09	Scrapers	D	750	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	2.56E+00	7.73E+00	1.94E+02	8.55E-04	4.24E-03	2.58E-03	2.14E+00	2.15E-05	9.54E-05	0.00E+00	7.71E-05	716.3404499
2035	Annual	Mon-Sun	2.27E+09	Paving Equ	D	25	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	1.74E+00	3.95E+00	2.27E+00	3.00E-05	1.03E-04	1.90E-04	2.49E-02	3.16E-07	7.09E-06	0.00E+00	2.71E-06	8.483047499
2035	Annual	Mon-Sun	2.27E+09	Paving Equ	D	50	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	1.47E+00	3.35E+00	3.68E+00	4.69E-05	3.65E-04	2.48E-04	4.01E-02	5.18E-07	4.98E-06	0.00E+00	4.23E-06	13.64112792
2035	Annual	Mon-Sun	2.27E+09	Paving Equ	D	120	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	2.12E+01	4.83E+01	1.20E+02	7.56E-04	8.69E-03	4.47E-03	1.32E+00	1.54E-05	1.49E-04	0.00E+00	6.82E-05	441.5001555
2035	Annual	Mon-Sun	2.27E+09	Paving Equ	D	175	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	9.95E+00	2.27E+01	1.04E+02	4.76E-04	6.66E-03	1.68E-03	1.15E+00	1.29E-05	8.10E-05	0.00E+00	4.30E-05	383.2279929
2035	Annual	Mon-Sun	2.27E+09	Paving Equ	D	250	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	2.81E+00	6.40E+00	3.54E+01	1.46E-04	7.85E-04	4.93E-04	3.91E-01	4.40E-06	1.72E-05	0.00E+00	1.32E-05	130.6364456
2035	Annual	Mon-Sun	2.27E+09	Surfacing E	D	50	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	1.34E+00	1.64E+00	1.06E+00	8.96E-06	8.61E-05	6.51E-05	1.16E-02	1.50E-07	8.51E-07	0.00E+00	8.09E-07	3.907407704
2035	Annual	Mon-Sun	2.27E+09	Surfacing E	D	120	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	2.67E-01	3.29E-01	9.54E-01	4.19E-06	6.42E-05	3.06E-05	1.05E-02	1.23E-07	7.10E-07	0.00E+00	3.78E-07	3.501276845
2035	Annual	Mon-Sun	2.27E+09	Surfacing E	D	175	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	2.00E-01	2.47E-01	9.61E-01	3.03E-06	5.71E-05	1.06E-05	1.06E-02	1.19E-07	4.72E-07	0.00E+00	2.73E-07	3.522826464
2035	Annual	Mon-Sun	2.27E+09	Surfacing E	D	250	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	4.01E-01	4.93E-01	3.00E+00	8.75E-06	6.14E-05	2.91E-05	3.32E-02	3.74E-07	9.83E-07	0.00E+00	7.89E-07	11.07216127
2035	Annual	Mon-Sun	2.27E+09	Surfacing E	D	500	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	3.34E+00	4.11E+00	4.11E+01	1.19E-04	8.14E-04	3.77E-04	4.54E-01	4.46E-06	1.32E-05	0.00E+00	1.07E-05	151.3277834
2035	Annual	Mon-Sun	2.27E+09	Surfacing E	D	750	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	4.89E-01	6.02E-01	9.43E+00	2.73E-05	1.87E-04	8.78E-05	1.04E-01	1.05E-06	3.04E-06	0.00E+00	2.46E-06	34.7595948
2035	Annual	Mon-Sun	2.27E+09	Signal Boar	D	15	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	1.88E+02	3.87E+02	1.09E+02	1.39E-03	7.28E-03	8.69E-03	1.19E+00	1.85E-05	3.39E-04	0.00E+00	1.25E-04	405.5754981
2035	Annual	Mon-Sun	2.27E+09	Signal Boar	D	50	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	9.35E-01	1.37E+00	2.26E+00	1.56E-05	1.78E-04	1.35E-04	2.48E-02	3.21E-07	8.93E-07	0.00E+00	1.41E-06	8.334823713
2035	Annual	Mon-Sun	2.27E+09	Signal Boar	D	120	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	1.53E+01	2.24E+01	8.18E+01	3.04E-04	5.45E-03	2.35E-03	8.99E-01	1.05E-05	2.87E-05	0.00E+00	2.74E-05	300.0808117
2035	Annual	Mon-Sun	2.27E+09	Signal Boar	D	175	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	9.48E+00	1.39E+01	9.76E+01	2.61E-04	5.76E-03	7.03E-04	1.07E+00	1.21E-05	2.70E-05	0.00E+00	2.35E-05	357.7273632
2035	Annual	Mon-Sun	2.27E+09	Signal Boar	D	250	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	2.00E+00	2.94E+00	3.39E+01	8.86E-05	6.85E-04	2.19E-04	3.75E-01	4.22E-06	7.75E-06	0.00E+00	8.00E-06	124.8255301
2035	Annual	Mon-Sun	2.27E+09	Trenchers	D	15	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	5.01E+00	8.49E+00	3.28E+00	4.18E-05	2.19E-04	2.62E-04	3.59E-02	5.59E-07	1.02E-05	0.00E+00	3.77E-06	12.21576322
2035	Annual	Mon-Sun	2.27E+09	Trenchers	D	25	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	5.28E+00	8.94E+00	1.34E+01	1.77E-04	6.05E-04	1.12E-03	1.47E-01	1.87E-06	4.19E-05	0.00E+00	1.60E-05	50.0886602
2035	Annual	Mon-Sun	2.27E+09	Trenchers	D	50	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	2.01E+02	3.44E+02	5.18E+02	6.78E-03	5.03E-02	3.53E-02	5.65E+00	7.30E-05	8.41E-04	0.00E+00	6.12E-04	1924.453266
2035	Annual	Mon-Sun	2.27E+09	Trenchers	D	120	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	2.72E+02	4.66E+02	1.38E+03	8.85E-03	9.86E-02	5.45E-02	1.51E+01	1.77E-04	2.05E-03	0.00E+00	7.98E-04	5068.065768
2035	Annual	Mon-Sun	2.27E+09	Trenchers	D	175	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	2.98E+01	5.10E+01	3.33E+02	1.56E-03	2.10E-02	6.24E-03	3.66E+00	4.12E-05	3.11E-04	0.00E+00	1.41E-04	1225.30835
2035	Annual	Mon-Sun	2.27E+09	Trenchers	D	250	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	2.67E+00	4.57E+00	4.60E+01	1.94E-04	1.03E-03	7.60E-04	5.09E-01	5.73E-06	2.80E-05	0.00E+00	1.75E-05	170.0491931
2035	Annual	Mon-Sun	2.27E+09	Trenchers	D	500	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	3.41E+00	5.83E+00	8.20E+01	3.40E-04	1.80E-03	1.26E-03	9.06E-01	8.89E-06	4.74E-05	0.00E+00	3.07E-05	302.7587384
2035	Annual	Mon-Sun	2.27E+09	Trenchers	D	750	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	9.78E-02	1.67E-01	4.44E+00	1.84E-05	9.72E-05	6.92E-05	4.90E-02	4.93E-07	2.58E-06	0.00E+00	1.66E-06	16.38520589
2035	Annual	Mon-Sun	2.27E+09	Bore/Drill f	D	15	Constructic	U	P	NHH	P	Sacramento	SV	SAC	6.68E-01	1.49E+00	7.01E-01	8.94E-06	4.69E-05	5.60E-05	7.68E-03	1.19E-07	2.19E-06	0.00E+00	8.06E-07	2.612413281
2035	Annual	Mon-Sun	2.27E+09	Bore/Drill f	D	25	Constructic	U	P	NHH	P	Sacramento	SV	SAC	2.00E+00	4.46E+00	3.24E+00	4.29E-05	1.47E-04	2.71E-04	3.56E-02	4.52E-07	1.01E-05	0.00E+00	3.87E-06	12.12402629
2035	Annual	Mon-Sun	2.27E+09	Bore/Drill f	D	50	Constructic	U	P	NHH	P	Sacramento	SV	SAC	8.75E+00	2.01E+01	2.84E+01	1.91E-04	2.21E-03	1.65E-03	3.11E-01	4.02E-06	7.32E-06	0.00E+00	1.72E-05	104.5021953
2035	Annual	Mon-Sun	2.27E+09	Bore/Drill f	D	120	Constructic	U	P	NHH	P	Sacramento	SV	SAC	2.68E+01	6.16E+01	2.16E+02	7.66E-04	1.43E-02	5.89E-03	2.37E+00	2.78E-05	5.31E-05	0.00E+00	6.91E-05	791.3984839
2035	Annual	Mon-Sun	2.27E+09	Bore/Drill f	D	175	Constructic	U	P	NHH	P	Sacramento	SV	SAC	6.21E+00	1.42E+01	9.12E+01	2.24E-04	5.37E-03	4.82E-04	1.00E+00	1.13E-05	1.86E-05	0.00E+00	2.02E-05	334.1192012
2035	Annual	Mon-Sun	2.27E+09	Bore/Drill f	D	250	Constructic	U	N	NHH	P	Sacramento	SV	SAC	5.34E+00	1.23E+01	1.04E+02	2.57E-04	2.10E-03	5.53E-04	1.15E+00	1.30E-05	2.03E-05	0.00E+00	2.32E-05	383.2193645
2035	Annual	Mon-Sun	2.27E+09	Bore/Drill f	D	500	Constructic	U	N	NHH	P	Sacramento	SV	SAC	1.19E+01	2.73E+01	3.83E+02	9.47E-04	7.51E-03	2.04E-03	4.24E+00	4.16E-05	7.49E-05	0.00E+00	8.55E-05	1411.156685
2035	Annual	Mon-Sun	2.27E+09	Bore/Drill f	D	750	Constructic	U	N	NHH	P	Sacramento	SV	SAC	1.52E+00	3.48E+00	9.65E+01	2.39E-04	1.89E-03	5.13E-04	1.07E+00	1.07E-05	1.89E-05	0.00E+00	2.15E-05	355.4681997
2035	Annual	Mon-Sun	2.27E+09	Bore/Drill f	D	1000	Constructic	U	N	NHH	P	Sacramento	SV	SAC	2.54E+00	5.82E+00	2.44E+02	6.03E-04	4.78E-03	1.13E-02	2.70E+00	2.72E-05	1.00E-04	0.00E+00	5.44E-05	898.9744874
2035	Annual	Mon-Sun	2.27E+09	Excavators	D	25	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	2.47E+00	9.46E+00	7.08E+00	9.37E-05	3.20E-04	5.92E-04	7.77E-02	9.86E-07	2.21E-05	0.00E+00	8.46E-06	26.46576078
2035	Annual	Mon-Sun	2.27E+09	Excavators	D	50	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	9.30E+01	3.59E+02	4.12E+02	4.52E-03	4.18E-02	2.63E-02	4.49E+00	5.80E-05	1.94E-04	0.00E+00	4.08E-04	1522.466386
2035	Annual	Mon-Sun	2.27E+09	Excavators	D	120	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	2.53E+02	9.76E+02	3.27E+03	1.79E-02	2.40E-01	9.79E-02	3.59E+01	4.21E-04	1.39E-03	0.00E+00	1.62E-03	12023.62724
2035	Annual	Mon-Sun	2.27E+09	Excavators	D	175	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	4.87E+02	1.88E+03	9.60E+03	3.67E-02	6.24E-01	6.78E-02	1.06E+02	1.19E-03	2.95E-03	0.00E+00	3.32E-03	35229.51337
2035	Annual	Mon-Sun	2.27E+09	Excavators	D	250	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	1.98E+02	7.65E+02	5.49E+03	2.09E-02	1.22E-01	3.65E-02	6.07E+01	6.83E-04	1.41E-03	0.00E+00	1.88E-03	20257.04733
2035	Annual	Mon-Sun	2.27E+09	Excavators	D	500	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	1.43E+02	5.52E+02	5.83E+03	2.22E-02	1.24E-01	3.83E-02	6.45E+01	6.33E-04	1.49E-03	0.00E+00	2.00E-03	21523.97298
2035	Annual	Mon-Sun	2.27E+09	Excavators	D	750	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	7.66E-01	2.96E+00	5.18E+01	1.97E-04	1.10E-03	3.41E-04	5.72E-01	5.76E-06	1.33E-05	0.00E+00	1.78E-05	191.1032804
2035	Annual	Mon-Sun	2.27E+09	Concrete/li	D	25	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	2.67E-01	4.34E-01	3.25E-01	4.31E-06	1.47E-05	2.72E-05	3.57E-03	4.53E-08	1.02E-06	0.00E+00	3.89E-07	1.216106765
2035	Annual	Mon-Sun	2.27E+09	Concrete/li	D	50	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	2.34E+00	3.72E+00	5.12E+00	3.71E-05	4.12E-04	3.07E-04	5.61E-02	7.25E-07	2.09E-06	0.00E+00	3.35E-06	18.87073669
2035	Annual	Mon-Sun	2.27E+09	Concrete/li	D	120	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	4.07E+00	6.48E+00	2.19E+01	8.46E-05	1.47E-03	6.30E-04	2.40E-01	2.82E-06	7.95E-06	0.00E+00	7.63E-06	80.14121023
2035	Annual	Mon-Sun	2.27E+09	Concrete/li	D	175	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	1.34E-01	2.12E-01	1.55E+00	4.30E-06	9.20E-05	1.12E-05	1.70E-02	1.91E-07	4.41E-07	0.00E+00	3.88E-07	5.663427751
2035	Annual	Mon-Sun	2.27E+09	Cement an	D	15	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	3.41E+01	2.81E+01	8.10E+00	1.03E-04	5.41E-04	6.46E-04	8.86E-02	1.38E-06	2.52E-05	0.00E+00	9.31E-06	30.16753032
2035	Annual	Mon-Sun	2.27E+09	Cement an	D	25	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	3.07E+00	2.53E+00	2.02E+00	2.67E-05	9.13E-05	1.69E-04	2.22E-02	2.81E-07	6.31E-06	0.00E+00	2.41E-06	7.55095025
2035	Annual	Mon-Sun	2.27E+09	Cranes	D	50	Constructic	U	P	NHH	P	Sacramento	SV	SAC	2.27E+00	7.95E+00	8.45E+00	9.74E-05	8.58E-04	5.51E-04	9.21E-02	1.19E-06	6.47E-06	0.00E+00	8.78E-06	31.26886746
2035	Annual	Mon-Sun	2.27E+09	Cranes	D	120	Constructic	U	P	NHH	P	Sacramento	SV	SAC	2.49E+01	8.72E+01	1.99E+02	1.15E-03	1.46E-02	6.45E-03	2.19E+00	2.56E-05	1.39E-04	0.00E+00	1.04E-04	732.7734288
2035	Annual	Mon-Sun	2.27E+09	Cranes	D	175	Constructic	U	P	NHH	P	Sacramento	SV	SAC	2.49E+01	8.72E+01	3.19E+02	1.31E-03	2.07E-02	3.20E-03	3.50E+00	3.94E-05	1.48E-04	0.00E+00	1.18E-04	1169.72959
2035	Annual	Mon-Sun	2.27E+09	Cranes	D	250	Constructic	U	N	NHH	P	Sacramento	SV	SAC	4.83E+01	1.69E+02	8.57E+02	3.39E-03	1.91E-02	7.74E-03	9.47E+00	1.07E-04	2.80E-04	0.00E+00	3.06E-04	3163.906701
2035	Annual	Mon-Sun	2.27E+09	Cranes	D	500	Constructic	U	N	NHH	P	Sacramento	SV	SAC	1.77E+01	6.20E+01	5.04E+02	1.99E-03	1.07E-02	4.34E-03	5.58E+00	5.47E-05	1.63E-04	0.00E+00	1.79E-04	1862.098968
2035	Annual	Mon-Sun	2.27E+09	Cranes	D	750	Constructic	U	N	NHH	P	Sacramento	SV	SAC	3.18E+00	1.11E+01	1.52E+02	6.01E-04	3.22E-03	1.33E-03	1.68E+00	1.69E-05	4.94E-05	0.00E+00	5.42E-05	562.59547
2035	Annual	Mon-Sun	2.27E+09	Cranes	D	9999	Constructic	U	N	NHH	P	Sacramento	SV	SAC	3.99E+00	1.40E+01	6.13E+02	2.50E-03	1.30E-02	3.12E-02	6.77E+00	6.81E-05	3.81E-04	0.00E+00	2.26E-04	2262.340139
2035	Annual	Mon-Sun	2.27E+09	Graders	D	50	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	9.35E-01	2.41E+00	3.04E+00	3.46E-05	3.02E-04	1.96E-04	3.31E-02	4.28E-07	2.22E-06	0.00E+00	3.12E-06	11.23428614
2035	Annual	Mon-Sun	2.27E+09	Graders	D	120	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	6.24E+01	1.61E+02	5.48E+02	3.10E-03	3.99E-02	1.76E-02	6.01E+00	7.05E-05	3.69E-04	0.00E+00	2.80E-04	2015.061151
2035	Annual	Mon-Sun	2.27E+09	Graders	D	175	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	2.13E+02	5.48E+02	3.09E+03	1.23E-02	1.99E-01	3.03E-02	3.40E+01	3.82E-04	1.38E-03	0.00E+00	1.11E-03	11339.25889
2035	Annual	Mon-Sun	2.27E+09	Graders	D	250	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	1.32E+02	3.40E+02	2.65E+03	1.01E-02	5.86E-02	2.33E-02	2.93E+01	3.29E-04	8.43E-04	0.00E+00	9.11E-04	9767.999329
2035	Annual	Mon-Sun	2.27E+09	Graders	D	500	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	3.74E+00	9.62E+00	9.98E+01	3.79E-04	2.10E-03	8.43E-04	1.10E+00	1.08E-05	3.12E-05	0.00E+00	3.42E-05	368.3419674
2035	Annual	Mon-Sun	2.27E+09	Graders	D	750	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	4.89E-02	1.26E-01	2.76E+00	1.05E-05	5.82E-05	2.36E-05	3.05E-02	3.07E-07	8.68E-07	0.00E+00	9.47E-07	10.19181265
2035	Annual	Mon-Sun	2.27E+09	Off-Highwa	D	175	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	4.34E+00	2.35E+01	1.34E+02	5.46E-04	8.84E-03	9.81E-04	1.47E+00	1.65E-05	4.34E-05	0.00E+00	4.92E-05	490.1306031
2035	Annual	Mon-Sun	2.27E+09	Off-Highwa	D	250	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	3.21E+01	1.73E+02	1.31E+03	5.29E-03	2.96E-02	8.97E-03	1.44E+01	1.62E-04	3.48E-04	0.00E+00	4.78E-04	4818.44568
2035	Annual	Mon-Sun	2.27E+09	Off-Highwa	D	500	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	4.51E+01	2.44E+02	3.01E+03	1.22E-02	6.46E-02	2.04E-02	3.32E+01	3.26E-04	8.01E-04	0.00E+00	1.10E-03	11096.34736
2035	Annual	Mon-Sun	2.27E+09	Off-Highwa	D	750	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	1.03E+01	5.54E+01	1.11E+03	4.49E-03	2.38E-02	7.51E-03	1.22E+01	1.23E-04	2.95E-04	0.00E+00	4.05E-04	4086.58446
2035	Annual	Mon-Sun	2.27E+09	Off-Highwa	D	1000	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	4.81E+00	2.60E+01	7.33E+02	2.99E-03	1.58E-02	3.66E-02	8.11E+00	8.15E-05	4.07E-04	0.00E+00	2.70E-04	2707.927194
2035	Annual	Mon-Sun	2.27E+09	Crushing/P	D	50	Constructic	U	P	NHH	P	Sacramento	SV	SAC	1.07E+01	2.80E+01	5.63E+01	5.28E-04	5.22E-03	3.51E-03	6.15E-01	7.95E-06	2.52E-05	0.00E+00	4.77E-05	207.9212169
2035	Annual	Mon-Sun	2.27E+09	Crushing/P	D	120	Constructic	U	P	NHH	P	Sacramento	SV	SAC	3.01E+01	7.89E+01	2.99E+02	1.44E-03	2.11E-02	8.83E-03	3.28E+00	3.84E-05	1.18E-04	0.00E+00	1.30E-04	1096.13769
2035	Annual	Mon-Sun	2.27E+09	Crushing/P	D	175	Constructic	U	P	NHH	P	Sacramento	SV	SAC	1.28E+01	3.34E+01	2.54E+02	8.66E-04	1.59E-02	1.88E-03	2.79E+00	3.14E-05	7.58E-05	0.00E+00	7.81E-05	931.0675803
2035	Annual	Mon-Sun	2.27E+09	Crushing/P	D	250	Constructic	U	N	NHH	P	Sacramento	SV	SAC	1.27E+00	3.32E+00	3.67E+01	1.23E-04	7.89E-04	2.44E-04	4.06E-01	4.57E-06	9.01E-06	0.00E+00	1.11E-05	135.3878948

2035	Annual	Mon-Sun	2.27E+09	Crushing/P	D	500	Constructic	U	N	NHH	P	Sacramento	SV	SAC	7.15E+00	1.87E+01	3.16E+02	1.06E-03	6.50E-03	2.08E-03	3.49E+00	3.43E-05	7.75E-05	0.00E+00	9.57E-05	1165.018868
2035	Annual	Mon-Sun	2.27E+09	Crushing/P	D	750	Constructic	U	N	NHH	P	Sacramento	SV	SAC	8.15E-02	2.13E-01	5.68E+00	1.91E-05	1.17E-04	3.74E-05	6.28E-02	6.31E-07	1.39E-06	0.00E+00	1.72E-06	20.93448388
2035	Annual	Mon-Sun	2.27E+09	Crushing/P	D	9999	Constructic	U	N	NHH	P	Sacramento	SV	SAC	8.15E-02	2.13E-01	1.26E+01	4.36E-05	2.60E-04	6.09E-04	1.39E-01	1.40E-06	6.49E-06	0.00E+00	3.93E-06	46.50388448
2035	Annual	Mon-Sun	2.27E+09	Rough Terr	D	50	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	7.41E+00	2.29E+01	3.56E+01	3.56E-04	3.42E-03	2.23E-03	3.88E-01	5.02E-06	1.56E-05	0.00E+00	3.21E-05	131.2743948
2035	Annual	Mon-Sun	2.27E+09	Rough Terr	D	120	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	3.55E+02	1.10E+03	3.12E+03	1.58E-02	2.24E-01	9.23E-02	3.43E+01	4.02E-04	1.23E-03	0.00E+00	1.43E-03	11472.55592
2035	Annual	Mon-Sun	2.27E+09	Rough Terr	D	175	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	4.55E+01	1.41E+02	7.99E+02	2.85E-03	5.09E-02	5.63E-03	8.78E+00	9.88E-05	2.35E-04	0.00E+00	2.57E-04	2929.787854
2035	Annual	Mon-Sun	2.27E+09	Rough Terr	D	250	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	2.54E+00	7.85E+00	6.06E+01	2.14E-04	1.32E-03	3.94E-04	6.70E-01	7.54E-06	1.49E-05	0.00E+00	1.93E-05	223.5323773
2035	Annual	Mon-Sun	2.27E+09	Rough Terr	D	500	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	1.67E+00	5.17E+00	5.99E+01	2.11E-04	1.25E-03	3.87E-04	6.62E-01	6.50E-06	1.47E-05	0.00E+00	1.91E-05	220.9149063
2035	Annual	Mon-Sun	2.27E+09	Rubber Tire	D	25	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	9.35E-01	2.45E+00	1.89E+00	2.50E-05	8.54E-05	1.58E-04	2.08E-02	2.63E-07	5.91E-06	0.00E+00	2.26E-06	7.06916597
2035	Annual	Mon-Sun	2.27E+09	Rubber Tire	D	50	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	1.82E+01	4.81E+01	6.86E+01	7.58E-04	6.75E-03	4.39E-03	7.48E-01	9.67E-06	4.74E-05	0.00E+00	6.84E-05	253.5961236
2035	Annual	Mon-Sun	2.27E+09	Rubber Tire	D	120	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	4.94E+02	1.31E+03	3.51E+03	1.94E-02	2.54E-01	1.11E-01	3.84E+01	4.51E-04	2.24E-03	0.00E+00	1.75E-03	12884.64981
2035	Annual	Mon-Sun	2.27E+09	Rubber Tire	D	175	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	2.78E+02	7.36E+02	3.56E+03	1.38E-02	2.28E-01	3.32E-02	3.91E+01	4.40E-04	1.52E-03	0.00E+00	1.25E-03	13058.75562
2035	Annual	Mon-Sun	2.27E+09	Rubber Tire	D	250	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	2.77E+02	7.32E+02	4.93E+03	1.84E-02	1.08E-01	4.18E-02	5.45E+01	6.13E-04	1.50E-03	0.00E+00	1.66E-03	18190.89534
2035	Annual	Mon-Sun	2.27E+09	Rubber Tire	D	500	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	1.15E+02	3.05E+02	3.26E+03	1.21E-02	6.84E-02	2.65E-02	3.61E+01	3.54E-04	9.78E-04	0.00E+00	1.09E-03	12043.45847
2035	Annual	Mon-Sun	2.27E+09	Rubber Tire	D	750	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	1.97E+00	5.22E+00	1.14E+02	4.26E-04	2.40E-03	9.38E-04	1.27E+00	1.27E-05	3.45E-05	0.00E+00	3.84E-05	422.2924572
2035	Annual	Mon-Sun	2.27E+09	Rubber Tire	D	1000	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	2.12E-01	5.60E-01	1.50E+01	5.67E-05	3.16E-04	7.55E-04	1.66E-01	1.67E-06	8.84E-06	0.00E+00	5.12E-06	55.44568097
2035	Annual	Mon-Sun	2.27E+09	Rubber Tire	D	175	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	6.68E-01	2.94E+00	1.74E+01	1.08E-04	1.17E-03	4.52E-04	1.90E-01	2.14E-06	2.39E-05	0.00E+00	9.76E-06	63.90537108
2035	Annual	Mon-Sun	2.27E+09	Rubber Tire	D	250	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	1.64E+01	7.21E+01	5.99E+02	3.33E-03	1.47E-02	1.40E-02	6.61E+00	7.44E-05	5.37E-04	0.00E+00	3.00E-04	2215.427365
2035	Annual	Mon-Sun	2.27E+09	Rubber Tire	D	500	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	2.52E+01	1.11E+02	1.33E+03	7.21E-03	3.30E-02	2.87E-02	1.47E+01	1.44E-04	1.11E-03	0.00E+00	6.51E-04	4919.657949
2035	Annual	Mon-Sun	2.27E+09	Rubber Tire	D	750	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	2.17E+00	9.55E+00	1.72E+02	9.36E-04	4.28E-03	3.78E-03	1.90E+00	1.91E-05	1.46E-04	0.00E+00	8.45E-05	637.6341738
2035	Annual	Mon-Sun	2.27E+09	Rubber Tire	D	1000	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	1.47E-01	6.46E-01	1.73E+01	9.67E-05	4.41E-04	1.08E-03	1.91E-01	1.92E-06	2.03E-05	0.00E+00	8.73E-06	64.0000995
2035	Annual	Mon-Sun	2.27E+09	Tractors/Lc	D	25	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	1.88E+01	4.86E+01	3.51E+01	4.65E-04	1.59E-03	2.94E-03	3.86E-01	4.89E-06	1.10E-04	0.00E+00	4.20E-05	131.3364049
2035	Annual	Mon-Sun	2.27E+09	Tractors/Lc	D	50	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	1.13E+02	2.94E+02	4.08E+02	4.04E-03	3.88E-02	2.55E-02	4.46E+00	5.76E-05	1.77E-04	0.00E+00	3.65E-04	1508.043647
2035	Annual	Mon-Sun	2.27E+09	Tractors/Lc	D	120	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	1.51E+03	3.93E+03	9.26E+03	4.62E-02	6.62E-01	2.72E-01	1.02E+02	1.19E-03	3.68E-03	0.00E+00	4.17E-03	34018.74759
2035	Annual	Mon-Sun	2.27E+09	Tractors/Lc	D	175	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	1.12E+02	2.94E+02	1.35E+03	4.70E-03	8.57E-02	9.11E-03	1.49E+01	1.67E-04	3.93E-04	0.00E+00	4.24E-04	4959.72047
2035	Annual	Mon-Sun	2.27E+09	Tractors/Lc	D	250	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	3.63E+01	9.49E+01	7.37E+02	2.54E-03	1.60E-02	4.75E-03	8.14E+00	9.16E-05	1.80E-04	0.00E+00	2.29E-04	2716.8875
2035	Annual	Mon-Sun	2.27E+09	Tractors/Lc	D	500	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	5.86E+01	1.53E+02	2.39E+03	8.23E-03	4.95E-02	1.51E-02	2.64E+01	2.97E-04	5.81E-04	0.00E+00	7.43E-04	8805.125472
2035	Annual	Mon-Sun	2.27E+09	Tractors/Lc	D	750	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	9.86E+00	2.58E+01	6.02E+02	2.08E-03	1.25E-02	3.83E-03	6.66E+00	7.49E-05	1.47E-04	0.00E+00	1.87E-04	2220.756565
2035	Annual	Mon-Sun	2.27E+09	Crawler Tra	D	50	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	9.35E-01	2.64E+00	3.01E+00	4.09E-05	3.17E-04	2.05E-04	3.28E-02	4.24E-07	3.86E-06	0.00E+00	3.69E-06	11.17709753
2035	Annual	Mon-Sun	2.27E+09	Crawler Tra	D	120	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	5.30E+02	1.50E+03	4.49E+03	2.99E-02	3.33E-01	1.66E-01	4.92E+01	5.77E-04	5.27E-03	0.00E+00	2.70E-03	16525.04815
2035	Annual	Mon-Sun	2.27E+09	Crawler Tra	D	175	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	1.80E+02	5.06E+02	2.79E+03	1.34E-02	1.83E-01	4.29E-02	3.07E+01	3.45E-04	2.09E-03	0.00E+00	1.21E-03	10256.15685
2035	Annual	Mon-Sun	2.27E+09	Crawler Tra	D	250	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	1.54E+02	4.35E+02	3.27E+03	1.46E-02	7.52E-02	4.43E-02	3.61E+01	4.06E-04	1.66E-03	0.00E+00	1.32E-03	12073.3958
2035	Annual	Mon-Sun	2.27E+09	Crawler Tra	D	500	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	1.06E+02	2.98E+02	3.49E+03	1.54E-02	7.79E-02	4.47E-02	3.86E+01	3.79E-04	1.70E-03	0.00E+00	1.39E-03	12908.71398
2035	Annual	Mon-Sun	2.27E+09	Crawler Tra	D	750	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	1.30E+00	3.68E+00	7.72E+01	3.41E-04	1.72E-03	9.99E-04	8.54E-01	8.58E-06	3.78E-05	0.00E+00	3.08E-05	285.3540386
2035	Annual	Mon-Sun	2.27E+09	Crawler Tra	D	1000	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	1.30E+00	3.67E+00	1.09E+02	4.93E-04	2.46E-03	5.93E-03	1.21E+00	1.21E-05	8.75E-05	0.00E+00	4.44E-05	403.7997314
2035	Annual	Mon-Sun	2.27E+09	Skid Steer I	D	25	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	1.28E+02	2.93E+02	1.84E+02	2.44E-03	8.32E-03	1.54E-02	2.02E+00	2.56E-05	5.76E-04	0.00E+00	2.20E-04	688.4217425
2035	Annual	Mon-Sun	2.27E+09	Skid Steer I	D	50	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	1.16E+03	2.70E+03	3.14E+03	2.49E-02	2.66E-01	1.87E-01	3.44E+01	4.44E-04	9.16E-04	0.00E+00	2.25E-03	11581.73205
2035	Annual	Mon-Sun	2.27E+09	Skid Steer I	D	120	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	6.09E+02	1.41E+03	2.75E+03	1.12E-02	1.88E-01	7.66E-02	3.02E+01	3.54E-04	7.52E-04	0.00E+00	1.01E-03	10084.77344
2035	Annual	Mon-Sun	2.27E+09	Off-Highwa	D	120	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	6.68E-02	2.02E-01	8.64E-01	6.98E-06	6.49E-05	3.92E-05	9.46E-03	1.11E-07	1.79E-06	0.00E+00	6.30E-07	3.187261863
2035	Annual	Mon-Sun	2.27E+09	Off-Highwa	D	175	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	8.17E+01	2.47E+02	1.47E+03	8.54E-03	9.69E-02	3.56E-02	1.61E+01	1.81E-04	1.86E-03	0.00E+00	7.71E-04	5396.967454
2035	Annual	Mon-Sun	2.27E+09	Off-Highwa	D	250	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	7.72E+01	2.34E+02	1.38E+03	7.18E-03	3.30E-02	2.99E-02	1.52E+01	1.71E-04	1.14E-03	0.00E+00	6.48E-04	5094.197279
2035	Annual	Mon-Sun	2.27E+09	Off-Highwa	D	750	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	8.18E+00	2.47E+01	6.36E+02	3.24E-03	1.53E-02	1.29E-02	7.02E+00	7.06E-05	4.97E-04	0.00E+00	2.92E-04	2350.939015
2035	Annual	Mon-Sun	2.27E+09	Off-Highwa	D	1000	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	8.64E-01	2.61E+00	9.61E+01	5.04E-04	2.37E-03	5.82E-03	1.06E+00	1.07E-05	1.06E-04	0.00E+00	4.55E-05	355.5088633
2035	Annual	Mon-Sun	2.27E+09	Dumpers/T	D	25	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	1.60E+00	2.91E+00	1.01E+00	1.34E-05	4.56E-05	8.45E-05	1.11E-02	1.41E-07	3.16E-06	0.00E+00	1.21E-06	3.775439348
2035	Annual	Mon-Sun	2.27E+09	Other Cons	D	15	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	2.21E+01	4.18E+01	1.93E+01	2.46E-04	1.29E-03	1.54E-03	2.11E-01	3.29E-06	6.02E-05	0.00E+00	2.22E-05	71.87524403
2035	Annual	Mon-Sun	2.27E+09	Other Cons	D	25	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	3.74E+00	7.08E+00	4.26E+00	5.64E-05	1.92E-04	3.56E-04	4.67E-02	5.93E-07	1.33E-05	0.00E+00	5.09E-06	15.91740552
2035	Annual	Mon-Sun	2.27E+09	Other Cons	D	50	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	5.74E+00	1.10E+01	1.40E+01	1.11E-04	1.18E-03	8.44E-04	1.53E-01	1.98E-06	5.09E-06	0.00E+00	9.99E-06	51.6804724
2035	Annual	Mon-Sun	2.27E+09	Other Cons	D	120	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	9.48E+00	1.81E+01	6.67E+01	2.75E-04	4.55E-03	1.90E-03	7.32E-01	8.59E-06	2.20E-05	0.00E+00	2.48E-05	244.5088953
2035	Annual	Mon-Sun	2.27E+09	Other Cons	D	175	Constructic	U	P	NHH	NP	Sacramento	SV	SAC	1.31E+01	2.50E+01	1.21E+02	3.51E-04	7.33E-03	7.84E-04	1.33E+00	1.50E-05	3.13E-05	0.00E+00	3.17E-05	443.4073668
2035	Annual	Mon-Sun	2.27E+09	Other Cons	D	500	Constructic	U	N	NHH	NP	Sacramento	SV	SAC	3.04E+01	5.81E+01	6.67E+02	1.92E-03	1.34E-02	4.03E-03	7.37E+00	7.24E-05	1.49E-04	0.00E+00	1.73E-04	2456.680932
2035	Annual	Mon-Sun	2.27E+09	Leaf Blowe	D	15	Lawn and (	U	N	NHH	P	Sacramento	SV	SAC	4.58E-01	1.50E-01	2.07E-02	2.35E-07	1.38E-06	1.65E-06	2.26E-04	3.52E-09	6.44E-08	0.00E+00	2.12E-08	0.076764284
2035	Annual	Mon-Sun	2.27E+09	Leaf Blowe	D	120	Lawn and (	U	N	NHH	P	Sacramento	SV	SAC	4.01E-01	1.32E-01	2.91E-01	6.22E-07	1.77E-05	7.94E-06	3.20E-03	3.75E-08	7.71E-08	0.00E+00	5.61E-08	1.064541899
2035	Annual	Mon-Sun	2.27E+09	Leaf Blowe	D	250	Lawn and (	U	N	NHH	P	Sacramento	SV	SAC	1.14E-01	3.76E-02	1.70E-01	2.60E-07	3.14E-06	1.05E-06	1.89E-03	2.12E-08	3.40E-08	0.00E+00	2.35E-08	0.626282804
2035	Annual	Mon-Sun	2.27E+09	Lawn & Ga	D	15	Lawn and (	U	N	NHH	NP	Sacramento	SV	SAC	1.10E+03	1.65E+03	6.98E+02	7.92E-03	4.67E-02	5.57E-02	7.64E+00	1.19E-04	2.18E-03	0.00E+00	7.15E-04	2592.902704
2035	Annual	Mon-Sun	2.27E+09	Lawn & Ga	D	25	Lawn and (	U	N	NHH	NP	Sacramento	SV	SAC	8.64E+02	1.29E+03	8.38E+02	1.11E-02	3.79E-02	7.01E-02	9.20E+00	1.17E-04	2.62E-03	0.00E+00	1.00E-03	3133.590805
2035	Annual	Mon-Sun	2.27E+09	Chippers/S	D	25	Lawn and (	U	P	NHH	P	Sacramento	SV	SAC	5.15E-01	6.56E-01	6.01E-01	7.96E-06	2.72E-05	5.03E-05	6.60E-03	8.37E-08	1.88E-06	0.00E+00	7.18E-07	2.248175062
2035	Annual	Mon-Sun	2.27E+09	Chippers/S	D	120	Lawn and (	U	P	NHH	P	Sacramento	SV	SAC	1.42E+01	1.81E+01	6.24E+01	2.17E-04	4.10E-03	1.78E-03	6.86E-01	8.05E-06	2.17E-05	0.00E+00	1.96E-05	228.8869033
2035	Annual	Mon-Sun	2.27E+09	Chippers/S	D	175	Lawn and (	U	P	NHH	P	Sacramento	SV	SAC	9.73E-01	1.24E+00	7.42E+00	1.86E-05	4.32E-04	5.33E-05	8.16E-02	9.18E-07	2.07E-06	0.00E+00	1.68E-06	27.16375101
2035	Annual	Mon-Sun	2.27E+09	Chippers/S	D	250	Lawn and (	U	N	NHH	P	Sacramento	SV	SAC	2.29E-01	2.92E-01	2.93E+00	7.21E-06	5.84E-05	1.90E-05	3.24E-02	3.65E-07	6.72E-07	0.00E+00	6.51E-07	10.78415285
2035	Annual	Mon-Sun	2.27E+09	Chippers/S	D	500	Lawn and (	U	N	NHH	P	Sacramento	SV	SAC	2.12E+00	2.70E+00	3.01E+01	7.41E-05	5.85E-04	1.93E-04	3.33E-01	3.27E-06	6.90E-06	0.00E+00	6.68E-06	110.8370432
2035	Annual	Mon-Sun	2.27E+09	Chippers/S	D	750	Lawn and (	U	N	NHH	P	Sacramento	SV	SAC	2.40E+00	3.06E+00	8.22E+01	2.02E-04	1.60E-03	5.29E-04	9.10E-01	9.15E-06	1.89E-05	0.00E+00	1.83E-05	302.8879635
2035	Annual	Mon-Sun	2.27E+09	Chippers/S	D	1000	Lawn and (	U	N	NHH	P	Sacramento	SV	SAC	4.58E+00	5.82E+00	2.23E+02	5.50E-04	4.33E-03	1.04E-02	2.46E+00	2.48E-05	1.02E-04	0.00E+00	4.97E-05	820.2103378
2035	Annual	Mon-Sun	2.27E+09	Commercia	D	15	Lawn and (	U	N	NHH	NP	Sacramento	SV	SAC	2.78E+01	8.14E+01	3.58E+01	4.07E-04	2.40E-03	2.86E-03	3.92E-01	6.11E-06	1.12E-04	0.00E+00	3.67E-05	133.1603908
2035	Annual	Mon-Sun	2.27E+09	Commercia	D	25	Lawn and (	U	N	NHH	NP	Sacramento	SV	SAC	5.23E+02	1.53E+03	1.01E+03	1.33E-02	4.56E-02	8.43E-02	1.11E+01	1.40E-04	3.15E-03	0.00E+00	1.20E-03	3769.21521
2035	Annual	Mon-Sun	2.27E+09	Other Lawr	D	15	Lawn and (	U	N	NHH	NP	Sacramento	SV	SAC	4.01E-01	4.75E-01	2.65E-01	3.01E-06	1.77E-05	2.12E-05	2.90E-03	4.52E-08	8.27E-07	0.00E+00	2.72E-07	0.984616955
2035	Annual	Mon-Sun	2.27E+09	Other Lawr	D	25	Lawn and (	U	N	NHH	NP	Sacramento	SV	SAC	5.72E-02	6.79E-02	5.03E-02	6.67E-07	2.28E-06	4.21E-06	5.53E-04	7.01E-09	1.57E-07	0.00E+00	6.02E-08	0.188286985

Table 17. OFFROAD Emissions 2040

Lawn and Garden Summary - 2050		
		Source
Total Lawn & Garden Emissions (MTCO2e)	42,740	
DU Elk Grove	93,423	Scale Factor
DU Sac County	1,425,199	SACOG 2016 RTP/SCS
Elk Grove % of Total	6.6%	
Elk Grove Emissions (MTCO2e)	2,802	

Construction Equipment Summary - 2050		
		Source
Total Const. Equipment Emissions (MTCO2e)	450,322	
Elk Grove Houses Constructed	626	Scale Factor
Sac County Houses Constructed	15,790	Extrapolation from SACOG RTP/SCS
Elk Grove % of Total	4.0%	
Elk Grove Emissions (MTCO2e)	17,846	

total ag -

CY	Season	AvgDays	Code	Equipment	Fuel	MaxHP	Class	C/R	Pre	Hand	Port	County	Air Basin	Air Dist.	Population	Activity	Consumpti	ROG Exhau	CO Exhaust	NOX Exhau	CO2 Exhaus	SO2 Exhaus	PM Exhaus	N2O Exhau	CH4 Exhaus	Annual County Total (MTCO2e)
2040	Annual	Mon-Sun	2260002006	Tampers/R	G2	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	9.37E+01	4.68E+01	9.43E+00	5.94E-04	2.55E-02	4.63E-04	4.87E-02	2.01E-06	4.08E-04	7.28E-05	3.69E-05	20.04292647
2040	Annual	Mon-Sun	2260002009	Plate Comp	G2	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	8.04E+00	4.54E+00	9.16E-01	5.76E-05	2.47E-03	4.49E-05	4.73E-03	1.95E-07	3.96E-05	7.06E-06	3.58E-06	1.945439643
2040	Annual	Mon-Sun	2260004010	Lawn Mow	G2	15	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	2.42E+03	1.52E+03	1.71E+02	1.94E-02	3.48E-01	5.21E-03	1.03E+00	4.26E-05	3.26E-03	1.34E-03	1.21E-03	460.4582836
2040	Annual	Mon-Sun	2260004010	Lawn Mow	G2	15	Lawn and Ga	R	N	NHH	NP	Sacramento	SV	SAC	1.82E+04	7.72E+02	9.39E+01	7.68E-03	2.23E-01	2.02E-03	5.26E-01	2.17E-05	1.35E-03	5.85E-04	4.77E-04	221.5539513
2040	Annual	Mon-Sun	2260004020	Chainsaws	G2	2	Lawn and Ga	C	N	HH	NP	Sacramento	SV	SAC	4.34E+03	3.44E+03	2.05E+02	1.71E-01	3.10E-01	2.71E-03	8.38E-01	3.45E-05	4.88E-04	1.39E-03	1.07E-02	1224.876804
2040	Annual	Mon-Sun	2260004020	Chainsaws	G2	2	Lawn and Ga	R	N	HH	NP	Sacramento	SV	SAC	4.88E+04	6.55E+02	2.99E+01	9.49E-03	5.91E-02	5.17E-04	1.60E-01	6.57E-06	9.29E-05	2.65E-04	5.90E-04	107.0392683
2040	Annual	Mon-Sun	2260004020	Chainsaws	G2	15	Lawn and Ga	C	N	HH	NP	Sacramento	SV	SAC	3.05E+03	2.42E+03	3.49E+02	2.92E-01	5.28E-01	4.62E-03	1.43E+00	5.88E-05	8.31E-04	1.57E-03	1.81E-02	2078.511716
2040	Annual	Mon-Sun	2260004020	Chainsaws	G2	15	Lawn and Ga	R	N	HH	NP	Sacramento	SV	SAC	3.44E+04	4.61E+02	5.09E+01	1.62E-02	1.01E-01	8.81E-04	2.72E-01	1.12E-05	1.58E-04	2.99E-04	1.00E-03	180.8752435
2040	Annual	Mon-Sun	2260004021	Chainsaws	G2	15	Lawn and Ga	C	P	HH	NP	Sacramento	SV	SAC	3.80E+03	3.01E+03	4.34E+02	3.63E-01	6.57E-01	5.75E-03	1.78E+00	7.31E-05	1.03E-03	1.95E-03	2.26E-02	2587.024129
2040	Annual	Mon-Sun	2260004021	Chainsaws	G2	15	Lawn and Ga	R	P	HH	NP	Sacramento	SV	SAC	4.28E+04	5.74E+02	6.34E+01	2.01E-02	1.25E-01	1.10E-03	3.38E-01	1.39E-05	1.97E-04	3.72E-04	1.25E-03	225.1277104
2040	Annual	Mon-Sun	2260004025	Trimmers/E	G2	2	Lawn and Ga	C	N	HH	NP	Sacramento	SV	SAC	1.41E+04	4.70E+03	2.09E+02	1.13E-01	3.71E-01	3.24E-03	1.00E+00	4.12E-05	5.83E-04	1.77E-03	6.99E-03	961.7482086
2040	Annual	Mon-Sun	2260004025	Trimmers/E	G2	2	Lawn and Ga	R	N	HH	NP	Sacramento	SV	SAC	1.58E+05	9.28E+03	3.94E+02	1.76E-01	7.31E-01	6.41E-03	1.98E+00	8.14E-05	1.15E-03	3.49E-03	1.09E-02	1647.882332
2040	Annual	Mon-Sun	2260004030	Leaf Blowe	G2	2	Lawn and Ga	C	N	HH	P	Sacramento	SV	SAC	2.11E+04	1.14E+04	6.06E+02	4.18E-01	9.95E-01	8.71E-03	2.69E+00	1.11E-04	1.57E-03	4.52E-03	2.60E-02	3213.448623
2040	Annual	Mon-Sun	2260004030	Leaf Blowe	G2	2	Lawn and Ga	R	N	HH	P	Sacramento	SV	SAC	5.44E+04	7.16E+02	3.17E+01	9.97E-03	6.27E-02	5.49E-04	1.69E-01	6.98E-06	9.86E-05	2.85E-04	6.20E-04	113.1337298
2040	Annual	Mon-Sun	2260004050	Shredders	G2	15	Lawn and Ga	C	P	NHH	NP	Sacramento	SV	SAC	1.07E+02	3.97E+01	1.74E+01	9.78E-04	4.72E-02	7.63E-04	9.01E-02	3.71E-06	7.56E-04	8.80E-05	6.08E-05	35.99745188
2040	Annual	Mon-Sun	2260004050	Shredders	G2	15	Lawn and Ga	R	P	NHH	NP	Sacramento	SV	SAC	3.80E+03	9.37E+00	4.10E+00	1.98E-04	1.11E-02	1.54E-04	2.13E-02	8.77E-07	1.78E-04	1.91E-05	1.23E-05	8.30442368
2040	Annual	Mon-Sun	2260004070	Commercia	G2	15	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	5.66E+01	1.24E+02	5.08E+01	2.29E-03	1.38E-01	1.73E-03	2.64E-01	1.09E-05	1.23E-04	2.32E-04	1.42E-04	102.0858625
2040	Annual	Mon-Sun	2260004070	Commercia	G2	25	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	2.79E+01	6.12E+01	5.43E+01	2.37E-03	1.53E-01	1.83E-03	2.75E-01	1.13E-05	1.28E-04	1.72E-04	1.47E-04	105.6246918
2040	Annual	Mon-Sun	2260004075	Other Lawr	G2	2	Lawn and Ga	C	N	HH	NP	Sacramento	SV	SAC	2.39E+01	4.49E+00	2.51E-01	1.23E-04	4.56E-04	4.00E-06	1.23E-03	5.08E-08	7.18E-07	1.94E-06	7.66E-06	1.098562959
2040	Annual	Mon-Sun	2260004075	Other Lawr	G2	2	Lawn and Ga	R	N	HH	NP	Sacramento	SV	SAC	7.33E+02	8.63E+00	4.41E-01	1.33E-04	8.77E-04	7.68E-06	2.37E-03	9.76E-08	1.38E-06	3.72E-06	8.27E-06	1.545050482
2040	Annual	Mon-Sun	2260004075	Other Lawr	G2	15	Lawn and Ga	C	N	HH	NP	Sacramento	SV	SAC	1.04E+01	1.96E+00	5.46E-01	2.68E-04	9.93E-04	8.70E-06	2.68E-03	1.11E-07	1.56E-06	1.99E-06	1.67E-05	2.369384756
2040	Annual	Mon-Sun	2260004075	Other Lawr	G2	15	Lawn and Ga	R	N	HH	NP	Sacramento	SV	SAC	3.19E+02	3.76E+00	9.60E-01	2.90E-04	1.91E-03	1.67E-05	5.16E-03	2.12E-07	3.00E-06	3.82E-06	1.80E-05	3.323686787
2040	Annual	Mon-Sun	2265002003	Asphalt Pa	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.04E+00	2.22E+00	1.29E+00	9.72E-05	3.69E-03	7.24E-05	6.24E-03	1.78E-07	5.23E-05	6.35E-06	5.50E-06	2.607612415
2040	Annual	Mon-Sun	2265002003	Asphalt Pa	G4	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.50E+00	3.80E+00	5.54E+00	4.29E-04	1.64E-02	2.80E-04	2.61E-02	6.61E-07	2.19E-04	1.68E-05	2.43E-05	10.92318866
2040	Annual	Mon-Sun	2265002003	Asphalt Pa	G4	50	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.80E+00	3.01E+00	7.06E+00	9.59E-05	8.14E-03	1.21E-04	5.50E-02	6.68E-07	4.21E-06	9.59E-06	5.42E-06	18.7686154
2040	Annual	Mon-Sun	2265002003	Asphalt Pa	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.54E+00	1.66E+00	6.29E+00	4.01E-05	2.32E-03	9.34E-05	5.69E-02	5.50E-07	4.41E-06	6.28E-06	2.27E-06	19.10408135
2040	Annual	Mon-Sun	2265002006	Tampers/R	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	4.32E+00	2.16E+00	1.04E+00	7.83E-05	2.99E-03	5.83E-05	5.06E-03	1.44E-07	4.24E-05	5.58E-06	4.43E-06	2.114821122
2040	Annual	Mon-Sun	2265002009	Plate Comp	G4	5	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.59E+02	7.84E+01	1.42E+01	2.01E-03	3.05E-02	9.07E-04	8.16E-02	2.82E-06	2.66E-05	1.29E-04	1.14E-04	38.1889608
2040	Annual	Mon-Sun	2265002009	Plate Comp	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.68E+02	9.51E+01	4.08E+01	3.06E-03	1.17E-01	2.28E-03	1.98E-01	5.65E-06	1.66E-03	2.31E-04	1.73E-04	82.92888057
2040	Annual	Mon-Sun	2265002015	Rollers	G4	5	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.77E+01	4.02E+00	1.09E+00	1.31E-04	2.60E-03	5.92E-05	5.91E-03	2.04E-07	1.93E-06	7.52E-06	7.41E-06	2.675499575
2040	Annual	Mon-Sun	2265002015	Rollers	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.86E+01	2.43E+01	1.32E+01	9.92E-04	3.80E-02	7.39E-04	6.42E-02	1.83E-06	5.39E-04	6.70E-05	5.61E-05	26.8187976
2040	Annual	Mon-Sun	2265002015	Rollers	G4	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.93E+01	1.64E+01	1.94E+01	1.49E-03	5.75E-02	9.73E-04	9.15E-02	2.32E-06	7.67E-04	6.46E-05	8.45E-05	38.32109201
2040	Annual	Mon-Sun	2265002015	Rollers	G4	50	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.98E+00	3.36E+00	9.34E+00	1.54E-04	1.46E-02	1.73E-04	6.66E-02	8.10E-07	5.10E-06	1.22E-05	8.68E-06	22.93357306
2040	Annual	Mon-Sun	2265002015	Rollers	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.71E+00	6.32E+00	2.86E+01	2.40E-04	1.56E-02	5.63E-04	2.51E-01	2.43E-06	1.94E-05	3.03E-05	1.36E-05	84.58863719
2040	Annual	Mon-Sun	2265002021	Paving Equ	G4	5	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.22E+02	1.04E+02	2.02E+01	2.83E-03	4.38E-02	1.28E-03	1.16E-01	4.00E-06	3.77E-05	1.76E-04	1.60E-04	53.98274979
2040	Annual	Mon-Sun	2265002021	Paving Equ	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.76E+02	2.06E+02	1.19E+02	8.87E-03	3.40E-01	6.61E-03	5.76E-01	1.64E-05	4.83E-03	5.84E-04	5.02E-04	240.064774
2040	Annual	Mon-Sun	2265002021	Paving Equ	G4	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	8.35E+00	4.58E+00	5.97E+00	4.58E-04	1.77E-02	2.99E-04	2.81E-02	7.13E-07	2.36E-04	1.90E-05	2.59E-05	11.76910767
2040	Annual	Mon-Sun	2265002021	Paving Equ	G4	50	Construction	U	P	NHH	NP	Sacramento	SV	SAC	7.66E+00	3.68E+00	8.21E+00	8.79E-05	6.10E-03	1.28E-04	6.93E-02	8.43E-07	5.31E-06	1.09E-05	4.97E-06	23.489123
2040	Annual	Mon-Sun	2265002021	Paving Equ	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.98E+00	9.48E-01	3.39E+00	1.55E-05	7.14E-04	3.56E-05	3.15E-02	3.04E-07	2.44E-06	2.92E-06	8.74E-07	10.53701038
2040	Annual	Mon-Sun	2265002024	Surfacing E	G4	5	Construction	U	P	NHH	NP	Sacramento	SV	SAC	4.08E+01	2.24E+01	4.48E+00	6.48E-04	9.45E-03	2.93E-04	2.59E-02	8.96E-07	8.46E-06	3.93E-05	3.66E-05	12.16920139
2040	Annual	Mon-Sun	2265002024	Surfacing E	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.21E+02	1.67E+02	6.40E+01	5.02E-03	1.84E-01	3.74E-03	3.10E-01	8.84E-06	2.60E-03	3.91E-04	2.84E-04	131.2448566
2040	Annual	Mon-Sun	2265002024	Surfacing E	G4	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.66E+00	2.29E+00	2.14E+00	1.72E-04	6.33E-03	1.12E-04	1.01E-02	2.56E-07	8.45E-05	8.14E-06	9.74E-06	4.268748496
2040	Annual	Mon-Sun	2265002027	Signal Boar	G4	5	Construction	U	P	NHH	NP	Sacramento	SV	SAC	5.04E-01	1.79E-01	5.82E-02	7.47E-06	1.34E-04	3.37E-06	3.23E-04	1.11E-08	1.05E-07	3.82E-07	4.22E-07	0.147521188
2040	Annual	Mon-Sun	2265002027	Signal Boar	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.58E+00	2.79E+00	1.65E+00	1.23E-04	4.75E-03	9.18E-05	8.03E-03	2.29E-07	6.73E-05	8.02E-06	6.97E-06	3.346013772
2040	Annual	Mon-Sun	2265002030	Trenchers	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.31E+01	3.94E+01	2.54E+01	1.95E-03	7.29E-02	1.45E-03	1.23E-01	3.51E-06	1.03E-03	1.20E-04	1.10E-04	51.58187427
2040	Annual	Mon-Sun	2265002030	Trenchers	G4	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.57E+01	3.06E+01	4.26E+01	3.35E-03	1.26E-01	2.18E-03	2.01E-01	5.08E-06	1.68E-03	1.33E-04	1.89E-04	84.22497403
2040	Annual	Mon-Sun	2265002030	Trenchers	G4	50	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.80E+01	1.98E+01	4.42E+01	6.26E-04	5.45E-02	7.68E-04	3.39E-01	4.12E-06	2.59E-05	6.20E-05	3.54E-05	115.8363771
2040	Annual	Mon-Sun	2265002030	Trenchers	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	5.96E+00	6.58E+00	2.72E+01	1.84E-04	1.09E-02	4.28E-04	2.45E-01	2.36E-06	1.89E-05	2.69E-05	1.04E-05	82.12657312
2040	Annual	Mon-Sun	2265002033	Bore/Drill F	G4	15	Construction	U	P	NHH	P	Sacramento	SV	SAC	9.48E-01	3.22E-01	2.48E-01	1.81E-05	7.13E-04	1.35E-05	1.21E-03	3.44E-08	1.01E-05	1.05E-06	1.02E-06	0.498641666
2040	Annual	Mon-Sun	2265002033	Bore/Drill F	G4	25	Construction	U	P	NHH	P	Sacramento	SV	SAC	4.71E+00	1.60E+00	2.29E+00	1.71E-04	6.77E-03	1.11E-04	1.08E-02	2.73E-07	9.04E-05	6.86E-06	9.67E-06	4.481139379
2040	Annual	Mon-Sun	2265002033	Bore/Drill F	G4	50	Construction	U	P	NHH	P	Sacramento	SV	SAC	8.69E-01	2.55E-01	6.55E-01	6.85E-06	4.64E-04	1.01E-05	5.57E-03	6.77E-08	4.26E-07	8.10E-07	3.88E-07	1.884445362
2040	Annual	Mon-Sun	2265002033	Bore/Drill F	G4	120	Construction	U	P	NHH	P	Sacramento	SV	SAC	3.99E+00	1.17E+00	7.45E+00	3.29E-05	1.48E-03	7.57E-05	6.95E-02	6.71E-07	5.38E-06	4.82E-06	1.86E-06	23.21350347
2040	Annual	Mon-Sun	2265002033	Bore/Drill F	G4	175	Construction	U	P	NHH	P	Sacramento	SV	SAC	9.88E-01	2.90E-01	2.61E+00	8.86E-06	7.78E-04	2.85E-05	2.39E-02	2.38E-07	1.91E-06	1.49E-06	5.01E-07	7.987469838
2040	Annual	Mon-Sun	2265002039	Concrete/Ir	G4	5	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.74E+01	6.20E+00	1.65E+00	2.12E-04	3.79E-03	9.56E-05	9.15E-03	3.16E-07	2.98E-06	1.19E-05	1.20E-05	4.191983207
2040	Annual	Mon-Sun	2265002039	Concrete/Ir	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	7.82E+01	6.65E+01	4.55E+01	3.41E-03	1.31E-01	2.54E-03	2.21E-01	6.30E-06	1.85E-03	2.07E-04	1.93E-04	91.99104044
2040	Annual	Mon-Sun	2265002039	Concrete/Ir	G4	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.45E+01	2.08E+01	2.77E+01	2.13E-03	8.19E-02	1.39E-03	1.31E-01	3.31E-06	1.09E-03	8.72E-05	1.20E-04	54.60135942
2040	Annual	Mon-Sun	2265002039	Concrete/Ir	G4	50	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.24E+00	5.42E+00	1.50E+01	1.57E-04	1.06E-02	2.32E-04	1.28E-01	1.55E-06	9.78E-06	1.79E-05	8.87E-06	43.23400452
2040	Annual	Mon-Sun	2265002039	Concrete/Ir	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.86E+00	3.11E+00	1.46E+01	6.45E-05	2.89E-03	1.48E-04	1.36E-01	1.32E-06	1.06E-05	1.09E-05	3.65E-06	45.61512035
2040	Annual	Mon-Sun	2265002042	Cement an	G4	5	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.16E+02	7.96E+01	2.02E+01	2.53E-03	4.72E-02	1.14E-03	1.11E-01	3.84E-06	3.63E-05	1.47E-04	1.43E-04	50.75077401
2040	Annual	Mon-Sun	2265002042	Cement an	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	5.35E+02	1.35E+02	6.21E+01	4.56E-03	1.78E-01	3.40E-03	3.02E-01	8.60E-06	2.53E-03	3.36E-04	2.58E-04	125.5977932
2040	Annual	Mon-Sun	2265002042	Cement an	G4	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.25E+00	5.68E-01	8.41E-01	6.34E-05	2.49E-03	4.13E-05	3.97E-03	1.00E-07	3.32E-05	2.49E-06	3.58E-06	1.650501852
2040	Annual	Mon-Sun	2265002045	Cranes	G4	50	Construction	U	P	NHH	P	Sacramento	SV	SAC	9.88E-01	1.12E+00	2.21E+00	3.16E-05	2.78E-03	3.86E-05	1.69E-02	2.05E-07	1.29E-06	3.30E-06	1.79E-06	5.774917917
2040	Annual	Mon-Sun	2265002045	Cranes	G4	120	Construction	U	P	NHH	P	Sacramento	SV	SAC	1.98E+00	2.25E+00	7.43E+00	5.09E-05	3.05E-03	1.19E-04	6.67E-02	6.45E-07	5.17E-06	8.21E-06	2.88E-06	22.42729133
2040	Annual	Mon-Sun	2265002045	Cranes	G4	175	Construction	U	P	NHH	P	Sacramento	SV	SAC	7.90E-02	8.99E-02	4.82E-01	3.31E-06	1.58E-04	8.11E-06	4.39E-03	4.36E-08	3.49E-07	4.38E-07	1.87E-07	1.472651459
2040	Annual	Mon-Sun	2265002054	Crushing/P	G4	15	Construction	U	P	NHH	P	Sacramento	SV	SAC	8.59E-01	6.81E-01	5.08E-01	3.79E-05	1.46E-03	2.82E-05	2.46E-03	7.03E-08	2.07E-05	2.21E-06	2.14E-06	1.024709708
2040	Annual	Mon-Sun	2265002054	Crushing/P	G4	25	Construction	U	P	NHH	P	Sacramento	SV	SAC	5.63E-01	4.46E-01	6.09E-01	4.66E-05	1.80E-03	3.04E-05	2.87E-03	7.28E-08	2.41E-05	1.89E-06	2.64E-06	1.199433765
2040	Annual	Mon-Sun	2265002054	Crushing/P	G4	120	Construction	U	P	NHH	P	Sacramento	SV	SAC	1.15E+00	7.57E-01	5.75E+00	3.16E-05	1.68E-03	7.33E-05	5.27E-02	5.10E-07	4.09E-06	3.84E-06	1.79E-06	17.65564589
2040	Annual	Mon-Sun	2265002057	Rough Terr	G4	50	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.95E-01	4.47E-01	1.50E+00	2.14E-05	1.88E-03	2.61E-05	1.14E-02	1.39E-07	8.76E-07	1.74E-06	1.21E-06	3.909428524
2040	Annual	Mon-Sun	2265002057	Rough Terr	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	5.61E+00	6.35E+00	3.23E+01	2.21E-04	1.32E-02	5.16E-04	2.90E-01	2.81E-06	2.25E-05	2.92E-05	1.25E-05	97.53138428
2040	Annual	Mon-Sun	2265002057	Rough Terr	G4	175	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.98E-01	2.24E-01	1.82E+00	1.25E-05	5.99E-04	3.06E-05	1.66E-02	1.65E-07	1.32E-06	1.36E-06	7.06E-07	5.5761251
2040	Annual	Mon-Sun	2265002060	Rubber Tire	G4	50	Construction	U	P	NHH	NP	Sacramento	SV	SAC	9.88E-01	1.39E+00	3.48E+00	5.26E-05	4.77E-03	6.22E-05	2.59E-02	3.14E-07	1.98E-06	4.68E-06	2.97E-06	8.86659852
2040	Annual	Mon-Sun	2265002060	Rubber Tire	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	6.56E+00	9.21E+00	3.43E+01	2.55E-04	1.58E-02	5.96E-04	3.06E-01	2.95E-06	2.37E-05	3.74E-05	1.44E-05	102.7981594
2040	Annual	Mon-Sun	2265002066	Tractors/Lc	G4	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.48E+00	8.29E+00	2.43E+01	1.94E-04	1.24E-02	4.53E-04	2.14E-01	2.07E-06	1.66E-05	3.07E-05	1.09E-05	72.13673759
2040	Annual	Mon-Sun	2265002072	Skid Steer I	G4	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.69E+00	1.48E+00	1.17E+00	8.89E-05	3.36E-03	6.62E-05	5.68E-03	1.62E-07	4.76E-05	5.01E-06	5.03E-06	2.367086466
2040	Annual	Mon-Sun	2265002072	Skid Steer I	G4	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.13E+02	9.87E+01	1.09E+02	8.52E-03	3.23E-01	5.55E-03	5.15E-01	1.31E-05	4.32E-03	3.78E-04	4.82E-04	216.3194875

2040	Annual		Mon-Sun	2265002072	Skid Steer l	G4	50	Construction U	P	NHH	NP	Sacramento	SV	SAC	2.69E+01	2.29E+01	4.38E+01	4.82E-04	3.43E-02	6.88E-04	3.67E-01	4.46E-06	2.81E-05	6.27E-05	2.72E-05	124.492104
2040	Annual		Mon-Sun	2265002072	Skid Steer l	G4	120	Construction U	P	NHH	NP	Sacramento	SV	SAC	1.61E+01	1.37E+01	5.85E+01	2.77E-04	1.32E-02	6.39E-04	5.43E-01	5.24E-06	4.20E-05	4.73E-05	1.57E-05	181.5160808
2040	Annual		Mon-Sun	2265002078	Dumpers/T	G4	5	Construction U	P	NHH	NP	Sacramento	SV	SAC	1.61E+01	6.58E+00	8.84E-01	1.27E-04	1.87E-03	5.75E-05	5.11E-03	1.76E-07	1.67E-06	9.33E-06	7.21E-06	2.41110901
2040	Annual		Mon-Sun	2265002078	Dumpers/T	G4	15	Construction U	P	NHH	NP	Sacramento	SV	SAC	3.44E+01	1.40E+01	5.05E+00	3.84E-04	1.45E-02	2.86E-04	2.45E-02	6.99E-07	2.06E-04	3.13E-05	2.17E-05	10.31609653
2040	Annual		Mon-Sun	2265002078	Dumpers/T	G4	25	Construction U	P	NHH	NP	Sacramento	SV	SAC	6.37E+00	2.60E+00	2.04E+00	1.59E-04	6.02E-03	1.03E-04	9.59E-03	2.43E-07	8.04E-05	8.27E-06	8.98E-06	4.041686762
2040	Annual		Mon-Sun	2265002078	Dumpers/T	G4	120	Construction U	P	NHH	NP	Sacramento	SV	SAC	7.11E-01	2.48E-01	6.15E-01	2.82E-06	1.31E-04	6.49E-06	5.72E-03	5.53E-08	4.43E-07	6.29E-07	1.59E-07	1.913991276
2040	Annual		Mon-Sun	2265002081	Other Cons	G4	175	Construction U	P	NHH	NP	Sacramento	SV	SAC	2.77E+00	2.81E+00	1.54E+01	6.03E-05	4.66E-03	1.82E-04	1.41E-01	1.40E-06	1.13E-05	1.16E-05	3.41E-06	47.18173766
2040	Annual		Mon-Sun	2265004010	Lawn Mow	G4	5	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	1.43E+04	8.98E+03	1.07E+03	1.28E-01	2.37E+00	3.26E-02	6.12E+00	2.11E-04	1.93E-02	7.93E-03	7.14E-03	2726.294559
2040	Annual		Mon-Sun	2265004010	Lawn Mow	G4	5	Lawn and Ga	R	N	NHH	NP	Sacramento	SV	SAC	2.27E+05	9.65E+03	1.27E+03	9.79E-02	3.40E+00	2.43E-02	6.58E+00	2.27E-04	1.57E-02	6.96E-03	5.47E-03	2722.283912
2040	Annual		Mon-Sun	2265004015	Tillers	G4	5	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	1.49E+03	2.28E+02	3.22E+01	2.86E-03	8.07E-02	7.21E-04	1.73E-01	5.96E-06	4.55E-04	1.87E-04	1.62E-04	73.08318745
2040	Annual		Mon-Sun	2265004015	Tillers	G4	5	Lawn and Ga	R	N	NHH	NP	Sacramento	SV	SAC	5.78E+03	2.85E+02	4.10E+01	3.34E-03	1.06E-01	8.35E-04	2.16E-01	7.45E-06	5.38E-04	2.24E-04	1.89E-04	90.11121485
2040	Annual		Mon-Sun	2265004025	Trimmers/t	G4	5	Lawn and Ga	C	P	NHH	NP	Sacramento	SV	SAC	2.62E+03	9.73E+02	2.97E+01	3.87E-03	6.77E-02	1.75E-03	1.66E-01	5.72E-06	5.40E-05	5.93E-04	2.19E-04	79.60542997
2040	Annual		Mon-Sun	2265004025	Trimmers/t	G4	5	Lawn and Ga	R	P	NHH	NP	Sacramento	SV	SAC	1.22E+04	7.18E+02	2.29E+01	2.62E-03	5.65E-02	1.18E-03	1.22E-01	4.23E-06	3.99E-05	4.17E-04	1.48E-04	57.38619895
2040	Annual		Mon-Sun	2265004030	Leaf Blowe	G4	5	Lawn and Ga	C	N	NHH	P	Sacramento	SV	SAC	6.67E+02	1.13E+02	7.48E+00	5.54E-04	2.00E-02	1.38E-04	3.87E-02	1.34E-06	9.07E-05	5.60E-05	3.13E-05	16.0722225
2040	Annual		Mon-Sun	2265004030	Leaf Blowe	G4	5	Lawn and Ga	R	N	NHH	P	Sacramento	SV	SAC	5.73E+02	7.54E+00	5.19E-01	2.97E-05	1.48E-03	7.20E-06	2.57E-03	8.87E-08	5.11E-06	3.28E-06	1.68E-06	1.028274346
2040	Annual		Mon-Sun	2265004040	Rear Engine	G4	15	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	7.85E+03	5.84E+03	1.92E+03	8.96E-02	5.59E+00	6.48E-02	9.45E+00	2.69E-04	4.38E-03	9.41E-03	5.07E-03	3660.193361
2040	Annual		Mon-Sun	2265004040	Rear Engine	G4	15	Lawn and Ga	R	N	NHH	NP	Sacramento	SV	SAC	6.89E+03	5.32E+02	1.75E+02	6.94E-03	5.09E-01	5.08E-03	8.61E-01	2.45E-05	3.43E-04	7.90E-04	3.93E-04	326.8789258
2040	Annual		Mon-Sun	2265004040	Rear Engine	G4	25	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	3.59E+01	2.67E+01	1.71E+01	7.68E-04	5.12E-02	5.66E-04	8.16E-02	2.07E-06	3.79E-05	6.07E-05	4.35E-05	31.39892766
2040	Annual		Mon-Sun	2265004040	Rear Engine	G4	25	Lawn and Ga	R	N	NHH	NP	Sacramento	SV	SAC	3.10E+01	2.39E+00	1.53E+00	5.99E-05	4.59E-03	4.21E-05	7.32E-03	1.85E-07	2.91E-06	4.92E-06	3.39E-06	2.765299396
2040	Annual		Mon-Sun	2265004045	Front Mow	G4	15	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	3.60E+02	2.68E+02	1.41E+02	6.55E-03	4.09E-01	4.75E-03	6.91E-01	1.97E-05	3.21E-04	5.53E-04	3.71E-04	266.5897839
2040	Annual		Mon-Sun	2265004045	Front Mow	G4	15	Lawn and Ga	R	N	NHH	NP	Sacramento	SV	SAC	1.16E+04	8.99E+02	4.72E+02	1.87E-02	1.37E+00	1.37E-02	2.32E+00	6.62E-05	9.26E-04	1.71E-03	1.06E-03	878.0342406
2040	Annual		Mon-Sun	2265004045	Front Mow	G4	25	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	2.82E+02	2.10E+02	1.48E+02	6.67E-03	4.45E-01	4.91E-03	7.08E-01	1.79E-05	3.29E-04	5.03E-04	3.77E-04	272.2335365
2040	Annual		Mon-Sun	2265004045	Front Mow	G4	25	Lawn and Ga	R	N	NHH	NP	Sacramento	SV	SAC	9.11E+03	7.04E+02	4.97E+02	1.95E-02	1.49E+00	1.37E-02	2.38E+00	6.03E-05	9.48E-04	1.53E-03	1.10E-03	898.6449705
2040	Annual		Mon-Sun	2265004050	Shredders	G4	5	Lawn and Ga	C	P	NHH	NP	Sacramento	SV	SAC	2.83E+02	1.05E+02	2.85E+01	3.72E-03	6.50E-02	1.68E-03	1.59E-01	5.50E-06	5.19E-05	2.05E-04	2.10E-04	73.03770274
2040	Annual		Mon-Sun	2265004050	Shredders	G4	5	Lawn and Ga	R	P	NHH	NP	Sacramento	SV	SAC	1.05E+04	2.59E+01	8.22E+00	6.22E-04	2.40E-02	2.81E-04	3.92E-02	1.36E-06	1.28E-05	4.12E-05	3.52E-05	16.46310735
2040	Annual		Mon-Sun	2265004055	Lawn & Ga	G4	15	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	1.44E+03	5.07E+02	3.22E+02	1.26E-02	9.37E-01	9.20E-03	1.58E+00	4.52E-05	6.22E-04	1.06E-03	7.11E-04	596.7825925
2040	Annual		Mon-Sun	2265004055	Lawn & Ga	G4	15	Lawn and Ga	R	N	NHH	NP	Sacramento	SV	SAC	9.35E+03	3.74E+02	2.37E+02	8.54E-03	6.91E-01	6.29E-03	1.17E+00	3.33E-05	4.25E-04	7.52E-04	4.83E-04	436.1698834
2040	Annual		Mon-Sun	2265004055	Lawn & Ga	G4	25	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	5.68E+02	2.00E+02	2.02E+02	7.80E-03	6.06E-01	5.45E-03	9.65E-01	2.45E-05	3.79E-04	5.20E-04	4.41E-04	363.1628132
2040	Annual		Mon-Sun	2265004055	Lawn & Ga	G4	25	Lawn and Ga	R	N	NHH	NP	Sacramento	SV	SAC	3.69E+03	1.47E+02	1.49E+02	5.37E-03	4.47E-01	3.65E-03	7.12E-01	1.80E-05	2.59E-04	3.64E-04	3.04E-04	265.7835808
2040	Annual		Mon-Sun	2265004055	Lawn & Ga	G4	50	Lawn and Ga	U	N	NHH	NP	Sacramento	SV	SAC	8.21E+00	2.34E+00	3.54E+00	3.56E-05	2.38E-03	6.92E-05	3.03E-02	3.68E-07	2.32E-06	6.35E-06	2.01E-06	10.27049337
2040	Annual		Mon-Sun	2265004060	Wood Split	G4	5	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	4.83E+02	1.70E+02	4.98E+01	5.26E-03	1.16E-01	1.34E-03	2.78E-01	9.60E-06	8.16E-04	2.27E-04	2.98E-04	120.2914091
2040	Annual		Mon-Sun	2265004060	Wood Split	G4	5	Lawn and Ga	R	N	NHH	NP	Sacramento	SV	SAC	1.21E+04	3.64E+01	1.23E+01	5.92E-04	3.63E-02	1.41E-04	5.95E-02	2.05E-06	1.06E-04	3.34E-05	3.35E-05	22.93633799
2040	Annual		Mon-Sun	2265004065	Chippers/S	G4	15	Lawn and Ga	C	P	NHH	P	Sacramento	SV	SAC	6.81E+00	2.36E+01	1.99E+01	1.57E-03	5.75E-02	1.16E-03	9.57E-02	2.73E-06	8.02E-04	8.37E-05	8.75E-05	40.13743179
2040	Annual		Mon-Sun	2265004065	Chippers/S	G4	15	Lawn and Ga	R	P	NHH	P	Sacramento	SV	SAC	1.22E+01	5.50E-01	4.57E-01	2.67E-05	1.32E-03	1.99E-05	2.23E-03	6.37E-08	1.87E-05	1.66E-06	1.51E-06	0.887531678
2040	Annual		Mon-Sun	2265004065	Chippers/S	G4	25	Lawn and Ga	C	P	NHH	P	Sacramento	SV	SAC	3.87E+01	1.34E+02	1.91E+02	1.54E-02	5.67E-01	9.97E-03	8.89E-01	2.25E-05	7.45E-03	5.93E-04	8.59E-04	375.2492982
2040	Annual		Mon-Sun	2265004065	Chippers/S	G4	25	Lawn and Ga	R	P	NHH	P	Sacramento	SV	SAC	6.89E+01	3.11E+00	4.36E+00	2.61E-04	1.30E-02	1.70E-04	2.07E-02	5.24E-07	1.73E-04	1.17E-05	1.48E-05	8.255207168
2040	Annual		Mon-Sun	2265004070	Commercia	G4	15	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	5.10E+02	1.12E+03	5.96E+02	3.36E-02	1.73E+00	2.41E-02	2.91E+00	8.29E-05	1.62E-03	2.56E-03	1.90E-03	1152.552433
2040	Annual		Mon-Sun	2265004070	Commercia	G4	25	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	2.51E+02	5.50E+02	5.21E+02	2.78E-02	1.56E+00	2.14E-02	2.47E+00	6.27E-05	1.38E-03	1.73E-03	1.57E-03	972.3548333
2040	Annual		Mon-Sun	2265004070	Commercia	G4	50	Lawn and Ga	U	N	NHH	NP	Sacramento	SV	SAC	1.01E+02	2.03E+02	3.41E+02	5.19E-03	5.15E-01	1.10E-02	2.46E+00	2.99E-05	1.88E-04	7.48E-04	2.93E-04	846.3236856
2040	Annual		Mon-Sun	2265004070	Commercia	G4	120	Lawn and Ga	U	N	NHH	NP	Sacramento	SV	SAC	6.69E-01	1.34E+00	3.29E+00	1.47E-05	7.98E-04	8.83E-05	3.04E-02	2.94E-07	2.36E-06	5.59E-06	8.32E-07	10.19160752
2040	Annual		Mon-Sun	2265004075	Other Lawr	G4	5	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	4.47E+02	8.41E+01	1.72E+01	1.53E-03	4.33E-02	3.84E-04	9.23E-02	3.19E-06	2.43E-04	8.39E-05	8.63E-05	38.92373901
2040	Annual		Mon-Sun	2265004075	Other Lawr	G4	5	Lawn and Ga	R	N	NHH	NP	Sacramento	SV	SAC	1.37E+04	1.62E+02	3.59E+01	2.01E-03	1.03E-01	4.87E-04	1.77E-01	6.13E-06	3.48E-04	1.30E-04	1.14E-04	69.93404459
2040	Annual		Mon-Sun	2265004075	Other Lawr	G4	15	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	1.99E+02	3.73E+01	1.67E+01	6.59E-04	4.85E-02	4.82E-04	8.20E-02	2.34E-06	3.26E-05	6.51E-05	3.73E-05	31.03019918
2040	Annual		Mon-Sun	2265004075	Other Lawr	G4	15	Lawn and Ga	R	N	NHH	NP	Sacramento	SV	SAC	6.09E+03	7.17E+01	3.19E+01	1.09E-03	9.32E-02	8.04E-04	1.58E-01	4.49E-06	5.43E-05	1.16E-04	6.15E-05	58.64956629
2040	Annual		Mon-Sun	2265004075	Other Lawr	G4	25	Lawn and Ga	C	N	NHH	NP	Sacramento	SV	SAC	4.20E+00	7.89E-01	7.70E-01	3.01E-05	2.31E-03	2.11E-05	3.68E-03	9.33E-08	1.46E-06	2.03E-06	1.70E-06	1.387168515
2040	Annual		Mon-Sun	2265004075	Other Lawr	G4	25	Lawn and Ga	R	N	NHH	NP	Sacramento	SV	SAC	1.29E+02	1.53E+00	1.49E+00	5.11E-05	4.47E-03	3.40E-05	7.12E-03	1.80E-07	2.45E-06	3.56E-06	2.89E-06	2.643730892
2040	Annual		Mon-Sun	2265004075	Other Lawr	G4	50	Lawn and Ga	U	N	NHH	NP	Sacramento	SV	SAC	3.04E-01	5.08E-02	1.06E-01	1.02E-06	6.46E-05	1.97E-06	9.16E-04	1.11E-08	7.02E-08	1.59E-07	5.80E-08	0.310013246
2040	Annual		Mon-Sun	2265004075	Other Lawr	G4	120	Lawn and Ga	U	N	NHH	NP	Sacramento	SV	SAC	7.30E-01	1.22E-01	6.57E-01	2.54E-06	1.07E-04	1.65E-05	6.16E-03	5.95E-08	4.77E-07	7.46E-07	1.43E-07	2.059772537
2040	Annual		Mon-Sun	2270002003	Pavers	D	25	Construction U	P	NHH	NP	Sacramento	SV	SAC	1.06E+00	2.39E+00	2.03E+00	2.68E-05	9.16E-05	1.70E-04	2.22E-02	2.82E-07	6.34E-06	0.00E+00	2.42E-06	7.576626835
2040	Annual		Mon-Sun	2270002003	Pavers	D	50	Construction U	P	NHH	NP	Sacramento	SV	SAC	6.16E+01	1.39E+02	1.79E+02	2.12E-03	1.78E-02	1.16E-02	1.95E+00	2.52E-05	1.63E-04	0.00E+00	1.92E-04	662.2552726
2040	Annual		Mon-Sun	2270002003	Pavers	D	120	Construction U	P	NHH	NP	Sacramento	SV	SAC	7.26E+01	1.64E+02	5.18E+02	3.03E-03	3.76E-02	1.73E-02	5.68E+00	6.66E-05	4.36E-04	0.00E+00	2.73E-04	1905.104711
2040	Annual		Mon-Sun	2270002003	Pavers	D	175	Construction U	P	NHH	NP	Sacramento	SV	SAC	4.51E+01	1.02E+02	5.96E+02	2.46E-03	3.82E-02	6.74E-03	6.55E+00	7.37E-05	3.22E-04	0.00E+00	2.22E-04	2187.266865
2040	Annual		Mon-Sun	2270002003	Pavers	D	250	Construction U	N	NHH	NP	Sacramento	SV	SAC	5.44E+00	1.23E+01	1.08E+02	4.21E-04	2.40E-03	1.11E-03	1.20E+00	1.34E-05	3.98E-05	0.00E+00	3.80E-05	399.1222238
2040	Annual		Mon-Sun	2270002003	Pavers	D	500	Construction U	N	NHH	NP	Sacramento	SV	SAC	5.58E+00	1.26E+01	1.33E+02	5.15E-04	2.81E-03	1.29E-03	1.47E+00	1.44E-05	4.78E-05	0.00E+00	4.64E-05	491.3577548
2040	Annual		Mon-Sun	2270002009	Plate Comp	D	15	Construction U	P	NHH	NP	Sacramento	SV	SAC	2.28E+01	3.74E+01	7.37E+00	9.39E-05	4.93E-04	5.88E-04	8.07E-02	1.26E-06	2.30E-05	0.00E+00	8.47E-06	27.45216852
2040	Annual		Mon-Sun	2270002015	Rollers	D	15	Construction U	P	NHH	NP	Sacramento	SV	SAC	4.27E+01	8.15E+01	2.35E+01	2.99E-04	1.57E-03	1.87E-03	2.57E-01	4.00E-06	7.33E-05	0.00E+00	2.70E-05	87.53501018
2040	Annual		Mon-Sun	2270002015	Rollers	D	25	Construction U	P	NHH	NP	Sacramento	SV	SAC	1.79E+01	3.41E+01	2.07E+01	2.74E-04	9.35E-04	1.73E-03	2.27E-01	2.88E-06	6.47E-05	0.00E+00	2.47E-05	77.35448989
2040	Annual		Mon-Sun	2270002015	Rollers	D	50	Construction U	P	NHH	NP	Sacramento	SV	SAC	5.56E+01	1.06E+02	1.26E+02	1.14E-03	1.14E-02	7.79E-03	1.38E+00	1.78E-05	5.85E-05	0.00E+00	1.03E-04	465.972872
2040	Annual		Mon-Sun	2270002015	Rollers	D	120	Construction U	P	NHH	NP	Sacramento	SV	SAC	2.99E+02	5.71E+02	1.53E+03	7.11E-03	1.07E-01	4.52E-02	1.68E+01	1.97E-04	6.41E-04	0.00E+00	6.41E-04	5625.36878
2040	Annual		Mon-Sun	2270002015	Rollers	D	175	Construction U	P	NHH	NP	Sacramento	SV	SAC	1.20E+02	2.30E+02	1.13E+03	3.68E-03	6.99E-02	8.15E-03	1.24E+01	1.40E-04	3.47E-04	0.00E+00	3.32E-04	4134.890344
2040	Annual		Mon-Sun	2270002015	Rollers	D	250	Construction U	N	NHH	NP	Sacramento	SV	SAC	1.70E+01	3.26E+01	2.25E+02	7.25E-04	4.79E-03	1.53E-03	2.49E+00	2.80E-05	5.65E-05	0.00E+00	6.54E-05	830.171051
2040	Annual		Mon-Sun	2270002015	Rollers	D	500	Construction U	N	NHH	NP	Sacramento	SV	SAC	1.19E+01	2.28E+01	2.26E+02	7.27E-04	4.61E-03	1.50E-03	2.50E+00	2.45E-05	5.65E-05	0.00E+00	6.56E-05	833.1684474
2040	Annual		Mon-Sun	2270002018	Scrapers	D	120	Construction U	P	NHH	NP	Sacramento	SV	SAC	2.76E+00	8.30E+00	3.55E+01	2.17E-04	2.63E-03	1.18E-03	3.89E-01	4.57E-06	2.81E-05	0.00E+00	1.96E-05	130.670474
2040	Annual		Mon-Sun	2270002018	Scrapers	D	175	Construction U	P	NHH	NP	Sacramento	SV	SAC	2.52E+01	7.60E+01	5.12E+02	2.20E-03	3.35E-02	5.45E-03	5.62E+00	6.33E-05	2.61E-04	0.00E+00	1.98E-04	1878.790742
2040	Annual		Mon-Sun	2270002018	Scrapers	D	250	Construction U	N	NHH	NP	Sacramento	SV	SAC	2.46E+01	7.41E+01	7.01E+02	2.87E-03	1.58E-02	6.82E-03	7.75E+00	8.72E-05	2.49E-04	0.00E+00	2.59E-04	2589.537564
2040	Annual		Mon-Sun	2270002018	Scrapers	D	500	Construction U	N	NHH	NP	Sacramento	SV	SAC	6.77E+01	2.04E+02	2.96E+03	1.20E-02	6.34E-02	2.74E-02	3.27E+01	3.21E-04	1.03E-03	0.00E+00	1.09E-03	10938.25503
2040	Annual		Mon-Sun	2270002018	Scrapers	D	750	Construction U	N	NHH	NP	Sacramento	SV	SAC	2.71E+00	8.16E+00	2.05E+02	8.33E-04	4.38E-03	1.91E-03	2.26E+00	2.27E-05	7.15E-05	0.00E+00	7.51E-05	755.6532492
2040	Annual		Mon-Sun	2270002021	Paving Equ	D	25	Construction U	P	NHH	NP	Sacramento	SV	SAC	1.84E+00	4.18E+00	2.40E+00	3.18E-05	1.08E-04	2.01E-04	2.63E-02	3.34E-07	7.50E-06	0.00E+00	2.87E-06	8.974203764
2040	Annual		Mon-Sun	2270002021	Paving Equ	D	50	Construction U	P	NHH	NP	Sacramento	SV	SAC	1.55E+00	3.54E+00	3.88E+00	4.40E-05	3.81E-04	2.51E-04	4.24E-02	5.48E-07	3.17E-06	0.00E+00	3.97E-06	14.37247556
2040	Annual		Mon-Sun	2270002021	Paving Equ	D	120	Construction U	P	NHH	NP	Sacramento	SV	SAC	2.24E+01	5.11E+01	1.27E+02	7.14E-04	9.16E-03	4.13E-03	1.39E+00	1.63E-05	9.60E-05	0.00E+00	6.44E-05	465.9460607
2040	Annual		Mon-Sun	2270002021	Paving Equ	D	175	Construction U	P	NHH	NP	Sacramento	SV	SAC	1.05E+01	2.40E+01	1.10E+02	4.38E-04	7.04E-03	1.15E-03	1.21E+00	1.36E-05	5.44E-05	0.00E+00	3.95E-05	404.5096896
2040	Annual		Mon-Sun	2270002021	Paving Equ	D	250	Construction U	N	NHH	NP	Sacramento	SV	SAC	2.97E+00	6.76E+00	3.74E+01	1.41E-04	8.20E-04	3.54E-04	4.13E-01	4.65E-06	1.25E-05	0.00E+00	1.27E-05	137.9595635
2040	Annual		Mon-Sun	2270002024	Surfacing E	D	50	Construction U	P	NHH	NP	Sacramento	SV	SAC	1.41E+00	1.74E+00	1.12E+00	8.52E-06	9.01E-05	6.71E-05	1.22E-02	1.58E-07	5.61E-07	0.00E+00	7.69E-07	4.120345186
2040	Annual		Mon-Sun	2270002024	Surfacing E	D	120	Construction U	P	NHH	NP	Sacramento	SV	SAC	2.83E-01	3.47E-01	1.01E+00	4.03E-06	6.77E-05	2.96E-05	1.11E-02	1.30E-07	4.69E-07	0.00E+00	3.64E-07	3.69575664
2040	Annual		Mon-Sun	2270002024	Surfacing E	D	175	Construction U	P	NHH	NP	Sacramento	SV	SAC	2.12E-01	2.61E-01	1.01E+00	2.87E-06	6.04E-05	7.81E-06	1.12E-02	1.26E-07	3.38E-07	0.00E+00	2.59E-07	3.718974614
2040	Annual		Mon-Sun	2270002024	Surfacing E	D	250	Construction U	N	NHH	NP	Sacramento	SV	SAC	4.24E-01	5.21E-01	3.17E+00	8.70E-06	6.47E-05	2.29E-05	3.51E-02	3.95E-07	8.09E-07	0.00E+00	7.85E-07	11.69265994
2040	Annual		Mon-Sun	2270002024	Surfacing E	D	500	Construction U	N	NHH	NP	Sacramento	SV	SAC	3.53E+00	4.34E+00	4.34E+01	1.19E-04	8.57E-04	3.03E-04	4.80E-01	4.71E-06	1.09E-05	0.00E+00	1.07E-05	159.8133054
2040	Annual		Mon-Sun	2270002024	Surfacing E	D	750	Construction U	N	NHH	NP	Sacramento	SV	SAC	5.17E-01	6.36E-01	9.96E+00	2.73E-05	1.97E-04	7.01E-05	1.10E-01	1.11E-06	2.52E-06	0.00E+00	2.46E-06	36.70855862
2040	Annual		Mon-Sun	2270002027	Signal Boar	D	15	Construction U	P	NHH	NP	Sacramento	SV	SAC	1.99E+02	4.09E+02	1.15E+02	1.47E-03	7.70E-03	9.19E-03	1.26E+00	1.96E-05	3.59E-04	0.00E+00	1.32E-04	429.0578473
2040	Annual		Mon-Sun	2270002027	Signal Boar	D	50	Construction U	P	NHH	NP	Sacramento	SV	SAC	9.89E-01	1.45E+00	2.40E+00	1.65E-05	1.88E-04	1.40E-04	2.62E-02	3.39E-07	6.71E-07	0.00E+00	1.48E-06	8.817219585
2040	Annual		Mon-Sun	2270002027	Signal Boar	D	120	Construction U	P	NHH	NP	Sacramento	SV	SAC	1.62E+01	2.37E+01	8.66E+01	3.15E-04	5.77E-03	2.39E-03	9.51E-01	1.12E-05	2.27E-05	0.00E+00	2.84E-05	317.4024792
2040	Annual		Mon-Sun	2270002027	Signal Boar	D	175	Construction U	P	NHH	NP	Sacramento	SV	SAC	1.00E+01	1.47E+01	1.03E+02	2.63E-04	6.10E-03	5.93E-04	1.14E+00	1.28E-05	2.21E-05	0.00E+00	2.37E-05	378.3345669
2040	Annual		Mon-Sun	2270002027	Signal Boar	D	250	Construction U	N	NHH	NP	Sacramento	SV	SAC	2.12E+00	3.11E+00	3.58E+01	9.08E-05	7.25E-04	1.97E-04	3.97E-01	4.46E-06	7.12E-06	0.00E+00	8.19E-06	132.0293587
2040	Annual		Mon-Sun	2270002030	Trenchers	D	15	Construction U	P	NHH	NP	Sacramento	SV	SAC	5.30E+00	8.98E+00	3.47E+00	4.42E-05	2.32E-04	2.77E-04	3.80E-02	5.91E-07	1.08E-05	0.00E+00	3.99E-06	12.92303796
2040	Annual		Mon-Sun	2270002030	Trenchers	D	25	Construction U	P	NHH	NP	Sacramento	SV	SAC	5.58E+00	9.46E+00	1.42E+01	1.88E-04	6.40E-04	1.19E-03	1.56E-01	1.97E-06	4.43E-05	0.00E+00	1.69E-05	52.98871373
2040	Annual		Mon-Sun	2270002030	Trenchers	D	50	Construction U	P	NHH	NP	Sacramento	SV	SAC	2.12E+02	3.63E+02	5.47E+02	6.29E-03	5.23E-02	3.54E-02	5.96E+00	7.71E-05	5.48E-04	0.00E+00	5.67E-04	2024.22164
2040	Annual		Mon-Sun	2270002030	Trenchers	D	120	Construction U	P	NHH	NP	Sacramento	SV	SAC	2.88E+02	4.91E+02	1.45E+03	8.23E-03	1.04E-01	4.96E-02	1.59E+01	1.87E-04	1.35E-03	0.00E+00	7.42E-04	5340.079923
2040	Annual		Mon-Sun	2270002030	Trenchers	D	175	Construction U	P	NHH	NP	Sacramento	SV	SAC	3.15E+01	5.38E+01	3.52E+02	1.42E-03	2.22E-02	4.35E-03	3.87E+00	4.35E-05	2.09E-04	0.00E+00	1.28E-04	1291.376523
2040	Annual		Mon-Sun	2270002030	Trenchers	D	250	Construction U	N	NHH	NP	Sacramento	SV	SAC	2.83E+00	4.82E+00	4.86E+01	1.83E-04	1.07E-03	5.43E-04	5.37E-01	6.04E-06	1.98E-05	0.00E+00	1.65E-05	179.2953298

2040	Annual		Mon-Sun	2270002030	Trenchers	D	500	Construction U		N	NHH	NP	Sacramento V	SAC	3.60E+00	6.15E+00	8.65E+01	3.22E-04	1.82E-03	9.14E-04	9.56E-01	9.39E-06	3.40E-05	0.00E+00	2.91E-05	319.2454987
2040	Annual		Mon-Sun	2270002030	Trenchers	D	750	Construction U		N	NHH	NP	Sacramento V	SAC	1.03E-01	1.77E-01	4.68E+00	1.75E-05	9.85E-05	5.01E-05	5.18E-02	5.20E-07	1.85E-06	0.00E+00	1.58E-06	17.27738721
2040	Annual		Mon-Sun	2270002033	Bore/Drill F	D	15	Construction U		P	NHH	P	Sacramento V	SAC	7.07E-01	1.57E+00	7.42E-01	9.45E-06	4.96E-05	5.92E-05	8.12E-03	1.26E-07	2.31E-06	0.00E+00	8.53E-07	2.763668303
2040	Annual		Mon-Sun	2270002033	Bore/Drill F	D	25	Construction U		P	NHH	P	Sacramento V	SAC	2.12E+00	4.71E+00	3.43E+00	4.54E-05	1.55E-04	2.87E-04	3.76E-02	4.78E-07	1.07E-05	0.00E+00	4.10E-06	12.82598809
2040	Annual		Mon-Sun	2270002033	Bore/Drill F	D	50	Construction U		P	NHH	P	Sacramento V	SAC	9.26E+00	2.12E+01	3.00E+01	2.02E-04	2.33E-03	1.75E-03	3.29E-01	4.25E-06	7.74E-06	0.00E+00	1.82E-05	110.3988909
2040	Annual		Mon-Sun	2270002033	Bore/Drill F	D	120	Construction U		P	NHH	P	Sacramento V	SAC	2.84E+01	6.50E+01	2.28E+02	8.10E-04	1.51E-02	6.22E-03	2.51E+00	2.94E-05	5.61E-05	0.00E+00	7.31E-05	836.0499733
2040	Annual		Mon-Sun	2270002033	Bore/Drill F	D	175	Construction U		P	NHH	P	Sacramento V	SAC	6.57E+00	1.50E+01	9.64E+01	2.37E-04	5.67E-03	5.09E-04	1.06E+00	1.19E-05	1.97E-05	0.00E+00	2.14E-05	352.9701502
2040	Annual		Mon-Sun	2270002033	Bore/Drill F	D	250	Construction U		N	NHH	P	Sacramento V	SAC	5.65E+00	1.29E+01	1.10E+02	2.72E-04	2.22E-03	5.84E-04	1.22E+00	1.37E-05	2.15E-05	0.00E+00	2.45E-05	404.8404449
2040	Annual		Mon-Sun	2270002033	Bore/Drill F	D	500	Construction U		N	NHH	P	Sacramento V	SAC	1.26E+01	2.88E+01	4.05E+02	1.00E-03	7.93E-03	2.15E-03	4.48E+00	4.40E-05	7.91E-05	0.00E+00	9.03E-05	1490.774101
2040	Annual		Mon-Sun	2270002033	Bore/Drill F	D	750	Construction U		N	NHH	P	Sacramento V	SAC	1.60E+00	3.67E+00	1.02E+02	2.52E-04	2.00E-03	5.42E-04	1.13E+00	1.13E-05	1.99E-05	0.00E+00	2.28E-05	375.5239419
2040	Annual		Mon-Sun	2270002033	Bore/Drill F	D	1000	Construction U		N	NHH	P	Sacramento V	SAC	2.69E+00	6.15E+00	2.58E+02	6.38E-04	5.05E-03	1.19E-02	2.85E+00	2.87E-05	1.06E-04	0.00E+00	5.75E-05	949.6947725
2040	Annual		Mon-Sun	2270002036	Excavators	D	25	Construction U		P	NHH	NP	Sacramento V	SAC	2.61E+00	1.00E+01	7.49E+00	9.91E-05	3.38E-04	6.27E-04	8.22E-02	1.04E-06	2.34E-05	0.00E+00	8.95E-06	27.99808797
2040	Annual		Mon-Sun	2270002036	Excavators	D	50	Construction U		P	NHH	NP	Sacramento V	SAC	9.84E+01	3.80E+02	4.35E+02	4.74E-03	4.41E-02	2.75E-02	4.74E+00	6.13E-05	1.61E-04	0.00E+00	4.27E-04	1608.377906
2040	Annual		Mon-Sun	2270002036	Excavators	D	120	Construction U		P	NHH	NP	Sacramento V	SAC	2.67E+02	1.03E+03	3.46E+03	1.87E-02	2.54E-01	1.01E-01	3.79E+01	4.45E-04	1.19E-03	0.00E+00	1.68E-03	12702.30376
2040	Annual		Mon-Sun	2270002036	Excavators	D	175	Construction U		P	NHH	NP	Sacramento V	SAC	5.16E+02	1.99E+03	1.01E+04	3.79E-02	6.60E-01	6.12E-02	1.11E+02	1.25E-03	2.59E-03	0.00E+00	3.42E-03	37217.0341
2040	Annual		Mon-Sun	2270002036	Excavators	D	250	Construction U		N	NHH	NP	Sacramento V	SAC	2.10E+02	8.09E+02	5.80E+03	2.17E-02	1.29E-01	3.40E-02	6.41E+01	7.21E-04	1.33E-03	0.00E+00	1.96E-03	21401.18812
2040	Annual		Mon-Sun	2270002036	Excavators	D	500	Construction U		N	NHH	NP	Sacramento V	SAC	1.51E+02	5.83E+02	6.16E+03	2.30E-02	1.31E-01	3.61E-02	6.81E+01	6.69E-04	1.41E-03	0.00E+00	2.08E-03	22739.73831
2040	Annual		Mon-Sun	2270002036	Excavators	D	750	Construction U		N	NHH	NP	Sacramento V	SAC	8.10E-01	3.13E+00	5.47E+01	2.04E-04	1.16E-03	3.20E-04	6.05E-01	6.08E-06	1.26E-05	0.00E+00	1.84E-05	201.8976182
2040	Annual		Mon-Sun	2270002039	Concrete/Ir	D	25	Construction U		P	NHH	NP	Sacramento V	SAC	2.83E-01	4.59E-01	3.44E-01	4.56E-06	1.55E-05	2.88E-05	3.78E-03	4.79E-08	1.08E-06	0.00E+00	4.11E-07	1.286517241
2040	Annual		Mon-Sun	2270002039	Concrete/Ir	D	50	Construction U		P	NHH	NP	Sacramento V	SAC	2.47E+00	3.93E+00	5.42E+00	3.91E-05	4.36E-04	3.19E-04	5.94E-02	7.67E-07	1.56E-06	0.00E+00	3.52E-06	19.9618894
2040	Annual		Mon-Sun	2270002039	Concrete/Ir	D	120	Construction U		P	NHH	NP	Sacramento V	SAC	4.31E+00	6.85E+00	2.31E+01	8.74E-05	1.55E-03	6.41E-04	2.54E-01	2.98E-06	6.21E-06	0.00E+00	7.89E-06	84.76489111
2040	Annual		Mon-Sun	2270002039	Concrete/Ir	D	175	Construction U		P	NHH	NP	Sacramento V	SAC	1.41E-01	2.25E-01	1.63E+00	4.32E-06	9.74E-05	9.41E-06	1.80E-02	2.02E-07	3.55E-07	0.00E+00	3.90E-07	5.989536169
2040	Annual		Mon-Sun	2270002042	Cement an	D	15	Construction U		P	NHH	NP	Sacramento V	SAC	3.61E+01	2.97E+01	8.57E+00	1.09E-04	5.73E-04	6.84E-04	9.38E-02	1.46E-06	2.67E-05	0.00E+00	9.85E-06	31.91418902
2040	Annual		Mon-Sun	2270002042	Cement an	D	25	Construction U		P	NHH	NP	Sacramento V	SAC	3.25E+00	2.67E+00	2.14E+00	2.83E-05	9.65E-05	1.79E-04	2.34E-02	2.98E-07	6.68E-06	0.00E+00	2.55E-06	7.988137055
2040	Annual		Mon-Sun	2270002045	Cranes	D	50	Construction U		P	NHH	P	Sacramento V	SAC	2.40E+00	8.41E+00	8.94E+00	9.73E-05	9.03E-04	5.70E-04	9.74E-02	1.26E-06	4.23E-06	0.00E+00	8.78E-06	33.02138966
2040	Annual		Mon-Sun	2270002045	Cranes	D	120	Construction U		P	NHH	P	Sacramento V	SAC	2.64E+01	9.23E+01	2.11E+02	1.15E-03	1.54E-02	6.31E-03	2.31E+00	2.71E-05	8.94E-05	0.00E+00	1.04E-04	774.3317259
2040	Annual		Mon-Sun	2270002045	Cranes	D	175	Construction U		P	NHH	P	Sacramento V	SAC	2.64E+01	9.23E+01	3.37E+02	1.29E-03	2.19E-02	2.42E-03	3.70E+00	4.17E-05	1.05E-04	0.00E+00	1.16E-04	1236.208643
2040	Annual		Mon-Sun	2270002045	Cranes	D	250	Construction U		N	NHH	P	Sacramento V	SAC	5.11E+01	1.79E+02	9.06E+02	3.44E-03	2.02E-02	6.08E-03	1.00E+01	1.13E-04	2.34E-04	0.00E+00	3.10E-04	3344.654124
2040	Annual		Mon-Sun	2270002045	Cranes	D	500	Construction U		N	NHH	P	Sacramento V	SAC	1.87E+01	6.55E+01	5.33E+02	2.02E-03	1.13E-02	3.53E-03	5.90E+00	5.79E-05	1.37E-04	0.00E+00	1.83E-04	1968.526137
2040	Annual		Mon-Sun	2270002045	Cranes	D	750	Construction U		N	NHH	P	Sacramento V	SAC	3.36E+00	1.18E+01	1.61E+02	6.11E-04	3.41E-03	1.07E-03	1.78E+00	1.79E-05	4.15E-05	0.00E+00	5.52E-05	594.7478001
2040	Annual		Mon-Sun	2270002045	Cranes	D	9999	Construction U		N	NHH	P	Sacramento V	SAC	4.22E+00	1.48E+01	6.48E+02	2.50E-03	1.37E-02	3.19E-02	7.16E+00	7.20E-05	3.47E-04	0.00E+00	2.26E-04	2391.260937
2040	Annual		Mon-Sun	2270002048	Graders	D	50	Construction U		P	NHH	NP	Sacramento V	SAC	9.89E-01	2.54E+00	3.20E+00	3.47E-05	3.17E-04	2.03E-04	3.49E-02	4.52E-07	1.65E-06	0.00E+00	3.13E-06	11.84157826
2040	Annual		Mon-Sun	2270002048	Graders	D	120	Construction U		P	NHH	NP	Sacramento V	SAC	6.60E+01	1.69E+02	5.78E+02	3.11E-03	4.20E-02	1.74E-02	6.34E+00	7.44E-05	2.77E-04	0.00E+00	2.81E-04	2125.386904
2040	Annual		Mon-Sun	2270002048	Graders	D	175	Construction U		P	NHH	NP	Sacramento V	SAC	2.25E+02	5.79E+02	3.26E+03	1.22E-02	2.10E-01	2.40E-02	3.58E+01	4.03E-04	1.09E-03	0.00E+00	1.10E-03	11960.74824
2040	Annual		Mon-Sun	2270002048	Graders	D	250	Construction U		N	NHH	NP	Sacramento V	SAC	1.40E+02	3.59E+02	2.79E+03	1.03E-02	6.16E-02	1.96E-02	3.09E+01	3.47E-04	7.34E-04	0.00E+00	9.27E-04	10305.90841
2040	Annual		Mon-Sun	2270002048	Graders	D	500	Construction U		N	NHH	NP	Sacramento V	SAC	3.96E+00	1.02E+01	1.05E+02	3.87E-04	2.21E-03	7.20E-04	1.16E+00	1.14E-05	2.75E-05	0.00E+00	3.49E-05	388.6347097
2040	Annual		Mon-Sun	2270002048	Graders	D	750	Construction U		N	NHH	NP	Sacramento V	SAC	5.17E-02	1.33E-01	2.91E+00	1.07E-05	6.12E-05	2.01E-05	3.22E-02	3.24E-07	7.63E-07	0.00E+00	9.66E-07	10.75328479
2040	Annual		Mon-Sun	2270002051	Off-Highwa	D	175	Construction U		P	NHH	NP	Sacramento V	SAC	4.59E+00	2.48E+01	1.41E+02	5.61E-04	9.35E-03	8.69E-04	1.55E+00	1.74E-05	3.74E-05	0.00E+00	5.07E-05	517.8655096
2040	Annual		Mon-Sun	2270002051	Off-Highwa	D	250	Construction U		N	NHH	NP	Sacramento V	SAC	3.39E+01	1.83E+02	1.38E+03	5.49E-03	3.13E-02	8.21E-03	1.52E+01	1.72E-04	3.25E-04	0.00E+00	4.95E-04	5091.470665
2040	Annual		Mon-Sun	2270002051	Off-Highwa	D	500	Construction U		N	NHH	NP	Sacramento V	SAC	4.78E+01	2.58E+02	3.18E+03	1.26E-02	6.83E-02	1.89E-02	3.51E+01	3.45E-04	7.49E-04	0.00E+00	1.14E-03	11725.13085
2040	Annual		Mon-Sun	2270002051	Off-Highwa	D	750	Construction U		N	NHH	NP	Sacramento V	SAC	1.08E+01	5.86E+01	1.17E+03	4.66E-03	2.51E-02	6.96E-03	1.29E+01	1.30E-04	2.76E-04	0.00E+00	4.20E-04	4318.153312
2040	Annual		Mon-Sun	2270002051	Off-Highwa	D	1000	Construction U		N	NHH	NP	Sacramento V	SAC	5.09E+00	2.75E+01	7.75E+02	3.09E-03	1.67E-02	3.82E-02	8.57E+00	8.61E-05	3.99E-04	0.00E+00	2.79E-04	2861.304718
2040	Annual		Mon-Sun	2270002054	Crushing/P	D	50	Construction U		P	NHH	P	Sacramento V	SAC	1.13E+01	2.96E+01	5.96E+01	5.60E-04	5.54E-03	3.66E-03	6.51E-01	8.41E-06	1.99E-05	0.00E+00	5.05E-05	219.9670997
2040	Annual		Mon-Sun	2270002054	Crushing/P	D	120	Construction U		P	NHH	P	Sacramento V	SAC	3.19E+01	8.34E+01	3.16E+02	1.50E-03	2.24E-02	9.01E-03	3.47E+00	4.07E-05	9.75E-05	0.00E+00	1.35E-04	1159.438173
2040	Annual		Mon-Sun	2270002054	Crushing/P	D	175	Construction U		P	NHH	P	Sacramento V	SAC	1.35E+01	3.53E+01	2.69E+02	8.84E-04	1.69E-02	1.59E-03	2.95E+00	3.32E-05	6.35E-05	0.00E+00	7.97E-05	984.7185919
2040	Annual		Mon-Sun	2270002054	Crushing/P	D	250	Construction U		N	NHH	P	Sacramento V	SAC	1.34E+00	3.52E+00	3.88E+01	1.28E-04	8.36E-04	2.21E-04	4.29E-01	4.83E-06	8.37E-06	0.00E+00	1.15E-05	143.2036402
2040	Annual		Mon-Sun	2270002054	Crushing/P	D	500	Construction U		N	NHH	P	Sacramento V	SAC	7.56E+00	1.98E+01	3.34E+02	1.10E-03	6.89E-03	1.90E-03	3.70E+00	3.63E-05	7.20E-05	0.00E+00	9.91E-05	1232.275096
2040	Annual		Mon-Sun	2270002054	Crushing/P	D	750	Construction U		N	NHH	P	Sacramento V	SAC	8.62E-02	2.26E-01	6.00E+00	1.97E-05	1.24E-04	3.42E-05	6.64E-02	6.68E-07	1.29E-06	0.00E+00	1.78E-06	22.14333046
2040	Annual		Mon-Sun	2270002054	Crushing/P	D	9999	Construction U		N	NHH	P	Sacramento V	SAC	8.62E-02	2.26E-01	1.33E+01	4.43E-05	2.75E-04	6.38E-04	1.47E-01	1.48E-06	6.27E-06	0.00E+00	4.00E-06	49.18241565
2040	Annual		Mon-Sun	2270002057	Rough Terr	D	50	Construction U		P	NHH	NP	Sacramento V	SAC	7.84E+00	2.43E+01	3.76E+01	3.75E-04	3.62E-03	2.33E-03	4.10E-01	5.30E-06	1.28E-05	0.00E+00	3.39E-05	138.8264269
2040	Annual		Mon-Sun	2270002057	Rough Terr	D	120	Construction U		P	NHH	NP	Sacramento V	SAC	3.76E+02	1.16E+03	3.30E+03	1.65E-02	2.37E-01	9.48E-02	3.62E+01	4.25E-04	1.05E-03	0.00E+00	1.49E-03	12131.40132
2040	Annual		Mon-Sun	2270002057	Rough Terr	D	175	Construction U		P	NHH	NP	Sacramento V	SAC	4.81E+01	1.49E+02	8.45E+02	2.92E-03	5.38E-02	4.96E-03	9.29E+00	1.04E-04	2.03E-04	0.00E+00	2.63E-04	3097.777835
2040	Annual		Mon-Sun	2270002057	Rough Terr	D	250	Construction U		N	NHH	NP	Sacramento V	SAC	2.68E+00	8.30E+00	6.41E+01	2.22E-04	1.40E-03	3.65E-04	7.09E-01	7.97E-06	1.41E-05	0.00E+00	2.00E-05	236.3675635
2040	Annual		Mon-Sun	2270002057	Rough Terr	D	500	Construction U		N	NHH	NP	Sacramento V	SAC	1.77E+00	5.46E+00	6.33E+01	2.19E-04	1.32E-03	3.61E-04	7.00E-01	6.87E-06	1.39E-05	0.00E+00	1.98E-05	233.6000006
2040	Annual		Mon-Sun	2270002060	Rubber Tire	D	25	Construction U		P	NHH	NP	Sacramento V	SAC	9.89E-01	2.60E+00	2.00E+00	2.65E-05	9.04E-05	1.67E-04	2.20E-02	2.79E-07	6.25E-06	0.00E+00	2.39E-06	7.47846168
2040	Annual		Mon-Sun	2270002060	Rubber Tire	D	50	Construction U		P	NHH	NP	Sacramento V	SAC	1.92E+01	5.08E+01	7.24E+01	7.58E-04	7.09E-03	4.56E-03	7.90E-01	1.02E-05	3.45E-05	0.00E+00	6.84E-05	267.4997554
2040	Annual		Mon-Sun	2270002060	Rubber Tire	D	120	Construction U		P	NHH	NP	Sacramento V	SAC	5.22E+02	1.38E+03	3.70E+03	1.94E-02	2.68E-01	1.10E-01	4.06E+01	4.76E-04	1.62E-03	0.00E+00	1.75E-03	13599.92682
2040	Annual		Mon-Sun	2270002060	Rubber Tire	D	175	Construction U		P	NHH	NP	Sacramento V	SAC	2.94E+02	7.78E+02	3.76E+03	1.37E-02	2.41E-01	2.66E-02	4.13E+01	4.65E-04	1.17E-03	0.00E+00	1.24E-03	13784.93685
2040	Annual		Mon-Sun	2270002060	Rubber Tire	D	250	Construction U		N	NHH	NP	Sacramento V	SAC	2.93E+02	7.73E+02	5.21E+03	1.88E-02	1.14E-01	3.51E-02	5.76E+01	6.48E-04	1.33E-03	0.00E+00	1.70E-03	19207.48208
2040	Annual		Mon-Sun	2270002060	Rubber Tire	D	500	Construction U		N	NHH	NP	Sacramento V	SAC	1.22E+02	3.22E+02	3.45E+03	1.24E-02	7.22E-02	2.27E-02	3.81E+01	3.74E-04	8.74E-04	0.00E+00	1.12E-03	12716.77121
2040	Annual		Mon-Sun	2270002060	Rubber Tire	D	750	Construction U		N	NHH	NP	Sacramento V	SAC	2.09E+00	5.51E+00	1.21E+02	4.37E-04	2.53E-03	8.01E-04	1.34E+00	1.34E-05	3.07E-05	0.00E+00	3.94E-05	445.9000699
2040	Annual		Mon-Sun	2270002060	Rubber Tire	D	1000	Construction U		N	NHH	NP	Sacramento V	SAC	2.24E-01	5.91E-01	1.59E+01	5.75E-05	3.32E-04	7.79E-04	1.75E-01	1.76E-06	8.27E-06	0.00E+00	5.19E-06	58.54034255
2040	Annual		Mon-Sun	2270002063	Rubber Tire	D	175	Construction U		P	NHH	NP	Sacramento V	SAC	7.07E-01	3.11E+00	1.83E+01	9.74E-05	1.23E-03	3.20E-04	2.01E-01	2.26E-06	1.63E-05	0.00E+00	8.79E-06	67.32709509
2040	Annual		Mon-Sun	2270002063	Rubber Tire	D	250	Construction U		N	NHH	NP	Sacramento V	SAC	1.73E+01	7.61E+01	6.32E+02	3.12E-03	1.51E-02	9.97E-03	6.98E+00	7.85E-05	3.83E-04	0.00E+00	2.81E-04	2335.497185
2040	Annual		Mon-Sun	2270002063	Rubber Tire	D	500	Construction U		N	NHH	NP	Sacramento V	SAC	2.66E+01	1.17E+02	1.40E+03	6.81E-03	3.27E-02	2.07E-02	1.55E+01	1.52E-04	8.05E-04	0.00E+00	6.15E-04	5186.98369
2040	Annual		Mon-Sun	2270002063	Rubber Tire	D	750	Construction U		N	NHH	NP	Sacramento V	SAC	2.29E+00	1.01E+01	1.82E+02	8.84E-04	4.24E-03	2.72E-03	2.01E+00	2.02E-05	1.05E-04	0.00E+00	7.98E-05	672.2766646
2040	Annual		Mon-Sun	2270002063	Rubber Tire	D	1000	Construction U		N	NHH	NP	Sacramento V	SAC	1.55E-01	6.82E-01	1.82E+01	9.04E-05	4.32E-04	1.03E-03	2.02E-01	2.03E-06	1.62E-05	0.00E+00	8.16E-06	67.46759438
2040	Annual		Mon-Sun	2270002066	Tractors/Lc	D	25	Construction U		P	NHH	NP	Sacramento V	SAC	1.99E+01	5.15E+01	3.71E+01	4.92E-04	1.68E-03	3.11E-03	4.08E-01	5.17E-06	1.16E-04	0.00E+00	4.44E-05	138.9405847
2040	Annual		Mon-Sun	2270002066	Tractors/Lc	D	50	Construction U		P	NHH	NP	Sacramento V	SAC	1.19E+02	3.10E+02	4.31E+02	4.21E-03	4.10E-02	2.67E-02	4.71E+00	6.08E-05	1.51E-04	0.00E+00	3.80E-04	1591.766336
2040	Annual		Mon-Sun	2270002066	Tractors/Lc	D	120	Construction U		P	NHH	NP	Sacramento V	SAC	1.59E+03	4.15E+03	9.78E+03	4.80E-02	6.99E-01	2.80E-01	1.07E+02	1.26E-03	3.18E-03	0.00E+00	4.33E-03	35911.05671
2040	Annual		Mon-Sun	2270002066	Tractors/Lc	D	175	Construction U		P	NHH	NP	Sacramento V	SAC	1.19E+02	3.10E+02	1.43E+03	4.85E-03	9.05E-02	8.44E-03	1.57E+01	1.77E-04	3.54E-04	0.00E+00	4.38E-04	5235.665104
2040	Annual		Mon-Sun	2270002066	Tractors/Lc	D	250	Construction U		N	NHH	NP	Sacramento V	SAC	3.84E+01	1.00E+02	7.78E+02	2.65E-03	1.69E-02	4.50E-03	8.60E+00	9.68E-05	1.74E-04	0.00E+00	2.39E-04	2868.226616
2040	Annual		Mon-Sun	2270002066	Tractors/Lc	D	500	Construction U		N	NHH	NP	Sacramento V	SAC	6.20E+01	1.62E+02	2.52E+03	8.58E-03	5.23E-02	1.46E-02	2.79E+01	3.14E-04	5.64E-04	0.00E+00	7.74E-04	9295.646893
2040	Annual		Mon-Sun	2270002066	Tractors/Lc	D	750	Construction U		N	NHH	NP	Sacramento V	SAC	1.04E+01	2.72E+01	6.36E+02	2.16E-03	1.32E-02	3.67E-03	7.03E+00	7.91E-05	1.42E-04	0.00E+00	1.95E-04	2344.469845
2040	Annual		Mon-Sun	2270002069	Crawler Tra	D	50	Construction U		P	NHH	NP	Sacramento V	SAC	9.89E-01	2.78E+00	3.17E+00	3.97E-05	3.31E-04	2.08E-04	3.45E-02	4.47E-07	2.60E-06	0.00E+00	3.59E-06	11.75461223
2040	Annual		Mon-Sun	2270002069	Crawler Tra	D	120	Construction U		P	NHH	NP	Sacramento V	SAC	5.61E+02	1.58E+03	4.73E+03	2.89E-02	3.50E-01	1.56E-01	5.18E+01	6.08E-04	3.58E-03	0.00E+00	2.61E-03	17397.62358
2040	Annual		Mon-Sun	2270002069	Crawler Tra	D	175	Construction U		P	NHH	NP	Sacramento V	SAC	1.90E+02	5.34E+02	2.94E+03	1.26E-02	1.93E-01	3.07E-02	3.23E+01	3.64E-04	1.45E-03	0.00E+00	1.14E-03	10798.86593
2040	Annual		Mon-Sun	2270002069	Crawler Tra	D	250	Construction U		N	NHH	NP	Sacramento V	SAC	1.63E+02	4.59E+02	3.44E+03	1.42E-02	7.82E-02	3.30E-02	3.81E+01	4.28E-04	1.25E-03	0.00E+00	1.28E-03	12716.65374
2040	Annual		Mon-Sun	2270002069	Crawler Tra	D	500	Construction U		N	NHH	NP	Sacramento V	SAC	1.12E+02	3.14E+02	3.68E+03	1.51E-02	7.97E-02	3.38E-02	4.07E+01	4.00E-04	1.29E-03	0.00E+00	1.36E-03	13597.197
2040	Annual		Mon-Sun	2270002069	Crawler Tra	D	750	Construction U		N	NHH	NP	Sacramento V	SAC	1.38E+00	3.88E+00	8.14E+01	3.34E-04	1.76E-03	7.53E-04	9.00E-01	9.05E-06	2.87E-05	0.00E+00	3.01E-05	300.5724645
2040	Annual		Mon-Sun	2270002069	Crawler Tra	D	1000	Construction U		N	NHH	NP	Sacramento V	SAC	1.38E+00	3.87E+00	1.15E+02	4.78E-04	2.51E-03	5.94E-03	1.27E+00	1.28E-05	7.37E-05	0.00E+00	4.31E-05	425.3011082
2040	Annual		Mon-Sun	2270002072	Skid Steer I	D	25	Construction U		P	NHH	NP	Sacramento V	SAC	1.36E+02	3.10E+02	1.95E+02	2.58E-03	8.80E-03	1.63E-02	2.14E+00	2.71E-05	6.09E-04	0.00E+00	2.33E-04	728.280246
2040	Annual		Mon-Sun	2270002072	Skid Steer I	D	50	Construction U		P	NHH	NP	Sacramento V	SAC	1.23E+03	2.85E+03	3.32E+03	2.63E-02	2.81E-01	1.98E-01	3.63E+01	4.70E-04	9.41E-04	0.00E+00	2.38E-03	12237.48697
2040	Annual		Mon-Sun	2270002072	Skid Steer I	D	120	Construction U		P	NHH	NP	Sacramento V	SAC	6.45E+02	1.49E+03	2.90E+03	1.18E-02	1.99E-01	8.06E-02	3.19E+01	3.74E-04	7.80E-04	0.00E+00	1.07E-03	10655.39933
2040	Annual		Mon-Sun	2270002075	Off-Highwa	D	120	Construction U		P	NHH	NP	Sacramento V	SAC	7.07E-02	2.13E-01	9.11E-01	6.37E-06	6.81E-05	3.47E-05	9.98E-03	1.17E-07	1.18E-06	0.00E+00	5.75E-07	3.356345873
2040	Annual		Mon-Sun	2270002075	Off-Highwa	D	175	Construction U		P	NHH	NP	Sacramento V	SAC	8.64E+01	2.61E+02	1.55E+03	7.69E-03	1.02E-01	2.50E-02	1.70E+01	1.91E-04	1.26E-03	0.00E+00	6.94E-04	5686.117509
2040	Annual		Mon-Sun	2270002075	Off-Highwa	D	250	Construction U		N	NHH	NP	Sacramento V	SAC	8.17E+01	2.46E+02	1.45E+03	6.71E-03	3.39E-02	2.12E-02	1.61E+01	1.81E-04	8.04E-04	0.00E+00	6.05E-04	5370.161547
2040	Annual		Mon-Sun	2270002075	Off-Highwa	D	750	Construction U		N	NHH	NP	Sacramento V	SAC	8.65E+00	2.61E+01	6.71E+02	3.06E-03	1.52E-02	9.28E-03	7.41E+00	7.45E-05	3.55E-04	0.00E+00	2.76E-04	2478.575217
2040	Annual		Mon-Sun	2270002075	Off-Highwa	D	1000	Construction U		N	NHH	NP	Sacramento V	SAC	9.14E-01	2.75E+00	1.01E+02	4.71E-04	2.33E-03	5.61E-03	1.12E+00	1.13E-05	8.42E-05	0.00E+00	4.25E-05	374.7628409

2040	Annual		Mon-Sun	2270002078	Dumpers/T	D	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.70E+00	3.08E+00	1.07E+00	1.41E-05	4.83E-05	8.94E-05	1.17E-02	1.49E-07	3.34E-06	0.00E+00	1.28E-06	3.994029352
2040	Annual		Mon-Sun	2270002081	Other Cons	D	15	Construction	U	P	NHH	NP	Sacramento	SV	SAC	2.34E+01	4.42E+01	2.04E+01	2.60E-04	1.36E-03	1.63E-03	2.23E-01	3.48E-06	6.36E-05	0.00E+00	2.35E-05	76.03670128
2040	Annual		Mon-Sun	2270002081	Other Cons	D	25	Construction	U	P	NHH	NP	Sacramento	SV	SAC	3.96E+00	7.49E+00	4.50E+00	5.96E-05	2.04E-04	3.77E-04	4.94E-02	6.27E-07	1.41E-05	0.00E+00	5.38E-06	16.83899647
2040	Annual		Mon-Sun	2270002081	Other Cons	D	50	Construction	U	P	NHH	NP	Sacramento	SV	SAC	6.08E+00	1.16E+01	1.48E+01	1.17E-04	1.25E-03	8.84E-04	1.62E-01	2.10E-06	4.35E-06	0.00E+00	1.05E-05	54.63790902
2040	Annual		Mon-Sun	2270002081	Other Cons	D	120	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.00E+01	1.92E+01	7.05E+01	2.87E-04	4.82E-03	1.96E-03	7.74E-01	9.08E-06	1.94E-05	0.00E+00	2.59E-05	258.4825816
2040	Annual		Mon-Sun	2270002081	Other Cons	D	175	Construction	U	P	NHH	NP	Sacramento	SV	SAC	1.38E+01	2.64E+01	1.28E+02	3.61E-04	7.75E-03	7.19E-04	1.41E+00	1.58E-05	2.81E-05	0.00E+00	3.26E-05	468.7191919
2040	Annual		Mon-Sun	2270002081	Other Cons	D	500	Construction	U	N	NHH	NP	Sacramento	SV	SAC	3.21E+01	6.14E+01	7.05E+02	1.99E-03	1.41E-02	3.88E-03	7.80E+00	7.65E-05	1.44E-04	0.00E+00	1.80E-04	2597.066805
2040	Annual		Mon-Sun	2270004030	Leaf Blowe	D	15	Lawn and Ga	U	N	NHH	P	Sacramento	SV	SAC	4.87E-01	1.60E-01	2.20E-02	2.49E-07	1.47E-06	1.75E-06	2.41E-04	3.74E-09	6.85E-08	0.00E+00	2.25E-08	0.081625165
2040	Annual		Mon-Sun	2270004030	Leaf Blowe	D	120	Lawn and Ga	U	N	NHH	P	Sacramento	SV	SAC	4.26E-01	1.40E-01	3.09E-01	6.46E-07	1.88E-05	8.14E-06	3.40E-03	3.99E-08	6.02E-08	0.00E+00	5.83E-08	1.131830156
2040	Annual		Mon-Sun	2270004030	Leaf Blowe	D	250	Lawn and Ga	U	N	NHH	P	Sacramento	SV	SAC	1.22E-01	4.00E-02	1.81E-01	2.68E-07	3.34E-06	9.46E-07	2.00E-03	2.26E-08	3.16E-08	0.00E+00	2.42E-08	0.665876643
2040	Annual		Mon-Sun	2270004055	Lawn & Ga	D	15	Lawn and Ga	U	N	NHH	NP	Sacramento	SV	SAC	1.17E+03	1.75E+03	7.42E+02	8.43E-03	4.96E-02	5.92E-02	8.13E+00	1.26E-04	2.31E-03	0.00E+00	7.60E-04	2757.09015
2040	Annual		Mon-Sun	2270004055	Lawn & Ga	D	25	Lawn and Ga	U	N	NHH	NP	Sacramento	SV	SAC	9.19E+02	1.37E+03	8.91E+02	1.18E-02	4.03E-02	7.46E-02	9.78E+00	1.24E-04	2.79E-03	0.00E+00	1.06E-03	3332.016221
2040	Annual		Mon-Sun	2270004065	Chippers/S	D	25	Lawn and Ga	U	P	NHH	P	Sacramento	SV	SAC	5.48E-01	6.97E-01	6.39E-01	8.47E-06	2.89E-05	5.35E-05	7.02E-03	8.90E-08	2.00E-06	0.00E+00	7.64E-07	2.390534142
2040	Annual		Mon-Sun	2270004065	Chippers/S	D	120	Lawn and Ga	U	P	NHH	P	Sacramento	SV	SAC	1.51E+01	1.92E+01	6.64E+01	2.24E-04	4.36E-03	1.82E-03	7.29E-01	8.56E-06	1.67E-05	0.00E+00	2.02E-05	243.3274374
2040	Annual		Mon-Sun	2270004065	Chippers/S	D	175	Lawn and Ga	U	P	NHH	P	Sacramento	SV	SAC	1.03E+00	1.32E+00	7.88E+00	1.87E-05	4.59E-04	4.48E-05	8.68E-02	9.76E-07	1.65E-06	0.00E+00	1.69E-06	28.87492328
2040	Annual		Mon-Sun	2270004065	Chippers/S	D	250	Lawn and Ga	U	N	NHH	P	Sacramento	SV	SAC	2.43E-01	3.10E-01	3.11E+00	7.35E-06	6.21E-05	1.70E-05	3.44E-02	3.88E-07	6.07E-07	0.00E+00	6.63E-07	11.46448697
2040	Annual		Mon-Sun	2270004065	Chippers/S	D	500	Lawn and Ga	U	N	NHH	P	Sacramento	SV	SAC	2.25E+00	2.87E+00	3.20E+01	7.55E-05	6.22E-04	1.75E-04	3.54E-01	3.48E-06	6.24E-06	0.00E+00	6.81E-06	117.8294706
2040	Annual		Mon-Sun	2270004065	Chippers/S	D	750	Lawn and Ga	U	N	NHH	P	Sacramento	SV	SAC	2.56E+00	3.25E+00	8.74E+01	2.06E-04	1.70E-03	4.77E-04	9.68E-01	9.73E-06	1.70E-05	0.00E+00	1.86E-05	321.99648
2040	Annual		Mon-Sun	2270004065	Chippers/S	D	1000	Lawn and Ga	U	N	NHH	P	Sacramento	SV	SAC	4.87E+00	6.19E+00	2.37E+02	5.60E-04	4.60E-03	1.09E-02	2.62E+00	2.63E-05	9.79E-05	0.00E+00	5.06E-05	871.95217
2040	Annual		Mon-Sun	2270004070	Commercia	D	15	Lawn and Ga	U	N	NHH	NP	Sacramento	SV	SAC	2.96E+01	8.65E+01	3.81E+01	4.33E-04	2.55E-03	3.04E-03	4.17E-01	6.49E-06	1.19E-04	0.00E+00	3.90E-05	141.592382
2040	Annual		Mon-Sun	2270004070	Commercia	D	25	Lawn and Ga	U	N	NHH	NP	Sacramento	SV	SAC	5.56E+02	1.63E+03	1.07E+03	1.42E-02	4.84E-02	8.97E-02	1.18E+01	1.49E-04	3.35E-03	0.00E+00	1.28E-03	4007.887962
2040	Annual		Mon-Sun	2270004075	Other Lawr	D	15	Lawn and Ga	U	N	NHH	NP	Sacramento	SV	SAC	4.26E-01	5.05E-01	2.82E-01	3.20E-06	1.88E-05	2.25E-05	3.09E-03	4.80E-08	8.79E-07	0.00E+00	2.89E-07	1.04696504
2040	Annual		Mon-Sun	2270004075	Other Lawr	D	25	Lawn and Ga	U	N	NHH	NP	Sacramento	SV	SAC	6.08E-02	7.22E-02	5.35E-02	7.09E-07	2.42E-06	4.48E-06	5.88E-04	7.46E-09	1.67E-07	0.00E+00	6.40E-08	0.200209683

Attachment 2

GHG Reduction Measures

Measure Number	Measure Name	GHG Reductions (MTCO2e/year) 2020	2030	2050
BE-1	Promote energy conservation	1,876	4,340	11,393
BE-2	Building Stock: Residential Appliances in Existing Development	4,487	10,134	19,250
BE-3	Building Stock: Nonresidential Appliances in Existing Development	912	2,116	5,642
BE-4	CALGreen Tier 1 - New Construction	1,174	9,244	25,574
BE-5	Zero Net Energy - New Construction	-	29,930	163,902
BE-6	CALGreen Tier 1 - Existing Buildings	3,972	8,511	34,043
BE-7	Solar PV in All Residential and Commercial Development	5,488	13,459	44,544
BE-8	SMUD Offset Program for Electricity Use	12,193	19,846	33,167
BE-9	Increase Tree Planting	620	1,505	3,275
RC-1	Waste Reduction	5,272	10,169	16,957
RC-2	Composting	3,208	6,791	9,713
TACM-1	Local Goods	4,388	7,008	9,935
TACM-2	Transit Oriented Development	3,189	6,963	14,613
TACM-3	Intra-City Transportation Demand Management	5,485	9,344	24,838
TACM-4	Pedestrian & Bicycle Travel	3,299	4,265	5,533
TACM-5	Affordable Housing	12,028	16,018	21,193
TACM-6	Vehicle Miles Traveled Limits	26,526	18,539	24,525
TACM-7	Traffic Calming Measures	274	292	828
TACM-8	Tier 4 Final Construction Equipment	-	644	892
TACM-9	Electric Vehicle Charging Stations	316	794	689
	Total	**94,710**	**179,913**	**470,508**
	Target Reduction	(381,953)	84,368	846,264
		(476,663)	(95,545)	375,756

BE-1.	BE-1.	Promote energy conservation
BE-1.	Reduction Measure:	Promote energy conservation by residents and businesses in existing structures in close coordination with other agencies and local energy providers, including the Sacramento Municipal Utility District (SMUD) and Pacific Gas and Electric (PG&E).
BE-1.	Location in GPU	NR-6-1
BE-1.	Action Items:	• Work closely with SMUD, PG&E, and other private partners to support widespread social marketing and prepare tools to encourage conservation and greater efficiency in energy behaviors. • Partner with the Elk Grove Chamber of Commerce, and utility providers to launch an energy efficiency program for local businesses that promotes cost-effective business behaviors. • Support PG&E and SMUD in-home monitoring program participation through smart grid programs and advocate for pilot neighborhood competitions throughout Elk Grove. • Leverage resources from PG&E and SMUD to support enhanced local education to local businesses on the nonresidential energy use disclosure program (AB 1103) and programs for energy monitoring, such as the Energy Star Portfolio Manager. • Provide educational materials to encourage participation in energy monitoring programs at large multi-tenant commercial developments through SMUD and PG&E programs or via the Energy Start Portfolio Manager.
BE-1.	2020 Reductions (MTCO2e):	1,876
BE-1.	2030 Reductions (MTCO2e):	4,340
BE-1.	2050 Reductions (MTCO2e)	11,393
BE-1.	Target Indicators	15% household and business participation in conservation programs, and 15% household participation in monitoring programs that are supported by the smart grid.
BE-1.	Methodology and Sources:	Based on a 2011 Residential Behavior Profile and findings for the Sacramento identified by ICF, assumed participation rates in outreach programs and in-home monitoring programs calculated for existing households. Energy reductions based on case studies and SMUD reports on smart grid efficacy. ICF GHG Reduction Measure Analysis for SMUD. April 2011. Bonneville Power Administration (BPA). 2011. Residential Behavior Based Energy Efficiency Program Profiles 2011. http://www.bpa.gov/Energy/n/pdf/BBEE_Res_Profiles_Dec_2011.pdf SMUD Smart Grid Activities 2010 Presentation

Energy/GHG Summary

	2020	2030	2050
Residential energy Savings (kWh)	3,538,576	9,436,201	24,770,029
Residential energy Savings (Therms)	166,586	444,228	1,166,099
Nonresidential energy Savings (kWh)	536,061	1,429,496	3,752,426
Nonresidential energy Savings (Therms)	1,184	3,156	8,285
Residential Electricity Emissions Reduction (MTCO2e)	853.65	1,701.38	4,466.12
Residential natural gas emissions reduction (MTCO2e)	886.65	2,364.40	6,206.55
Nonresidential electricity emissions reduction (MTCO2e)	129.32	257.74	676.57
Nonresidential natural gas emissions reduction (MTCO2e)	6.30	16.80	44.10
Residential Total (MTCO2e)	1,740.30	4,065.78	10,672.67
Nonresidential Total (MTCO2e)	135.62	274.54	720.67
Electricity Emissions Reduction (MTCO2e)	**983**	**1,959**	**5,143**
Natural Gas Emissions Reduction (MTCO2e)	**893**	**2,381**	**6,251**

Assumptions

	2020	2030	2050
Target DU participation rate in outreach programs	15%	25%	35%
Target DU participation rate in monitoring programs	15%	25%	35%
Target businesses participation rate in outreach programs	15%	25%	35%

Implementation

	2020	2030	2050
Outreach - reduction per DU (kWh)	89	89	89
Outreach - reduction per DU (therms)	4	4	4
Outreach - number of DU	52,783	52,783	52,783
Monitoring - reduction per DU (kWh)	358	358	358
Monitoring - reduction per DU (therms)	17	17	17
Monitoring - number of DU	52,783	52,783	52,783
Outreach - reduction per business (kWh)	410	410	410
Outreach - reduction per business (therms)	9	9	9
Outreach - number of businesses	8,710	8,710	8,710

Workspace

RESIDENTIAL QUANTIFICATION

		2013
Baseline	Residential electricity use (kWh)	471,810,070
	Residential natural gas use (therms)	22,211,400
	Number of DU	52,783
	kWh/DU	8,939
	Therms/DU	421

		2020	2030	2050
Participation	Target household participation rate in outreach programs	15%	25%	35%
	Target household participation rate in monitoring programs	15%	25%	35%

		2020	2030	2050	
Assumed Savings per Participant	Percent savings per DU from aggressive outreach	1%	1%	1%	< BPA
	Percent savings per DU from in-home monitoring	4%	4%	4%	< SMUD source (energy savings only, transmission credited elsewhere)

		2020	2030	2050
Per Household Savings	OUTREACH - Electricity Savings per DU (kWh)	89.39	89.39	89.39
	OUTREACH - Natural Gas Savings per DU (therms)	4.21	4.21	4.21
	MONITORING - Electricity Savings per DU (kWh)	357.55	357.55	357.55
	MONITORING - Natural Gas Savings per DU (therms)	16.83	16.83	16.83

	2020	2030	2050

Total Savings	OUTREACH - subtotal electricity savings (kWh)	707,715	1,179,525	1,651,335
	OUTREACH - subtotal natural gas savings (therms)	33,317	55,529	77,740
	MONITORING - subtotal electricity savings (kWh)	2,830,860	4,718,101	6,605,341
	MONITORING - subtotal natural gas savings (therms)	133,268	222,114	310,960
	TOTAL ELECTRICITY SAVINGS per year (kWh)	**3,538,576**	**5,897,626**	**8,256,676**
	TOTAL ELECTRICITY SAVINGS cumulative (kWh)	**3,538,576**	**9,436,201**	**24,770,029**
	TOTAL NATURAL GAS SAVINGS PER YEAR (therms)	**166,586**	**277,643**	**388,700**
	TOTAL NATURAL GAS SAVINGS CUMULATIVE (therms)	**166,586**	**444,228**	**1,166,099**

NONRESIDENTIAL QUANTIFICATION

		2013	
Baseline	Nonresidential electricity use (kWh)	357,373,889	
	Nonresidential natural gas use (therms)	7,736,910	
	Number of businesses	8,710	< 2013 estimate from Elk Grove Jobs Report from City, 2013
	kWh/business	41,030	
	Therms/business	888	

		2020	**2030**	**2050**
Participation	OUTREACH - Electricity Savings per business (kWh)	15%	25%	35%
	OUTREACH - Natural Gas Savings per business (therms)	15%	25%	35%

		2020	**2030**	**2050**
Assumed Savings per Participant	Percent savings per business from aggressive outreach	1%	1%	1%

		2020	**2030**	**2050**
Per Business Savings	OUTREACH - Electricity Savings per business (kWh)	410.30	410.30	410.30
	OUTREACH - Natural Gas Savings per business (therms)	8.88	8.88	8.88

		2020	**2030**	**2050**
Total Savings	Total electricity savings per year (kWh)	536,061	893,435	1,250,809
	Total electricity savings cumulative (kWh)	536,061	1,429,496	3,752,426
	Total natural gas savings per year (therms)	1,184	1,973	2,762
	Total natural gas savings cumulative (therms)	1,184	3,156	8,285

BE-2.	BE-2.	Building Stock: Residential Appliances in Existing Development
BE-2.	Reduction Measure:	Support residential upgrades to more energy-efficient, cost-saving appliances for existing homes, leveraging regional and state resources to target indoor and outdoor appliances and equipment in existing homes.
BE-2.	Location in GPU	Policy NR-6-2
BE-2.	Action Items:	• Educate City residents about rebate offerings for appliances and equipment for Energy Star and other qualified appliances, including those offered by utility providers, the California Energy Commission, and the Sacramento Metropolitan Air Quality Management District. • Work with SMUD and Sacramento County to conduct targeted mailings to homeowners with pools to promote financial incentives for upgrades of residential pool pumps to more efficient, variable-speed pumps. Pool owners will be identified with County assessors parcel data and GIS files. • Identify opportunities to partner with other Sacramento communities to pursue bulk procurement of discounted variable-speed pool pumps in order to offer efficient pumps at affordable rates to residents. • Promote free utility assessments of appliances and heating, ventilation, and air conditioning units in partnership with SMUD and PG&E. Opportunities likely exist in the community's older suburbs, and City staff may leverage efforts with existing resources, such as the City's Home Repair and Rehabilitation Program. • Partner with SMUD to promote SMUD's multi-family prescriptive rebates for multi-family improvements to appliances, lighting, and other equipment upgrades.
BE-2.	2020 Reductions (MTCO2e):	4,487
BE-2.	2030 Reductions (MTCO2e):	10,134
BE-2.	2050 Reductions (MTCO2e)	19,250
BE-2.	Target indicators:	10% single-family household participation in energy efficient appliance programs 5% multi-family household participation in energy efficient appliance programs 10% of single-family households to install in solar hot water heaters 5% of multi-family households to install solar hot water heaters 15% of single-family households to upgrade pool pumps 5% of multi-family developments to upgrade pool pumps
BE-2.	Methodology and Sources:	Calculation assesses impact of appliance upgrades for existing development only. Reductions for each category of appliance upgrades were calculated using single-family and multi-family household electricity from CAPCOA Table BE 4-2 for climate zone 12 and applied to baseline electricity usage per household to render reductions by household. A target utilization rate of 50% was applied to all participating household and total reductions to reflect the likelihood that not all appliances, internal to the CAPCOA assumption, will be retrofitted in the participating homes. Solar hot water heater reductions calculated based on the amount of natural gas offset on average in comparison to conventional water heaters in climate zone 12. Pool pump savings calculated using the 2010 Residential Appliance Saturation Study, assuming the average amount of electricity used per household on pool pumps. Usage data for PG&E service territory was used, usage data was not available to unavailability of SMUD territory or climate zone 12 information. as the use is not climate dependent, so usage in PG&E's service territory was used as a proxy. Information provided by the City of Elk Grove was used to calculate the average annual number of pool permits issued since incorporation. This estimate of the number of pools was combined with the target participation rates and the CEC source below for reductions from retrofitting a conventional pump to a variable speed drive pool pump. CAPCOA. 2010. Quantifying Greenhouse Gas Mitigation Measures. http://capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf. California Energy Commission (2007). Draft Residential Swimming Pool Report. http://www.energy.ca.gov/title24/2008standards/prerulemaking/documents/2007-02-26-27_workshop/supporting/PGE-DRAFT_REPORT_RESIDENTIAL_SWIMMING_POOL.PDF

Energy/GHG Summary

	2020	2030	2050
Residential energy Savings (kWh)	1,629,704	3,909,321	7,756,409
Residential energy Savings (Therms)	769,195	1,771,607	3,353,904
Nonresidential energy Savings (kWh)			
Nonresidential energy Savings (Therms)			
Electricity Emissions Reduction (MTCO2e)	**393**	**705**	**1,399**
Natural Gas Emissions Reduction (MTCO2e)	**4,094**	**9,429**	**17,851**

Assumptions

	2020	2030	2050	
Target single-family household participation rate in energy efficient appliance program (% of all homes)	10%	15%	25%	< % of all homes
Target multi-family household participation rate in energy efficient appliance program (% of all homes)	5%	10%	20%	< % of all homes
Appliance utilization rate	70%	70%	70%	

Target single-family household participation rate in solar hot water program (% of all homes)	10%	13%	20%	< % of all homes
Target multi-family household participation rate in solar hot water program (% of all homes)	5%	7%	15%	< % of all homes
Target single-family household participation rate in pool pump program (% of homes with pools)	15%	18%	30%	< % of homes with pools
Target multi-family household participation rate in pool pump program (% of homes with pools)	5%	6%	10%	< % of homes with pools

Implementation

	2020	2030	2050
1. APPLIANCES - reduction per SFH (kWh)	883,795	1,325,692	2,209,487
1. APPLIANCES - reduction per MFH (kWh)	74,191	148,382	296,765
1. APPLIANCES - number of SFH	4,708	7,062	11,771
1. APPLIANCES - number of MFH	285	570	1,140
2. SOLAR HOT WATER - reduction per household (therms)	154	154	154
2. SOLAR HOT WATER - number of SFH participants	4,708	6,121	9,416
2. SOLAR HOT WATER - number of SFH participants	285	399	855
3. POOLS - reduction per HH (kWh)	1,300	1,300	1,300
3. POOLS - number of SFH	500	600	1,000
3. POOLS - number of MFH	15	18	30

Energy Efficiency Appliances

Baseline

	2013	
Residential electricity use (kWh)	471,810,070	
Residential natural gas use (therms)	22,211,400	
Number of DU	52,783	
kWh/DU	8,939	
Therms/DU	421	
Number of SFH	47,082	< Utilizes the percent of HH as SFH in 2013 using 2013 ACS
Number of MFH	5,701	< Utilizes the percent of HH as MFH in 2013 using 2013 ACS

Participation

	2020	2030	2050	
Percent of Single Family Homes	10%	15%	25%	< Arbitrary
NUMBER of SFHs	4,708	7,062	11,771	< Utilizes the percent of HH as SFH in 2020 using 2013 ACS
Percent of Multi-Family Homes	5%	10%	20%	< Arbitrary
NUMBER of MFHs	285	570	1,140	< Utilizes the percent of HH as MFH in 2020 using 2013 ACS

Assumed % Savings

	Single Family	Multi Family	
Total EnergyStar Savings (% total kWh reduction)	3.00%	4.16%	< CAPCOA Table BE 4-2. CZ 12
Utilization rate	70.00%	70.00%	

Total Savings

	2020	2030	2050
APPLIANCE - kWh/SFH	883,795	1,325,692	2,209,487
APPLIANCE - kWh/MFH	74,191	148,382	296,765
TOTAL per year kWh	**957,986**	**1,474,074**	**2,506,251**
TOTAL cumulative kWh	**957,986**	**2,432,060**	**4,938,311**

CAPCOA Table BE 4-2
Climate Zone 12

	Refrigerator	Clothes Washer	Dishwasher	Ceiling Fan	TOTAL
Multi-family	2.89%	0.03%	0.11%	1.13%	**4.16%**
Single-family	1.76%	0.51%	0.13%	0.60%	**3.00%**
Townhouse	2.53%	0.32%	0.13%	0.93%	

Solar Hot Water Heaters

	2013
Residential electricity use (kWh)	471,810,070
Residential natural gas use (therms)	22,211,400

Baseline	Number of DU	52,783	
	kWh/DU	8,939	
	Therms/DU	421	
	Number of SFH	47,082	< Utilizes the percent of HH as SFH in 2013 using 2013 ACS
	Number of MFH	5,701	< Utilizes the percent of HH as MFH in 2013 using 2013 ACS

		2020	2030	2050
Participation	Percent of homes with conventional water heater	73%	73%	73%
	Percent of SFH participating	10%	13%	20%
	Percent of MFH participating	5%	7%	15%
	Number of SFH participating	4,708	6,121	9,416
	Number of MFH participating	285	399	855

		2020	2030	2050	
Assumed % Savings	Average water heating therms per year	173	173	173	**California Solar Energy Industries Association. January 2009, The Value Proposition of Solar Water Heating in California. http://calseia.org/wp-content/uploads/2009/01/calseiareport_swh-value-proposition1.pdf**
	Average energy produced by residential SHW system	130	130	130	
	Percent of water heating therms offset with SHW system	75%	75%	75%	
	CZ 12 therms per year from conventional water heater (therms)	205	205	205	

		2020	2030	2050
Total Savings	Savings per participant (therms per home[SFH or MFH])	154	154	154
	SFH savings (Therms)	725,287	941,060	1,450,574
	MFH savings (Therms)	43,908	61,352	131,723
	TOTAL per year Therms	**769,195**	**1,002,413**	**1,582,297**
	TOTAL cumulative Therms	**769,195**	**1,771,607**	**3,353,904**

2010 California Residential Appliance Saturation Survey
http://www.energy.ca.gov/2010publications/CEC-200-2010-004/CEC-200-2010-004-V2.PDF

	Climate Zone 12			
	All Homes		Homes with gas data	
	UEC	Sat	UEC	Sat
All Household UEC	303	1098 homes	305	1035 homes
Primary Heat	85	87%	85	93%
Auxiliary Heat	31	0%	32	0%
Conventional Gas water heat	205	73%	205	78%
Dryer	25	51%	25	54%
Range/oven	35	82%	35	86%
Pool heater	246	6%	246	7%
Spa heater	60	6%	62	6%
misc.	25	12%	25	13%

Source:

Pool Pumps

		2013
Baseline	Residential electricity use (kWh)	471,810,070
	Residential natural gas use (therms)	22,211,400
	Number of DU	52,783
	kWh/DU	8,939
	Number of SFH	421
	Number of MFH	47,082
	Percent of homes that are SFH	89%
	Percent of homes that are MSFH	11%
	Number of pool permits issued July 2000 - Dec 21 2005	3,630
	SFH Pools	3,332
	MFH Pools	298

Table 2-27: Gas UECs for Forecast Zones 10-13

	Zone 10				Zone 11				Zone 12				Zone 13			
	All Homes		Homes w/Gas Data		All Homes		Homes w/Gas Data		All Homes		Homes w/Gas Data		All Homes		Homes w/Gas Data	
	UEC	Sat	UEC	Sat	UEC	Sat	UEC	Sat	UEC	Sat	UEC	Sat	UEC	Sat	UEC	Sat
All Household UEC	390	3206 homes	402	2347 homes	273	1576 homes	274	1366 homes	303	1098 homes	305	1036 homes	295	3886 homes	305	2924 homes
Primary Heat	173	0.83	179	0.94	62	0.75	63	0.86	85	0.87	85	0.93	98	0.73	100	0.94
Auxiliary Heat	64	0.02	69	0.00	30	0.01	30	0.01	31	0.00	32	0.00	44	0.00	56	0.00
Conv. Gas Water Heat	179	0.83	181	0.92	228	0.63	228	0.73	205	0.73	205	0.78	178	0.69	178	0.88
Solar Water Heat w/Gas Backup	143	0.00	143	0.00	203	0.00	203	0.00	200	0.00	200	0.00	141	0.00	140	0.00
Dryer	26	0.57	26	0.63	28	0.29	27	0.33	25	0.51	25	0.54	24	0.41	25	0.54
Range/Oven	34	0.77	33	0.84	40	0.74	40	0.84	35	0.82	35	0.86	31	0.58	32	0.73
Pool Heat	212	0.06	209	0.07	227	0.03	229	0.03	246	0.06	246	0.07	185	0.04	185	0.05
Spa Heat	48	0.07	48	0.09	96	0.02	97	0.02	60	0.06	62	0.06	49	0.07	50	0.09
Miscellaneous	23	0.14	23	0.16	31	0.06	31	0.07	25	0.12	25	0.13	21	0.15	21	0.18

Source: 2010 California Residential Appliance Saturation Survey

		2020		
Participation	Target single-family household participation rate in pool pump program (% of homes with pools)	15%	18%	30%
	Target multi-family household participation rate in pool pump program (% of homes with pools)	5%	6%	10%
	Number of SFH pumps replaced	500	600	1,000
	Number of MFH pumps replaced	15	18	30

		2020	2030	2050
Assumed % Savings	Percent Electricity Reduction for VSD Pool Pump	40%	40%	40%
	PG&E territory, average kWh /year from pool pump (RASS)	3250	3250	3250
	kWh Savings per pump replaced	1,300	1,300	1,300

< PG&E
http://www.energy.ca.gov/title24/2008standards/prerulemaking/documents/2007-02-26-27_workshop/supporting/PGE-

		2020	2030	2050
Total Savings	SFH savings (kWh)	651,053	781,003	1,300,806
	MFH savings (kWh)	20,666	24,539	40,031
	TOTAL per year kWh	**671,719**	**805,542**	**1,340,837**
	TOTAL cumulative kWh	**671,719**	**1,477,261**	**2,818,098**

Table 2-8: Electric UECs by Electric Utility

	PG&E		SDG&E		SCE		LADWP	
	UEC	Satura-tion	UEC	Satura-tion	UEC	Satura-tion	UEC	Satura-tion
All Household	6,458	7390 homes	5,970	3882 homes	6,444	10514 homes	5,538	2670 homes
Conv. Heat	1,032	0.05	353	0.03	371	0.03	169	0.02
Heat Pump	818	0.01	483	0.02	508	0.01	228	0.00
Aux. Heat	267	0.02	98	0.01	141	0.01	66	0.00
Furnace Fan	245	0.65	133	0.62	143	0.66	99	0.48
Attic Ceiling Fan	104	0.15	118	0.13	156	0.15	139	0.10
Central Air Conditioning	709	0.44	493	0.43	883	0.58	699	0.41
Room AC	221	0.11	107	0.13	238	0.18	152	0.24
Evap. Cooler	458	0.06	494	0.02	716	0.07	345	0.03
Water Heat	2,680	0.09	2,149	0.07	2,143	0.05	1,737	0.05
Solar Water Heat	1,897	0.00	2,231	0.00	1,838	0.00	.	0.00
Dryer	648	0.46	587	0.28	693	0.19	639	0.15
Clothes Washer	88	0.83	110	0.78	119	0.82	107	0.59
Dishwasher	71	0.73	76	0.71	77	0.68	73	0.49
First Refrigerator	774	1.00	725	1.00	784	1.00	766	1.00
Second Refrigerator	1,226	0.25	1,188	0.20	1,174	0.26	1,344	0.18
Freezer	959	0.22	898	0.15	914	0.16	964	0.12
Pool Pump	3,250	0.09	3,794	0.12	3,442	0.11	4,360	0.08
Spa	274	0.08	283	0.13	294	0.10	381	0.04
Outdoor Lighting	319	0.67	345	0.67	348	0.66	423	0.50
Range/Oven	251	0.58	271	0.51	282	0.32	255	0.27
TV	672	1.00	620	1.00	735	1.00	696	1.00
Spa Electric Heat	1,056	0.06	956	0.06	951	0.04	1,003	0.01
Microwave	119	0.93	117	0.94	128	0.93	123	0.86
Home Office	82	0.19	83	0.25	80	0.21	85	0.20
PC	593	0.86	638	0.87	618	0.85	625	0.80
Well Pump	547	0.08	513	0.01	594	0.02	428	0.01
Miscellaneous	1,798		1,835		1,909		1,740	

Source: *2010 California Residential Appliance Saturation Survey*

Pool Pump data is here

Year	Pool permits issued
2003	545
2004	752
2005	678
2006	407
2007	206
2008	114
2009	78
2010	58
2011	66
Mean	**320**
2003-2005 mean	**660**

Date incorporated	July 2000
Years from incorporation though 2005	5.5

Table 2-8: Electric UECs by Electric Utility	
	PG&E kWh/year
Pool Pump	3250

BE-3.	BE-3.	Building Stock: Nonresidential Appliances in Existing Development
BE-3.	Reduction Measure:	Equip businesses in Elk Grove to reduce operational expenses and maximize energy efficiency through the use of energy-efficient and cost-effective indoor and outdoor appliances and equipment.
BE-3.	Location in GPU	Policy NR-6-2
BE-3.	Action Items:	• Work with SMUD and PG&E to promote free appliance improvements and rebate programs, including rebates for lighting, motors, office equipment, and heating and cooling systems. • Integrate materials on energy efficiency resources and opportunities into the City's economic development resources. • Create a standardized tenant improvement checklist and informational materials to encourage the installation of Energy Star and energy-efficient appliances through the tenant-improvement process. • Partner with SMUD and PG&E to promote the optimization of information technology systems in office complexes to reduce energy expenses and equipment maintenance costs, including plug load sensors, server virtualization, the use of remote desktops, and more. • Encourage energy-intense uses to incorporate energy management practices in business operations. • Promote SMUD's custom and prescriptive lighting standards and rebates for qualifying commercial lighting systems, and support outreach efforts through targeted mailings or direct outreach to the business community through the Chamber of Commerce and other networks. • Continue to connect businesses and residents with programs that provide free or low-cost energy efficiency audits and retrofits. • Conduct public outreach to inform residents about energy usage and energy costs. • Partner with local energy providers to develop a pilot program to demonstrate energy efficient upgrades in existing municipal buildings.
BE-3.	2020 Reductions (MTCO2e):	912
BE-3.	2030 Reductions (MTCO2e):	2,116
BE-3.	2050 Reductions (MTCO2e):	5,642
BE-3.	Target Indicators	5% participation of businesses participating in appliance upgrades by 2020, 10% by 2030, and 25% by 2050.
BE-3.	Methodology and Sources:	Nonresidential electricity and natural gas use was assessed by end use using the 2007 California Commercial End-use Survey. Energy savings by end use function calculated based on case studies. A target utilization rate was applied to reflect the likelihood that not all efficiency measures would take place in participating businesses. Reductions only include savings for end-uses associated with nonresidential appliances An estimated number of square feet per employee was calculated based on an assumption of 400 square feet per employee. Participation rates were assumed based on regional assessments prepared by SMUD in a 2011 analysis for SMUD. Itron, Inc. California Commercial End-use Survey - Results Page. (2007) <http://capabilities.itron.com/CeusWeb/Chart.aspx> Brown, Rich, Sam Borgeson, Jon Koomey, and Peter Biermayer. 2008. U.S. Building-Sector Energy Efficiency Potential. Ernest Orlando Lawrence Berkeley National Laboratory, University of California. http://enduse.lbl.gov/info/LBNL-1096E.pdf ICF GHG Reduction Measure Analysis for SMUD. April 2011.

Energy/GHG Summary

Residential energy Savings (kWh)
Residential energy Savings (Therms)
Nonresidential energy Savings (kWh)
Nonresidential energy Savings (Therms)
Electricity Emissions Reduction (MTCO2e)
Natural Gas Emissions Reduction (MTCO2e)

Assumptions

Target participation rate in appliance program

Implementation

kWh saved per participating business
Therms saved per participating business
kWh saved per participating sq-ft
Therms saved per participating sq-ft
Target Appliance Utilization Rate

Baseline	Number of jobs
	Square feet per employee
	square feet
	Nonresidential electricity use (kWh)
	Nonresidential natural gas use (therms)
	Number of businesses
	kWh/business
	Therms/business in 2005
	sq-ft per business

Participation	Target participation rate
	Number of business participating
	Sq-ft participating

CEUS - Electricity	Heating
	Cooling
	Ventilation
	Water Heating
	Cooking
	Refrigeration
	Exterior Lighting
	Interior Lighting
	Office Equipment
	Miscellaneous
	Process
	Motors
	Air Compressor
	Segment Total

CEUS - Natural Gas	Heating
	Cooling
	Water Heating
	Cooking
	Miscellaneous
	Process
	Segment Total

Percent Electricity Savings (appliance end uses only)	Water heating
	Cooking
	Refrigeration
	Exterior Lighting
	Interior Lighting
	Office equip.
	Motors
	Air Compressor

Percent Natural Savings (appliance end uses only)	Water Heating

Total Electricity Savings (kWh)	Water heating
	Cooking
	Refrigeration
	Exterior Lighting
	Interior Lighting
	Office equip.
	Motors
	Air Compressor
	TOTAL ELECTRICITY SAVED per year (kWh)
	TOTAL ELECTRICITY SAVED cumulative (kWh)

Total Natural Gas Savings (therms)	Water Heating
	TOTAL NATURAL GAS SAVED per year (therms)
	TOTAL NATURAL GAS SAVED cumulative (therms)

Savings per participant	kWh saved per participating business
	Therms saved per participating business
	kWh saved per participating sq-ft
	Therms saved per participating sq-ft

2020	2030	2050
3,384,152	10,152,456	27,073,216
17,872	53,617	142,978
816	**1,831**	**4,881**
95	**285**	**761**

2020	2030	2050
5%	10%	25%

2020	2030	2050
7,771	7,771	7,771
41	41	41
3.72	3.72	3.72
0.02	0.02	0.02
50%	75%	275%

2013	2020	2030	2050	ICF Report is here
45,463	51,704	68,632	102,765	
400	400	400	400	< Chris at City of Elk Grove
18,185,200	20,681,600	27,452,800	41,106,000	
357,373,889	389,752,845	477,577,068	654,662,618	
7,736,910	8,437,893	10,339,230	14,173,016	
8,710				
41,030				
888				
2,088				

	5%	10%	25%
	436	871	2,178
	909,260	1,818,520	4,546,300

% Electricity Use by End Use	
3%	3%
15%	15%
14%	14%
1%	1%
4%	4%
11%	11%
6%	6%
26%	26%
9%	9%
6%	6%
0%	0%
4%	4%
1%	1%
100%	100%

% Natural Gas Use by End Use		
44%	44%	
0%	0%	
31%	31%	
18%	18%	< No LBNL reductions
3%	3%	
5%	5%	
100%	100%	

11%	11%	<< Brown et al. 2008
32%	32%	<< Brown et al. 2008
38%	38%	<< Brown et al. 2008
25%	25%	<< Brown et al. 2008
25%	25%	<< Brown et al. 2008
43%	43%	<< Brown et al. 2008
35%	35%	<< Brown et al. 2008
35%	35%	<< Brown et al. 2008

15%	15%

2020	2030	2050
21,621	43,242	108,106
200,129	400,259	1,000,647
719,751	1,439,502	3,598,755
276,965	553,930	1,384,824
1,170,399	2,340,799	5,851,997
713,854	1,427,709	3,569,272
231,400	462,799	1,156,998
50,032	100,065	250,162
3,384,152	**6,768,304**	**16,920,760**
3,384,152	**10,152,456**	**27,073,216**

17,872	35,745	89,361
17,872	**35,745**	**89,361**
17,872	**53,617**	**142,978**

7,771	7,771	7,771
41	41	41

3.72	3.72	3.72
0.02	0.02	0.02

BE-4.	BE-4.	CALGreen Tier 1 - New Construction
BE-4.	Reduction Measure:	Adopt CALGreen Tier 1 standards to require all new construction to achieve a 15 percent improvement over minimum Title 24 CALGreen energy requirement by 2020.
BE-4.	Location in GPU	Policy NR-6-1; Policy NR-6-2; Policy NR-6-3; SD-2-1; SD-2-2
BE-4.	Action Items:	• Require all new development to achieve Tier 1 of Title 24, Part 11 green building standards until the next Title 24 update becomes effective. • Analyze future Title 24 updates released by the California Energy Commission (CEC) and require the level of efficiency above minimum standards necessary to achieve the energy reduction potential outlined in this Plan. • Partner with local energy provider(s) to develop a pilot program to demonstrate energy-efficient techniques and products in new municipal buildings. • Support the use of innovative and alternative building materials and designs to improve efficiency, encouraging voluntary action such as compliance with Leadership in Energy and Environmental Design (LEED) or Build It Green (BIG) GreenPoint rating systems. • Update the City's website and proactively work with applicants to make compliance with the energy efficiency standards as effective and efficient as possible. • Partner with SMUD to promote SMUD's Savings By Design program, which provides cash incentives and technical assistance to help new commercial projects maximize energy efficiency. • Collaborate with the Northern California Chapter of the US Green Building Council, SMUD, and PG&E to provide local training and workshops for energy efficiency and green building training. • Continue to enforce zoning provisions that require outdoor lighting fixtures in parking areas to be energy efficient.
BE-4.	2020 Reductions (MTCO2e):	1,174
BE-4.	2030 Reductions (MTCO2e):	9,244
BE-4.	2050 Reductions (MTCO2e):	25,574
BE-4.	Target Indicator:	Adoption of Tier 1 standards 100% participation of new residential development from 2020-2030 to comply with Tier 1 standards. 100% participation of new commercial development from 2020-2034 to comply withTier 1 standards.

CalGreen Tier 1 For New Buildings

This calculates the reductions in energy usage solely due to the green building ordinance in 2020. This calculations assumes energy efficiency gains under this measure only apply to commercial/industrial and residential uses. Agricultural energy uses do no apply.

Residential		2013	2020	2030	2050
Forecast energy usage (no leg. reduction, w/o 2016 code)					
	Electricity (kWh)	471,810,070	524,356,520	632,105,092	843,222,401
	Natural Gas (therms)	22,211,400	24,685,129	29,757,608	39,696,376
New Energy Use Only (w/o 2016 code)					
	Electricity (kWh)		52,546,450	160,295,022	371,412,331
	Natural Gas (therms)		2,473,729	7,546,208	17,484,976
New Energy Use Only (w/ 2016 code)					
	Electricity (kWh)		28,375,083	86,559,312	200,562,659
	Natural Gas (therms)		1,781,085	5,433,270	12,589,183
Percent Reduction due to CalGreen Tier 1 from Title 24 Standards for buildings by milestone year			15%	15%	15%
Adjusted energy use from buildings built through years:		2013-2017	2018-2019	2020-2029	2030-2050
	Electricity (kWh)	20,267,916	6,891,092	49,456,595	96,902,845
	Natural Gas (therms)	1,272,203	432,549	3,104,357	6,082,526
Cumulative energy use from new buildings					
	Electricity (kWh)		27,159,008	76,615,602	173,518,447
	Natural Gas (therms)		1,704,753	4,809,110	10,891,636
Energy Reductions from Baseline			2020	2030	2050
	Electricity (kWh)		1,216,075	9,943,709	27,044,211
	Natural Gas (therms)		76,332	624,160	1,697,547
Emissions Reductions (MTCO2e)					
	Electricity		293.37	1,792.88	4,876.16
	Natural Gas		406.28	3,322.09	9,035.18
	Total		**699.64**	**5,114.97**	**13,911.34**

Commercial		2013	2020	2030	2050
Forecast energy usage (no leg. reduction, w/o 2016 code)					
	Electricity (kWh)	357,373,889	406,432,914	539,499,918	807,811,357
	Natural Gas (therms)	7,736,910	8,799,006	11,679,819	17,488,585
New Energy Use Only (w/o 2016 code)					
	Electricity (kWh)		49,059,025	182,126,029	450,437,468
	Natural Gas (therms)		1,062,096	3,942,909	9,751,675
New Energy Use Only (w/ 2016 code)					
	Electricity (kWh)		46,606,073	173,019,727	427,915,594
	Natural Gas (therms)		1,008,991	3,745,763	9,264,092
Percent Reduction due to CalGreen Tier 1 from Title 24 Standards			10%	10%	10%
Adjusted Energy Use from buildings built through years:		2013-2017	2018-2019	2020-2029	2030-2050
	Electricity (kWh)	33,290,052	11,984,419	113,772,288	229,406,280
	Natural Gas (therms)	720,708	259,455	2,463,095	4,966,495
Cumulative Energy Use from New Buildings					
	Electricity (kWh)		45,274,471	159,046,760	388,453,040
	Natural Gas (therms)		980,163	3,443,258	8,409,753
Energy Reductions from Baseline					
	Electricity (kWh)		1,331,602	13,972,967	39,462,554
	Natural Gas (therms)		28,828	302,506	854,338
Emissions Reductions (MTCO2e)					
	Electricity		321.24	2,519.37	7,115.23
	Natural Gas		153.44	1,610.08	4,547.21
	Total		**474.67**	**4,129**	**11,662**

Commercial and Residential					
Emissions Reductions (MTCO2e)			**1,174.32**	**9,244**	**25,574**

BE-5.	BE-5.	Zero Net Energy - New Construction
BE-5.	Reduction Measure:	Adopt green building standards to require all new construction to achieve zero net energy by 2030 for residential and 2035 for commercial.
BE-5.	Location in GPU	Policy NR-6-1; NR-6-2; NR-6-3; SD-2-1; SD-2-2
BE-5.	Action Items:	• Analyze future Title 24 updates released by the California Energy Commission (CEC) and ZNE requirements. • Update the City's website and proactively work with applicants to make compliance with the energy efficiency standards as effective and efficient as possible.
BE-5.	2020 Reductions (MTCO2e):	-
BE-5.	2030 Reductions (MTCO2e):	29,930
BE-5.	2050 Reductions (MTCO2e):	163,902
BE-5.	Target Indicator:	Adoption of ZNE standards 100% participation of new residential development from 2030-2050 to comply with ZNE standards. 100% participation of new commercial development from 2035-2050 to comply with ZNE standards.

Zero Net Energy For New Buildings

This calculates the reductions in energy usage solely due to the zero net energy standard in 2030 and 2050. This calculations assumes energy efficiency gains under this measure only apply to commercial/industrial and residential uses. Agricultural energy uses do no apply.

Residential		2013	2020	2030	2050
Forecast energy usage (no leg. reduction, w/o 2016 code)					
	Electricity (kWh)	471,810,070	524,356,520	632,105,092	843,222,401
	Natural Gas (therms)	22,211,400	24,685,129	29,757,608	39,696,376
New Energy Use Only (w/o 2016 code)					
	Electricity (kWh)		52,546,450	160,295,022	371,412,331
	Natural Gas (therms)		2,473,729	7,546,208	17,484,976
New Energy Use Only (w/ 2016 code)					
	Electricity (kWh)		28,375,083	86,559,312	200,562,659
	Natural Gas (therms)		1,781,085	5,433,270	12,589,183
Percent Reduction due to ZNE from Title 24 Standards for buildings by milestone year			0%	100%	100%

Adjusted energy use from buildings built through years:		2013-2017	2018-2019	2020-2029	2036-2050
	Electricity (kWh)	20,267,916	8,107,167	0	0
	Natural Gas (therms)	1,272,203	508,881	0	0
Cumulative energy use from new buildings					
	Electricity (kWh)			28,375,083	28,375,083
	Natural Gas (therms)			1,781,085	1,781,085

Energy Reductions from Baseline		2030	2050
	Electricity (kWh)	58,184,228.93	172,187,575.83
	Natural Gas (therms)	3,652,184.82	10,808,098.05
Emissions Reductions (MTCO2e)			
	Electricity	10,490.81	31,045.98
	Natural Gas	19,438.72	57,526.02
	Total	**29,929.53**	**88,572.00**

Commercial					
Forecast energy usage (no leg. reduction, w/o 2016 code)					
	Electricity (kWh)	357,373,889	406,432,914	539,499,918	807,811,357
	Natural Gas (therms)	7,736,910	8,799,006	11,679,819	17,488,585
New Energy Use Only (w/o 2016 code)					
	Electricity (kWh)		49,059,025	182,126,029	450,437,468
	Natural Gas (therms)		1,062,096	3,942,909	9,751,675
New Energy Use Only (w/ 2016 code)					
	Electricity (kWh)		46,606,073	173,019,727	427,915,594
	Natural Gas (therms)		1,008,991	3,745,763	9,264,092
Percent Reduction due to ZNE from Title 24 Standards			0%	0%	100%

Adjusted Energy Use from buildings built through years:		2013-2017	2018-2019	2020-2029	2036-2050
	Electricity (kWh)	33290052.49	13316021	126413653.6	0
	Natural Gas (therms)	720707.7741	288283.1096	2736772.581	0
Cumulative Energy Use from New Buildings					
	Electricity (kWh)				173,019,727
	Natural Gas (therms)				3,745,763
Energy Reductions from Baseline					
	Electricity (kWh)				254,895,867
	Natural Gas (therms)				5,518,328
Emissions Reductions (MTCO2e)					
	Electricity				45,958.56
	Natural Gas				29,371.26
	Total				**75,330**

Commercial and Residential					
Emissions Reductions (MTCO2e)				**29,930**	**163,902**

BE-6.	BE-6.	CALGreen Tier 1 - Existing Buildings
BE-6.	Reduction Measure:	Adopt CALGreen Tier 1 standards to require existing buildings to achieve a 15 percent improvement over minimum Title 24 CALGreen energy requirement.
BE-6.	Location in GPU	Policy NR-6-1; Policy NR-6-2; Policy NR-6-3; SD-2-1; SD-2-2
BE-6.	Action Items:	• Require all major remodels to achieve Tier 1 of Title 24, Part 11 green building standards until the next Title 24 update becomes effective. • Analyze future Title 24 updates released by the California Energy Commission (CEC) and require the level of efficiency above minimum standards necessary to achieve the energy reduction potential outlined in this Plan. • Partner with local energy provider(s) to develop a pilot program to demonstrate energy-efficient techniques and products in new municipal buildings. • Support the use of innovative and alternative building materials and designs to improve efficiency, encouraging voluntary action such as compliance with Leadership in Energy and Environmental Design (LEED) or Build It Green (BIG) GreenPoint rating systems. • Update the City's website and proactively work with applicants to make compliance with the energy efficiency standards as effective and efficient as possible. • Partner with SMUD to promote SMUD's Savings By Design program, which provides cash incentives and technical assistance to help new commercial projects maximize energy efficiency. • Collaborate with the Northern California Chapter of the US Green Building Council, SMUD, and PG&E to provide local training and workshops for energy efficiency and green building training. • Continue to enforce zoning provisions that require outdoor lighting fixtures in parking areas to be energy efficient.
BE-6.	2020 Reductions (MTCO2e):	3,972
BE-6.	2030 Reductions (MTCO2e):	8,511
BE-6.	2050 Reductions (MTCO2e):	34,043
BE-6.	Target Indicator:	Adoption of Tier 1 standards 2% participation of existing development from 2021-2029 to comply with Tier 1 standards 5% participation of existing development from 2030-2049 to comply with Tier 1 standards 20% participation of existing development from 2050-forward to comply with Tier 1 standards

CalGreen Tier 1 For Existing Buildings

	2013	2020	2030	2050
From Inventory Demographics Assumptions (Unincorporated County)				
Households (HH)	52,783	58,095	70,033	93,423
Population	163,093	181,257	218,503	291,481
Jobs	45,463	51,704	68,632	102,765
Participation Rates				
Participation rate of existing buildings becoming retrofitted to meet CalGreen Tier 1 standards under this measure				
Residential		2%	5%	20%
Commercial		2%	5%	20%
Residential	2013	2020	2030	2050
Forecast energy usage (w/o CalGreen Tier 1)				
Electricity (kWh)	471,810,070			
Natural Gas (therms)	22,211,400			
Participating Existing Energy Use Only (w/o CalGreen Tier 1)				
Electricity (kWh)		9,436,201	23,590,504	94,362,014
Natural Gas (therms)		444,228	1,110,570	4,442,280
Percent Reduction from Existing Electricity Use by upgrading to CalGreen Tier 1		51%	51%	51%
Percent Reduction from Existing Natural Gas Use by upgrading to CalGreen Tier 1		51%	51%	51%
Existing Energy Use Only (w/ CalGreen Tier 1)				
Electricity (kWh)		4,623,739	11,559,347	46,237,387
Natural Gas (therms)		217,672	544,179	2,176,717
Energy Reductions				
Electricity (kWh)		4,812,463	12,031,157	48,124,627
Natural Gas (therms)		226,556	566,391	2,265,563
Emissions Reductions (MTCO2e)				
Electricity		1,161	2,169	8,677
Natural Gas		1,206	3,015	12,058
Total		**2,367**	**5,184**	**20,735**
Commercial				
Forecast energy usage (w/o CalGreen Tier 1)				
Electricity (kWh)	357,373,889			
Natural Gas (therms)	7,736,910			
Participating Existing Energy Use Only (w/o CalGreen Tier 1)				
Electricity (kWh)		7,147,478	17,868,694	71,474,778
Natural Gas (therms)		154,738	386,846	1,547,382
Percent Reduction from Existing Electricity Use by upgrading to CalGreen Tier 1		37%	37%	37%
Percent Reduction from Existing Natural Gas Use by upgrading to CalGreen Tier 1		37%	37%	37%
New Energy Use Only (w/ CalGreen Tier 1)				
Electricity (kWh)		2,644,567	6,611,417	26,445,668
Natural Gas (therms)		57,253	143,133	572,531
Energy Reductions				
Electricity (kWh)		4,502,911	11,257,278	45,029,110
Natural Gas (therms)		97,485	243,713	974,851
Emissions Reductions (MTCO2e)				
Electricity		1,086	2,030	8,119
Natural Gas		519	1,297	5,189
Total		**1,605**	**3,327**	**13,308**
Total Residential and Commercial Emissions Reductions (MTCO2e)		**3,972**	**8,511**	**34,043**

BE-7.	BE-7.	Solar PV in All Residential and Commercial Development
BE-7.	Reduction Measure:	Promote voluntary installations of on-site solar photovoltaics in new and existing development, and revise standards to facilitate the transition to solar water heaters and solar photovoltaics in new development.
BE-7.	Location in GPU	Policy NR-6-6; Policy NR-6-5
BE-7.	Action Items:	• Promote innovative private development projects in Elk Grove that have constructed SolarSmart Home projects. • Partner with private developers and SMUD to encourage new developments to achieve certification through SMUD's SolarSmart Homes program, with standards including installation of a rooftop solar photovoltaic system, roofing with a radiant barrier, a 90 percent efficiency furnace, and high-efficiency air conditioning systems. • Work with SMUD and private developers to prepare locally-specific preapproved single-family plans for the SolarSmart Home program. • Support implementation of the Homebuyer Solar Option for all subdivision projects, and encourage developers of new medium- and high-density residential projects to supply 20 percent of projected electricity use of each building from renewable resources. • Continue to issue photovoltaic system permits at no charge upon SMUD's approval, and consider expanding this permitting incentive to apply to solar water heaters as well. • Facilitate building siting for solar access and setbacks to allow for small-lot development. • Update the Citywide Design Guidelines and the Zoning Code to remove impediments to the installation of renewable energy facilities and provide solar-ready building guidelines. • Encourage use of battery storage for solar produced during the day to be used during peak hours to reduce demand from the grid.
BE-7.	2020 Reductions (MTCO2e):	5,488
BE-7.	2030 Reductions (MTCO2e):	13,459
BE-7.	2050 Reductions (MTCO2e):	44,544
BE-7.	Target Indicators:	Approximately 3,100 homes to install solar PV systems by 2020, 7,000 homes by 2030, 14,500 by 2050 Approximately 550 businesses to install solar PV systems by 2020, 1,300 businesses by 2030, and 3,200 by 2050

Energy/GHG Summary

	2020	2030	2050
Residential energy Savings (kWh)	19,340,358	62,894,646	205,357,028
Residential energy Savings (Therms)	-	-	-
Nonresidential energy Savings (kWh)	3,408,984	11,749,190	41,695,368
Nonresidential energy Savings (Therms)	-	-	-
Residential Emissions Reduction (MTCO2e)	4,665.67	11,340.11	37,026.54
Nonresidential Emissions Reduction (MTCO2e)	822.38	2,118.42	7,517.81
Electricity Emissions Reduction (MTCO2e)	**5,488**	**13,459**	**44,544**
Natural Gas Emissions Reduction (MTCO2e)	**-**	**-**	**-**

Assumptions

	2020	2030	2050
Participation by existing homes	5%	10%	20%
Participation by existing businesses	5%	10%	20%
Participation by new homes	35%	37%	40%
Total numbers of homes with solar	3,151	7,096	14,718
Total number of businesses with solar	555	1,357	3,295
Participation of new businesses	10%	15%	30%

Implementation

2020	2035

Average annual kWh/PV system	6,138	

Solar Installed since 2005 - From SMUD

		2020
kWh savings	*Number of rooftop solar installations - Sacramento County*	*247*
	Proportion of rooftop solar in Elk Grove	
	Average Annual kWh (ICF source)	*4,519*
	Total kWh produced by installed solar PV	*1,116,193*
	MTCO2e	*216.79*

Existing homes

		2020	2030	2050	
kWh savings	2013 Residential Electricity Use	471,810,070			
	Existing 2013 Single Family homes	47,082			
	Average electricity use per home	10,020.94			
	Participation rate	5%	10%	20%	
	Participating homes	2,354.12	4,708.24	9,416.49	
	Average annual kWh/PV system	6,138	6,138	6,138	<PV Watts calculator
	Total kWh produced by solar PV	**14,449,600**	**28,899,199**	**57,798,398**	
	Cumulative kWh produced by solar PV	**14,449,600**	**43,348,799**	**144,495,996**	

Existing Businesses

		2020	2030	2050
kWh savings	2013 Nonresidential electricity use	357,373,889		
	Existing number of businesses	8,710		
	Participating rate for businesses	5%	10%	20%
	Total number of businesses participating	435.50	871.00	1,742.00
	Average annual kWh/PV system	6,138	6,138	6,138
	Total kWh produced by solar PV	**2,673,099**	**5,346,198**	**10,692,396**
	Cumulative kWh produced by solar PV	2,673,099	8,019,297	26,730,990

New Homes - Homebuyer Solar Option

		2020	2030	2050
kWh savings	New Homes	5,312	11,938	17,671
	Participation rate	15%	20%	30%
	Average annual kWh/PV system	6,138	6,138	6,138
	Total number of homes participating	797	2,388	5,301
	Total kWh produced by solar PV	**4,890,758**	**14,655,089**	**32,539,379**
	Cumuliatve kWh produced by solar PV	4,890,758	19,545,847	60,861,032

New Businesses

		2020	2030	2050
kWh savings	Number of businesses in 2013	8,710		
	Number of jobs	45,463		
	2013 jobs/business	5.2		
	Forecast jobs	6,241	16,928	27,013
	Forecasted new businesses	1,196	3,243	5,175
	2013 kWh	357,373,889		
	2013 kWh/business	41,030.30		76,982.92
	Assumed percent of new business subject to PV regulation	10%	15%	30%
	Number of new businesses participating	119.57	486.47	1,552.58
	solar PV percent kWh reduction	15%	15%	15%
	Total kWh produced by solar PV	**735,885**	**2,994,008**	**9,555,426**
	Cumulative kWh produced by solar PV	735,885	3,729,893	14,964,378

Table 2: Expected Annual TDV Energy of Reference Solar Energy System

Climate Zone	Expected Annual kWh	Expected Annual TDV Energy
CZ01	2927	43596
CZ02	3303	48686
CZ03	3735	52314
CZ04	3809	54135
CZ05	3887	54289
CZ06	3921	55388
CZ07	3837	61446
CZ08	3883	54577
CZ09	3723	52270
CZ10	3737	52572
CZ11	3802	56055
CZ12	3942	56627
CZ13	3987	53539
CZ14	4262	57345
CZ15	4164	55408
CZ16	3712	55960

Notes:

1. AC rating as calculated: 2.071760 kW, figures in table are scaled to 2 kW AC.
2. Calculations performed with Solar Offset Program Calculator version 1.0.
3. Calculated solar energy system composed of the most commonly used PV module and inverter in NSHP as of June 28, 2010.
4. TDV multipliers from the 2008 Building Energy Efficiency Standards for Residential and Nonresidential Buildings.

0.043372

BE-8.	BE-8.	SMUD Offset Program for Electricity Use
BE-8.	Reduction measure:	Encourage participation in SMUD's offsite renewable energy programs, which allow building renters and owners to opt into cleaner electricity sources.
BE-8.	Location in GPU	Policy NR-6-6
BE-8.	Action Items:	• Promote participation in SMUD's Greenergy program, which allows all electricity customers to pay low monthly fees to meet electricity needs from either 50% or 100% renewable sources. • Promote participation in SMUD's SolarShares program, which allows all account holders to pay a fixed monthly fee to purchase solar electricity produced on a local solar farm. • Update the City's website and materials for residents and businesses to promote SMUD's affordable green electricity source options. • Work closely with SMUD to conduct local outreach, events, and promotions for SMUD's clean energy programs.
BE-8.	2020 Reductions (MTCO2e):	12,193
BE-8.	2030 Reductions (MTCO2e):	19,846
BE-8.	2050 Reductions (MTCO2e):	33,167
BE-8.	Target Indicators:	15% participation in Greenenergy by 2020 20% participation in Greenenergy by 2030
BE-8.	Methodology and Sources:	SMUD allows customers to opt into the Greenergy program in order to achieve up to a 100% renewable energy mix. To ensure that the renewable credit goes toward participating customers, SMUD retains the Renewable Energy Credits for this program. Based on existing Greenenergy Trends identified by ICF, assumes an existing regional customer participation rate of 9% in the SMUD territory. Assumes an equivalent participation rate in Elk Grove. City will support up to a 15% market penetration for local participation in the Greenenergy program. This measure assumes the incremental benefit for participating customers to exceed the minimum Renewable Portfolio Standards energy mix assumed in the adjusted forecast. Greenenergy provides option for participants to receive either 50% or 100% renewable energy, depending on the monthly payment. Measure assumes an average 75% renewable energy mix, to account for participation across both program options. ICF GHG Reduction Measure Analysis for SMUD. April 2011. SMUD. 2010. Greenenergy label. http://www.energy.ca.gov/sb1305/labels/2010_labels/SMUD_PCL.pdf. SMUD. 2012. Greenenergy Program. https://www.smud.org/en/residential/environment/greenergy/.

Energy/GHG Summary

	2020	2030	2050
Total electricity Savings (kWh)	50,544,537	110,072,236	183,950,407
	-	-	-
Nonresidential energy Savings (kWh)	-	-	-
Nonresidential energy Savings (Therms)			
Electricity Emissions Reduction (MTCO2e)	**12,193.38**	**19,846.38**	**33,166.86**
	-	**-**	**-**

Assumptions

	2020	2030	2050	
Market penetration for Greenenergy:	15%	20%	20%	9.1 current participation rate
Forecast Electricity Mix - Renewable Portfolio Standard:	33%	50%	50%	
Greenenergy Opt-In Option 1: Renewable Electricity Mix:	50%	50%	50%	
Greenenergy Opt-In Option 2: Renewable Electricity Mix:	100%	100%	100%	
Average Greenenergy Opt-In Renewable Electricity Mix:	75%	75%	75%	
Additional Renewable Electricity Credit in Addition to Renewable Portfolio Standard:	42%	40%	40%	
Target Market Penetration for Greenenergy in Elk Grove:	15%	20%	30%	

Reductions from other measures

		2020	2030	2050
	BE-1 (kWh) - Existing	4,074,636	10,865,697	28,522,455
	BE-2 (kWh) - Existing	1,629,704	3,909,321	7,756,409

	BE-3 (kWh) - Existing	3,384,152	10,152,456	27,073,216
	BE-4 (kWh) - New	46,490,546	168,990,469	-
	BE-5 (kWh) - Existing	9,315,374	23,288,434	93,153,737
	BE-6 (kWh) - Existing and New	22,749,342	74,643,836	247,052,396
	Total	87,643,755	291,850,213	403,558,214

Greenenergy

		2020	2030	2050	
	Total kWh - Res + NonRes	802,294,243	744,096,236	923,477,133	
	Current Penetration	9%	9%	9%	
kWh savings	Market penetration	15%	20%	20%	<ICF 2011
	Forecasted RPS Electricity Mix	33%	50%	50%	
	Opt-In RPS Allocation mix #1	50%	50%	50%	
	Opt-In RPS Allocation mix #2	100%	100%	100%	
	Average of Opt-In RPS Allocations	75%	75%	75%	
	Additional percent of RPS through Greenenergy	42%	40%	40%	<ICF
	New kWh produced from renewables	**50,544,537**	**59,527,699**	**73,878,171**	
	Cumulative kWh produced from renewables	**50,544,537**	**110,072,236**	**183,950,407**	

SolarShares

		2020	2035	
	Total kWh produced by solar PV	111,205	127,417	
kWh savings				<ICF 2011
				<ICF

Features of a SolarSmart Home®

A **state-of-the-art rooftop solar electricity system** generates much of the energy you will use. And, when your system makes more electricity than you use, you'll see a credit right on your SMUD bill.
A **radiant barrier in the roof** lowers the need for air conditioning by reflecting away heat that would otherwise enter the attic.
A 90% **efficient furnace** that converts natural gas into heat for your home.
A **high-efficiency** (14 SEER/ 12 EER) **air conditioning** system that remains efficient even in extreme conditions. You save even on the hottest days.
Energy-efficient **Compact Fluorescent Lighting** (CFLs).
ENERGY STAR® windows that keep your home cooler in the summer and warmer in winter, giving you maximum comfort.
Third-party certification and **SMUD quality assurance inspections** to ensure better built homes. You can be confident that the energy efficiency features are properly installed and operating as designed.

Current electricity mix:
http://www.energy.ca.gov/sb1305/labels/2010_labels/SMUD_PCL.pdf
https://www.smud.org/en/residential/environment/greenergy/

Here is the Green Energy mix: https://www.smud.org/en/residential/environment/greenergy/documents/PowerContentLabel.pdf

SMUD and the City of Sacramento and Sacramento County are working together to make it easier to build homes on vacant lots in many of the City's and County's older neighborhoods. There are six plans available that comply with SMUD's Home of the Future Program or with SMUD's SolarSmart Home® program. The SolarSmart Home® Pre-Approved Infill Plans use up to 60% less energy than a typical single-family home while the Home of the Future Infill Plans use up to 85% less energy over a typical Title 24 compliant home. A number of tax credits and other incentive programs are available to offset some of the improvement costs for these programs.

https://www.smud.org/en/residential/environment/solar-for-your-home/solarsmart-homes/

The 1-MW system was subscribed to the desired level within
six months of program inception. Little paid marketing was
necessary—media stories and word of mouth were sufficient
to produce this level of demand. Approximately 700
customers were sufficient to fully subscribe the system, and
there is a persistent waiting list of approximately 60
customers. The current mix by customer size is about 27%

BE-9.	BE-9.	Increase City Tree Planting
BE-9.	Reduction measure:	Continue planting an average of 2,500 trees per year with assistance from the Sacramento Tree Foundation.
BE-9.	Location in GPU	Policy NR-2-2; NR-2-3; NR-2-4
BE-9.	Action Items:	• Work with the Sacramento Tree Foundation to organize tree plantings and determine areas that could benefit from shade coverage.
BE-9.	2020 Reductions (MTCO2e):	620
BE-9.	2030 Reductions (MTCO2e):	1,505
BE-9.	2050 Reductions (MTCO2e):	3,275
BE-9.	Target Indicators:	Plant an average of 2,500 trees per year

Increase City Tree Planting

	2005	2020	2030	2050
Annual Tree Planting Targets starting in 2005	2500			
Annual Tree Planting Targets starting in 2020		17,500	42,500	92,500
Total number of Trees Planted since 2004	5000			
Feasibility Test				
Average Tree Canopy Area of mature tree (sqft)	50			
Total Acres of Planted Tree Canopy (Acres)	3874	20.09	48.78	106.18
Total undeveloped acres in the City (Acres)	12,255	8,650	3,499	813
Percent Coverage by new trees		0.23%	1.39%	13.07%
Default Annual CO2 accumulation per tree for Miscellaneous Trees (MT CO2e/tree/year) (From Appendix A of CalEEMod v2016.3.1)	0.0354			
Annual Sequestration from Planted Trees (MTCO2e/year)		620	1,505	3,275

sq ft/acre 43560

RC-1.	RC-1.	Waste Reduction
RC-1.	Reduction Measure:	The City shall facilitate recycling, reduction in the amount of waste, and re-use of materials to reduce the amount of solid waste generated in Elk Grove.
RC-1.	Location in GPU	Policy CIF-1.1; CIF-1.2; CIF-1.3
RC-1.	Measure Description:	The City of Elk Grove has already implemented several waste reduction programs for residents and businesses within Elk Grove. The City will continue to identify local and regional programs as they become available to increase the the portion of waste diverted from the landfill. The community of Elk Grove currently diverts 75% of their waste through recycling, composting, and greenwaste pickup. Residents of Elk Grove are able to dispose of green waste, recyclable materials, and e-waste along with their normal garbage through the City's curbside pick up program. The City also hosts composting workshops for residents interested in converting their food scraps and yard waste into nutrient-rich soil. Businesses within Elk Grove may have their food waste and grease picked up for a fee. The City has also created a business recycling ordinance, requiring businesses to provide appropriate recycling facilities and training for employees.
RC-1.	Action Items:	• Continue to provide curbside greenwaste opportunities for residents and businesses • Expand the types of material accepted for curbside recycling • Encourage and create incentives for the use of recycled concrete in all base material utilized in City and private road construction. • Where required or desired, storage and/or recycling centers should be incorporated into the initial site planning for non-residential developments.
RC-1.	2020 Reductions (MTCO2e):	5,272
RC-1.	2030 Reductions (MTCO2e):	10,169
RC-1.	2050 Reductions (MTCO2e):	16,957
RC-1.	Target Indicators:	Achieve an 85% diversion rate by 2050.
RC-1.	Methodology and Sources:	In 2013, the City of Elk Grove reported a 75% diversion rate for solid waste. The measure calculates the reduction in emissions that will result from achieving an 85% diversion rate. Through the enactment of AB 341, CalRecyle is tasked with implementing a plan to achieve a policy goal of 75% diversion of the solid waste generated to be source-reduced, recycled or composted by 2020. This will be achieved through statewide improvements to to recycling infrastructure, an increase in services for organics, and mandatory recycling requirements for commercial uses. CalRecycle. Jurisdiction Profile, http://www.calrecycle.ca.gov/Profiles/Juris, accessed January 2018. CalRecycle (2012). California's New Goal: 75% Recycling. http://www.calrecycle.ca.gov/75percent/Plan.pdf.

Waste Reductions

	2013	2020	2030	2050
2013 Reported Diversion Rate for the City of Elk Grove	75.00%	75.00%	75.00%	75.00%
Diversion Target Assumed Under Measure Implementation	75.00%	80.00%	83.00%	85.00%
Emissions Reductions	0	5,272	10,169	16,957

	Tons	Emissions	MTCO2e/Ton
Waste disposed	80,850	23,720	0.29338281
	2020	2030	2050
BAU Disposed Waste Emissions:	26,362	31,779	42,393
Business-as-usual tonnage	89,854	108,318	144,496
Baseline diversion rate:	75.00%	75.00%	75.00%
Target diversion rate	80.00%	83.00%	85.00%
Additional tonnage diverted through measure	17,971	34,662	57,798
Emissions Reductions	5,272	10,169	16,957
			-0.0298083

RC-2.	RC-2:	Reduce Organic Waste
RC-2.	Reduction measure:	Target reduction of disposal of organic waste, consistent with statewide goals of 50 percent of 2014 levels in 2020 and 75 percent of 2014 levels in 2025, using alternatives such as composting, anaerobic digestion, and biomass energy.
RC-2.	Location in GPU	Policy CIF-1.1; CIF-1.2
RC-2.	Measure Description:	Reduce organic waste through the development of a compost program for both food and green (yards) waste.
RC-2.	Action Items:	• Create a curbside compost pick up program for residents. • Provide information on compostable materials on the City website. • Provide businesses with a means to collect or drop off organic waste.
RC-2.	2020 Reductions (MTCO2e):	3,208
RC-2.	2030 Reductions (MTCO2e):	7,506
RC-2.	2050 Reductions (MTCO2e):	9,713
RC-2.	Target Indicators:	50 percent of food waste and 80 percent of green waste composed by 2020 for both residential and commercial/municipal waste.

	2017	2020	2030	2050
Generation of Organic Waste In Elk Grove (Ascent Adjusted)				
Disposal	87,271	84,664	102,062	136,149
Commercial/Municipal				
Percentage of Disposal that is Commercial/Municipal [+]	51%	51%	51%	51%
Commercial Disposal	44,610	43,178.80	52,051.50	69,436.22
Percentage of Commercial/Municipal Disposal that is Organic [+†]	56%	56%	56%	56%
Commercial/Municipal Organic Disposal	24,981.60	24,180	29,149	38,884
Residential				
*Percentage of Disposal that is Residential**	49%	49%	49%	49%
Residential Disposal	42,661	41,485.52	50,010.26	66,713.23
*Percentage of Residential Disposal that is Organic**	47%	47%	47%	47%
Residential Organic Disposal	20,018	19,498	23,505	31,355

[+] Based on 2017 Commercial Streams Export from CalRecycle Waste Characterization Web Tool

*Based on 2016 Residential Streams Export from CalRecycle Waste Characterization Web Tool

† This is a conservative assumption because the success of the 75% diversion target would most likely reduce the number of landfilled recyclables and increase the percentage of overall organics per ton of disposal. However, the BAU forecast is also conservative because it assumes the percent organics does not change.

Commercial/Municipal Compost			
Tons to Be Landfilled, Which Will Be Composted Instead	2020	2030	2050
AB 1826's Commercial Organic Waste Disposal Limit	12,491	12,491	12,491
Tons Composted Instead of Landfilled	11,689	16,658	26,393

Organic Breakdown		
	Residential	Commercial
Food	49%	43%
Green	8%	8%
Lumber	2%	1%
Paper	40%	47%
Manure	0.01%	0.2%

Percent of organics composted under RC-2	**2020**	**2030**	**2050**
Food	50%	85%	85%
Green	80%	100%	100%
Composted Commercial/Municipal Tons			
Food	2,513	6,959	9,647
Green	761	1,550	2,149

Residential Compost

Percent of organics composted under RC-2			
Food	50%	85%	85%
Green	80%	100%	100%
Composted Residential Tons			
Food	4,808	10,658	13,145
Green	1,295	2,111	2,603

TOTAL ORGANICS COMPOSTED INSTEAD OF LANDFILLED under RC-2			
Food	7,322	17,617	22,792
Green	2,056	3,660	4,752
Total	9,378	21,278	27,544

Emissions reductions per ton of food waste composted instead of landfilled (MTCH4/ton)	0.01565818	0.01565818	0.0156582
Emissions reductions per ton of green waste composted instead of landfilled (MTCH4/ton)	0.00665873	0.00665873	0.0066587
Emissions reductions from food waste composted instead of landfilled (MTCH4)	115	276	357
Emissions reductions from green waste composted instead of landfilled (MTCH4)	14	24	32
Emissions reductions from food waste composted instead of landfilled (MTCO2e)	2,866	6,896	8,922
Emissions reductions from green waste composted instead of landfilled (MTCO2e)	342	609	791
Total Emissions Reduction (MTCO2e)	3,208	7,506	9,713

TACM-1.	TACM-1.	Local Goods
TACM-1.	Reduction Measure:	Promote policies, programs and services that support the local movement of goods in order to reduce the need for travel.
TACM-1.	Location in GPU	Policy MOB-3.5; MOB-6.4; MOB-7.8
TACM-1.	Measure Description:	Promoting commerce between local businesses and residents reduces the amount of travel required to meet the service needs of residents. Elk Grove's Think Shop Live campaign and the Fantastic Fridays program encourages participating businesses to host events and provide incentives or discounts to residents to shop at local and independently owned stores on the second weekend of every month. Elk Grove also has a weekly Farmer's Market, where residents can purchase food and produce from local farmers and reduce the distance that their food must travel. Co benefits Shopping locally increases the tax revenues that the City receives and can help to fund other emissions reduction programs
TACM-1.	Action Items:	• Support efforts that encourage Elk Grove residents and businesses to buy goods and services locally. • Support strategies to increase business-to-business commerce in Elk Grove. • Create a program to recognize employers that contribute to the quality of life in the community. • Actively promote revitalization and strong sales in Old Town Elk Grove, and along major commercial thoroughfares. • Assist local merchants and business organizations interested in forming mutual benefit organizations such as merchants associations and business improvement districts. • Support strategies to increase business-to-business commerce in Elk Grove.
TACM-1.	2020 Reductions (MTCO2e):	4,388
TACM-1.	2030 Reductions (MTCO2e):	7,008
TACM-1.	2050 Reductions (MTCO2e):	9,935
TACM-1.	Target Indicators	Divert 10% of local VMT to alternative modes through increased business serving local residents.
TACM-1.	Methodology and Sources:	Quantifies the benefit of reduced heavy trucking VMT, based on a case study identifying a relationship between a 10% increase in local production and consumption supporting a 30% reduction in local heavy trucking VMT. Measure quantifies the impact on local trucking VMT using data from EMFAC 2007, which identifies that heavy data trucks contribute 20% of VMT in Sacramento County. Sources Table 9 [http://www.leopold.iastate.edu/pubs/staff/ppp/food_mil.pdf] EMFAC 2007.

	2020	2030	2050
Total Emissions Reduction (Metric Tons CO2e)	4,388	7,008	9,935

	2020	2030	2050
Total VMT attributed to Trucking/Shipping in Elk Grove	52,852,761	75,909,436	122,022,785
Percentage Reduction in VMT with Measure Applied:	20%	30%	30%
Total Reduction in VMT:	10,570,552	22,772,831	36,606,836
CO2 (g)	4,336,361,188	6,956,464,598	9,879,046,827
CH4 (g)	208,450	237,926	262,777
N2O (g)	173,338	169,509	184,309
CO2 (MT)	4,336.36	6,956.46	9,879.05
CH4 (MT)	0.21	0.24	0.26
N2O (MT)	0.17	0.17	0.18
MTCO2e	4,388	7,008	9,935

mt/g 0.000001

-The conventional system of transporting food used four to 17 times more fuel than the Iowa-based Regional and local systems, depending on the system and truck type. The same conventional system released from five to 17 times more CO2 from the burning of this fuel than the Iowa-based regional and local systems.
'-Growing and transporting 10 percent more of the produce for Iowa consumption in an Iowa-based Regional or local food system would result in an annual savings ranging from 280 to 346 thousand gallons
of fuel and an annual reduction in CO2 emissions ranging from 6.7 to 7.9 million pounds, depending on the system and truck type. (Source: http://www.leopold.iastate.edu/research/marketing_files/food/Food_Facts_0409.pdf) (Source: http://www.leopold.iastate.edu/pubs/staff/ppp/food_mil.pdf Table 9)

TACM-2.	TACM-2.	Transit Oriented Development
TACM-2.	Reduction Measure:	Support higher density, compact, residential development along transit by placing high density residential or mixed-use sites near transit opportunities.
TACM-2.	Location in GPU	Policy NR-4-6
TACM-2.	Measure Description:	This measure would ensure that new development is directed towards areas in close to existing or proposed transit or bike thoroughfares in order to decrease Elk Grove's dependency on single-occupancy vehicle trips. The measure would also allow new developments within transit oriented areas to be built at higher densities and encourage a mix of commercial and residential uses.
TACM-2.	Action Items:	• Identify and designate opportunity areas. • Change General Plan and zoning maps
TACM-2.	2020 Reductions (MTCO2e):	3,189
TACM-2.	2030 Reductions (MTCO2e):	6,963
TACM-2.	2050 Reductions (MTCO2e):	14,613
TACM-2.	Target Indicators:	Increase citywide density by 58% by 2020, 119% by 2030, and 176% by 2050.
TACM-2.	Methodology and Sources:	The performance of this measure is related to the elasticity of increased density and reduced travel associated with the increased mixture of uses. Case studies support a range of reductions for vehicle miles traveled based on every 100% increase in density and increase in convenience to jobs access. CAPCOA identifies a range of VMT reduction potential for increased density of to 30%. To calculate the net increase in density in the City between 2005 and the target years, calculates the increased density through population and employees per acre. Per every 100% increase in density, assumes a constrained 5% reduction for city-wide VMT due to co-location of homes and other uses, and a 0.5% reduction in new VMT associated with density for jobs, work commutes, and shopping. Sources CAPCOA. 2010. Quantifying Greenhouse Mitigation Measures. A resource for local governments to assess emission reductions from greenhouse gas mitigation measures. Climate Change Action Plan: Addressing Greenhouse Gas Emissions Under the California Environmental Quality Act; Draft Staff Report, June 30, 2009. San Joaquin Valley Air Pollution Control District. CCAP Transportation Emission Guidebook. ONL (2004), Transportation Energy Book, Oak Ridge National Lab, Dept. of Energy (http://cta.ornl.gov/data/index.shtml. TIAX Results of 2005 Literature Search Conducted by Tax on behalf of SMAQMD, as cited in CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, January 2008. California Air Pollution Control Officers Association. (Appendix B)

Emissions Reduction

	2020	2030	2050
Emissions Reduction (MT CO2e)	3,189	6,963	14,613

Transportation-Related Reductions

	2020	2030	2050
Percentage decrease in VMT per 100% increase in density (Citywide)	0.05	0.05	0.05
Percentage increase density (Citywide) :	0.58	1.19	1.76
Percentage decrease in VMT (Citywide) for increased density:	0.0291	0.0596	0.0882
Annual Citywide decrease in VMT for increased density:	7,683,091	22,627,272	53,842,486
CO2 (g)	3,151,836,890.05	6,912,000,352.35	14,530,412,926.54
CH4 (g)	151,509.40	236,405.55	386,501.32
N2O (g)	125,988.70	168,425.54	271,087.39
CO2 (MT)	3,152	6,912	14,530
CH4 (MT)	0	0	0
N2O (MT)	0	0	0
MTCO2e	3,189.47	6,963.25	14,613.07
VMT from new development	68,464,119	226,942,525	
VMT attributed to shopping and commuting	21,976,982	72,848,551	
Percentage decrease in VMT for mixed-use and jobs-housing balance	0.50%	0.50%	
Annual decrease in new local shopping and commute VMT for increased mixed-use and jobs-housing:	109,885	364,243	
Total VMT Reduction for increased density and convenience to services	4,333,082	16,389,463	
Percentage decrease in VMT (Citywide) for mixed-used and jobs-housing concentration:		0.18%	

mt/g 0.000001

TACM-3.	TACM-3.	Intra-City Transportation Demand Management
TACM-3.	Reduction Measure:	The City shall continue to implement strategies and policies that reduce the demand for personal motor vehicle travel for intra-City (local) trips.
TACM-3.	Location in GPU	Policy NR-4-5
TACM-3.	Measure Description:	The City of Elk Grove Transit Services has a Transportation Demand Management Program (TDM) to promote and encourage the use of alternative transportation within the City of Elk Grove. The City is developing partnerships with public and private employers within the City to work together in addressing local transportation and air quality issues. The goal of the program is to make Elk Grove a better place to live, work and shop by promoting innovative solutions to parking, commuting and air quality problems. Services provided include: • Ridematching (Carpool/Vanpools/Bicycling) • Emergency Ride Home with a taxi or rental car • Promotion of alternative transportation (Walking, biking, public transit or ridesharing) to all residents • Promote Sacramento Region 511 and other regional alternative transportation programs • Manage and maintain the Elk Grove/South Sacramento Commuter Club • Outreach to employers about alternative transportation • Technical assistance to Employer Transportation - Coordinators and employers in preparing a trip reduction plan or developing a transportation demand management program • Perform Travel Training. We will teach you how to ride public transit, use bicycle and pedestrian trails in the City, to telecommute or rideshare in a car or van • Promotion of Best Workplaces for Commuters The program aims to reduce local commute traffic by 20%, which is equivalent to each person taking alternative transportation modes once a week. More information can be found on the City's website at http://www.e-tran.org/commuter-alternatives.asp
TACM-3.	Action Items:	• Implement policies and actions in the Mobility Element which seek to encourage non-vehicular transportation alternatives in Elk Grove. • The City will support positive incentives such as carpool and vanpool parking, bus turnouts, and pedestrian-friendly project designs to promote the use of transportation alternatives. • The City shall participate in the preparation and implementation of a Congestion Management Plan (CMP) consistent with legal requirements which gives priority to air quality goals, alternatives to automobile travel, and the development of demand reduction measures over additional road capacity. • Implement the requirements for designated carpool and vanpool parking for all new office developments and update standards to meet VMT reduction targets. • Facilitate SACOG's partnership with community and employer organizations that is intended to support proactive and innovative transportation demand management programs covering all parts of the urbanized area, to offer a variety of choices to driving alone. (MTP Policy 22) • Continue to implement Trip Reduction programs for businesses with 100 or more employees • Consider expanding the standards for Trip Reduction Permits. • Create a standard for shopping center carpool parking spaces near store entries to encourage multiple occupant vehicle visitors.
TACM-3.	2020 Reductions (MTCO2e):	5,485
TACM-3.	2030 Reductions (MTCO2e):	9,344
TACM-3.	2050 Reductions (MTCO2e):	24,838
TACM-3.	Target indicators:	Implementation of the City's Transportation Demand Management Program to achieve a 15% reduction in local road VMT.
TACM-3.	Methods:	The literature supports a 30% reduction in overall VMT through the implementation of a local TDM program. Assumes only VMT on local roads will be effected by TDM program. Effectiveness of a TDM program will be incremental with the full VMT reduction potential being reached by 2025. Source: Victoria Transport Policy Institute (VTPI), Transportation Management Programs, http://www.vtpi.org/tdm/tdm42.htm

	2013	2020	2030	2050
Percent Reduction in Local Road VMT:	0%	5%	8%	15%
Total Local Road VMT:	206,622,120	264,263,806	379,547,179	610,113,925
Reduction in Local Road VMT:	-	13,213,190	30,363,774	91,517,089
CO2 (g)	-	5,420,451,485	9,275,286,130	24,697,617,067
CH4 (g)	-	260,562.14	317,235.09	656,943.58
N2O (g)	-	216,672.26	226,012.01	460,772.35
CO2 (MT)	-	5,420	9,275	24,698
CH4 (MT)	-	0.261	0.317	0.657
N2O (MT)	-	0.2167	0.2260	0.4608
MTCO2e	-	5,485	9,344	24,838
	-			

mt/g 0.000001

TACM-4.	TACM-4.	Pedestrian & Bicycle Travel
TACM-4.	Reduction Measure:	Provide for safe and convenient pedestrian and bicycle travel through implementation of the Bicycle and Pedestrian Master Plan and increased bicycle parking standards.
TACM-4.	Location in GPU	Policy NR-4-4; PT-2-4; MOB-1.5; MOB-3.1; MOB-3.7; MOB-3.9; MOB-3.15; MOB-3.16; MOB-3.17; MOB-4.2; MOB-4.3; MOB-4.4; MOB-4.5; HTH-1.3
TACM-4.	Measure Description:	The City's bicycle and pedestrian master plan was completed in 2004 and details the City's anticipated future bikeways and bike and pedestrian facility improvements.
TACM-4.	Action Items:	• Commercial parking standards will be revised to require a ratio of one bicycle parking space per 20 vehicle parking spaces. Multi-family parking standards will be revised to require one long-term bicycle storage space per unit. Storage options may include a multitude of options that provide secured storage. • Standards will be revised to require the provision of bicycle support facilities (lockers, shower rooms, etc.) for appropriate development. • New multi-family development developed by the target years will be characterized by internal and off-site pedestrian and bicycle connections that are in excess of those called for in the Bicycle and Pedestrian Master Plan. • Ensure that applications for new office and mixed-use development analyze the project's connection and orientation to pedestrian paths, bicycle paths, and existing transit stops within 1/2 mile of the project site. To the extent feasible, the project should be oriented toward an existing transit, bicycle, or pedestrian corridor with minimum setbacks. Exceptions may be considered for site-specific project constraints or projects that support equivalent pedestrian, bicycle, or alternative transportation through other methods. • Require applications for new office and mixed-use development to minimize setbacks from the street and provide pedestrian pathways. City staff shall work with project applicants to ensure that entrance locations and parking lot designs encourage pedestrian access and safety, using design features such as clearly marked and shaded pedestrian pathways between transit facilities and building entrances. • Encourage pedestrian-oriented plazas, walkways, bike trails, bike lanes, and street furniture and connections to other community areas. • Promote pedestrian convenience and recreational opportunities through development conditions requiring sidewalks, walking paths, or hiking trails connecting various land uses and including safety amenities such as lighting and signage.
TACM-4.	2020 Reductions (MTCO2e):	3,299
TACM-4.	2030 Reductions (MTCO2e):	4,265
TACM-4.	2050 Reductions (MTCO2e):	5,533
TACM-4.	Target Indicators:	Pedestrian design to be integrated into new development Bicycle parking in all new multi-family and nonresidential development Completion of the projects in the Bicycle Plan

Pedestrian Infrastructure Reductions

	2020	2030	2050
Percent Completion of Pedestrian Master Plan	75%	100%	100%
Legislative Adjusted BAU On-Road Transportation Emissions	541,455	524,978	681,001
Percent VMT Reduction due to Bicycle Network Improvements	0.50%	0.50%	0.50%
Annual GHG Reductions	2,030	2,625	3,405

Source: CAPCOA SDT-1

Bicycle Infrastructure Reductions

	2020	2030	2050
Percent Completion of Planned Bike Lanes	75%	100%	100%
Planned new Class I bike lanes (mi)	36.00	36.00	36.00
Planned new Class II bike lanes (mi)	73.90	73.90	73.90
Planned new Class III bike lanes (mi)	28.50	28.50	28.50
Total new bike lanes completed	103.80	138.40	138.40
Legislative Adjusted BAU On-Road Transportation Emissions	541,455	524,978	681,001
Percent VMT Reduction due to Bicycle Network Improvements	0.31%	0.31%	0.31%
Annual GHG Reductions	1,269.04	1,640.56	2,128.13

Source: CAPCOA SDT-5 (this calculations assumes half of CAPCOA's suggested vmt reduction due to rural context. Also assumes this SDT-5 is combined with other bicycle measures, as a

TACM-5.	TACM-5.	Affordable housing
TACM-5.	Reduction Measure:	Continue to promote and require the development of affordable housing in Elk Grove.
TACM-5.	Location in GPU	Policy H-2-1
TACM-5.	Measure Description:	A significant amount of evidence points to the fact that lower-income households and senior citizens own fewer vehicles and drive less. Furthermore, affordable housing ensures an equitable and just community in which people of all income levels can live in Elk Grove. By constructing and maintaining affordable housing near transit and alternative transportation modes, VMT can be reduced while still allowing mobility of lower-income households.
TACM-5.	Action Items:	• Provide for affordable housing development in Elk Grove consistent with the goals and actions of the Housing Element, as well as SACOG's Regional Housing Needs Allocation.
TACM-5.	2020 Reductions (MTCO2e):	12,027.80
TACM-5.	2030 Reductions (MTCO2e):	16,017.64
TACM-5.	2050 Reductions (MTCO2e):	21,193.24
TACM-5.	Target indicators:	Approximately 3,000 new housing units that are below market rate by 2020, and 4,000 homes that are below market rate by 2030.
TACM-5.	Methods:	CAPCOA provides a 4% reduction in vehicle trips for each deed-restricted BMR unit. Thus, the total reduction is as follows: estimates 2,950 new affordable housing units by 2020. These units will constitute 19% of total new housing units in Elk Grove. Assuming a constant percentage of new units, affordable housing will result in a 1% decrease in VMT (4% * 19%). CAPCOA. 2010. Quantifying Greenhouse Mitigation Measures. A resource for local governments to assess emission reductions from greenhouse gas mitigation measures. CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, January 2008. California Air Pollution Control Officers Association. (Appendix B MSG-21) Nelson/Nygaard Consulting Associates, Creating Low-Traffic Developments: Adjusting Site-Level Vehicle Trip Generation Using URBEMIS, 2005.

VMT and Emissions Reductions

	2020	2030	2050	
Number of new units that are BMR	2,950	2,268	3,357	2020 BMR based on SACOG RHNA
Total Unit Growth	5,312	11,938	17,671	5170
% of new units that are BMR	56%	19%	19%	0.511605
Percentage decrease in VMT for below market rate housing:	0.02	0.01	0.01	
Annual Decrease in VMT	28,973,724	12,965,075	19,069,733	
CO2 (g)	11,885,900,636	3,960,468,729	5,146,327,973	
CH4 (g)	571,358	135,457	136,890	
N2O (g)	475,116	96,505	96,013	
CO2 (MT)	11,886	3,960	5,146	
CH4 (MT)	0.57	0.14	0.14	
N2O (MT)	0.48	0.10	0.10	
MTCO2e	12,028	16,018	21,193	
mt/g	0.000001			

TACM-6.	TACM-6:	Vehicle Miles Traveled Limits
TACM-6.	Reduction Measure:	Any new land use plans, amendments to such plans, and other discretionary development proposals (referred to as "development projects") are required to demonstrate a 15 percent reduction in VMT from existing (2015) conditions.
TACM-6.	Location in GPU	Policy MOB-1.1; NR-4-3
TACM-6.	Action Items:	• Development projects shall demonstrate that the VMT produced by the project at buildout is equal to or less than the VMT limit of the project's General Plan land use designation, as shown in **Table 6 3**, which incorporates the 15 percent reduction from 2015 conditions. • Development projects located within the existing (2017) City limits shall demonstrate that cumulative VMT would be equal to or less than the established citywide limit of 5,565,587 VMT (total daily VMT), which incorporates the 15 percent reduction from 2015 conditions • Development projects located in Study Areas shall demonstrate that cumulative VMT within the applicable Study Area would be equal to or less than the established limit shown in Table 6-4, which incorporates the 15 percent reduction from 2015 conditions.
TACM-6.	2020 Reductions (MTCO2e):	26,526
TACM-6.	2030 Reductions (MTCO2e):	18,539
TACM-6.	2050 Reductions (MTCO2e):	24,525
TACM-6.	Target Indicators:	All projects after 2020 must demonstrate compliance with 15% VMT reduction requirement.

	2020	2030	2050
New VMT	425,995,966	401,622,223	602,433,334
15% Reduction in VMT	63,899,395	60,243,333	90,365,000
CO2 (g)	26,213,470,168	18,402,658,006	24,386,704,170
CH4 (g)	1,260,087	629,411	648,673.46
N2O (g)	1,047,834	448,420	454,972
CO2 (MT)	26,213	18,403	24,387
CH4 (MT)	1.26	0.63	0.65
N2O (MT)	1.05	0.45	0.45
MTCO2e	26,526	18,539	24,525
mt/g	0.000001		

TACM-7.	TACM-7:	Traffic Calming Measures
TACM-7.	Reduction Measure:	Increase the number of streets and intersections that have traffic calming measures.
TACM-7.	Location in GPU	N/A
TACM-7.	Measure Description:	Adding traffic calming measures such as marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, bulb out, crosswalks, encourages people to walk or bike instead of using a vehicle, which results in a reduction in VMT.
TACM-7.	Action Items:	• Install a variety of traffic calming measures on streets and intersections.
TACM-7.	2020 Reductions (MTCO2e):	274.26
TACM-7.	2030 Reductions (MTCO2e):	292.00
TACM-7.	2050 Reductions (MTCO2e):	827.94
TACM-7.	Target Indicators:	25% of streets and 25% of intersections would feature traffic calming measures by 2020.

	2013	2020	2030	2050
Local VMT	206,622,120	264,263,806	379,547,179	610,113,925

CAPCOA SDT-2 Percent reduction in VMT

	% of streets with improvements			
	25%	50%	75%	100%
% of intersections with improvements	% VMT Reduction			
25%	0.25%	0.25%	0.50%	0.50%
50%	0.25%	0.50%	0.50%	0.75%
75%	0.50%	0.50%	0.75%	0.75%
100%	0.50%	0.75%	0.75%	1%

		2020	2030	2050
Percent of intersections in Elk Grove with improvements		25%	25%	50%
Percent of streets in Elk Grove with improvements		25%	25%	50%
Percent Reduction in VMT under T-2.1		0.25%	0.25%	0.50%
Annual VMT reduced under T-2.1		660,660	948,868	3,050,570
CO2 (g)		271,022,574.24	289,852,691.57	823,253,902.24
CH4 (g)		13,028.11	9,913.60	21,898.12
N2O (g)		10,833.61	7,062.88	15,359.08
CO2 (MT)		271.02	289.85	823.25
CH4 (MT)		0.01	0.01	0.02
N2O (MT)		0.01	0.01	0.02
MTCO2e		274.26	292.00	827.94
mt/g	0.000001			

TACM-8.	TACM-8:	Tier 4 Final Construction Equipment
TACM-8.	Reduction measure:	Require all construction equipment used in Elk Grove to achieve EPA-rated Tier 4 Final diesel engine standards by 2030 and encourage the use of electrified equipment where feasible.
TACM-8.	Location in GPU	Policy NR-4-8
TACM-8.	Action Items:	• Work with Sacramento Metropolitan Air Quality Management District to ensure grading permits are not issued until project applicants verify construction will use Tier 4 Final diesel engines where applicable.
TACM-8.	2020 Reductions (MTCO2e):	-
TACM-8.	2030 Reductions (MTCO2e):	644
TACM-8.	2050 Reductions (MTCO2e):	892
TACM-8.	Target Indicators:	100% of diesel equipment used in construction is EPA-rated Tier 4 Final by 2030.

	2020	2030	2050
Off-road Construction and Mining Emissions (MTCO2e)	25,176	12,885	17,846
Percent of equipment that are Tier 4 Final	No change	100%	100%
Average percent improvement in fuel efficiency with Tier 4 equipment	5%	5%	5%
GHG Reductions (MTCO2e)	-	644	892

TACM-9.	TACM-9:	Install EV Charging Stations
TACM-9.	Reduction measure:	Increase the number of EV charging stations available for public charging at commercial and civic buildings.
TACM-9.	Location in GPU	Policy MOB-7.9
TACM-9.	Measure Description:	
TACM-9.	Action Items:	• Work with businesses and multi-unit developments to site EV charging stations. • Install EV charging stations at municipal facilities.
TACM-9.	2020 Reductions (MTCO2e):	316
TACM-9.	2030 Reductions (MTCO2e):	794
TACM-9.	2050 Reductions (MTCO2e):	689
TACM-9.	Target Indicators:	Install 50 EV chargers by 2020, 100 by 2030.

EV Charger Emission Reduction Calculation

2017 Number of charging stations in Elk Grove 14

2020

Number of Chargers	50	
Number of Connections per Charge	2	
Average Charging hours per Connection per day	3	
Number of hours of charge per year for all chargers (h/year)	102,200	
Average Efficiency of EV LDV (kWh/100-mi) (1)	34	<-for MY2015-2018
Average Efficiency of Gasoline LDV in 2020 (mpg)	29	<-informational purposes only
GHG Emissions per kWh in Sacramento in 2020 (MTCO2e/kWh)	0.00024	
GHG Emissions per mi for average gasoline LDV (gCO2/mi)	291	
Emissions reductions per EV mi (kg CO2/mi)	0.21	

Percent Breakdown of Charger Types	Type of EV Charger	Charger Power (kW or kWh/h) (2)	Charged amount (kWh)	Equivalent VMT (mi)	EV emissions (MT CO2e)	Equivalent Gasoline emissions (MT CO2e)	Emissions reductions (MT CO2e)	Emissions reductions per hour of charge (kg CO2e/h)
0%	Level 1	1.4	-	-	-	-	-	-
50%	Level 2 (low)	3.3	168,630	501,457	41	146	105	1
50%	Level 2 (high)	6.6	337,260	1,002,914	81	292	211	2
0%	DC Fast Charging	45	-	-	-	-	-	-
0%	Tesla Wall Connect	11.5	-	-	-	-	-	-
0%	Tesla Supercharger	120	-	-	-	-	-	-
			Total VMT	1,504,371		Total Reductions	316	

2030

Number of Chargers	100	
Number of Connections per Charge	2	
Average Charging hours per Connection per day	3	
Number of hours of charge per year for all chargers (h/year)	204,400	
Average Efficiency of EV LDV (kWh/100-mi) (1)	34	<-for MY2015-2018
Average Efficiency of Gasoline LDV in 2020 (mpg)	42	<-informational purposes only
GHG Emissions per kWh in Sacramento in 2030 (MTCO2e/kWh)	0.00018	
GHG Emissions per mi for average gasoline LDV (gCO2/mi)	325	
Emissions reductions per EV mi (kg CO2/mi)	0.26	

Percent Breakdown of Charger Types	Type of EV Charger	Charger Power (kW or kWh/h) (2)	Charged amount (kWh)	Equivalent VMT (mi)	EV emissions (MT CO2e)	Equivalent Gasoline emissions (MT CO2e)	Emissions reductions (MT CO2e)	Emissions reductions per hour of charge (kg CO2e/h)
0%	Level 1	1.4	-	-	-	-	-	-
50%	Level 2 (low)	3.3	337,260	1,002,914	61	326	265	1
50%	Level 2 (high)	6.6	674,520	2,005,828	122	651	529	3
0%	DC Fast Charging	45	-	-	-	-	-	-
0%	Tesla Wall Connect	11.5	-	-	-	-	-	-
0%	Tesla Supercharger	120	-	-	-	-	-	-
			Total VMT	3,008,742		Total Reductions	794	

2050

Number of Chargers	200	
Number of Connections per Charge	2	
Average Charging hours per Connection per day	3	
Number of hours of charge per year for all chargers (h/year)	408,800	
Average Efficiency of EV LDV (kWh/100-mi) (1)	34	<-for MY2015-2018
Average Efficiency of Gasoline LDV in 2020 (mpg)	48	<-informational purposes only
GHG Emissions per kWh in Sacramento in 2050 (MTCO2e/kWh)	0.00018	
GHG Emissions per mi for average gasoline LDV (gCO2/mi)	175	
Emissions reductions per EV mi (kg CO2/mi)	0.11	

Percent Breakdown of Charger Types	Type of EV Charger	Charger Power (kW or kWh/h) (2)	Charged amount (kWh)	Equivalent VMT (mi)	EV emissions (MT CO2e)	Equivalent Gasoline emissions (MT CO2e)	Emissions reductions (MT CO2e)	Emissions reductions per hour of charge (kg CO2e/h)
0%	Level 1	1.4	-	-	-	-	-	-
50%	Level 2 (low)	3.3	674,520	2,005,828	122	351	230	1
50%	Level 2 (high)	6.6	1,349,040	4,011,656	243	703	460	1
0%	DC Fast Charging	45	-	-	-	-	-	-
0%	Tesla Wall Connect	11.5	-	-	-	-	-	-
0%	Tesla Supercharger	120	-	-	-	-	-	-
			Total VMT	6,017,485		Total Reductions	689	

Source:
(1) https://www.driveclean.ca.gov/pev/Charging.php
(2) http://www.fueleconomy.gov/feg/download.shtml

Emission Factors

Sector	Subsector	Source	Units	2013	2020	2030	2035	2050	Source
Residential	Electricity	SMUD	$MTCO_2e/kWh$	0.000240	0.000241	0.00018	0.00018	0.00018	2013: Pers. Comm. Dimitri Antoniou, June 28, 2016 2020: based on 2009 PUP of SMUD at 29% renewables 2030/2050: assumed 50% renewable
Residential	Natural Gas	PG&E	$MTCO_2e/therm$	0.005322					
Nonresidential	Electricity	SMUD	$MTCO_2e/kWh$	0.000240	0.000241	0.00018	0.00018	0.00018	2013: Pers. Comm. Dimitri Antoniou, June 28, 2016 2020: based on 2009 PUP of SMUD at 29% renewables 2030/2050: assumed 50% renewable
Nonresidential	Natural Gas	PG&E	$MTCO_2e/therm$	0.005322					
Transportation	On-Road	CARB EMFAC	$MTCO_2e/VMT$	0.000490					
Off-Road Equipme	Construction/Mining Equipment	MBI 2013							
Off-Road Equipme	Lawn/Garden Equipment	MBI 2013	MTCO2e/du	0.047909491					
Solid Waste	Municipal Solid Waste	CARB Landfill Model	$MTCO_2e/ton$	0.296272					
Solid Waste	Alternative Daily Cover	CARB Landfill Model	$MTCO_2e/ton$	0.246253					
Solid Waste	Landfills								
Water	Indirect Water	SMUD	$MTCO_2e/kWh$	0.000240	0.00024124	0.00018	0.00018	0.00018	2020: based on 2009 PUP of SMUD at 29% renewables 2030/2050: assumed 50% renewable
Wastewater	Indirect Wastewater	SMUD	$MTCO_2e/kWh$	0.000240	0.00024124	0.00018	0.00018	0.00018	2020: based on 2009 PUP of SMUD at 29% renewables 2030/2050: assumed 50% renewable
Wastewater	Fugitive								
Agriculture	Agriculture Equipment	MBI 2013	MTCO2e/acre	0.293072824					
Agriculture	Livestock								
Agriculture	Fertilizer	ICLEI US Community Protocol	$MTCO_2e/acre$	0.176829					
	Electricity	eGRID 2012	MT CH4/kWh	1.41158E-08					
	Electricity	eGRID 2012	MT N2O/kWh	2.57187E-09					

On-Road Vehicle Emission Factors

Year	CO2 (g/mi)	CH4 (g/mi)	N2O (g/mi)
2013	484.6539914	0.038390373	0.034721657
2020	410.2303345	0.019719851	0.016398179
2030	305.4721072	0.010447815	0.007443475
2040	275.2640092	0.007830538	0.005534158
2050	269.8689109	0.007178371	0.005034823