Alaska Department of Environmental Conservation

Amendments to State Air Quality Control Plan

Vol. II: Appendix III.D.2.5

PM_{10} Design Values for Eagle River 2nd 10-year PM-10 Limited Maintenance Plan

DRAFT

[Date]

Michael J. Dunleavy
Governor

Jason W. Brune
Commissioner

Appendix to Volume II., Section III.D.2.5

PM10 Design Values for Eagle River and Qualification for Second 10-year limited Maintenance Plan

Computation of 24-hr Design Value

Computational methods for determining the 24-hour design value (DV) are outlined in the *PM_{10} SIP Development Guideline (EPA-450/2-86-001, June 1987).* The empirical frequency distribution approach (see Section 6.3.3. of the guidance) was used to determine the site-specific PM10 concentration that would be expected to be exceeded at a frequency of once every 365 days.

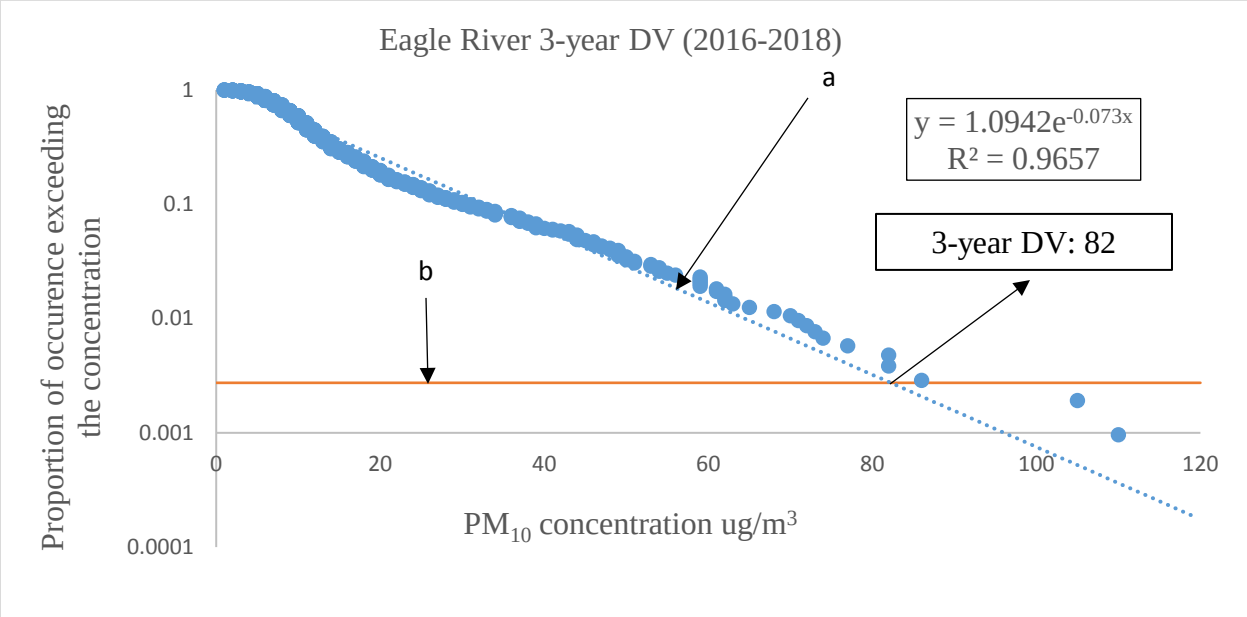
All observations by PM_{10} concentration were ranked for each 3-year block during the 2009 – 2018 period in descending order. Since PM_{10} concentrations were monitored generally on a one-in-six-days basis, each 3-year block had approximately 180 observations. Thus, the lowest concentration measured in each 3-year block had a rank order approximately 180.

Next, for a concentration ranked (*i*), the proportion of PM_{10} observations that exceed that concentration is calculated as:

i / total number of observations

The empirical frequency distribution for each 3-year block was then graphed by plotting the proportion of occurrence against PM10 concentrations. Figure 1 below shows an example of 2016-2018 period.

Figure 1
Example – Determination of 24-hr DV for 2016-2018



Since the DV is a concentration that corresponds to an exceedance frequency of 1/365 (line b), the DV was graphically determined as the intersecting point of Lines ***a*** and **b** in the Figure 1.

Line ***a*** = the empirical frequency distribution for all the observations during the 2016-2018 period. Line ***b*** = DV frequency by definition (1/365). Total number of observations = 1043. For this particulate period, DV was determined to be 82 µg/m^3.

Table 1 below shows the calculated DVs for the last decade, all eight 3-year blocks, to demonstrate that there is no increasing trend in DVs over the period. The average DV during the last 5-year period (2014-2018) was 96 µg/m^3, which is below the LMP criteria of 98 µg/m^3.

Table 1
Computation of Average DV for Parkgate Site in Eagle River

3-yr Period	**Equation of Line Describing Empirical Frequency Distribution**	**R^2**	**DV(computed from previous 3 years data using empirical frequency distribution (µg/m^3)**
2009-2011	$y = 1.0959e^{-0.062x}$	0.9103	96
2010-2012	$y = 1.1021e^{-0.067x}$	0.9306	90
2011-2013	$y = 1.1116e^{-0.068x}$	0.9640	88
2012-2014	$y = 1.0152e^{-0.055x}$	0.9770	106
2013-2015	$y = 1.0367e^{-0.056x}$	0.9789	106
2014-2016	$y = 1.0698e^{-0.055x}$	0.9840	109
2015-2017	$y = 1.1496e^{-0.070x}$	0.9795	86
2016-2018	$y = 1.0942e^{-0.073x}$	0.9657	82
	Average DV 2014-2018 =		**96** µg/m^3
	LMP Qualification Criteria		**< 98** µg/m^3

*In this equation y is the proportions of concentrations exceeding a particular PM10 concentrations and x is the concentration of interest. If y is set = 1/365 = 0.0027, the equation can be used to solve for x, the concentration that would be expected to be exceeded once per year.

Computation of a Site-Specific Design Value

Attachment B of the Limited Maintenance Plan guidance (Wegman memo, EPA, August 9, 2001) outline a procedure for computing a site-specific value (called a critical design value or CDV) that may serve as alternative to the 98 µg/m^3 value used to determine whether an area qualifies for LMP option or meets the Motor Vehicle Regional Emissions Analysis Test. The computation is described below:

CDV = NAAQS/(1+tcCV)

Where:

CDV = the critical design value

CV = the coefficient of variation of the annual design values (the ratio of standard deviation divided by the mean design value in the past)

t_c = the critical one-tail t-value corresponding to a given probability of exceeding the NAAQS in the future and the degree of freedom in the estimate for the CV.

The Tables below illustrate the guidance received from EPA Region 10 staff. CDV was calculated based on 3-yr DVs from tabular ADV (see attached Appendix A for details), the ADV for all empirical data, ADV for empirical greater than 40 µg /m^3, and ADV for upper 10% Tail Dist, using 10% to determine the appropriate critical one-tail t value (t_c) in the computation

Table 2
3-Year Average Design Values (ADVs) Data

Years	**3-Yr OBS**	**Tabular-ADV = lower**		**Empirical – ADV**	**Empirical – ADV**	**Upper 10% Tail Dist - ADV**
		upper	lower	all data	>= 40 µg /m^3	
2011-2014	1041	111	109	108	114	108
2012-2015	1037	111	109	106	114	105
2013-2016	1038	110	109	108	109	107
2015-2017	1045	90	86	86	93	96
2016-2018	1043	105	86	82	91	95

Table 3
Critical Design Value Calculation

CDV = NAAQS/(1+t_CCV)	**Tabular**	**Empirical (all)**	**Empirical (>39)**	**U10% Tail Dist**
SD	12.6	12.9	11.3	6.2
Mean	99.8	98.0	104.2	102.2
CV	0.126	0.131	0.109	0.061
NAAQS	150.0	150.0	150.0	150.0
n	5	5	5	5
df	4	4	4	4
t_C (10%, one-tail)	1.533	1.533	1.533	1.533
Critical Design Value (CDV)	125.7	124.8	128.5	137.2

With the 5-year ADV (96 µg/m^3) for this monitoring station, less than the CDV (124.8 µg/m^3), these CDVs provide additional evidence that the Eagle River Maintenance Area continues to remain eligible for a Limited Maintenance Plan. Hence, there is less than 10% probability of violating the PM_{10} 24-hr standard in the future at the Parkgate site in Eagle River.

All the site-specific values are considerably greater than the "default" value of 98 µg /m^3. The site-specific value (124.8 µg/m^3) was used as a margin of safety (MOS) value in the Motor Vehicle Regional Emissions Analysis Test.

Alaska Department of Environmental Conservation

Amendments to State Air Quality Control Plan

Vol. II: Appendix III.D.2.6

2017 PM_{10} Emission Inventory for Eagle River 2nd 10-year PM-10 Limited Maintenance Plan

DRAFT

[Date]

Michael J. Dunleavy
Governor

Jason W. Brune
Commissioner

Overview

With the exception of the on-road vehicle emissions and the non-road emissions sections which are new, all other sections of this appendix document for the second 10-year Limited Maintenance Plan (LMP) are updates of the appendix to the first 10-year LMP.

A maintenance plan typically contains an emission or modeling demonstration that shows how the area will stay in compliance through the 10-year maintenance period. This demonstration requires a projected emissions inventory usually. However, an area meeting the LMP qualification criteria is at little risk of violating the standard because emissions are not expected to grow sufficiently to threaten the maintenance of the standard. As stated in Section V.b. *Maintenance Demonstration of the Wegman memo*, "if the tests described in Section IV are met, we will treat that as a demonstration that the area will maintain the NAAQS. Consequently, there is no need to project emission over the maintenance period."

This document describes the assumptions and methods used to develop the 2017 base year PM_{10} emission inventory. The 2007 inventory is also shown for illustrative purposes. As shown in the inventory, the most significant sources of the crustal material (dust), in the maintenance area, are dust stirred up by vehicle traffic traveling on paved roadways and wind-lofted dust from roads, parking lots and un-vegetated areas within the area. This finding is consistent with past source apportionment studies that have consistently shown that the vast majority of PM_{10} in Eagle River and Anchorage consists of crustal material.[1]

In 1991, when the attainment plan for Eagle River was prepared, the most important source of PM_{10} was unpaved roads. Since that time, however, all of the roads in the area have been paved, so unpaved road emissions are no longer included in the inventory. Unlike the first 10-year LMP, six PM_{10} source categories were inventoried for the second 10-year LMP. These include (1) dust from paved roads; (2) wind-generated dust from roads, parking lots and un-vegetated areas; (3) fireplaces and woodstoves; (4) natural gas combustion; (5) exhaust, tire and brake wear emissions from motor vehicles; and (6) non-road emissions

AP-42, "Compilation of Air Pollution Emissions Factors," is an EPA publication that provides guidance on the estimation of emissions on a large variety of air pollution emission sources. Similar to the first 10-year LMP, emissions from significant sources within the 9 km^2 area were estimated using same standard methodologies outlined in AP-42 for fugitive PM_{10} sources. However, MOVES2014b, instead of MOBILES6.2, as shown in the attached spreadsheet, was used to estimate the contribution of motor vehicle exhaust, tire and brake wear emissions, and non-road equipment emissions to PM_{10}. The methods and assumptions used to estimate emissions from each of these sources are described in the next five sections.

[1] Four studies have been performed to characterize the sources of particulate and Anchorage and Eagle River. These include two chemical mass balance/source apportionment studies (Pritchett & Cooper, 1985, Cooper & Vodovinos, 1988) and two studies that used microscopy (Crutcher, 1994, R.J. Lee, Inc., 1995) to identify and quantify the types (and probable sources) of particulate.

(1) Dust from Paved Roads

Dust from paved roads is a major source of PM_{10} in Eagle River and Anchorage. Roads are often laden with large amounts of "sediment" and other fine-grained minerals left over from winter sanding operations, material abraded from the road surface itself by traffic (especially from vehicles equipped with studded tires), and spillage from hauling activities. Roads tend to be dirtiest during the spring break-up period which generally occurs between mid-March and the end of April. Although the grain size of most of the sediment on the roads is too large to be PM_{10}, some of this material has been pulverized to a grain size less than 10 microns. When these very fine grained particles are re-entrained into the air by turbulence from traffic traveling on the road, they become PM_{10}.

Section 13.2.1 of AP-42 outlines procedures for estimating PM_{10} emissions from paved roads. According to AP-42, emissions from a paved road are a function of how much fine-grained sediment or silt is on the road and the weight of vehicles using the road.[2] Paved road emissions increase in direct proportion to the amount of traffic or vehicle miles travelled (VMT) on the roads. Higher traffic volumes result in greater emissions.

The air quality conformity analysis for the 2007 Chugiak-Eagle River Long Range Transportation Plan (CE/LRTP) included VMT estimates for analysis years 2007, 2017, and 2027. These VMT estimates served as the basis for the 2017 inventory presented here. Since 2017 was of the five most recent years used for the calculation of ADV, it was selected as the base year. The VMT estimate for 2033, used for computation of the motor vehicle regional emissions analysis test, was obtained from the TDM consultant for Anchorage Transportation Planning Department of the Municipality of Anchorage. The projected VMT estimate for 2033 was calculated from the travel demand model of the road networks within the maintenance area (see attached Appendix B for details).

In the conformity analysis for the CE/LRTP, the FHWA-approved Anchorage Transportation Model was used to estimate VMT on arterials and freeways in the Eagle River Maintenance area; the model did not provide VMT estimates for local roads. In the first 10-year LMP, VMT on local roads was estimated by assuming that each household within the maintenance area makes seven home-based trips per day, each involving 0.62 miles of travel on local roads.[3] Each household was assumed to generate 4.34 miles *(7 trips x 0.62 m)* of local road VMT each day.

[2] Silt is defined as the finer-grained soil particles that pass a #200 mesh sieve; these are particles nominally 75 microns and smaller.

[3] For example, a trip from home to the local grocery store and back would count as two home-based trips.

Table 1
Estimated VMT in Eagle River PM10 Maintenance Area for Year 2017

Local Road VMT (based on housing Stock)					Arterial and Freeway VMT (Anchorage Transportation Model Estimates)	
Year	Housing Stock	Local Unpaved VMT	Paved (RAP)* VMT	Paved (SP/CG)** VMT	Arterials	Glenn Highway
2007	4,548	0	7,659	12,079	68,664	77,532
2017	4,908	0	8,264	13,034	83,370	107,640

* RAP = recycled asphalt pavement
** SP/CG = strip paved or curb and gutter
Data was extracted from the Air Quality Conformity Analysis for the 2007 Chugiak-Eagle River Long Range Transportation Plan (CE/LRTP)

Paved Road Emission Factor

Section 13.2.1 of AP-42 (updated November 2006) outlines recommended procedures for estimating PM_{10} emissions from paved roads. The paved road emission factor, the amount of PM_{10} generated in pounds per vehicle mile traveled (VMT), is a function of the "silt loading" on the road and the average weight of the vehicles traveling on the road.

The AP-42 paved road emission factor equation is:

$$E = k(sL/2)^{0.65} \times (W/3)^{1.5} - C$$

where

$E = PM_{10}$ emissions in Ibs/VMT

$k = 0.016$ (AP-42 specified particle size multiplier for PM_{10})

sL = road surface silt loading (varies by roadway type)

W = mean vehicle weight in tons (assumed to be 2 tons)

C = vehicle exhaust, tire and brake wear emissions (AP-42 recommendation = 0.00047 Ibs/VMT)

Data collected in Anchorage in 1996 (Montgomery-Watson, 1996) showed that silt loading varied by roadway type (for this inventory, Eagle River was assumed to have silt loadings identical to Anchorage).

The Municipality of Anchorage maintains a detailed inventory of the surface treatment of roads in the Chugiak – Eagle River area. While the majority of the roads in the area are paved with "traditional" hot asphalt paving (HAP) about one-third of the local roads in the maintenance area are constructed with recycled asphalt paving or RAP. Although air quality monitoring data suggest RAP treatment has proven to be an effective means in reducing PM_{10} from gravel roads in Eagle River, the surface of these roads is less durable and more erodible than those constructed using HAP. Because roadway abrasion is a significant source of silt on roads, it seems reasonable to assume that the silt loadings on RAP roads are higher than those surfaced with HAP.[4] For the purpose of this inventory, RAP-constructed roads were assumed to have silt loadings twice those constructed with HAP.

Table 2 shows average silt loading measurements and the computed AP-42 PM_{10} emission factor for roadway type for the spring and fall PM_{10} seasons.

Table 2
Typical Silt Loadings and PM_{10} Emission Factors by Season for Paved Roads in Eagle River

Roadway Type	**Silt Loading (g/m^2)**	**Spring PM_{10} Emission Factor (Ibs/VMT)**	**Silt Loading (g/m^2)**	**Fall PM_{10} Emission Factor (Ibs/VMT)**
Arterial Paved Roads	6.7	0.0207	1.1	0.0061
Freeways (Glenn Hwy)	20.4	0.0433	2.6	0.0110
Local Paved Roads (hot asphalt paving)	18.4	0.0404	4.7	0.0164
Local Paved Roads (recycled asphalt)	36.8#	0.0637	9.4#	0.0260

Silt loading estimated to be double those of local roads constructed with hot asphalt paving
Data was extracted from the appendix to the first 10-year LMP

Using AP-42 Emission Factors and VMT Estimates to Compute Paved Road PM10

Paved road PM_{10} emissions can be readily computed from the emission factor and VMT on each roadway type. Table 3 shows estimated emissions for the spring and fall periods for base year 2017.

Table 3
Estimated PM_{10} 2017 Emissions from Paved Roads in the Eagle River Maintenance Area

	2017		
Road Type	**VMT**	**Spring Emissions (tons/day)**	**Fall Emissions (tons/day**
Arterial Paved Roads	83,370	0.86	0.25

[4] The Municipality of Anchorage recently completed a study that suggests that roadway abrasion is the source of about 25% of the "dirt" on the road surface during spring break-up.

Freeways (Glenn Hwy)	107,640	2.33	0.59
Local Paved Roads (hot asphalt paving)	13,034	0.26	0.11
Local Paved Roads (recycled asphalt)	8,264	0.26	0.11
Total	**212,308**	**3.71**	**1.06**

(2) Wind Generated Dust from Roads, Parking Lots and Un-vegetated Areas

Although EPA guidance allows the flagging of PM_{10} exceedances that occur as a result of extreme wind events such as those that occurred on October 30, 2009, in Eagle River, PM_{10} observations resulting from commonly occurring, less energetic wind-related events are considered valid data and are not excluded when determining the design value for an area or determining whether the area is in compliance with the NAAQS. Monitoring data suggest that wind-generated dust frequently contributes to elevated PM_{10} concentrations in Eagle River.

Estimating the Amount of Area Covered by Roads, Parking Lots and Un-vegetated Areas

Wind-generated dust generally originates from paved surfaces laden with dirt and silt. These paved surfaces include roadways and parking lots in the maintenance area. There are also some cleared, un-vegetated areas that are unpaved.

Estimates of the amount of area available for the generation of windblown dust are shown in Table 4. The area amount of roadway was estimated by the length of each type of roadway and the average width of that type of roadway. For example, there are 6.2 miles of arterial roadway in the maintenance area and arterial roadways have an average paved width of approximately 60 feet.

The surface area of the arterial roadways in the maintenance area is therefore:

(6.2 miles length)(5,280 ft/mi)(60 ft width) = 1,964,160 ft^2

1,964,160 ft^2 / 43,560 ft^2 /acre = 45.1 acres

In 2010 when the first 10-year LMP was developed, the amount of acreage covered by parking lots, paved school playgrounds, and similar areas was estimated by inspecting Google satellite photos of the maintenance area. The acreage of unvegetated, cleared areas was estimated in like manner. The Google map utility includes a distance key that allows the dimensions and acreage of a particular surface feature to be estimated. For example, a parking lot with dimensions of 250 feet by 500 feet is approximately 3 acres in size. Because parking areas, particularly those serving retail establishments serve the local population, it was assumed that the total area covered by parking lots and the likes would increase in direct proportion with housing stock. Housing stock was projected to increase by 7.9% between 2007 and 2017; paved parking areas were assumed to increase by same proportion.

The total amount of paved or cleared area in the maintenance area in base year 2017 was estimated to be 292 acres. This constitutes about 12.6% of the land surface in the maintenance area.

Table 4
Estimated Surface Area Coverage of Roads, Parking Lots and Un-vegetated Areas in Eagle River PM10 Maintenance Area

	2007		2017	
	Roadway Length (miles)	**Estimated Area (acres)**	**Roadway Length (miles)**	**Estimated Area (acres)**
Glenn Highway	1.1	13	1.1	13
Arterials	6.2	45	6.2	45
Local Roads	45.6	165	45.6	165
Parking Lots	----	55	----	59
Un-vegetated Areas	----	10	----	10
Total		**288**		**292**

Note: To compute the total paved area of roadways, a paved width of 100 feet was assumed for the Glenn Highway, 60 feet for arterials, and 30 feet for local roads

Wind Blown Dust Emission Factor Estimation

AP-42 does not provide an emission factor methodology specific to estimating PM_{10} emission from roads, parking lots and un-vegetated areas. However, it does outline a methodology (see AP-42 Section 13.2.5.1) for estimating emissions from aggregate storage piles and open areas within an industrial facility. After examining other alternatives, the methodology recommended for estimating wind-generated PM_{10} emissions from open areas in industrial facilities seemed to offer the best fit available for estimating wind-generated PM_{10} in Eagle River.

The AP-42 Section 13.2.5.1 outlines a step-by-step procedure for estimating wind generated PM_{10} emission factor for open areas in industrial facilities. This methodology was applied to the estimation of emissions from open areas in Eagle River.

AP-42 provides the following equation for estimating PM_{10} emissions from wind-blown dust:

Equation 1

$$EF_{wind} = 0.5(58(u^* - u_t^*)^2 + 25\,(u^* - u_t^*))$$

where:

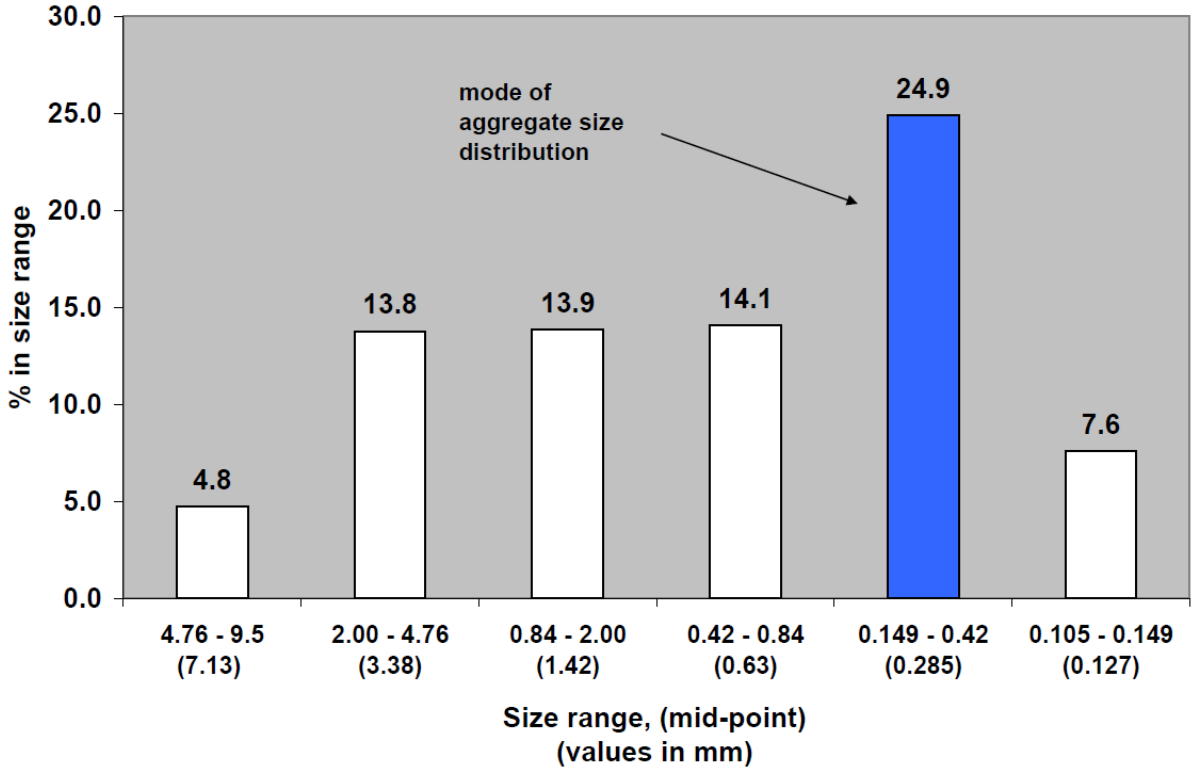
u^* = friction velocity (m/s)
u_t^* = threshold friction velocity (m/s)

The next two sub-sections will describe how the variables u^* and u_t^* were determined.

Determining u_t^*

AP-42 outlines a field procedure and lab test (sieve analysis) for estimating the threshold friction velocity (u_t^*). The mode of the aggregate size distribution is determined and can be related empirically (see AP-42 Table 13.2.5-1) to u_t^*. In order to estimate u_t^* for the aggregate material in the Eagle River maintenance area, existing sieve analysis data from street sediment collected in Anchorage was used.[5] Over 300 street sediment samples were collected and sieved. Although the sieves used in this analysis did not correspond exactly to those prescribed in Table 13.2.5-1, they were similar enough so that a reasonable estimate of u_t^* could be made.[6] The mode size was determined from the average of all 300+ sieve analysis results. On average, 24.9% of the total street sediment was "captured" between sieves #40 (0.42 mm) and #100 (0.149 mm). The midpoint size between these two sieves is 0.285 mm (See Figure 1).

Figure 1
Sieve Analysis Results for Anchorage Street Sediment Data



Note: The figure was extracted from the appendix document to the 1st 10-year LMP

Table 13.2.5-1 recommends a value for u_t^* = 0.43 m/s for a midpoint size range of 0.375 mm. Again, because different sieves were used to characterize the size distribution of Anchorage

[5] These data were collected in spring of 1996 by Montgomery-Watson, Inc. for the MOA Watershed Management Section as part of an analysis of street sediment impacts on streams and lakes in Anchorage.
[6] The sieves used in the Anchorage Street Sediment Testing were #4, #9, #20, and #100. The method recommends using sieves #5, #9, #16, #32, and #60.

Road Sediment than prescribed by AP-42, our midpoint value is slightly different. Nevertheless the data suggest that 0.43 m/s is a reasonable assumption of u_t^* for Eagle River road sediment.

Determining u^*

The friction wind velocity (u^*) is the estimated wind velocity at the ground surface where street sediment and other fine materials lay available for re-entrainment by the wind. Wind speed measurements are taken at 10 meters above the ground (u_{10}^+), however, the actual wind speed at the ground surface is significantly lower. AP-42 recommends the following equation to estimate u^*:

$$u^* = 0.053\ u_{10}^+ \text{ (expressed in m/sec)}$$

For the first 10-year year LMP, to estimate the contribution of wind-blown dust to PM_{10}, the five highest PM_{10} days during spring break-up (March, April) and fall freeze-up (October, November) were identified over the 10-year period 1998-2007, as illustrated in Table 5.

Note: The same conservative approach was made for the second 10-year LMP.

Table 5
Equivalent Friction Wind Velocities on High PM_{10} Days
During Spring Break-up and Fall Freeze-up (2009-2018)

Date	PM_{10} ($\mu g/m^3$)	Max 2-min Wind Speed u_{10}^+ (mph)	Equivalent Friction Wind Velocity u^* (m/s)		Date	PM_{10} ($\mu g/m^3$)	Max 2-min Wind Speed u_{10}^+ (mph)	Equivalent Friction Wind Velocity u^* (m/s)
3/10/2003	**92**	**23**	**0.55**		11/13/2006	65	16	0.38
3/17/2005	90	15	0.36		11/7/1998	55	7	0.17
3/4/2003	82	23	0.55		**10/21/2000**	**52**	**20**	**0.47**
4/15/2004	70	8	0.19		10/31/2005	51	14	0.33
3/14/2001	69	13	0.31		11/7/2006	48	20	0.22
Selected value for u^* =			**0.55**		**Selected value for u^* =**			**0.47**

Computing the Wind Blown Dust Emission Factor from Equation (1)

With the determination of the threshold friction velocity u_t^* and equivalent wind friction velocity u^* for the spring and fall PM_{10} seasons, the Equation 1 can be used to compute the PM_{10} emission factor for wind-blown dust.

$$\text{(Equation 1) } EF_{wind} = 0.5(58(u^* - u_t^*)^2 + 25\ (u^* - u_t^*))$$

Substituting the values for $u_t^* = 0.43$ m/sec and $u^* = 0.55$ m/s (spring) and 0.47 m/s (fall), the resultant spring and fall windblown dust PM_{10} emission factor are:

Spring Windblown Dust PM_{10} Emission Factor = 1.9 g/m^2/day = 17 Ibs/acre/day
Fall Windblown Dust PM_{10} Emission Factor = 0.5 g/m^2/day = 5 Ibs/acre/day

Table 6
Estimated Windblown Dust PM10 Emissions from Roads, Parking Lots and Un-Vegetated Areas

		Spring Break-up		Fall Freeze-up	
Year	**Total Estimated Area of Roads, Parking Lots, and Un-vegetated Areas (acres)**	**Wind Blown Dust PM10 Emission Factor (Ibs/acre)**	**Total PM10 Emission Factor (tons/day)**	**Wind Blown Dust PM10 Emission Factor (Ibs/acre)**	**Total PM10 Emission Factor (tons/day)**
2007	288	17	2.45	5	0.72
2017	292	17	2.48	5	0.73

(3) Fireplace and Woodstoves

Basic assumptions regarding fireplace and wood stove were obtained from a telephone survey conducted by ASK Marketing and Research in 1990. This survey asked Anchorage residents how many hours per week they burned wood in their fireplace or wood stove. Because the AP-42 emission factors for fireplaces and wood stoves (See AP-42, Sections 1.9 and 1.10) are based on the amount of wood (dry weight) burned, hourly usage rates from the survey had to be converted into consumption rates. Based on discussions between MOA and several reliable sources (OMNI Environmental Services, Virginia Polytechnic Institute, Colorado Department of Health), average burning rates (in wet weight) of 11 pounds per hour for fireplaces and 3.5 pounds per hour for wood stoves were assumed.

Residential wood burning assumptions are detailed in Table 7.[7]

[7] Assumptions regarding wood burning activity levels (i.e. the number of households engaging in wood burning on a winter season design day) were corroborated by a more recent telephone survey conducted by In 2003 Ivan Moore Research (IMR) asked approximately 600 Anchorage residents whether they had used their fireplace or woodstove during the preceding day. The survey was conducted when the preceding day had a minimum temperature between 5 and 15 ºF. Although the IMR survey did not provide as detailed information as the ASK survey, its results were roughly consistent with the assumptions used in this inventory.

Table 7
Estimation of Residential Wood Burning PM_{10} Emission Factors for Eagle River

Device	Average use per weekday (hours/household/day)	Average dry weight of wood consumed (lbs/hour)*	Average amount of wood burned per household (dry lbs /day)	AP-42 Emission Factor for PM_{10} (g/dry lb wood burned)	Estimated PM_{10} emissions per household (g/day)
Fireplaces	1.04	7.15	7.44	7.9	58.8
Wood Stoves	0.85	2.275	1.94	5.4**	10.5
Total	**1.89**	**------**	**9.38**	**------**	**69.3**

Note: Data was extracted from the appendix document to the 1st 10-year LMP
* The moisture content of wood burned was assumed to be 35%. Thus, dry burning rates were 65% of wet rates.
** The wood stove emission factor was determined by assuming that the wood stove population in Eagle River is comprised of equal proportions of conventional, catalyst, and non-catalyst stoves. The emission factor above was calculated as the weighted average of the AP-42 emission factors for each stove type. AP-42, 5th Edition (Oct 1996)

PM_{10} emissions from residential wood burning can be estimated from the emission factor computed above and the estimated number of households. Table 8 shows estimated PM_{10} emissions from residential wood burning for illustrative year 2007 and base year 2017.

Table 8
Estimated PM_{10} Emissions from Residential Wood Burning in Eagle River Maintenance Area 2007 and 2017

Year	Housing Stock in Inventory Area	AP-42 PM_{10} Wood Burning Emission Factor for Eagle River (g/household/day)	Estimated PM_{10} Emissions from Fireplaces and Woodstoves (tons/day)
2007	4,548	64.5	0.32
2017	4,908	64.5	0.35

Note: Wood burning rates per household were assumed to be the same in 2007 and 2017.

(4) Natural Gas Combustion

Natural gas is the main fuel source for space heating in the Municipality of Anchorage, including Eagle River. Survey information suggests that the vast majority of households use natural gas as their primary source of heat. Average household natural gas consumption during a peak heating day in the winter in the Anchorage area has been estimated to be 658 ft3/day. We, however, were interested in estimating natural gas consumption (and consequent PM_{10} emissions) during

spring break-up and fall freeze-up when temperatures are warmer. Estimates of peak household natural gas consumption were estimated for a day when the average ambient temperature was approximately -10 ºF while the typical average daily temperature during the spring and fall PM_{10} seasons is approximately +30 ºF. Natural gas consumption for a +30 ºF day can be estimated from consumption on a -10 ºF day by assuming that consumption is proportional to heating degrees. The computation is as follows:

Peak-day natural gas consumption per household = 658 ft^3/day
Ambient temperature on day of peak natural gas consumption = -10 ºF, heating degrees = 75
Ambient temperature on typical fall or spring day in PM_{10} season = +30 ºF, heating degrees = 35
Assume natural gas consumption is proportional to heating degree days, then
Natural gas consumption during fall or spring PM_{10} day = 658 ft^3/day x (35/75) = ***307 ft^3/day***

The Eagle River maintenance area is predominantly residential. While there are some commercial natural gas users, there is little if any industrial or utility usage. Because "nonresidential use" is relatively small within the maintenance area, it seemed reasonable to assume that combined commercial and industrial use would be no more than 50% of residential. Thus, for the purpose of this inventory, total natural gas use was assumed to be 150% of estimated residential use.

The emission factor for "total" particulate matter (see AP-42 Section 1.4, July 1998) is estimated to be 7.6 lbs per 10^6 ft^3 of natural gas consumed. PM_{10} emissions from natural gas combustion in the Eagle River maintenance area can be readily computed from the amount of gas consumed and this emission factor. Table 9 shows the results of this computation.

Table 9
Estimation of PM_{10} Emissions from Natural Gas Combustion in Eagle River Maintenance Area

	Natural Gas Consumption per Household (ft^3)	Housing Stock	Total Residential Natural Gas Consumption (ft^3)	Estimated Commercial and Industrial Natural Gas Consumption (ft^3)	Combined Residential, Commercial and Industrial Natural Gas Consumption (ft^3)	AP-42 PM_{10} Emission Factor (lbs per 10^6 (ft^3)	Estimated PM_{10} Emissions (tons/day)
2007	307	4,548	1.40×10^6	0.70×10^6	2.10×10^6	7.6	0.008
2017	307	4,908	1.51×10^6	0.75×10^6	2.26×10^6	7.6	0.009

(5) Exhaust, Tire and Brake Wear Emissions from Motor Vehicles

In addition to the PM_{10} that vehicles stir-up as they travel along dirty roadways, motor vehicles are also responsible for more "direct" PM emissions. These include tail pipe exhaust emissions, and emissions that result from tire and break wear. These emissions were estimated by using the latest EPA's mobile source emission factor model, MOVES2014b. For the first 10-year LMP, MOBILE6.2 was used. The county-level on-road vehicle emissions (Table 10) were developed from the local fleet data submitted to EPA for the 2017 NEI and the 2010 U.S. Census block level populations, using ArcGIS and the planning area map. As shown in Table 11, the on-road emissions for the Eagle River Maintenance area were calculated by scaling the data in Table 10 by a factor of 0.0339 (see attached Appendix C for details).

Table 10
County-Level MOVES2014b On-road Vehicle 2017 PM_{10} Emissions (tons/day)

	Break-up	Freeze-up
Vehicle Regulatory Type	Mar-Apr	Oct-Nov
Motorcycles	0.001	0.001
Light Duty Vehicles	0.116	0.123
Light Duty Trucks	0.353	0.373
Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.049	0.051
Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 lbs)	0.034	0.035
Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.040	0.041
Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.046	0.047
Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.133	0.135
Urban Bus (see CFR Sec 86.091_2)	0.003	0.003
On-Road Fleet Totals	**0.775**	**0.809**

Table 11
Estimation of Eagle River On-road Vehicle 2017 PM_{10} Emissions (tons/day)

	Break-up	Freeze-up
Vehicle Regulatory Type	Mar-Apr	Oct-Nov
Motorcycles	0.000	0.000
Light Duty Vehicles	0.004	0.004
Light Duty Trucks	0.012	0.013
Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.002	0.002
Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 lbs)	0.001	0.001
Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.001	0.001

Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.002	0.002
Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.005	0.005
Urban Bus (see CFR Sec 86.091_2)	0.000	0.000
On-Road Fleet Totals	**0.026**	**0.027**

(6) Non-road Emissions

In the first 10-year LMP, the emissions from non-road sector in Eagle River were assumed to be zero. However, to ensure that all the PM_{10} emissions are accounted for in this second 10-year LMP, DEC made MOVES2014b runs to see if there are any emissions from the sector in the Maintenance area for 2017. Unlike the on-road emissions which were developed from the county-level NEI data, the non-road estimates are based on MOVES defaults. However, similar to the on-road estimates, the non-road emissions for the maintenance area (Table 12) were calculated from the county-level data by using a scaling factor of 0.0339 or zeroing out where applicable (see attached Appendix D for details).

Table 12
Estimation of Eagle River Non-road Vehicle 2017 PM_{10} Emissions (tons/day)

	Break-up	Freeze-up
Non-Road Equipment Sector	Mar-Apr	Oct-Nov
Recreational	0.0011	0.0011
Construction	0.0080	0.0078
Industrial	0.0003	0.0003
Lawn/Garden	0.0030	0.0030
Agriculture	0.0000	0.0000
Commercial	0.0011	0.0011
Airport Support	0.0000	0.0000
Oil Field	0.0000	0.0000
Pleasure Craft	0.0000	0.0000
Railroad	0.0000	0.0000
Non-Road Totals	**0.0135**	**0.0132**

Eagle River PM_{10} Emissions Inventory Summary

The Eagle River PM_{10} emissions inventory for the base year 2017 is summarized in Table 13. The inventory consists of the two peak PM_{10} periods, fall freeze-up and the spring break-up. As shown in the Table, the most significant sources of PM_{10} in the Eagle River maintenance area for the second 10-year LMP, similar to the first 10-year LMP, are paved roads, wind-blown dust, and fireplaces and wood stoves.

Table 13
Eagle River 2nd 10-year Limited Maintenance Area PM_{10} 2017 Emissions Inventory
(All Emissions in tons/day with % of Total)

Source Category	Spring Break-up (March, April) (tons/day)	Fall Freeze-up (October, November) (tons/day)
Paved Roads	3.71 (56.3%)	1.06 (48.4%)
Wind-blown Dust from Paved Roads, Parking Lots and Un-Vegetated Areas	2.48 (37.6%)	0.73 (33.3%)
Fireplaces and Wood Stoves	0.35 (5.31%)	0.35 (16.0%)
Natural Gas Combustion	0.009 (0.14%)	0.009 (0.41%)
Exhaust, Tire and Brake Wear Emissions from Motor Vehicles	0.026 (0.39%)	0.027 (1.23%)
Non-Road Equipment Emissions	0.0135 (0.20%)	0.0132 (0.60%)
Total	6.589 (100%)	2.1892 (100%)

5-Yr ADVs

Years	5-Yr OBS	Tabular-ADV = 5th Max		Empirical - ADV	Empirical - ADV	Upper 10% Tail Dist - ADV
		4-Max	5-Max	all data	>= 40 ug/m3	
2010-2014	1719	109	108	101	120	104
2011-2015	1727	108	105	98	105	102
2012-2016	1732	109	105	103	109	107
2013-2017	1737	109	105	99	107	104
2014-2018	1734	105	105	96	99	103

Critical Design Value Calculation				
	Tabular	Empirical (all)	Empirical (>39)	U10% Tail Dist
St. Dev	1.7	1.6	1.7	1.8
Mean	105.6	99.2	108.0	104.0
CV	0.013	0.027	0.073	0.018
NAAQS	150.0	150.0	150.0	150.0
T Stat*	1.533	1.533	1.533	1.533
Critical Design Value	127.1	124.1	135.1	136.0

Note: I'm thinking the CDV could not be computed from 5-yr ADVs.
I think the CDV should be based on 3-yr DVs from the data below (A30:G46)

PM10 SIP Development Guideline (JAGER Corrected Table)

No. of Daily Values	Rank of Upper Bound	Rank of Lower Bound	Value Used for ADV
≤ 347	-	1	Highest Value
348 to 695	1	2	Second Highest Value
696 to 1043	2	3	Third Highest Value
1044 to 1391	3	4	Fourth Highest Value
1392 to 1739	4	5	Fifth Highest Value
1740 to 2087	5	6	Sixth Highest Value

1979 Ozone Guideline

No. of Daily Values	Rank of Upper Bound	Rank of Lower Bound	Value Used for ADV
≤ 364	-	1	O3 table doesn't give this record
365 to 729	1	2	Highest Value
730 to 1094	2	3	Second Highest Value
1095 to 1459	3	4	Third Highest Value
1460 to 1824	4	5	Fourth Highest Value
1825 to 2189	5	6	Fifth Highest Value

PM10 SIP Development Guideline

No. of Daily Values	Rank of Upper Bound	Rank of Lower Bound	Value Used for ADV
≤ 347	-	1	Highest Value
348 to 695	1	2	Second Highest Value
696 to 1042	2	3	Third Highest Value
1043 to ~~1095~~ 1390 (handwritten)	3	4	Fourth Highest Value
1391 to 1738 (handwritten)	4	5	Fifth (handwritten)
1739 to 2086 (handwritten)	5	6	

2087 (handwritten)
2435 (handwritten)
7th (handwritten)

3-Yr ADVs

Years	3-Yr OBS	Tabular-ADV = lower		Empirical - ADV	Empirical - ADV	Upper 10% Tail Dist - ADV
		upper	lower	all data	>= 40 ug/m3	
2011-2014	1041	111	109	108	114	108
2012-2015	1037	111	109	106	114	105
2013-2016	1038	110	109	108	109	107
2015-2017	1045	90	86	86	93	96
2016-2018	1043	105	86	82	91	95

Critical Design Value Calculation				
	Tabular	Empirical (all)	Empirical (>39)	U10% Tail Dist
St. Dev	12.6	12.9	11.3	6.2
Mean	99.8	98.0	104.2	102.2
CV	0.126	0.131	0.109	0.061
NAAQS	150.0	150.0	150.0	150.0
T Stat*	1.533	1.533	1.533	1.533
Critical Design Value	175.7	174.8	178.5	177.2

Eagle River Total Vehicle Miles Traveled			
Total AM VMT	**Total PM VMT**	**Total OP VMT**	**Total VMT**
39,126	68,400	158,205	265,731

ID	DIR	Length	FEANME	MPH	Lane Num	AB Lanes	BA Lanes	AB Name	BA Name	AllDay ID	AB AM Flow	BA AM Flow	Tot AM Flow	AB PM Flow	BA PM Flow	Tot PM Flow	AB OP Flow	BA OP Flow	Tot OP Flow	AB Flow	BA Flow	Tot Flow	PK LOS	Tot AM VMT	Tot PM VMT	Tot OP VMT	Tot VMT
#####	0	0.25003	EAGLE RIVER RD	45	2	1	1	EagleRiverRd EB	EagleRiverRd WB	22691	454.868172	1334.134581	1789.002753	2285.521238	1167.965867	3453.487104	3915.995741	3937.264322	7853.260063	6656.38515	6439.36477	13095.7499	0.54	447.2972023	863.4615667	1963.519201	3274.27797
#####	0	0.00996	ARTILLERY	35	2	1	1	ArtillervRd EB	ArtillervRd WB	22673	150.544929	1737.587021	1888.13195	903.422625	1879.309714	2782.732339	2408.364052	6539.46841	8947.832462	3462.33161	10156.3651	13618.6968	0.62	18.81145862	27.72436229	89.14725482	135.683076
#####	0	0.17484	EAGLE RIVER	45	2	1	1	EagleRiverRd EB	EagleRiverRd WB	22275	212.260277	736.62906	948.889337	1316.860238	957.001764	2273.862003	2934.749773	3242.66932	6177.419094	4463.87929	4936.30015	9400.17943	0.31	165.9091808	397.5712181	1080.084664	1643.56497
#####	0	0.23808	EAGLE RIVER LOOP	45	2	1	1	EagleRiverLoopRd EB	EagleRiverLoopRd WB	22277	570.021976	382.169319	952.191295	1013.286095	1055.445708	2068.731802	2423.113844	2096.714696	4519.82854	4006.42192	3534.32972	7540.75164	0.23	226.6977035	492.5236674	1076.080779	1795.30215
#####	0	0.46751	Meadow Creek	25	2	1	1	MeadowCreekRd EB	MeadowCreekRd WB	22278	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#####	0	0.27072	CORONADO	25	2	1	1	CoronadoRd EB	CoronadoRd WB	22279	14.218005	22.412297	36.630303	30.232958	64.738031	94.97099	84.267784	149.87109	234.138875	128.717848	237.021419	365.740167	0.02	9.916592258	25.71064138	63.38631038	99.0135438
#####	-1	0.92476	NEW GLENN	65	3	0	3	GlennHwy NB	GlennHwy SB	22290	8483.875565		8483.875565		4478.598345	4478.598345		20109.7833	20109.7833	0	33072.2572	33072.2572	0.74	7845.523316	4141.61517	18596.66288	30583.8014
#####	1	1.4088	NEW GLENN	65	3	3	0	GlennHwy NB	GlennHwy SB	22293	1679.725584		1679.725584	12154.34614		12154.34614	17304.72311		17304.72311	31138.7948	0	31138.7948	0.71	2366.399082	17123.05499	24378.91122	43868.3653
#####	1	1.35398	NEW GLENN	65	2	2	0	GlennHwy SB	GlennHwy NB	22305	7283.064666		7283.064666	4187.469466		4187.469466	18422.05208		18422.05208	29882.5862	0	29882.5862	0.96	9861.102047	5669.737345	24943.03481	40473.8742
#####	0	0.05904	BUSINESS	30	2	1	1	BusinessBlvd WB	BusinessBlvd EB	22308	174.579299	83.984615	258.563913	309.999378	444.286817	754.286195	926.768793	938.353815	1865.122608	1411.34747	1466.62525	2877.97272	0.41	15.26535486	44.53230267	110.1149737	169.912631
#####	1	0.41756	NEW GLENN	65	3	3	0	GlennHwy NB	GlennHwy SB	22310	1624.385697		1624.385697	10720.09063		10720.09063	16236.47894		16236.47894	28580.9553	0	28580.9553	0.63	678.2849892	4476.323925	6779.769093	11934.378
#####	0	0.3854	FARM	30	2	1	1	FarmRd WB	FarmRd EB	22311	149.242716	55.858012	205.100729	151.796695	270.225127	422.021823	499.465258	491.503084	990.968342	800.50467	817.580223	1618.09089	0.08	79.0450565	162.6459445	381.9162261	623.607376
#####	0	0.05286	BUSINESS	30	2	1	1	BusinessBlvd NB	BusinessBlvd SB	22312	100.090319	145.445471	245.535791	303.219904	301.47672	604.696624	678.978542	736.152498	1415.13104	1082.28877	1183.07469	2265.36346	0.08	12.97926745	31.96486824	74.80524191	119.749378
#####	0	0.11224	OLD GLENN	35	4	2	2	OldGlennHwy NB	OldGlennHwy SB	22313	262.557967	767.679341	1030.237308	1360.95519	699.714636	2060.669826	2192.479293	2275.386921	4467.866213	3815.99245	3742.7809	7558.77335	0.21	115.6297145	231.2813386	501.4554323	848.366485
#####	0	0.06477	BUSINESS	30	2	1	1	BusinessBlvd NB	BusinessBlvd SB	22314	98.675869	199.47856	298.15443	367.976801	284.392445	652.369246	733.165533	796.235303	1529.400836	1199.8182	1280.10631	2479.92451	0.1	19.31056797	42.25199896	99.05470395	160.617271
#####	0	0.07381	ARTILLERY	35	2	1	1	ArtillervRd EB	ArtillervRd WB	22315	549.55858	1700.588332	2250.146913	2925.721129	1751.268445	4676.989574	5675.72543	6267.561524	11943.28695	9151.00514	9719.4183	18870.4234	0.73	166.0765932	345.1945695	881.4981802	1392.76934
#####	0	0.10168	Centerfield Drive	25	2	1	1	CenterfieldDr EB	CenterfieldDr WB	22317	315.384339	135.639815	451.024154	394.862582	530.780704	925.643286	1205.355425	1075.519333	2280.874758	1915.60235	1741.93985	3657.5422	0.16	45.860587	94.12033496	231.9216263	371.902548
#####	1	0.24818	NEW GLENN	65	2	2	0	GlennHwy NB	GlennHwy SB	22319	7139.375502		7139.375502	3412.384198		3412.384198	16255.93132		16255.93132	26807.691	0	26807.691	0.94	1771.835933	846.8786855	4034.364524	6653.07914
#####	0	0.11986	MAUSEL	30	2	1	1	MauselRd WB	MauselRd EB	22320	153.745786	148.187046	301.932832	348.30667	379.632728	727.939397	886.053607	913.704566	1799.758174	1388.10606	1441.52434	2829.6304	0.12	36.18997118	87.25154406	215.7208145	339.16233
#####	1	0.23389	OFF-RAMP	45	1	1	0	GlennHwySBOfframp NB	GlennHwySBOfframp NB	22322	143.689163		143.689163	775.085268		775.085268	2166.12076		2166.12076	3084.89519	0	3084.89519	0.18	33.60717096	181.2831432	506.6296523	721.519966
#####	1	0.02829	ON-RAMP	45	1	1	0	GlennHwyNBOnramp NB	GlennHwyNBOnramp SB	22675	380.672453		380.672453	716.084269		716.084269	2471.024096		2471.024096	3567.78082	0	3567.78082	0.17	10.77074639	20.26088831	69.95155577	100.94679
#####	1	0.17178	NEW GLENN	65	3	3	0	GlennHwy NB	GlennHwy SB	22324	1243.71244		1243.71244	10004.00637		10004.00637	13765.45485		13765.45485	25013.1745	0	25013.1745	0.59	213.6413299	1718.458201	2364.588537	4296.68807
#####	0	0.01077	ARTILLERY	35	2	1	1	ArtillervRd EB	ArtillervRd WB	22325	244.465253	106.334829	350.800082	1092.853513	286.442186	1379.295699	2887.463968	693.69225	3581.156218	4224.78273	1086.46927	5311.252	0.26	3.778116883	14.85501468	38.56905247	57.202184
#####	0	0.08049	BUSINESS	30	2	1	1	BusinessBlvd NB	BusinessBlvd SB	22326	80.048407	172.342138	252.390545	334.905971	216.856692	551.762663	662.549483	647.147548	1309.697032	1077.50386	1036.34638	2113.85024	0.09	20.31466258	44.41082498	105.4162044	170.141692
#####	1	0.08866	OFF-RAMP	45	2	0	0	GlennHwyNBOfframp NB	GlennHwyNBOfframp SB	22330	436.012339		436.012339	2150.339773		2150.339773	3539.268264		3539.268264	6125.62038	0	6125.62038	0.26	38.657726	190.653425	313.7986028	543.109754
#####	1	0.05717	OFF-RAMP	45	2	0	0	GlennHwyNBOfframp NB	GlennHwyNBOfframp SB	22676	436.012339		436.012339	2150.339773		2150.339773	3539.268264		3539.268264	6125.62038	0	6125.62038	0.26	24.92856947	122.9435262	202.3541237	350.226219
#####	0	0.0481	BUSINESS	30	2	1	1	BusinessBlvd NB	BusinessBlvd SB	22332	12.745134	16.659018	29.404153	68.007624	36.726242	104.733866	147.814983	106.592455	254.407438	228.567741	159.977716	388.545457	0.02	1.414192739	5.037175285	12.23572573	18.6870938
#####	0	0.08702	Centerfield Drive	25	2	1	1	CenterfieldDr EB	CenterfieldDr WB	22333	155.683119	67.303273	222.986392	180.13045	266.898347	447.028797	540.555093	514.734501	1055.289594	876.368663	848.93612	1725.30478	0.08	19.40472818	38.90133997	91.83341105	150.139473
#####	0	0.0367	Centerfield Drive	25	2	1	1	CenterfieldDr EB	CenterfieldDr WB	22334	295.491737	103.080688	398.572425	303.738554	477.244992	780.983546	995.794234	882.250664	1878.044898	1595.02453	1462.57634	3057.60087	0.14	14.62920229	28.66522007	69.93175994	112.226182
#####	0	0.02892	BUSINESS	30	2	1	1	BusinessBlvd NB	BusinessBlvd SB	22336	12.745134	16.659018	29.404153	68.007624	36.726242	104.733866	147.814983	106.592455	254.407438	228.567741	159.977716	388.545457	0.02	0.850383701	3.028798671	7.3572087	11.2363461
#####	0	0.25126	Regency Dr.	25	2	1	1	RegencyDr NB	RegencyDr SB	22340	39.734011	148.176846	187.910857	244.099339	113.825525	357.924864	400.126572	417.917305	818.043878	683.359922	679.910676	1363.8796	0.07	47.21504566	89.9332751	205.5441589	342.692479
#####	0	0.36729	Reaency Dr.	25	2	1	1	ReaencyDr NB	ReaencyDr SB	22341	44.671895	29.550638	74.222533	79.509419	104.701909	184.211329	224.842285	234.995247	459.837532	349.0236	369.247794	718.271394	0.03	27.26097148	67.65842639	168.8924476	263.811745
#####	0	0.12933	BUSINESS BLVD	30	2	1	1	BusinessBlvd NB	BusinessBlvd SB	22342	55.418424	115.894834	171.313258	223.710485	196.774811	420.485296	454.136257	501.157251	955.293508	733.265166	813.826896	1547.09206	0.06	22.11542972	54.38010188	123.5452435	200.080775
#####	0	0.17359	BUSINESS	30	2	1	1	BusinessBlvd NB	BusinessBlvd SB	22343	64.054896	56.414752	120.469648	135.395316	182.084775	317.480092	360.543616	405.822652	766.366268	559.993828	644.32218	1204.31601	0.05	20.9123262	55.11136917	133.0335205	209.057216
#####	0	0.77999	EAGLE RIVER	45	2	1	1	EagleRiverRd SB	EagleRiverRd NB	22345	274.943756	784.167958	1059.111714	1447.330364	1028.809361	2476.139725	3137.810254	3467.05156	6604.861814	4860.08438	5280.02888	10140.1133	0.34	826.0997231	1931.371653	5151.745981	7909.21736
#####	0	0.47024	OLD EAGLE RIVER RD	25	2	1	1	OldEagleRiverRd SB	OldEagleRiverRd NB	22346	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#####	0	0.15186	Monte Rd.	25	2	1	1	MonteRd EB	MonteRd WB	22347	18.837168	77.328896	96.166065	125.029826	54.49216	179.521987	222.909886	234.258941	457.168927	366.079998	732.856978	0.04	14.6041633	27.26392703	69.42750193	111.294592
#####	0	0.06217	OLD GLENN	35	4	2	2	OldGlennHwy NB	OldGlennHwy SB	22349	509.370682	1197.892481	1707.263164	2093.781904	1283.985579	3377.771483	4007.328114	4267.595956	8274.92407	6610.4807	6749.47802	13359.9587	0.28	106.1388436	209.9926753	514.4437545	830.575273
#####	0	0.10873	Monte Rd.	25	2	1	1	MonteRd EB	MonteRd WB	22350	155.322825	293.379339	448.702163	523.88429	315.944837	839.829127	1040.099533	1065.775291	2105.874824	1719.30665	1675.09947	3394.40611	0.16	48.78918099	91.3179803	228.9801931	369.087354
#####	0	0.14739	EAGLE RIVER	45	2	1	1	EagleRiverRd NB	EagleRiverRd SB	22351	790.918492	328.41054	1119.329031	1126.633648	1491.294008	2617.927656	3653.517048	3321.948796	6975.465844	5571.06919	5141.65334	10712.7225	0.36	164.9734286	385.8458855	1028.086009	1578.90532
#####	0	0.08969	OLD GLENN	35	4	2	2	OldGlennHwy NB	OldGlennHwy SB	22353	321.717074	698.213267	1019.926341	1279.303045	806.078611	2085.381656	2467.327914	2572.661415	5039.989329	4068.34403	4076.95329	8145.29733	0.23	91.47821345	187.0399661	452.0416829	730.559862
#####	0	0.02673	OLD GLENN	35	4	2	2	OldGlennHwy NB	OldGlennHwy SB	22354	450.627676	1006.872393	1457.500069	1798.649646	1189.507091	2988.156737	3510.284292	3745.453885	7255.738177	5759.56162	5941.83337	11701.395	0.18	38.95606184	79.86745327	193.93137	312.754885
#####	0	0.0564	OLD GLENN	35	4	2	2	OldGlennHwy NB	OldGlennHwy SB	22355	503.004534	1197.305765	1700.310299	2091.002287	1273.92028	3364.922567	3988.446551	4249.291902	8237.738452	6582.45337	6720.51795	13302.9713	0.21	95.9043021	189.7950925	464.6413996	750.340794
#####	0	0.02382	MONTE	25	2	1	1	MonteRd EB	MonteRd WB	22356	155.322825	293.379339	448.702163	523.88429	315.944837	839.829127	1040.099533	1065.775291	2105.874824	1719.30665	1675.09947	3394.40611	0.16	10.68763682	20.00388998	50.15983243	80.8513592
#####	0	0.02657	OLD GLENN	35	4	2	2	OldGlennHwy NB	OldGlennHwy SB	22357	450.627676	1006.872393	1457.500069	1798.649646	1189.507091	2988.156737	3510.284292	3745.453885	7255.738177	5759.56162	5941.83337	11701.395	0.18	38.72869183	79.40130082	192.7994748	310.929468
#####	0	0.10906	EAGLE RIVER LOOP	45	2	1	1	EagleRiverLoopRd EB	EagleRiverLoopRd WB	22360	630.934231	556.485104	1187.419336	1298.072359	1211.177237	2509.249596	3005.841347	2717.879582	5723.720929	4934.84794	4485.54192	9420.38986	0.29	129.4975779	273.6537424	624.2175571	1027.36888
#####	0	0.24986	OLD GLENN	35	4	2	2	OldGlennHwy NB	OldGlennHwy SB	22361	439.007076	1088.622489	1527.629565	1949.015811	1271.982388	3220.998199	3094.350171	3402.118584	6496.468755	5482.37306	5762.72346	11245.0965	0.2	381.698106	804.808273	1623.227173	2809.73355
#####	0	0.25585	CORONADO	25	2	1	1	CoronadoRd EB	CoronadoRd WB	22363	16.929441	62.164581	79.09402	90.143757	73.534156	163.677913	163.549462	223.609793	387.159255	270.62266	359.308531	629.93119	0.03	20.23581006	41.87617565	99.0527096	161.164745
#####	0	0.135	EAGLE RIVER	45	2	1	1	EagleRiverRd EB	EagleRiverRd WB	22365	630.934231	556.485104	1187.419336	1298.072359	1211.177237	2509.249596	3005.841347	2717.879582	5723.720929	4934.84794	4485.54192	9420.38986	0.35	160.2980481	338.7411677	772.6851543	1271.72437
#####	0	0.12909	OLD GLENN	35	4	2	2	OldGlennHwy NB	OldGlennHwy SB	22366	256.503006	779.067607	1035.570613	1436.808609	697.208203	2134.016812	2283.662646	2279.439421	4563.102067	3976.97426	3755.71523	7732.68949	0.26	133.6797393	275.4759622	589.0417196	998.197421
#####	0	0.07864	OLD GLENN	35	4	2	2	OldGlennHwy NB	OldGlennHwy SB	22367	373.539562	1078.742686	1452.282248	1851.648908	1111.521864	2963.170772	2733.741548	3049.826629	5783.568177	4958.93002	5240.09118	10199.0212	0.29	114.2031191	233.014864	454.8024507	802.02043
#####	0	0.02126	OLD GLENN	35	4	2	2	OldGlennHwy NB	OldGlennHwy SB	22369	254.532515	759.849853	1014.382368	1376.424849	677.191517	2053.616366	2190.665392	2206.986792	4397.652184	3821.62276	3644.02816	7465.65092	0.14	21.56982667	43.66809841	93.51167604	158.749601
#####	0	0.06518	OLD GLENN	35	4	2	2	OldGlennHwy NB	OldGlennHwy SB	22370	256.503006	779.067607	1035.570613	1436.808609	697.208203	2134.016812	2283.662646	2279.439421	4563.102067	3976.97426	3755.71523	7732.68949	0.15	67.49849256	139.0952158	297.4229927	504.016701
#####	0	0.10418	OLD GLENN	35	4	2	2	OldGlennHwy NB	OldGlennHwy SB	22371	259.670789	719.557023	979.227812	1310.834823	666.203871	1977.038694	2113.943045	2136.790342	4250.733387	3684.44866	3522.55124	7206.99989	0.13	102.013995	205.9639371	442.8329028	750.810835
#####	0	0.10723	BUSINESS	30	2	1	1	BusinessBlvd NB	BusinessBlvd SB	22373	157.724443	265.913839	423.638282	557.610492	470.188732	1027.799224	1273.770287	1306.116826	2579.887112	1989.10522	2042.2194	4031.32462	0.51	45.42800389	110.2139942	276.6490347	432.291033
#####	0	0.14861	OLD GLENN	35	4	2	2	OldGlennHwy NB	OldGlennHwy SB	22374	366.412058	978.230478	1344.642537	1699.351891	1077.653279	2777.005169	2538.887717	2847.010623	5385.89834	4604.65167	4902.89438	9507.54605	0.17	199.8259828	412.6879612	800.3929664	1412.90691
#####	0	0.06798	CORONADO	25	2	1	1	CoronadoRd EB	CoronadoRd WB	22378	16.929441	62.164581	79.09402	90.143757	73.534156	163.677913	163.549462	223.609793	387.159255	270.62266	359.308531	629.93119	0.03	5.377127992	11.12747924	26.32063479	42.825142
#####	0	0.02379	EAGLE RIVER LOOP	45	2	1	1	EagleRiverLoopRd EB	EagleRiverLoopRd WB	22379	626.986868	550.404392	1177.391261	1284.143637	1202.888729	2487.032366	2975.782342	2690.228824	5666.011166	4886.91285	4443.52195	9330.43479	0.31	28.00425114	59.15406483	134.7660756	221.924392
#####	0	0.02723	OLD GLENN	35	4	2	2	OldGlennHwy NB	OldGlennHwy SB	22381	439.007076	1088.622489	1527.629565	1949.015811	1271.982388	3220.998199	3094.350171	3402.118584	6496.468755	5482.37306	5762.72346	11245.0965	0.2	41.60193594	87.71744395	176.9183336	306.237714
#####	0	0.44146	EAGLE RIVER	55	2	1	1	EagleRiverRd EB	EagleRiverRd WB	22382	181.058148	727.315542	908.373691	1180.402347	525.292048	1705.632896	1910.185052	1910.558934	3820.743986	3271.64555	3163.10453	6434.75007	0.24	401.0070161	752.9616655	1686.690357	2840.65903
#####	0	0.25036	EAGLE RIVER RD	45	2	1	1	EagleRiverRd EB	EagleRiverRd WB	22385	454.868172	1334.134581	1789.002753	2285.521238	1167.965867	3453.487104	3915.995741	3937.264322	7853.260063	6656.38515	6439.36477	13095.7499	0.51	447.8857842	864.5977639	1966.102923	3278.58647
#####	0	0.87356	SKYLINE	30	2	1	1	SkylineDr NB	SkylineDr SB	22391	179.530366	268.545252	448.075618	522.654767	419.287855	941.942621	1125.1147	1134.634929	2259.749629	1827.29983	1822.46804	3649.76787	0.16	391.4191446	822.8396282	1974.017847	3188.27662
#####	0	0.53625	MEADOW CREEK	25	2	1	1	MeadowCreekRd EB	MeadowCreekRd WB	22392	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#####	0	0.47754	EAGLE RIVER	45	2	1	1	EagleRiverRd EB	EagleRiverRd WB	22393	692.634247	1683.036711	2375.670958	2921.110393	2001.231709	4922.342102	5543.466928	5883.782654	11427.24958	9157.21157	9568.05107	18725.2626	0.72	1134.480285	2350.62017	5456.980193	8942.08065
#####	0	0.17158	EAGLE RIVER	45	2	1	1	EagleRiverRd NB	EagleRiverRd SB	22394	423.059025	773.219732	1196.278757	1383.970819	1103.153092	2487.123911	2581.849743	2860.606089	5442.455832	4388.87959	4736.97891	9125.8585	0.33	205.2587054	426.7432078	933.8220141	1565.83293
#####	0	0.65287	EAGLE RIVER LOOP	45	2	1	1	EagleRiverLoopRd EB	EagleRiverLoopRd WB	22395	567.411466	387.7531	955.164566	1002.035757	1078.700444	2080.736201	2409.022435	2148.226594	4557.249028	3978.46966	3614.68014	7593.1498	0.24	623.5944695	1358.441921	2975.272944	4957.30933
#####	0	0.49976	EAGLE RIVER RD	45	2	1	1	EagleRiverRd EB	EagleRiverRd WB	22400	173.811705	533.821322	707.633027	1020.4579	885.391576	1905.849476	2548.978222	2797.276297	5346.256118	3743.2443	4216.4892	7959.73862	0.29	353.6431434	952.4578049	2671.818226	3977.91918
#####	0	0.33591	EAGLE RIVER	45	2	1	1	EagleRiverRd NB	EagleRiverRd SB	22403	370.169678	923.890779	1294.060458	1528.059859	995.46041	2523.520269	2549.005714	2832.90213	5381.907844	4447.23525	4752.25332	9199.48857	0.44	434.6852603	847.6706465	1807.8259	3090.18181
#####	0	0.05851	EAGLE RIVER	45	2	1	1	EagleRiverRd NB	EagleRiverRd SB	22406	417.604627	686.277879	1103.882506	1259.082744	1079.051145	2338.133889	2433.76315	2704.07922	5137.842371	4110.40552	4469.40825	8579.85877	0.28	64.58816543	136.8042138	300.6151571	502.007536
#####	0	0.1587	EAGLE RIVER	45	2	1	1	EagleRiverRd EB	EagleRiverRd SB	22407	423.059025	773.219732	1196.278757	1383.970819	1103.153092	2487.123911	2581.849743	2860.606089	5442.455832	4388.87959	4736.97891	9125.8585	0.31	189.8530276	394.714026	863.7340679	1448.30112
#####	0	0.24936	EAGLE RIVER RD	55	2	1	1	EagleRiverRd EB	EagleRiverRd WB	22411	398.019566	1066.079494	1464.099059	1834.164944	974.238044	2808.402989	3195.687712	3212.747444	6408.435156	5427.87222	5253.06498	10680.9372	0.44	365.081885	700.2921357	1597.981757	2663.35578
#####	1	0.09442	ON-RAMP	30	1	1	0	GlennHwyNBOnramp NB	GlennHwyNBOnramp SB	22674	380.672453		380.672453	716.084269		716.084269	2471.024096		2471.024096	3567.78082	0	3567.78082	0.17	35.9446157	67.61554102	233.3239792	336.884136
#####	1	0.1611	NEW GLENN	65	3	3	0	GlennHwy NB	GlennHwy SB	22677	1624.385697		1624.385697	10720.09063		10720.09063	16236.47894		16236.47894	28580.9553	0	28580.9553	0.63	261.6820382	1726.963721	2615.631811	4604.27757
#####	1	0.19281	NEW GLENN	65	2	2	0	GlennHwy NB	GlennHwy SB	22678	8483.875565		8483.875565	4478.598345		4478.598345	20109.7833		20109.7833	33072.2572	0	33072.2572	1.12	1635.801499	863.5319827	3877.427648	6376.76113
#####	1	0.03058	ON-RAMP	30	1	1	0	GlennHwy NB	GlennHwy SB	22679	380.672453		380.672453	716.084269		716.084269	2471.024096		2471.024096	3567.78082	0	3567.78082	0.17	11.6398216	21.89570869	75.55650378	109.092034
#####	1	0.02643	ON-RAMP	30	1	1	0	GlennHwy SB	GlennHwy NB	22680	1344.500062		1344.500062	1066.214147		1066.214147	3853.851981		3853.851981	6264.56619	0	6264.56619	0.48	35.53782564	28.18217233	101.8650156	165.585014
#####	0	0.13399	ARTILLERY	35	2	1	1	ArtillervRd EB	ArtillervRd WB	22755	172.851794	1379.221433	1552.073227	1000.877331	1260.680151	2261.557482	2600.026886	4260.107148	6860.134034	3773.75601	6900.00873	10673.7647	0.49	207.9591875	303.0215639	919.1756389	1430.15639
#####	1	0.06047	ON-RAMP	30	1	1	0	ArtillervRdGlennHwySBOnramp SB	ArtillervRdGlennHwySBOnramp NB	22756	1344.500062		1344.500062	1066.214147		1066.214147	3853.851981		3853.851981	6264.56619	0	6264.56619	0.48	81.30460775	64.4761019	233.050137	378.830847
#####	1	0.03014	ON-RAMP	30	1	1	0	ArtillervRdGlennHwySBOnramp SB	ArtillervRdGlennHwySBOnramp NB	22757	1344.500062		1344.500062	1066.214147		1066.214147	3853.851981		3853.851981	6264.56619	0	6264.56619	0.48	40.52860987	32.13995925	116.1705141	188.839083
#####	1	0.92272	NEW GLENN	65	2	2	0	GlennHwy NB	GlennHwy SB	22807	1624.385697		1624.385697	10720.09063		10720.09063	16236.47894		16236.47894	28580.9553	0	28580.9553	0.94	1498.856419	9891.66347	14981.75632	26372.2762
#####	-1	0.40498	NEW GLENN	65	2	0	2	GlennHwy NB	GlennHwy SB	22808	8483.875565		8483.875565	4478.598345		4478.598345	20109.7833		20109.7833	33072.2572	0	33072.2572	1.12	3435.816894	1813.751715	8144.100262	13393.6689

County-Level MOVES2014b On-Road Vehicle 2017 PM10 Emissions (tons/day) based on DEC's 2017 NEI MOVES Inputs
(includes exhaust, brakewear and tirewear)

	Municipality of Anchorage		
	Break-up	Freeze-up	
Vehicle Regulatory Type	Mar-Apr	Oct-Nov	Annual
Motorcycles	0.001	0.001	0.001
Light Duty Vehicles	0.116	0.123	0.112
Light Duty Trucks	0.353	0.373	0.343
Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.049	0.051	0.050
Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 lbs)	0.034	0.035	0.034
Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.040	0.041	0.039
Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.046	0.047	0.046
Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.133	0.135	0.135
Urban Bus (see CFR Sec 86.091_2)	0.003	0.003	0.003
On-Road Fleet Totals	**0.775**	**0.809**	**0.764**

Calculation of Census Population-Based Factors for Scaling County-Level to LMP Maintenance Area Emissions
(using GIS analysis of census block-level data from 2010 U.S. Census)

	Anchorage County	Eagle River Maint Area	Scaling Factor
Census Blocks:	4,337	137	-
Population:	291,826	9,885	**0.0339**

LMP Maintenance Area On-Road Vehicle 2017 PM10 Emissions (tons/day)
(includes exhaust, brakewear and tirewear)

		Eagle River	
	Break-up	Freeze-up	
Vehicle Regulatory Type	Mar-Apr	Oct-Nov	Annual
Motorcycles	0.000	0.000	0.000
Light Duty Vehicles	0.004	0.004	0.004
Light Duty Trucks	0.012	0.013	0.012
Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.002	0.002	0.002
Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 lbs)	0.001	0.001	0.001
Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.001	0.001	0.001
Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.002	0.002	0.002
Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.005	0.005	0.005
Urban Bus (see CFR Sec 86.091_2)	0.000	0.000	0.000
On-Road Fleet Totals	**0.026**	**0.027**	**0.026**

MOVES2014B TABULATIONS OF COUNTY EMISSIONS AND TRAVEL ACTIVITY FOR ANCHORAGE BOROUGH, ALASKA USING 2017 NEI COUNTY-LEVEL INPUTS DEVELOPED BY ADEC

G/Ton: 907185

PM10 EMISSIONS

PM10 Exhaust (tons/day) by Month

Mode	Fuel Type	Reg Class	Regulatory Class Name	1	2	3	4	5	6	7	8	9	10	11	12
			Days per Month --->	31	28	31	30	31	30	31	31	30	31	30	31
			Pollutant ID --->	100	100	100	100	100	100	100	100	100	100	100	100
				0.592	0.507	0.489	0.368	0.306	0.294	0.286	0.298	0.320	0.383	0.535	0.569
Start/ Ext Idle	1	10	Motorcycles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	1	20	Light Duty Vehicles	0.065	0.048	0.042	0.021	0.012	0.009	0.007	0.009	0.014	0.023	0.049	0.056
	1	30	Light Duty Trucks	0.193	0.142	0.125	0.064	0.035	0.026	0.022	0.026	0.041	0.069	0.144	0.166
	1	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.007	0.005	0.004	0.002	0.001	0.001	0.001	0.001	0.001	0.002	0.005	0.006
	1	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
	1	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
	1	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
	1	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	1	48	Urban Bus (see CFR Sec 86.091_2)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	10	Motorcycles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	20	Light Duty Vehicles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	30	Light Duty Trucks	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	2	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	2	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
	2	48	Urban Bus (see CFR Sec 86.091_2)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Running	1	10	Motorcycles	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000
	1	20	Light Duty Vehicles	0.036	0.031	0.030	0.021	0.016	0.014	0.013	0.014	0.017	0.023	0.034	0.036
	1	30	Light Duty Trucks	0.097	0.085	0.083	0.060	0.046	0.042	0.040	0.043	0.049	0.064	0.092	0.097
	1	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.004	0.004	0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.003	0.004	0.004
	1	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.011	0.009	0.009	0.006	0.004	0.004	0.004	0.004	0.005	0.006	0.010	0.011
	1	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.014	0.012	0.012	0.008	0.006	0.005	0.005	0.005	0.006	0.009	0.013	0.014
	1	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.010	0.009	0.008	0.006	0.004	0.003	0.003	0.003	0.004	0.006	0.010	0.010
	1	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002
	1	48	Urban Bus (see CFR Sec 86.091_2)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	10	Motorcycles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	20	Light Duty Vehicles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	30	Light Duty Trucks	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	2	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.025	0.027	0.028	0.029	0.030	0.031	0.032	0.032	0.030	0.030	0.029	0.028
	2	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.014	0.015	0.015	0.016	0.017	0.017	0.017	0.018	0.017	0.016	0.016	0.015
	2	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.013	0.014	0.014	0.015	0.015	0.016	0.016	0.017	0.015	0.015	0.015	0.014
	2	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.019	0.020	0.021	0.022	0.022	0.023	0.024	0.024	0.022	0.022	0.021	0.020
	2	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.072	0.076	0.080	0.084	0.086	0.090	0.091	0.092	0.086	0.085	0.082	0.079
	2	48	Urban Bus (see CFR Sec 86.091_2)	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Total	1	10	Motorcycles	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1	20	Light Duty Vehicles	0.101	0.079	0.072	0.043	0.028	0.023	0.021	0.023	0.031	0.046	0.083	0.092
	1	30	Light Duty Trucks	0.289	0.227	0.208	0.125	0.082	0.069	0.062	0.069	0.090	0.132	0.237	0.263
	1	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.011	0.009	0.008	0.005	0.003	0.003	0.003	0.003	0.004	0.005	0.009	0.010
	1	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.012	0.010	0.010	0.006	0.005	0.004	0.004	0.004	0.005	0.007	0.011	0.012
	1	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.016	0.013	0.013	0.009	0.006	0.005	0.005	0.005	0.006	0.009	0.015	0.016
	1	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.011	0.010	0.009	0.006	0.004	0.004	0.003	0.004	0.005	0.006	0.010	0.011
	1	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002
	1	48	Urban Bus (see CFR Sec 86.091_2)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	10	Motorcycles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	20	Light Duty Vehicles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	30	Light Duty Trucks	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
	2	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.026	0.027	0.029	0.030	0.031	0.032	0.032	0.033	0.031	0.030	0.029	0.028
	2	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.014	0.015	0.015	0.016	0.017	0.017	0.017	0.018	0.017	0.016	0.016	0.015
	2	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.013	0.014	0.014	0.015	0.015	0.016	0.016	0.017	0.015	0.015	0.015	0.014
	2	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.019	0.020	0.021	0.022	0.022	0.023	0.024	0.024	0.022	0.022	0.021	0.021
	2	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.074	0.078	0.083	0.086	0.088	0.092	0.093	0.094	0.088	0.087	0.084	0.081
	2	48	Urban Bus (see CFR Sec 86.091_2)	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
				0.592	**0.507**	**0.489**	**0.368**	**0.306**	**0.294**	**0.286**	**0.298**	**0.320**	**0.383**	**0.535**	**0.569**
		10	Motorcycles	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
		20	Light Duty Vehicles	0.102	0.079	0.073	0.043	0.028	0.023	0.021	0.023	0.031	0.046	0.083	0.093
		30	Light Duty Trucks	0.291	0.229	0.210	0.126	0.083	0.071	0.064	0.071	0.092	0.134	0.239	0.264
		40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.037	0.036	0.037	0.035	0.034	0.035	0.035	0.036	0.034	0.036	0.038	0.038
		41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.026	0.025	0.025	0.023	0.021	0.021	0.021	0.022	0.022	0.023	0.027	0.027
		42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.029	0.027	0.027	0.024	0.021	0.021	0.021	0.022	0.022	0.024	0.029	0.030
		46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.030	0.029	0.030	0.028	0.027	0.027	0.027	0.028	0.027	0.029	0.032	0.032
		47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.076	0.079	0.084	0.087	0.089	0.093	0.094	0.095	0.089	0.088	0.085	0.083
		48	Urban Bus (see CFR Sec 86.091_2)	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
			TOTALS:	**0.592**	**0.507**	**0.489**	**0.368**	**0.306**	**0.294**	**0.286**	**0.298**	**0.320**	**0.383**	**0.535**	**0.569**

PM10 Brakewear+Tirewear (tons/day) by Month

Mode	Fuel Type	Reg Class	Regulatory Class Name	1	2	3	4	5	6	7	8	9	10	11	12
			Days per Month --->	31	28	31	30	31	30	31	31	30	31	30	31
			Pollutant ID --->	106&107	106&107	106&107	106&107	106&107	106&107	106&107	106&107	106&107	106&107	106&107	106&107
				0.303	0.320	0.339	0.353	0.363	0.378	0.383	0.388	0.363	0.359	0.344	0.332
Start/ Ext Idle	1	10	Motorcycles												
	1	20	Light Duty Vehicles												
	1	30	Light Duty Trucks												
	1	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)												
	1	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l												
	1	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)												
	1	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)												
	1	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)												
	1	48	Urban Bus (see CFR Sec 86.091_2)												
	2	10	Motorcycles												
	2	20	Light Duty Vehicles												
	2	30	Light Duty Trucks												
	2	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)												
	2	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l												
	2	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)												
	2	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)												
	2	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)												
	2	48	Urban Bus (see CFR Sec 86.091_2)												
Running	1	10	Motorcycles	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000
	1	20	Light Duty Vehicles	0.050	0.053	0.056	0.058	0.060	0.062	0.063	0.064	0.060	0.059	0.057	0.055
	1	30	Light Duty Trucks	0.157	0.165	0.175	0.182	0.187	0.195	0.198	0.200	0.187	0.185	0.178	0.172
	1	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.004
	1	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.005	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.007	0.006	0.006	0.006
	1	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.008	0.008	0.009	0.009	0.009	0.010	0.010	0.010	0.009	0.009	0.009	0.008
	1	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.009	0.008	0.008	0.008	0.007
	1	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002
	1	48	Urban Bus (see CFR Sec 86.091_2)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	10	Motorcycles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	20	Light Duty Vehicles	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	2	30	Light Duty Trucks	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.005	0.005
	2	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.008	0.008	0.009	0.009	0.009	0.010	0.010	0.010	0.009	0.009	0.009	0.008
	2	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.004	0.004	0.004	0.004
	2	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.005	0.005
	2	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.008	0.008	0.009	0.009	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.009
	2	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.040	0.042	0.044	0.046	0.048	0.050	0.050	0.051	0.048	0.047	0.045	0.044
	2	48	Urban Bus (see CFR Sec 86.091_2)	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Total	1	10	Motorcycles	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000
	1	20	Light Duty Vehicles	0.050	0.053	0.056	0.058	0.060	0.062	0.063	0.064	0.060	0.059	0.057	0.055
	1	30	Light Duty Trucks	0.157	0.165	0.175	0.182	0.187	0.195	0.198	0.200	0.187	0.185	0.178	0.172
	1	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.004
	1	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.005	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.007	0.006	0.006	0.006
	1	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.008	0.008	0.009	0.009	0.009	0.010	0.010	0.010	0.009	0.009	0.009	0.008
	1	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.009	0.008	0.008	0.008	0.007
	1	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002
	1	48	Urban Bus (see CFR Sec 86.091_2)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	10	Motorcycles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	20	Light Duty Vehicles	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	2	30	Light Duty Trucks	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.005	0.005
	2	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.008	0.008	0.009	0.009	0.009	0.010	0.010	0.010	0.009	0.009	0.009	0.008
	2	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.004	0.004	0.004	0.004
	2	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.005	0.005
	2	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.008	0.008	0.009	0.009	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.009
	2	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.040	0.042	0.044	0.046	0.048	0.050	0.050	0.051	0.048	0.047	0.045	0.044
	2	48	Urban Bus (see CFR Sec 86.091_2)	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
				0.303	**0.320**	**0.339**	**0.353**	**0.363**	**0.378**	**0.383**	**0.388**	**0.363**	**0.359**	**0.344**	**0.332**
		10	Motorcycles	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000
		20	Light Duty Vehicles	0.051	0.053	0.057	0.059	0.061	0.063	0.064	0.065	0.061	0.060	0.057	0.056
		30	Light Duty Trucks	0.161	0.170	0.180	0.188	0.193	0.201	0.204	0.206	0.193	0.191	0.183	0.177
		40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.012	0.012	0.013	0.014	0.014	0.015	0.015	0.015	0.014	0.014	0.013	0.013
		41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.009	0.010	0.010	0.011	0.011	0.011	0.012	0.012	0.011	0.011	0.010	0.010
		42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.012	0.013	0.014	0.014	0.015	0.015	0.016	0.016	0.015	0.015	0.014	0.014
		46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.015	0.015	0.016	0.017	0.018	0.018	0.019	0.019	0.018	0.017	0.017	0.016
		47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.042	0.044	0.047	0.049	0.050	0.052	0.053	0.053	0.050	0.049	0.047	0.046
		48	Urban Bus (see CFR Sec 86.091_2)	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
			TOTALS:	**0.303**	**0.320**	**0.339**	**0.353**	**0.363**	**0.378**	**0.383**	**0.388**	**0.363**	**0.359**	**0.344**	**0.332**

PM10 Total (tons/day) by Month

Mode	Fuel Type	Reg Class	Regulatory Class Name	1	2	3	4	5	6	7	8	9	10	11	12
			Days per Month --->	31	28	31	30	31	30	31	31	30	31	30	31
Start/ Ext Idle	1	10	Motorcycles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	1	20	Light Duty Vehicles	0.065	0.048	0.042	0.021	0.012	0.009	0.007	0.009	0.014	0.023	0.049	0.056
	1	30	Light Duty Trucks	0.193	0.142	0.125	0.064	0.035	0.026	0.022	0.026	0.041	0.069	0.144	0.166
	1	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.007	0.005	0.004	0.002	0.001	0.001	0.001	0.001	0.001	0.002	0.005	0.006
	1	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
	1	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
	1	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
	1	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	1	48	Urban Bus (see CFR Sec 86.091_2)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	10	Motorcycles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	20	Light Duty Vehicles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	30	Light Duty Trucks	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	2	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	2	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
	2	48	Urban Bus (see CFR Sec 86.091_2)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Running	1	10	Motorcycles	0.000	0.000	0.001	0.001	0.001	0.002	0.002	0.002	0.001	0.001	0.001	0.000
	1	20	Light Duty Vehicles	0.086	0.084	0.086	0.080	0.076	0.077	0.076	0.078	0.077	0.082	0.091	0.091
	1	30	Light Duty Trucks	0.253	0.250	0.258	0.242	0.234	0.238	0.238	0.243	0.237	0.249	0.270	0.269
	1	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.008	0.008	0.008	0.007	0.007	0.007	0.007	0.007	0.007	0.008	0.009	0.009
	1	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.016	0.015	0.015	0.012	0.011	0.011	0.010	0.011	0.011	0.013	0.016	0.017
	1	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.022	0.020	0.021	0.017	0.015	0.015	0.014	0.015	0.015	0.018	0.022	0.023
	1	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.017	0.016	0.016	0.013	0.012	0.012	0.012	0.012	0.012	0.014	0.017	0.017
	1	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.004	0.003	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004
	1	48	Urban Bus (see CFR Sec 86.091_2)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	10	Motorcycles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	20	Light Duty Vehicles	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	2	30	Light Duty Trucks	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.006
	2	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.033	0.035	0.037	0.038	0.039	0.041	0.041	0.042	0.039	0.039	0.037	0.036
	2	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.017	0.018	0.020	0.020	0.021	0.022	0.022	0.022	0.021	0.021	0.020	0.019
	2	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.018	0.019	0.020	0.020	0.021	0.022	0.022	0.022	0.021	0.021	0.020	0.019
	2	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.027	0.028	0.030	0.031	0.032	0.033	0.034	0.034	0.032	0.032	0.030	0.029
	2	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.112	0.118	0.125	0.130	0.134	0.139	0.141	0.143	0.134	0.132	0.127	0.123
	2	48	Urban Bus (see CFR Sec 86.091_2)	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Total	1	10	Motorcycles	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001
	1	20	Light Duty Vehicles	0.151	0.132	0.128	0.101	0.087	0.085	0.084	0.087	0.090	0.105	0.140	0.147
	1	30	Light Duty Trucks	0.446	0.392	0.383	0.307	0.269	0.264	0.260	0.269	0.277	0.318	0.414	0.434
	1	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.015	0.013	0.013	0.010	0.008	0.008	0.008	0.008	0.008	0.010	0.014	0.015
	1	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.017	0.016	0.016	0.013	0.011	0.011	0.011	0.011	0.012	0.013	0.017	0.018
	1	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.024	0.022	0.021	0.017	0.015	0.015	0.014	0.015	0.016	0.018	0.023	0.024
	1	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.018	0.017	0.017	0.014	0.012	0.012	0.012	0.012	0.013	0.014	0.018	0.018
	1	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004
	1	48	Urban Bus (see CFR Sec 86.091_2)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	10	Motorcycles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2	20	Light Duty Vehicles	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	2	30	Light Duty Trucks	0.006	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.007	0.007	0.007
	2	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.033	0.035	0.037	0.039	0.040	0.042	0.042	0.043	0.040	0.039	0.038	0.037
	2	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.018	0.018	0.020	0.020	0.021	0.022	0.022	0.022	0.021	0.021	0.020	0.019
	2	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.018	0.019	0.020	0.020	0.021	0.022	0.022	0.022	0.021	0.021	0.020	0.019
	2	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.027	0.028	0.030	0.031	0.032	0.033	0.034	0.034	0.032	0.032	0.030	0.029
	2	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.114	0.120	0.127	0.132	0.136	0.142	0.143	0.145	0.136	0.134	0.129	0.125
	2	48	Urban Bus (see CFR Sec 86.091_2)	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
				0.895	**0.826**	**0.827**	**0.721**	**0.669**	**0.672**	**0.669**	**0.686**	**0.683**	**0.742**	**0.879**	**0.901**
		10	Motorcycles	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001
		20	Light Duty Vehicles	0.152	0.133	0.129	0.102	0.088	0.086	0.085	0.088	0.092	0.106	0.141	0.148
		30	Light Duty Trucks	0.452	0.399	0.390	0.314	0.276	0.272	0.268	0.277	0.285	0.325	0.421	0.441
		40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0.049	0.048	0.050	0.049	0.048	0.049	0.050	0.051	0.048	0.050	0.052	0.051
		41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0.035	0.034	0.035	0.033	0.032	0.033	0.033	0.033	0.033	0.034	0.037	0.037
		42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0.041	0.040	0.041	0.038	0.036	0.037	0.037	0.037	0.037	0.039	0.043	0.043
		46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0.045	0.045	0.047	0.045	0.044	0.045	0.046	0.046	0.045	0.046	0.048	0.048
		47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0.117	0.124	0.131	0.135	0.139	0.145	0.146	0.148	0.139	0.138	0.133	0.129
		48	Urban Bus (see CFR Sec 86.091_2)	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
			TOTALS:	**0.895**	**0.826**	**0.827**	**0.721**	**0.669**	**0.672**	**0.669**	**0.686**	**0.683**	**0.742**	**0.879**	**0.901**

TRAVEL ACTIVITY

Fuel Type	Reg Class	Regulatory Class Name	Daily VMT by Month 1	2	3	4	5	6	7	8	9	10	11	12	Annual VMT/day	Vehicle Pop'ns
1	10	Motorcycles	5,306	5,313	11,812	21,073	24,177	26,556	26,991	27,314	23,695	19,240	9,249	4,891	17,199	9,760
1	20	Light Duty Vehicles	1,054,135	1,113,214	1,178,835	1,226,637	1,262,081	1,315,607	1,331,629	1,347,565	1,262,083	1,247,845	1,195,723	1,156,952	1,224,991	63,875
1	30	Light Duty Trucks	3,041,377	3,211,836	3,401,161	3,539,067	3,641,323	3,795,767	3,842,000	3,887,968	3,641,367	3,600,258	3,449,900	3,338,032	3,534,329	163,120
1	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	71,717	75,737	80,201	83,453	85,864	89,506	90,596	91,680	85,865	84,896	81,350	78,712	83,341	3,925
1	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	48,671	51,398	54,428	56,635	58,272	60,743	61,483	62,218	58,272	57,615	55,208	53,418	56,559	1,993
1	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	54,672	57,736	61,139	63,618	65,456	68,232	69,064	69,890	65,457	64,718	62,015	60,004	63,533	2,785
1	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	34,515	36,449	38,598	40,163	41,324	43,076	43,601	44,123	41,324	40,857	39,151	37,881	40,109	2,043
1	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	6,395	6,753	7,151	7,441	7,656	7,981	8,078	8,175	7,656	7,570	7,254	7,019	7,431	342
1	48	Urban Bus (see CFR Sec 86.091_2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	10	Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	20	Light Duty Vehicles	13,875	14,652	15,516	16,145	16,612	17,316	17,527	17,737	16,612	16,424	15,738	15,228	16,124	834
2	30	Light Duty Trucks	91,314	96,432	102,116	106,257	109,327	113,964	115,352	116,733	109,328	108,095	103,580	100,221	106,115	5,329
2	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	135,424	143,014	151,444	157,585	162,138	169,015	171,074	173,120	162,139	160,310	153,614	148,632	157,373	7,289
2	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	31,073	32,815	34,749	36,158	37,203	38,781	39,253	39,723	37,203	36,783	35,247	34,104	36,110	471
2	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	31,619	33,392	35,360	36,794	37,857	39,462	39,943	40,421	37,857	37,430	35,866	34,704	36,744	462
2	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	41,012	43,311	45,864	47,724	49,103	51,185	51,808	52,428	49,103	48,549	46,521	45,012	47,660	1,071
2	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	127,588	134,739	142,682	148,468	152,757	159,236	161,176	163,104	152,758	151,035	144,726	140,033	148,268	2,390
2	48	Urban Bus (see CFR Sec 86.091_2)	5,799	6,125	6,486	6,749	6,944	7,238	7,326	7,414	6,944	6,865	6,578	6,365	6,739	287
9	10	Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	20	Light Duty Vehicles	694	732	776	807	830	866	876	887	830	821	787	761	806	33
9	30	Light Duty Trucks	214	226	240	249	257	267	271	274	257	254	243	235	249	9
9	40	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	41	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 l	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	42	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	46	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	47	Class 8a and 8b Trucks (GVWR > 33,000 lbs)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	48	Urban Bus (see CFR Sec 86.091_2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		TOTALS:	**4,795,401**	**5,063,873**	**5,368,558**	**5,595,022**	**5,759,179**	**6,004,797**	**6,078,048**	**6,150,772**	**5,758,749**	**5,689,564**	**5,442,751**	**5,262,203**	**5,583,681**	**266,020**
													Gas:	**5,027,493**	**90.0%**
													Dsl:	**555,133**	**9.9%**
													Elec:	**1,055**	**0.0%**

	Exhaust	BW+TW	Total
Fleet PM10 Emission Factors (g/mi):	**0.067**	**0.057**	**0.124**

sourceTypeID	HPMSVtypeID	sourceTypeName	rollingTermA	rotatingTermB	dragTermC	sourceMass
11	10	Motorcycle	0.0251	0	0.000315	0.285
21	20	Passenger Car	0.156461	0.00200193	0.000492646	1.4788
31	30	Passenger Truck	0.22112	0.00283757	0.000698282	1.86686
32	30	Light Commercial Truck	0.235008	0.00303859	0.000747753	2.05979
41	40	Intercity Bus	1.29515	0	0.00371491	19.5937
42	40	Transit Bus	1.0944	0	0.00358702	16.556
43	40	School Bus	0.746718	0	0.00217584	9.06989
51	50	Refuse Truck	1.41705	0	0.00357228	20.6845
52	50	Single Unit Short-haul Truck	0.561933	0	0.00160302	7.64159
53	50	Single Unit Long-haul Truck	0.498699	0	0.00147383	6.25047
54	50	Motor Home	0.617371	0	0.00210545	6.73483
61	60	Combination Short-haul Truck	1.96354	0	0.00403054	29.3275
62	60	Combination Long-haul Truck	2.08126	0	0.00418844	31.4038

regClassID	regClassName	regClassDesc
0	Doesn't Matter	Doesn't Matter
10	MC	Motorcycles
20	LDV	Light Duty Vehicles
30	LDT	Light Duty Trucks
40	LHD <= 10k	Class 2b Trucks with 2 Axles and 4 Tires (8,500 lbs < GVWR <= 10,000 lbs)
41	LHD <= 14k	Class 2b Trucks with 2 Axles and at least 6 Tires or Class 3 Trucks (8,500 lbs < GVWR <= 14,000 lbs)
42	LHD45	Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)
46	MHD67	Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)
47	HHD8	Class 8a and 8b Trucks (GVWR > 33,000 lbs)
48	Urban Bus	Urban Bus (see CFR Sec 86.091 2)

processID	processName	SCCProcID	occursOn RealRoads	shortName	process DisplayGroupID	isAffected ByOnroad	isAffected ByNonroad
1	Running Exhaust	X	Y	Running Exh	NULL	1	1
2	Start Exhaust	X	N	Start Exh	NULL	1	0
9	Brakewear	B	Y	Brakewear	NULL	1	0
10	Tirewear	T	Y	Tirewear	NULL	1	0
11	Evap Permeation	V	Y	Evap Permeation	NULL	1	0
12	Evap Fuel Vapor Venting	V	Y	Evap Fuel Vent	NULL	1	0
13	Evap Fuel Leaks	V	Y	Evap Fuel Leak	NULL	1	0
15	Crankcase Running Exhaust	X	Y	Crank Run Exh	NULL	1	1
16	Crankcase Start Exhaust	X	N	Crank Start Exh	NULL	1	0
17	Crankcase Extended Idle Exhaust	X	N	Crank Ext Idle	NULL	1	0
18	Refueling Displacement Vapor Loss	V	N	Refuel Disp Vap	NULL	1	1
19	Refueling Spillage Loss	V	N	Refuel Spillage	NULL	1	1
20	Evap Tank Permeation	V	N	NR Tank Perm	2	0	1
21	Evap Hose Permeation	V	N	NR Hose Perm	2	0	1
22	Evap RecMar Neck Hose Permeation	V	N	RecMar NeckPerm	2	0	0
23	Evap RecMar Supply/Ret Hose Permeation	V	N	RecMar SuppPerm	2	0	0
24	Evap RecMar Vent Hose Permeation	V	N	RecMar VentPerm	2	0	0
30	Diurnal Fuel Vapor Venting	V	N	NR Diurnal	1	0	1
31	HotSoak Fuel Vapor Venting	V	N	NR Hotsoak	1	0	1
32	RunningLoss Fuel Vapor Venting	V	N	NR RunLoss	1	0	1
40	Nonroad		N	Nonroad	3	0	0
90	Extended Idle Exhaust	X	N	Ext Idle Exh	NULL	1	0
91	Auxiliary Power Exhaust	X	N	Aux Power Exh	NULL	1	0
99	Well-to-Pump	NULL	N	Well-to-Pump	NULL	1	0

ActivityType ID	ActivityType Description
1	Distance traveled
2	Source Hours
3	Extended Idle Hours
4	Source Hours Operating
5	Source Hours Parked
6	Population
7	Starts
9	Average Horsepower
10	Fraction Retrofitted
11	Number Units Retrofitted
12	Load Factor
13	Hotelling Diesel Aux
14	Hotelling Battery or AC
15	Hotelling All Engines Off

pollutantID	pollutantName	energyOrMass	global WarmingPotential	NEIPollutantCode	pollutant DisplayGroupID	shortName	isAffected ByOnroad	isAffected ByNonroad
1	Total Gaseous Hydrocarbons	mass	NULL	HC	30	Total Gas HC	1	1
2	Carbon Monoxide (CO)	mass	NULL	CO	36	CO	1	1
3	Oxides of Nitrogen (NOx)	mass	NULL	NOX	37	NOx	1	1
5	Methane (CH4)	mass	25	CH4	35	Methane (CH4)	1	1
6	Nitrous Oxide (N2O)	mass	298	N2O	42	N2O	1	0
20	Benzene	mass	NULL	71432	57	Benzene	1	1
21	Ethanol	mass	NULL		58	Ethanol	1	1
22	MTBE	mass	NULL	1634044	59	MTBE	1	1
23	Naphthalene particle	mass	NULL	91203	65	Naphthalene P	1	1
24	1,3-Butadiene	mass	NULL	106990	60	1,3-Butadiene	1	1
25	Formaldehyde	mass	NULL	50000	61	Formaldehyde	1	1
26	Acetaldehyde	mass	NULL	75070	62	Acetaldehyde	1	1
27	Acrolein	mass	NULL	107028	63	Acrolein	1	1
30	Ammonia (NH3)	mass	NULL	NH3	41	NH3	1	1
31	Sulfur Dioxide (SO2)	mass	NULL	SO2	50	SO2	1	1
32	Nitrogen Oxide (NO)	mass	NULL	NO	38	NO	1	0
33	Nitrogen Dioxide (NO2)	mass	NULL	NO2	39	NO2	1	0
34	Nitrous Acid (HONO)	mass	NULL	7782-77-6	40	HONO	1	0
35	Nitrate (NO3)	mass	NULL	PM25_PRI	44	PM2.5 NO3	1	0
36	Ammonium (NH4)	mass	NULL	PM25_PRI	44	PM2.5 NH4	1	0
40	2,2,4-Trimethylpentane	mass	NULL	540841	64	2,2,4-Trimethylpentar	1	1
41	Ethyl Benzene	mass	NULL	100414	64	Ethyl Benzene	1	1
42	Hexane	mass	NULL	110543	64	Hexane	1	1
43	Propionaldehyde	mass	NULL	123386	64	Propionaldehyde	1	1
44	Styrene	mass	NULL	100425	64	Styrene	1	1
45	Toluene	mass	NULL	108883	64	Toluene	1	1
46	Xylene	mass	NULL	1330207	64	Xylene	1	1
51	Chloride	mass	NULL	PM25_PRI	44	PM2.5 Cl	1	0
52	Sodium	mass	NULL	PM25_PRI	44	PM2.5 Na	1	0
53	Potassium	mass	NULL	PM25_PRI	44	PM2.5 K	1	0
54	Magnesium	mass	NULL	PM25_PRI	44	PM2.5 Mg	1	0
55	Calcium	mass	NULL	PM25_PRI	44	PM2.5 Ca	1	0
56	Titanium	mass	NULL	PM25_PRI	44	PM2.5 Ti	1	0
57	Silicon	mass	NULL	PM25_PRI	44	PM2.5 Si	1	0
58	Aluminum	mass	NULL	PM25_PRI	44	PM2.5 Al	1	0
59	Iron	mass	NULL	PM25_PRI	44	PM2.5 Fe	1	0
60	Mercury Elemental Gaseous	mass	NULL	200	66	Hg Egas	1	1
61	Mercury Divalent Gaseous	mass	NULL	201	66	Hg Dgas	1	1
62	Mercury Particulate	mass	NULL	202	66	Hg Part	1	1
63	Arsenic Compounds	mass	NULL	93	66	As	1	1
65	Chromium 6+	mass	NULL	18540299	66	Cr+6	1	1
66	Manganese Compounds	mass	NULL	7439965	44	Mn	1	1
67	Nickel Compounds	mass	NULL	7440020	66	Ni	1	1
68	Dibenzo(a,h)anthracene particle	mass	NULL	53703	65	Dibenzo(a,h)anthracen	1	1
69	Fluoranthene particle	mass	NULL	206440	65	Fluoranthene P	1	1
70	Acenaphthene particle	mass	NULL	83329	65	Acenaphthene P	1	1
71	Acenaphthylene particle	mass	NULL	208968	65	Acenaphthylene P	1	1
72	Anthracene particle	mass	NULL	120127	65	Anthracene P	1	1
73	Benz(a)anthracene particle	mass	NULL	56553	65	Benz(a)anthracene P	1	1
74	Benzo(a)pyrene particle	mass	NULL	50328	65	Benzo(a)pyrene P	1	1
75	Benzo(b)fluoranthene particle	mass	NULL	205992	65	Benzo(b)fluoranthene	1	1
76	Benzo(g,h,i)perylene particle	mass	NULL	191242	65	Benzo(g,h,i)perylene F	1	1
77	Benzo(k)fluoranthene particle	mass	NULL	207089	65	Benzo(k)fluoranthene	1	1
78	Chrysene particle	mass	NULL	218019	65	Chrysene P	1	1
79	Non-Methane Hydrocarbons	mass	NULL	NMHC	31	NMHC	1	1
80	Non-Methane Organic Gases	mass	NULL	NMOG	32	NMOG	1	1
81	Fluorene particle	mass	NULL	86737	65	Fluorene P	1	1
82	Indeno(1,2,3,c,d)pyrene particle	mass	NULL	193395	65	Indeno(1,2,3,c,d)pyre	1	1
83	Phenanthrene particle	mass	NULL	85018	65	Phenanthrene P	1	1
84	Pyrene particle	mass	NULL	129000	65	Pyrene P	1	1
86	Total Organic Gases	mass	NULL	TOG	33	TOG	1	1
87	Volatile Organic Compounds	mass	NULL	VOC	34	VOC	1	1
88	NonHAPTOG	mass	NULL	NHTOG	-70	NHTOG	1	1
90	Atmospheric CO2	mass	1	CO2	55	Atmospheric CO2	1	1
91	Total Energy Consumption	energy	NULL		51	Total Energy	1	0
92	Petroleum Energy Consumption	energy	NULL		52	Petrol Energy	1	0
93	Fossil Fuel Energy Consumption	energy	NULL		53	Fossil Energy	1	0
98	CO2 Equivalent	mass	NULL	CO2	56	CO2 Equivalent	1	0
99	Brake Specific Fuel Consumption (BSFC)	mass	NULL	NULL	54	BSFC	0	1
100	Primary Exhaust PM10 - Total	mass	NULL	PM10-PRI	47	PM10 Total Exh	1	1
106	Primary PM10 - Brakewear Particulate	mass	NULL	PM10_PRI	48	PM10 Brakewear	1	0
107	Primary PM10 - Tirewear Particulate	mass	NULL	PM10_PRI	49	PM10 Tirewear	1	0
110	Primary Exhaust PM2.5 - Total	mass	NULL	PM25-PRI	43	PM2.5 Total Exh	1	1
111	Organic Carbon	mass	NULL	PM25_PRI	44	PM2.5 OC	1	0
112	Elemental Carbon	mass	NULL	PM25_PRI	44	PM2.5 EC	1	0
115	Sulfate Particulate	mass	NULL	PM25_PRI	44	PM2.5 Sulfate	1	0
116	Primary PM2.5 - Brakewear Particulate	mass	NULL	PM25_PRI	45	PM2.5 Brakewear	1	0
117	Primary PM2.5 - Tirewear Particulate	mass	NULL	PM25_PRI	46	PM2.5 Tirewear	1	0
118	Composite - NonECPM	mass	NULL	PM25_PRI	44	PM2.5 NonECPM	1	0
119	H2O (aerosol)	mass	NULL	PM25_PRI	44	PM2.5 H2O Aero	1	0
120	Primary PM2.5 - NonECNonSO4PM	mass	NULL	PM25_PRI	-1	PM2.5 NonECNonSO4	1	0
121	CMAQ5.0 Unspeciated (PMOTHR)	mass	NULL	PM25_PRI	44	PM2.5 PMOTHR	1	0
122	Non-carbon Organic Matter (NCOM)	mass	NULL	PM25_PRI	44	PM2.5 NCOM	1	0
130	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	mass	NULL	19408743	67	1,2,3,7,8,9-Hexachlore	1	1
131	Octachlorodibenzo-p-dioxin	mass	NULL	3268879	67	Octachlorodibenzo-p-	1	1
132	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	mass	NULL	35822469	67	1,2,3,4,6,7,8-Heptachl	1	1
133	Octachlorodibenzofuran	mass	NULL	39001020	67	Octachlorodibenzofur	1	1
134	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	mass	NULL	39227286	67	1,2,3,4,7,8-Hexachlore	1	1
135	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	mass	NULL	40321764	67	1,2,3,7,8-Pentachloro	1	1
136	2,3,7,8-Tetrachlorodibenzofuran	mass	NULL	51207319	67	2,3,7,8-Tetrachlorodibe	1	1
137	1,2,3,4,7,8,9-Heptachlorodibenzofuran	mass	NULL	55673897	67	1,2,3,4,7,8,9-Heptachl	1	1
138	2,3,4,7,8-Pentachlorodibenzofuran	mass	NULL	57117314	67	2,3,4,7,8-Pentachloro	1	1
139	1,2,3,7,8-Pentachlorodibenzofuran	mass	NULL	57117416	67	1,2,3,7,8-Pentachloro	1	1
140	1,2,3,6,7,8-Hexachlorodibenzofuran	mass	NULL	57117449	67	1,2,3,6,7,8-Hexachlore	1	1
141	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	mass	NULL	57653857	67	1,2,3,6,7,8-Hexachlore	1	1
142	2,3,7,8-Tetrachlorodibenzo-p-Dioxin	mass	NULL	1746016	67	2,3,7,8-Tetrachlorodib	1	1
143	2,3,4,6,7,8-Hexachlorodibenzofuran	mass	NULL	60851345	67	2,3,4,6,7,8-Hexachlore	1	1
144	1,2,3,4,6,7,8-Heptachlorodibenzofuran	mass	NULL	67562394	67	1,2,3,4,6,7,8-Heptachl	1	1
145	1,2,3,4,7,8-Hexachlorodibenzofuran	mass	NULL	70648269	67	1,2,3,4,7,8-Hexachlore	1	1
146	1,2,3,7,8,9-Hexachlorodibenzofuran	mass	NULL	72918219	67	1,2,3,7,8,9-Hexachlore	1	1
168	Dibenzo(a,h)anthracene gas	mass	NULL	53703	65	Dibenzo(a,h)anthracen	1	1
169	Fluoranthene gas	mass	NULL	206440	65	Fluoranthene G	1	1
170	Acenaphthene gas	mass	NULL	83329	65	Acenaphthene G	1	1
171	Acenaphthylene gas	mass	NULL	208968	65	Acenaphthylene G	1	1
172	Anthracene gas	mass	NULL	120127	65	Anthracene G	1	1
173	Benz(a)anthracene gas	mass	NULL	56553	65	Benz(a)anthracene G	1	1
174	Benzo(a)pyrene gas	mass	NULL	50328	65	Benzo(a)pyrene G	1	1

175	Benzo(b)fluoranthene gas	mass	NULL	205992	65	Benzo(b)fluoranthene	1	1
176	Benzo(g,h,i)perylene gas	mass	NULL	191242	65	Benzo(g,h,i)perylene (	1	1
177	Benzo(k)fluoranthene gas	mass	NULL	207089	65	Benzo(k)fluoranthene	1	1
178	Chrysene gas	mass	NULL	218019	65	Chrysene G	1	1
181	Fluorene gas	mass	NULL	86737	65	Fluorene G	1	1
182	Indeno(1,2,3,c,d)pyrene gas	mass	NULL	193395	65	Indeno(1,2,3,c,d)pyre	1	1
183	Phenanthrene gas	mass	NULL	85018	65	Phenanthrene G	1	1
184	Pyrene gas	mass	NULL	129000	65	Pyrene G	1	1
185	Naphthalene gas	mass	NULL	91203	65	Naphthalene G	1	1
1504	CB6CMAQ_CH4	gmole	NULL	NULL	-1	CB6CMAQ_CH4	1	0
1520	CB6CMAQ_BENZ	gmole	NULL	NULL	-1	CB6CMAQ_BENZ	1	0
1502	CB6CMAQ_ALDX	gmole	NULL	NULL	-1	CB6CMAQ_ALDX	1	0
1501	CB6CMAQ_ALD2	gmole	NULL	NULL	-1	CB6CMAQ_ALD2	1	0
1519	CB6CMAQ_ACET	gmole	NULL	NULL	-1	CB6CMAQ_ACET	1	0
1500	CB6CMAQ Mechanism	gmole	NULL	NULL	68	CB6CMAQ Mech	1	0
1018	CB05_XYL	gmole	NULL	NULL	-1	CB05_XYL	1	0
1017	CB05_UNR	gmole	NULL	NULL	-1	CB05_UNR	1	0
1015	CB05_TOL	gmole	NULL	NULL	-1	CB05_TOL	1	0
1014	CB05_TERP	gmole	NULL	NULL	-1	CB05_TERP	1	0
1013	CB05_PAR	gmole	NULL	NULL	-1	CB05_PAR	1	0
1012	CB05_OLE	gmole	NULL	NULL	-1	CB05_OLE	1	0
1011	CB05_MEOH	gmole	NULL	NULL	-1	CB05_MEOH	1	0
1010	CB05_ISOP	gmole	NULL	NULL	-1	CB05_ISOP	1	0
1009	CB05_IOLE	gmole	NULL	NULL	-1	CB05_IOLE	1	0
1008	CB05_FORM	gmole	NULL	NULL	-1	CB05_FORM	1	0
1007	CB05_ETOH	gmole	NULL	NULL	-1	CB05_ETOH	1	0
1006	CB05_ETHA	gmole	NULL	NULL	-1	CB05_ETHA	1	0
1005	CB05_ETH	gmole	NULL	NULL	-1	CB05_ETH	1	0
1004	CB05_CH4	gmole	NULL	NULL	-1	CB05_CH4	1	0
1003	CB05_BENZENE	gmole	NULL	NULL	-1	CB05_BENZENE	1	0
1002	CB05_ALDX	gmole	NULL	NULL	-1	CB05_ALDX	1	0
1001	CB05_ALD2	gmole	NULL	NULL	-1	CB05_ALD2	1	0
1000	CB05 Mechanism	gmole	NULL	NULL	68	CB05 Mech	1	0
1505	CB6CMAQ_ETH	gmole	NULL	NULL	-1	CB6CMAQ_ETH	1	0
1506	CB6CMAQ_ETHA	gmole	NULL	NULL	-1	CB6CMAQ_ETHA	1	0
1521	CB6CMAQ_ETHY	gmole	NULL	NULL	-1	CB6CMAQ_ETHY	1	0
1507	CB6CMAQ_ETOH	gmole	NULL	NULL	-1	CB6CMAQ_ETOH	1	0
1508	CB6CMAQ_FORM	gmole	NULL	NULL	-1	CB6CMAQ_FORM	1	0
1509	CB6CMAQ_IOLE	gmole	NULL	NULL	-1	CB6CMAQ_IOLE	1	0
1510	CB6CMAQ_ISOP	gmole	NULL	NULL	-1	CB6CMAQ_ISOP	1	0
1522	CB6CMAQ_KET	gmole	NULL	NULL	-1	CB6CMAQ_KET	1	0
1511	CB6CMAQ_MEOH	gmole	NULL	NULL	-1	CB6CMAQ_MEOH	1	0
1547	CB6CMAQ_NAPH	gmole	NULL	NULL	-1	CB6CMAQ_NAPH	1	0
1512	CB6CMAQ_OLE	gmole	NULL	NULL	-1	CB6CMAQ_OLE	1	0
1513	CB6CMAQ_PAR	gmole	NULL	NULL	-1	CB6CMAQ_PAR	1	0
1523	CB6CMAQ_PRPA	gmole	NULL	NULL	-1	CB6CMAQ_PRPA	1	0
1558	CB6CMAQ_SOAALK	gmole	NULL	NULL	-1	CB6CMAQ_SOAALK	1	0
1514	CB6CMAQ_TERP	gmole	NULL	NULL	-1	CB6CMAQ_TERP	1	0
1515	CB6CMAQ_TOL	gmole	NULL	NULL	-1	CB6CMAQ_TOL	1	0
1517	CB6CMAQ_UNR	gmole	NULL	NULL	-1	CB6CMAQ_UNR	1	0
1560	CB6CMAQ_XYLMN	gmole	NULL	NULL	-1	CB6CMAQ_XYLMN	1	0
2000	SAPRC07T Mechanism	gmole	NULL	NULL	68	SAPRC07T Mech	1	0
2019	SAPRC07T_ACET	gmole	NULL	NULL	-1	SAPRC07T_ACET	1	0
2024	SAPRC07T_ACRO	gmole	NULL	NULL	-1	SAPRC07T_ACRO	1	0
2025	SAPRC07T_ACYE	gmole	NULL	NULL	-1	SAPRC07T_ACYE	1	0
2026	SAPRC07T_ALK1	gmole	NULL	NULL	-1	SAPRC07T_ALK1	1	0
2027	SAPRC07T_ALK2	gmole	NULL	NULL	-1	SAPRC07T_ALK2	1	0
2028	SAPRC07T_ALK3	gmole	NULL	NULL	-1	SAPRC07T_ALK3	1	0
2029	SAPRC07T_ALK4	gmole	NULL	NULL	-1	SAPRC07T_ALK4	1	0
2030	SAPRC07T_ALK5	gmole	NULL	NULL	-1	SAPRC07T_ALK5	1	0
2031	SAPRC07T_APIN	gmole	NULL	NULL	-1	SAPRC07T_APIN	1	0
2032	SAPRC07T_ARO1	gmole	NULL	NULL	-1	SAPRC07T_ARO1	1	0
2033	SAPRC07T_ARO2MN	gmole	NULL	NULL	-1	SAPRC07T_ARO2MN	1	0
2034	SAPRC07T_B124	gmole	NULL	NULL	-1	SAPRC07T_B124	1	0
2035	SAPRC07T_BALD	gmole	NULL	NULL	-1	SAPRC07T_BALD	1	0
2036	SAPRC07T_BDE13	gmole	NULL	NULL	-1	SAPRC07T_BDE13	1	0
2020	SAPRC07T_BENZ	gmole	NULL	NULL	-1	SAPRC07T_BENZ	1	0
2037	SAPRC07T_CCHO	gmole	NULL	NULL	-1	SAPRC07T_CCHO	1	0
2004	SAPRC07T_CH4	gmole	NULL	NULL	-1	SAPRC07T_CH4	1	0
2038	SAPRC07T_CRES	gmole	NULL	NULL	-1	SAPRC07T_CRES	1	0
2039	SAPRC07T_ETHE	gmole	NULL	NULL	-1	SAPRC07T_ETHE	1	0
2007	SAPRC07T_ETOH	gmole	NULL	NULL	-1	SAPRC07T_ETOH	1	0
2040	SAPRC07T_GLY	gmole	NULL	NULL	-1	SAPRC07T_GLY	1	0
2041	SAPRC07T_HCHO	gmole	NULL	NULL	-1	SAPRC07T_HCHO	1	0
2042	SAPRC07T_IPRD	gmole	NULL	NULL	-1	SAPRC07T_IPRD	1	0
2010	SAPRC07T_ISOP	gmole	NULL	NULL	-1	SAPRC07T_ISOP	1	0
2043	SAPRC07T_MACR	gmole	NULL	NULL	-1	SAPRC07T_MACR	1	0
2044	SAPRC07T_MEK	gmole	NULL	NULL	-1	SAPRC07T_MEK	1	0
2011	SAPRC07T_MEOH	gmole	NULL	NULL	-1	SAPRC07T_MEOH	1	0
2045	SAPRC07T_MVK	gmole	NULL	NULL	-1	SAPRC07T_MVK	1	0
2046	SAPRC07T_MXYL	gmole	NULL	NULL	-1	SAPRC07T_MXYL	1	0
2048	SAPRC07T_NAPHTH	gmole	NULL	NULL	-1	SAPRC07T_NAPHTH	1	0
2049	SAPRC07T_NROG	gmole	NULL	NULL	-1	SAPRC07T_NROG	1	0
2050	SAPRC07T_OLE1	gmole	NULL	NULL	-1	SAPRC07T_OLE1	1	0
2051	SAPRC07T_OLE2	gmole	NULL	NULL	-1	SAPRC07T_OLE2	1	0
2052	SAPRC07T_OXYL	gmole	NULL	NULL	-1	SAPRC07T_OXYL	1	0
2053	SAPRC07T_PACD	gmole	NULL	NULL	-1	SAPRC07T_PACD	1	0
2054	SAPRC07T_PRD2	gmole	NULL	NULL	-1	SAPRC07T_PRD2	1	0
2055	SAPRC07T_PRPE	gmole	NULL	NULL	-1	SAPRC07T_PRPE	1	0
2056	SAPRC07T_PXYL	gmole	NULL	NULL	-1	SAPRC07T_PXYL	1	0
2057	SAPRC07T_RCHO	gmole	NULL	NULL	-1	SAPRC07T_RCHO	1	0
2058	SAPRC07T_SOAALK	gmole	NULL	NULL	-1	SAPRC07T_SOAALK	1	0
2014	SAPRC07T_TERP	gmole	NULL	NULL	-1	SAPRC07T_TERP	1	0
2059	SAPRC07T_TOLU	gmole	NULL	NULL	-1	SAPRC07T_TOLU	1	0
2016	SAPRC07T_UNK	gmole	NULL	NULL	-1	SAPRC07T_UNK	1	0

LMP Maintenance Area Non-Road Equipment 2017 PM10 Emissions (tons/day)

	Eagle River		
Non-Road Equipment Sector	Break-up Mar-Apr	Freeze-up Oct-Nov	Annual
Recreational	0.0011	0.0011	0.0147
Construction	0.0080	0.0078	0.0076
Industrial	0.0003	0.0003	0.0003
Lawn/Garden	0.0030	0.0030	0.0035
Agriculture	0.0000	0.0000	0.0000
Commercial	0.0011	0.0011	0.0011
Airport Support	0.0000	0.0000	0.0000
Oil Field	0.0000	0.0000	0.0000
Pleasure Craft	0.0000	0.0000	0.0000
Railroad	0.0000	0.0000	0.0000
Non-Road Totals	**0.0135**	**0.0132**	**0.0271**

MOVES2014B/NONROAD COUNTY-LEVEL PM10 EMISSIONS IN CALENDAR YEAR 2017 BY SCC AND MONTH

		CntyName:	Anchorage													Census-Based Pop'n Scaling Factor:	0.0339			
		CntyID:	2020	31	28	31	30	31	30	31	31	30	31	30	31	365	Eagle River		Eagle River LMP Area	
								2017 PM10 Emissions by Month (lbs/day)								Annual	LMP Area		Scaled Emissions (lbs/day)	
SCC	Description	SectorID	Sector Name	1	2	3	4	5	6	7	8	9	10	11	12	Avg	Scaling Factor	Mar-Apr	Oct-Nov	Annual
2260001010	2-Str Offroad Motorcycles	1	Recreational	14.6	16.2	41.7	43.1	41.7	85.6	82.8	82.8	43.1	41.7	43.1	14.6	46.1	0.0339	1.44	1.44	1.56
2260001020	2-Str Snowmobiles	1	Recreational	3133.3	3469.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3133.3	798.3	0.0339	0.00	0.00	27.04
2260001030	2-Str All Terrain Vehicles	1	Recreational	3.5	3.9	10.0	10.3	10.0	20.5	19.8	19.8	10.3	10.0	10.3	3.5	11.0	0.0339	0.34	0.34	0.37
2260001060	2-Str Specialty Vehicle Carts	1	Recreational	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0339	0.00	0.00	0.00
2265001010	4-Str Offroad Motorcycles	1	Recreational	0.4	0.4	1.0	1.0	1.0	2.1	2.0	2.0	1.0	1.0	1.0	0.4	1.1	0.0339	0.03	0.03	0.04
2265001030	4-Str All Terrain Vehicles	1	Recreational	3.2	3.5	9.0	9.3	9.0	18.5	17.9	17.9	9.3	9.0	9.3	3.2	10.0	0.0339	0.31	0.31	0.34
2265001050	4-Str Golf Carts	1	Recreational	0.2	0.3	0.7	0.7	0.7	1.4	1.4	1.4	0.7	0.7	0.7	0.2	0.8	0	0.00	0.00	0.00
2265001060	4-Str Specialty Vehicle Carts	1	Recreational	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0	0.00	0.00	0.00
2267001060	LPG - Specialty Vehicle Carts	1	Recreational	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00
2270001060	Dsl - Specialty Vehicle Carts	1	Recreational	0.2	0.2	0.6	0.6	0.6	1.2	1.1	1.1	0.6	0.6	0.6	0.2	0.6	0	0.00	0.00	0.00
2260002006	2-Str Tampers/Rammers	2	Construction	5.7	6.3	8.3	8.6	8.3	9.6	9.3	9.3	8.3	8.1	8.3	5.7	8.0	0.0339	0.29	0.28	0.27
2260002009	2-Str Plate Compactors	2	Construction	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.0339	0.01	0.01	0.01
2260002021	2-Str Paving Equipment	2	Construction	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.2	0.3	0.0339	0.01	0.01	0.01
2260002027	2-Str Signal Boards/Light Plants	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2260002039	2-Str Concrete/Industrial Saws	2	Construction	15.0	16.6	21.9	22.6	21.9	25.1	24.3	24.3	21.8	21.1	21.8	15.0	21.0	0.0339	0.75	0.73	0.71
2260002054	2-Str Crushing/Proc. Equipment	2	Construction	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0339	0.00	0.00	0.00
2265002003	4-Str Pavers	2	Construction	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0339	0.00	0.00	0.00
2265002006	4-Str Tampers/Rammers	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2265002009	4-Str Plate Compactors	2	Construction	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.0339	0.01	0.01	0.01
2265002015	4-Str Rollers	2	Construction	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0339	0.00	0.00	0.00
2265002021	4-Str Paving Equipment	2	Construction	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.0339	0.01	0.01	0.01
2265002024	4-Str Surfacing Equipment	2	Construction	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0339	0.00	0.00	0.00
2265002027	4-Str Signal Boards/Light Plants	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2265002030	4-Str Trenchers	2	Construction	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.0339	0.01	0.01	0.01
2265002033	4-Str Bore/Drill Rigs	2	Construction	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0339	0.00	0.00	0.00
2265002039	4-Str Concrete/Industrial Saws	2	Construction	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.3	0.4	0.0339	0.02	0.02	0.01
2265002042	4-Str Cement & Mortar Mixers	2	Construction	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.0339	0.01	0.01	0.01
2265002045	4-Str Cranes	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2265002054	4-Str Crushing/Proc. Equipment	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2265002057	4-Str Rough Terrain Forklift	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2265002060	4-Str Rubber Tire Loaders	2	Construction	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2265002066	4-Str Tractors/Loaders/Backhoes	2	Construction	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0339	0.00	0.00	0.00
2265002072	4-Str Skid Steer Loaders	2	Construction	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0339	0.00	0.00	0.00
2265002078	4-Str Dumpers/Tenders	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2265002081	4-Str Other Construction Equipment	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267002003	LPG - Pavers	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267002015	LPG - Rollers	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267002021	LPG - Paving Equipment	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267002024	LPG - Surfacing Equipment	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267002030	LPG - Trenchers	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267002033	LPG - Bore/Drill Rigs	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267002039	LPG - Concrete/Industrial Saws	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267002045	LPG - Cranes	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267002054	LPG - Crushing/Proc. Equipment	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267002057	LPG - Rough Terrain Forklift	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267002060	LPG - Rubber Tire Loaders	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267002066	LPG - Tractors/Loaders/Backhoes	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267002072	LPG - Skid Steer Loaders	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267002081	LPG - Other Construction Equipment	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2268002081	CNG - Other Construction Equipment	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2270002003	Dsl - Pavers	2	Construction	2.4	2.7	3.6	3.7	3.6	4.1	4.0	4.0	3.5	3.4	3.5	2.4	3.4	0.0339	0.12	0.12	0.12
2270002006	Dsl - Tampers/Rammers	2	Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2270002009	Dsl - Plate Compactors	2	Construction	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.0339	0.01	0.01	0.01
2270002015	Dsl - Rollers	2	Construction	7.7	8.5	11.2	11.5	11.2	12.8	12.4	12.4	11.1	10.8	11.1	7.7	10.7	0.0339	0.38	0.37	0.36
2270002018	Dsl - Scrapers	2	Construction	6.7	7.4	9.8	10.1	9.8	11.2	10.9	10.9	9.8	9.4	9.8	6.7	9.4	0.0339	0.34	0.33	0.32
2270002021	Dsl - Paving Equipment	2	Construction	0.6	0.7	0.9	0.9	0.9	1.0	1.0	1.0	0.9	0.9	0.9	0.6	0.8	0.0339	0.03	0.03	0.03
2270002024	Dsl - Surfacing Equipment	2	Construction	0.4	0.4	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.4	0.6	0.0339	0.02	0.02	0.02
2270002027	Dsl - Signal Boards/Light Plants	2	Construction	1.2	1.3	1.7	1.8	1.7	2.0	1.9	1.9	1.7	1.6	1.7	1.2	1.6	0.0339	0.06	0.06	0.06
2270002030	Dsl - Trenchers	2	Construction	5.6	6.2	8.2	8.5	8.2	9.4	9.1	9.1	8.2	7.9	8.2	5.6	7.9	0.0339	0.28	0.27	0.27
2270002033	Dsl - Bore/Drill Rigs	2	Construction	5.2	5.8	7.6	7.9	7.6	8.7	8.5	8.5	7.6	7.3	7.6	5.2	7.3	0.0339	0.26	0.25	0.25
2270002036	Dsl - Excavators	2	Construction	18.3	20.3	26.8	27.6	26.8	30.7	29.8	29.8	26.7	25.8	26.7	18.3	25.7	0.0339	0.92	0.89	0.87
2270002039	Dsl - Concrete/Industrial Saws	2	Construction	0.4	0.4	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.0339	0.02	0.02	0.02
2270002042	Dsl - Cement & Mortar Mixers	2	Construction	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.0339	0.01	0.01	0.01
2270002045	Dsl - Cranes	2	Construction	5.3	5.8	7.7	8.0	7.7	8.9	8.6	8.6	7.7	7.4	7.7	5.3	7.4	0.0339	0.27	0.26	0.25
2270002048	Dsl - Graders	2	Construction	4.2	4.7	6.2	6.4	6.2	7.1	6.9	6.9	6.2	6.0	6.2	4.2	5.9	0.0339	0.21	0.21	0.20
2270002051	Dsl - Off-highway Trucks	2	Construction	11.8	13.1	17.2	17.8	17.2	19.8	19.2	19.2	17.2	16.6	17.2	11.8	16.5	0.0339	0.59	0.57	0.56
2270002054	Dsl - Crushing/Proc. Equipment	2	Construction	1.2	1.3	1.7	1.7	1.7	1.9	1.9	1.9	1.7	1.6	1.7	1.2	1.6	0.0339	0.06	0.06	0.05
2270002057	Dsl - Rough Terrain Forklifts	2	Construction	13.9	15.4	20.4	21.0	20.4	23.4	22.6	22.6	20.3	19.7	20.3	13.9	19.5	0.0339	0.70	0.68	0.66
2270002060	Dsl - Rubber Tire Loaders	2	Construction	34.6	38.3	50.4	52.1	50.4	58.0	56.1	56.1	50.4	48.7	50.4	34.6	48.4	0.0339	1.74	1.68	1.64
2270002066	Dsl - Tractors/Loaders/Backhoes	2	Construction	78.9	87.4	115.2	119.0	115.2	132.4	128.1	128.1	115.0	111.3	115.0	78.9	110.5	0.0339	3.97	3.83	3.74
2270002069	Dsl - Crawler Tractor/Dozers	2	Construction	23.5	26.0	34.2	35.4	34.2	39.3	38.1	38.1	34.2	33.1	34.2	23.5	32.8	0.0339	1.18	1.14	1.11
2270002072	Dsl - Skid Steer Loaders	2	Construction	66.8	74.0	97.5	100.7	97.5	112.1	108.5	108.5	97.4	94.2	97.4	66.8	93.5	0.0339	3.36	3.24	3.17
2270002075	Dsl - Off-Highway Tractors	2	Construction	3.5	3.9	5.1	5.3	5.1	5.9	5.7	5.7	5.1	5.0	5.1	3.5	4.9	0.0339	0.18	0.17	0.17
2270002078	Dsl - Dumpers/Tenders	2	Construction	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.0339	0.01	0.01	0.01
2270002081	Dsl - Other Construction Equipment	2	Construction	4.5	5.0	6.6	6.8	6.6	7.6	7.3	7.3	6.6	6.4	6.6	4.5	6.3	0.0339	0.23	0.22	0.21
2260003030	2-Str Sweepers/Scrubbers	3	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2260003040	2-Str Other General Industrial Eqp	3	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2265003010	4-Str Aerial Lifts	3	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2265003020	4-Str Forklifts	3	Industrial	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0339	0.00	0.00	0.00
2265003030	4-Str Sweepers/Scrubbers	3	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2265003040	4-Str Other General Industrial Eqp	3	Industrial	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0339	0.00	0.00	0.00
2265003050	4-Str Other Material Handling Eqp	3	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2265003060	4-Str ACRefrigeration	3	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2265003070	4-Str Terminal Tractors	3	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267003010	LPG - Aerial Lifts	3	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267003020	LPG - Forklifts	3	Industrial	1.3	1.4	1.6	1.6	1.6	2.0	1.9	1.9	1.6	1.6	1.6	1.3	1.6	0.0339	0.05	0.05	0.05
2267003030	LPG - Sweepers/Scrubbers	3	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267003040	LPG - Other General Industrial Eqp	3	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267003050	LPG - Other Material Handling Eqp	3	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267003070	LPG - Terminal Tractors	3	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2268003020	CNG - Forklifts	3	Industrial	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0339	0.00	0.00	0.00
2268003060	CNG - ACRefrigeration	3	Industrial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2270003010	Dsl - Aerial Lifts	3	Industrial	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.0339	0.01	0.01	0.01
2270003020	Dsl - Forklifts	3	Industrial	0.7	0.7	0.8	0.9	0.8	1.0	1.0	1.0	0.9	0.8	0.9	0.7	0.8	0.0339	0.03	0.03	0.03
2270003030	Dsl - Sweepers/Scrubbers	3	Industrial	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.0339	0.01	0.01	0.01
2270003040	Dsl - Other General Industrial Eqp	3	Industrial	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.5	0.0339	0.02	0.02	0.02
2270003050	Dsl - Other Material Handling Eqp	3	Industrial	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0339	0.00	0.00	0.00
2270003060	Dsl - ACRefrigeration	3	Industrial	8.1	9.0	10.0	10.4	10.0	12.5	12.1	12.1	10.4	10.0	10.4	8.1	10.3	0.0339	0.35	0.35	0.35
2270003070	Dsl - Terminal Tractors	3	Industrial	0.4	0.4	0.4	0.5	0.4	0.6	0.5	0.5	0.5	0.4	0.5	0.4	0.5	0.0339	0.02	0.02	0.02
2260004015	2-Str Rotary Tillers < 6 HP (res)	4	Lawn/Garden	0.2	0.2	0.7	0.7	0.7	1.7	1.6	1.6	0.7	0.7	0.7	0.2	0.8	0.0339	0.02	0.02	0.03
2260004016	2-Str Rotary Tillers < 6 HP (com)	4	Lawn/Garden	0.7	0.8	2.7	2.8	2.7	6.4	6.2	6.2	2.8	2.7	2.8	0.7	3.2	0.0339	0.09	0.09	0.11
2260004020	2-Str Chain Saws < 6 HP (res)	4	Lawn/Garden	10.7	11.8	10.7	11.0	10.7	11.0	10.7	10.7	11.0	10.7	11.0	10.7	10.9	0.0339	0.37	0.37	0.37
2260004021	2-Str Chain Saws < 6 HP (com)	4	Lawn/Garden	53.4	59.1	53.4	55.2	53.4	55.2	53.4	53.4	55.2	53.4	55.2	53.4	54.4	0.0339	1.84	1.84	1.84
2260004025	2-Str Trimmers/Edgers/Brush Cutter (res)	4	Lawn/Garden	3.7	4.1	13.5	14.0	13.5	32.0	30.9	30.9	14.0	13.5	14.0	3.7	15.7	0.0339	0.47	0.47	0.53
2260004026	2-Str Trimmers/Edgers/Brush Cutter (com)	4	Lawn/Garden	6.7	7.4	24.4	25.2	24.4	57.8	55.9	55.9	25.2	24.4	25.2	6.7	28.4	0.0339	0.84	0.84	0.96
2260004030	2-Str Leafblowers/Vacuums (res)	4	Lawn/Garden	2.3	2.6	8.5	8.8	8.5	20.0	19.4	19.4	8.8	8.5	8.8	2.3	9.8	0.0339	0.29	0.29	0.33
2260004031	2-Str Leafblowers/Vacuums (com)	4	Lawn/Garden	7.6	8.4	27.8	28.7	27.8	65.7	63.6	63.6	28.7	27.8	28.7	7.6	32.3	0.0339	0.96	0.96	1.09
2260004035	2-Str Snowblowers (res)	4	Lawn/Garden	15.2	16.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.2	3.9	0.0339	0.00	0.00	0.13
2260004036	2-Str Snowblowers (com)	4	Lawn/Garden	28.3	31.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.3	7.2	0.0339	0.00	0.00	0.24
2260004071	2-Str Commercial Turf Equipment (com)	4	Lawn/Garden	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2265004010	4-Str Lawn mowers (res)	4	Lawn/Garden	1.2	1.3	4.4	4.5	4.4	10.3	10.0	10.0	4.5	4.4	4.5	1.2	5.1	0.0339	0.15	0.15	0.17
2265004011	4-Str Lawn mowers (Com)	4	Lawn/Garden	0.7	0.7	2.4	2.5	2.4	5.8	5.6	5.6	2.5	2.4	2.5	0.7	2.8	0.0339	0.08	0.08	0.10
2265004015	4-Str Rotary Tillers < 6 HP (res)	4	Lawn/Garden	0.1	0.1	0.4	0.4	0.4	0.9	0.9	0.9	0.4	0.4	0.4	0.1	0.4	0.0339	0.01	0.01	0.01
2265004016	4-Str Rotary Tillers < 6 HP (com)	4	Lawn/Garden	0.4	0.4	1.4	1.5	1.4	3.4	3.3	3.3	1.5	1.4	1.5	0.4	1.7	0.0339	0.05	0.05	0.06
2265004025	4-Str Trimmers/Edgers/Brush Cutter (res)	4	Lawn/Garden	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2265004026	4-Str Trimmers/Edgers/Brush Cutter (com)	4	Lawn/Garden	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2265004030	4-Str Leafblowers/Vacuums (res)	4	Lawn/Garden	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0339	0.00	0.00	0.00

2265004031	4-Str Leafblowers/Vacuums (com)	4	Lawn/Garden	0.3	0.3	1.0	1.1	1.0	2.4	2.3	2.3	1.1	1.0	1.1	0.3	1.2	0.0339	0.04	0.04	0.04
2265004035	4-Str Snowblowers (res)	4	Lawn/Garden	0.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.2	0.0339	0.00	0.00	0.01
2265004036	4-Str Snowblowers (com)	4	Lawn/Garden	1.4	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.4	0.0339	0.00	0.00	0.01
2265004040	4-Str Rear Engine Riding Mowers (res)	4	Lawn/Garden	0.1	0.1	0.4	0.4	0.4	0.9	0.8	0.8	0.4	0.4	0.4	0.1	0.4	0.0339	0.01	0.01	0.01
2265004041	4-Str Rear Engine Riding Mowers (com)	4	Lawn/Garden	0.0	0.0	0.1	0.1	0.1	0.3	0.3	0.3	0.1	0.1	0.1	0.0	0.2	0.0339	0.00	0.00	0.01
2265004046	4-Str Front Mowers (com)	4	Lawn/Garden	0.0	0.0	0.1	0.2	0.1	0.3	0.3	0.3	0.2	0.1	0.2	0.0	0.2	0.0339	0.01	0.01	0.01
2265004051	4-Str Shredders < 6 HP (com)	4	Lawn/Garden	0.0	0.1	0.2	0.2	0.2	0.4	0.4	0.4	0.2	0.2	0.2	0.0	0.2	0.0339	0.01	0.01	0.01
2265004055	4-Str Lawn & Garden Tractors (res)	4	Lawn/Garden	1.4	1.5	5.0	5.1	5.0	11.8	11.4	11.4	5.1	5.0	5.1	1.4	5.8	0.0339	0.17	0.17	0.20
2265004056	4-Str Lawn & Garden Tractors (com)	4	Lawn/Garden	0.5	0.6	1.8	1.9	1.8	4.4	4.2	4.2	1.9	1.8	1.9	0.5	2.1	0.0339	0.06	0.06	0.07
2265004066	4-Str Chippers/Stump Grinders (com)	4	Lawn/Garden	0.1	0.1	0.3	0.3	0.3	0.7	0.7	0.7	0.3	0.3	0.3	0.1	0.4	0.0339	0.01	0.01	0.01
2265004071	4-Str Commercial Turf Equipment (com)	4	Lawn/Garden	2.0	2.2	7.4	7.6	7.4	17.5	16.9	16.9	7.6	7.4	7.6	2.0	8.6	0.0339	0.25	0.25	0.29
2265004075	4-Str Other Lawn & Garden Eqp. (res)	4	Lawn/Garden	0.1	0.1	0.3	0.3	0.3	0.7	0.7	0.7	0.3	0.3	0.3	0.1	0.4	0.0339	0.01	0.01	0.01
2265004076	4-Str Other Lawn & Garden Eqp. (com)	4	Lawn/Garden	0.1	0.1	0.3	0.3	0.3	0.7	0.7	0.7	0.3	0.3	0.3	0.1	0.4	0.0339	0.01	0.01	0.01
2267004066	LPG - Chippers/Stump Grinders (com)	4	Lawn/Garden	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.1	0.0339	0.00	0.00	0.00
2270004031	Dsl - Leafblowers/Vacuums (com)	4	Lawn/Garden	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2270004036	Dsl - Snowblowers (com)	4	Lawn/Garden	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.0339	0.00	0.00	0.00
2270004046	Dsl - Commercial Mowers (com)	4	Lawn/Garden	1.0	1.1	3.7	3.8	3.7	8.7	8.4	8.4	3.8	3.7	3.8	1.0	4.3	0.0339	0.13	0.13	0.15
2270004056	Dsl - Lawn & Garden Tractors (com)	4	Lawn/Garden	0.2	0.2	0.6	0.7	0.6	1.5	1.5	1.5	0.7	0.6	0.7	0.2	0.7	0.0339	0.02	0.02	0.03
2270004066	Dsl - Chippers/Stump Grinders (com)	4	Lawn/Garden	1.4	1.5	5.0	5.2	5.0	11.8	11.4	11.4	5.2	5.0	5.2	1.4	5.8	0.0339	0.17	0.17	0.20
2270004071	Dsl - Commercial Turf Equipment (com)	4	Lawn/Garden	0.1	0.1	0.3	0.3	0.3	0.8	0.7	0.7	0.3	0.3	0.3	0.1	0.4	0.0339	0.01	0.01	0.01
2270004076	Dsl - Other Lawn & Garden Eqp. (com)	4	Lawn/Garden	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2260005035	2-Str Sprayers	5	Agriculture	0.1	0.1	0.3	0.3	0.3	0.7	0.7	0.7	0.3	0.3	0.3	0.1	0.3	0	0.00	0.00	0.00
2265005010	4-Str 2-Wheel Tractors	5	Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00
2265005015	4-Str Agricultural Tractors	5	Agriculture	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00
2265005025	4-Str Balers	5	Agriculture	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00
2265005030	4-Str Agricultural Mowers	5	Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00
2265005035	4-Str Sprayers	5	Agriculture	0.0	0.0	0.1	0.1	0.1	0.3	0.3	0.3	0.1	0.1	0.1	0.0	0.1	0	0.00	0.00	0.00
2265005040	4-Str Tillers > 6 HP	5	Agriculture	0.0	0.0	0.2	0.2	0.2	0.4	0.4	0.4	0.2	0.2	0.2	0.0	0.2	0	0.00	0.00	0.00
2265005045	4-Str Swathers	5	Agriculture	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00
2265005055	4-Str Other Agricultural Equipment	5	Agriculture	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0	0.00	0.00	0.00
2265005060	4-Str Irrigation Sets	5	Agriculture	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0	0.00	0.00	0.00
2268005060	CNG - Irrigation Sets	5	Agriculture	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0	0.00	0.00	0.00
2270005015	Dsl - Agricultural Tractors	5	Agriculture	12.4	13.8	45.4	46.9	45.4	107.2	103.8	103.8	46.9	45.4	46.9	12.4	52.7	0	0.00	0.00	0.00
2270005020	Dsl - Combines	5	Agriculture	1.1	1.2	4.0	4.1	4.0	9.5	9.2	9.2	4.1	4.0	4.1	1.1	4.7	0	0.00	0.00	0.00
2270005025	Dsl - Balers	5	Agriculture	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00
2270005035	Dsl - Sprayers	5	Agriculture	0.1	0.1	0.3	0.3	0.3	0.8	0.7	0.7	0.3	0.3	0.3	0.1	0.4	0	0.00	0.00	0.00
2270005045	Dsl - Swathers	5	Agriculture	0.1	0.1	0.5	0.5	0.5	1.1	1.1	1.1	0.5	0.5	0.5	0.1	0.5	0	0.00	0.00	0.00
2270005055	Dsl - Other Agricultural Equipment	5	Agriculture	0.2	0.3	0.9	0.9	0.9	2.1	2.0	2.0	0.9	0.9	0.9	0.2	1.0	0	0.00	0.00	0.00
2270005060	Dsl - Irrigation Sets	5	Agriculture	0.2	0.2	0.6	0.6	0.6	1.4	1.4	1.4	0.6	0.6	0.6	0.2	0.7	0	0.00	0.00	0.00
2260006005	2-Str Generator Sets	6	Commercial	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0339	0.03	0.03	0.03
2260006010	2-Str Pumps	6	Commercial	7.3	8.1	7.3	7.5	7.3	7.5	7.3	7.3	7.5	7.3	7.5	7.3	7.4	0.0339	0.25	0.25	0.25
2260006015	2-Str Air Compressors	6	Commercial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2260006035	2-Str Hydro Power Units	6	Commercial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2265006005	4-Str Generator Sets	6	Commercial	3.5	3.8	3.5	3.6	3.5	3.6	3.5	3.5	3.6	3.5	3.6	3.5	3.5	0.0339	0.12	0.12	0.12
2265006010	4-Str Pumps	6	Commercial	1.3	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0339	0.04	0.04	0.04
2265006015	4-Str Air Compressors	6	Commercial	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0339	0.02	0.02	0.02
2265006025	4-Str Welders	6	Commercial	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0339	0.03	0.03	0.03
2265006030	4-Str Pressure Washers	6	Commercial	2.1	2.4	2.1	2.2	2.1	2.2	2.1	2.1	2.2	2.1	2.2	2.1	2.2	0.0339	0.07	0.07	0.07
2265006035	4-Str Hydro Power Units	6	Commercial	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0339	0.00	0.00	0.00
2267006005	LPG - Generator Sets	6	Commercial	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0339	0.01	0.01	0.01
2267006010	LPG - Pumps	6	Commercial	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0339	0.00	0.00	0.00
2267006015	LPG - Air Compressors	6	Commercial	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0339	0.00	0.00	0.00
2267006025	LPG - Welders	6	Commercial	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0339	0.00	0.00	0.00
2267006030	LPG - Pressure Washers	6	Commercial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2267006035	LPG - Hydro Power Units	6	Commercial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2268006005	CNG - Generator Sets	6	Commercial	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0339	0.00	0.00	0.00
2268006010	CNG - Pumps	6	Commercial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2268006015	CNG - Air Compressors	6	Commercial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0339	0.00	0.00	0.00
2268006020	CNG - Gas Compressors	6	Commercial	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0339	0.01	0.01	0.01
2270006005	Dsl - Generator Sets	6	Commercial	18.6	20.6	18.6	19.2	18.6	19.2	18.6	18.6	19.2	18.6	19.2	18.6	18.9	0.0339	0.64	0.64	0.64
2270006010	Dsl - Pumps	6	Commercial	4.6	5.1	4.6	4.8	4.6	4.8	4.6	4.6	4.8	4.6	4.8	4.6	4.7	0.0339	0.16	0.16	0.16
2270006015	Dsl - Air Compressors	6	Commercial	8.3	9.2	8.3	8.6	8.3	8.6	8.3	8.3	8.6	8.3	8.6	8.3	8.5	0.0339	0.29	0.29	0.29
2270006025	Dsl - Welders	6	Commercial	11.2	12.4	11.2	11.6	11.2	11.6	11.2	11.2	11.6	11.2	11.6	11.2	11.4	0.0339	0.39	0.39	0.39
2270006030	Dsl - Pressure Washers	6	Commercial	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0339	0.02	0.02	0.02
2270006035	Dsl - Hydro Power Units	6	Commercial	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0339	0.01	0.01	0.01
2265008005	4-Str Airport Support Equipment	8	Airport Support	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0	0.00	0.00	0.00
2267008005	LPG - Airport Support Equipment	8	Airport Support	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0	0.00	0.00	0.00
2270008005	Dsl - Airport Support Equipment	8	Airport Support	30.3	33.6	30.3	31.4	30.3	31.4	30.3	30.3	31.4	30.3	31.4	30.3	30.9	0	0.00	0.00	0.00
2265010010	4-Str Other Oil Field Equipment	10	Oil Field	4.8	5.4	4.5	4.6	4.5	7.8	7.5	7.5	4.6	4.5	4.6	4.8	5.4	0	0.00	0.00	0.00
2268010010	CNG - Other Oil Field Equipment	10	Oil Field	2.9	3.3	2.7	2.8	2.7	4.7	4.6	4.6	2.8	2.7	2.8	2.9	3.3	0	0.00	0.00	0.00
2270010010	Dsl - Other Oil Field Equipment	10	Oil Field	39.2	43.4	36.1	37.3	36.1	62.9	60.8	60.8	37.3	36.1	37.3	39.2	43.9	0	0.00	0.00	0.00
2282005010	2-Str Outboard	11	Pleasure Craft	0.0	0.0	0.2	0.2	0.2	1.1	1.1	1.1	0.2	0.2	0.2	0.0	0.4	0	0.00	0.00	0.00
2282005015	2-Str Personal Water Craft	11	Pleasure Craft	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0	0.00	0.00	0.00
2282010005	4-Str Inboard/Sterndrive	11	Pleasure Craft	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00
2282020005	Dsl - Inboard/Sterndrive	11	Pleasure Craft	0.0	0.0	0.1	0.1	0.1	0.3	0.2	0.2	0.1	0.1	0.1	0.0	0.1	0	0.00	0.00	0.00
2282020010	Dsl - Outboard	11	Pleasure Craft	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00
2285002015	Dsl - Railway Maintenance	12	Railroad	1.9	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	0	0.00	0.00	0.00
2285004015	4-Str Railway Maintenance	12	Railroad	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00
2285006015	LPG - Railway Maintenance	12	Railroad	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00
COUNTY TOTALS				**3785.2**	**4191.7**	**915.6**	**947.0**	**917.6**	**1323.1**	**1281.7**	**1282.7**	**935.7**	**906.8**	**937.7**	**3796.2**	**1756.5**		**26.94**	**26.39**	**54.23**

MOVES/NONROAD LOOKUP TABLES

NRFuelType

fuelTypeID	default Formulation ID	fuelTypeDesc	humidity Correction Coeff	humidity Correction Coeff CV	fuel Density	subject To Evap Calculations
1	10	Gasoline	0.0038	0.5	2819	Y
3	30	Compressed Natural Gas (CNG)	0	0.5	500	N
4	40	Liquefied Petroleum Gas (LPG)	0	0.5	1923	N
23	23	Nonroad Diesel Fuel	0.0026	0.5	3167	N
24	24	Marine Diesel Fuel	0.0026	0.5	3167	N

NRFuelSubType

fuelSubtype ID	fuelType ID	fuelSubtypeDesc	fuelSubtype Petroleum Fraction	fuelSubtype Petroleum Fraction CV	fuelSubtype Fossil Fraction	fuelSubtype Fossil Fraction CV	carbon Content	oxidation Fraction	carbon Content CV	oxidation Fraction CV	energy Content
10	1	Conventional Gasoline	0.95	NULL	1	NULL	0.0196	1	NULL	NULL	43.488
11	1	Reformulated Gasoline (RFG)	0.95	NULL	1	NULL	0.0196	1	NULL	NULL	42.358
12	1	Gasohol (E10)	0.94	NULL	0.94	NULL	0.0196	1	NULL	NULL	41.762
13	1	Gasohol (E8)	0.945	NULL	1	NULL	0.0196	1	NULL	NULL	42.1
14	1	Gasohol (E5)	0.945	NULL	1	NULL	0.0196	1	NULL	NULL	42.605
15	1	Gasohol (E15)	0.94	NULL	0.94	NULL	0.0196	1	NULL	NULL	40.92
18	5	Ethanol (E20)	0.9	NULL	0.9	NULL	0.0194	1	NULL	NULL	40.077
20	2	Conventional Diesel Fuel	1	NULL	1	NULL	0.02	1	NULL	NULL	42.791
21	2	Biodiesel (BD20)	0.81	NULL	0.81	NULL	0.0199	1	NULL	NULL	41.738
22	2	Fischer-Tropsch Diesel (FTD100)	0	NULL	1	NULL	0.0205	1	NULL	NULL	43.247
23	23	Nonroad Diesel Fuel	1	NULL	1	NULL	0.02	1	NULL	NULL	43.306
24	24	Marine Diesel Fuel	1	NULL	1	NULL	0.02	1	NULL	NULL	43.306
30	3	Compressed Natural Gas (CNG)	0	NULL	1	NULL	0.0161	1	NULL	NULL	48.632
40	4	Liquefied Petroleum Gas (LPG)	0	NULL	1	NULL	0.0161	1	NULL	NULL	46.607
50	5	Ethanol	0.26	NULL	0.26	NULL	0.0194	1	NULL	NULL	26.592
51	5	Ethanol (E85)	0.26	NULL	0.26	NULL	0.0194	1	NULL	NULL	29.12
52	5	Ethanol (E70)	0.46	NULL	0.46	NULL	0.0194	1	NULL	NULL	31.649
90	9	Electricity	0.02	NULL	0.87	NULL	0	0	NULL	NULL	NULL

Sector

sectorID	description
0	Highway mobile
1	Recreational
2	Construction
3	Industrial
4	Lawn/Garden
5	Agriculture
6	Commercial
7	Logging
8	Airport Support
9	Underground Mining
10	Oil Field
11	Pleasure Craft
12	Railroad

NRSCC

SCC	NREquip Type ID	description	fuelType ID
2260001010	2	2-Str Offroad Motorcycles	1
2260001020	1	2-Str Snowmobiles	1
2260001030	3	2-Str All Terrain Vehicles	1
2260001060	5	2-Str Specialty Vehicle Carts	1
2260002006	7	2-Str Tampers/Rammers	1
2260002009	8	2-Str Plate Compactors	1
2260002021	10	2-Str Paving Equipment	1
2260002027	12	2-Str Signal Boards/Light Plants	1
2260002039	15	2-Str Concrete/Industrial Saws	1
2260002054	18	2-Str Crushing/Proc. Equipment	1
2260003030	27	2-Str Sweepers/Scrubbers	1
2260003040	28	2-Str Other General Industrial Eqp	1
2260004015	34	2-Str Rotary Tillers < 6 HP (res)	1
2260004016	35	2-Str Rotary Tillers < 6 HP (com)	1
2260004020	36	2-Str Chain Saws < 6 HP (res)	1
2260004021	37	2-Str Chain Saws < 6 HP (com)	1
2260004025	38	2-Str Trimmers/Edgers/Brush Cutter (res)	1
2260004026	39	2-Str Trimmers/Edgers/Brush Cutter (com)	1
2260004030	40	2-Str Leafblowers/Vacuums (res)	1
2260004031	41	2-Str Leafblowers/Vacuums (com)	1
2260004035	42	2-Str Snowblowers (res)	1
2260004036	43	2-Str Snowblowers (com)	1
2260004071	51	2-Str Commercial Turf Equipment (com)	1
2260005035	59	2-Str Sprayers	1
2260006005	64	2-Str Generator Sets	1

2260006010	65	2-Str Pumps	1
2260006015	66	2-Str Air Compressors	1
2260006035	70	2-Str Hydro Power Units	1
2260007005	71	2-Str Chain Saws > 6 HP	1
2265001010	2	4-Str Offroad Motorcycles	1
2265001030	3	4-Str All Terrain Vehicles	1
2265001050	4	4-Str Golf Carts	1
2265001060	5	4-Str Specialty Vehicle Carts	1
2265002003	6	4-Str Pavers	1
2265002006	7	4-Str Tampers/Rammers	1
2265002009	8	4-Str Plate Compactors	1
2265002015	9	4-Str Rollers	1
2265002021	10	4-Str Paving Equipment	1
2265002024	11	4-Str Surfacing Equipment	1
2265002027	12	4-Str Signal Boards/Light Plants	1
2265002030	13	4-Str Trenchers	1
2265002033	14	4-Str Bore/Drill Rigs	1
2265002039	15	4-Str Concrete/Industrial Saws	1
2265002042	16	4-Str Cement & Mortar Mixers	1
2265002045	17	4-Str Cranes	1
2265002054	18	4-Str Crushing/Proc. Equipment	1
2265002057	19	4-Str Rough Terrain Forklift	1
2265002060	20	4-Str Rubber Tire Loaders	1
2265002066	21	4-Str Tractors/Loaders/Backhoes	1
2265002072	22	4-Str Skid Steer Loaders	1
2265002078	23	4-Str Dumpers/Tenders	1
2265002081	24	4-Str Other Construction Equipment	1
2265003010	25	4-Str Aerial Lifts	1
2265003020	26	4-Str Forklifts	1
2265003030	27	4-Str Sweepers/Scrubbers	1
2265003040	28	4-Str Other General Industrial Eqp	1
2265003050	29	4-Str Other Material Handling Eqp	1
2265003060	30	4-Str ACRefrigeration	1
2265003070	31	4-Str Terminal Tractors	1
2265004010	32	4-Str Lawn mowers (res)	1
2265004011	33	4-Str Lawn mowers (Com)	1
2265004015	34	4-Str Rotary Tillers < 6 HP (res)	1
2265004016	35	4-Str Rotary Tillers < 6 HP (com)	1
2265004025	38	4-Str Trimmers/Edgers/Brush Cutter (res)	1
2265004026	39	4-Str Trimmers/Edgers/Brush Cutter (com)	1
2265004030	40	4-Str Leafblowers/Vacuums (res)	1
2265004031	41	4-Str Leafblowers/Vacuums (com)	1
2265004035	42	4-Str Snowblowers (res)	1
2265004036	43	4-Str Snowblowers (com)	1
2265004040	44	4-Str Rear Engine Riding Mowers (res)	1
2265004041	45	4-Str Rear Engine Riding Mowers (com)	1
2265004046	46	4-Str Front Mowers (com)	1
2265004051	47	4-Str Shredders < 6 HP (com)	1
2265004055	48	4-Str Lawn & Garden Tractors (res)	1
2265004056	49	4-Str Lawn & Garden Tractors (com)	1
2265004066	50	4-Str Chippers/Stump Grinders (com)	1
2265004071	51	4-Str Commercial Turf Equipment (com)	1
2265004075	52	4-Str Other Lawn & Garden Eqp. (res)	1
2265004076	53	4-Str Other Lawn & Garden Eqp. (com)	1
2265005010	54	4-Str 2-Wheel Tractors	1
2265005015	55	4-Str Agricultural Tractors	1
2265005020	56	4-Str Combines	1
2265005025	57	4-Str Balers	1
2265005030	58	4-Str Agricultural Mowers	1
2265005035	59	4-Str Sprayers	1
2265005040	60	4-Str Tillers > 6 HP	1
2265005045	61	4-Str Swathers	1
2265005055	62	4-Str Other Agricultural Equipment	1
2265005060	63	4-Str Irrigation Sets	1
2265006005	64	4-Str Generator Sets	1
2265006010	65	4-Str Pumps	1
2265006015	66	4-Str Air Compressors	1
2265006025	68	4-Str Welders	1
2265006030	69	4-Str Pressure Washers	1
2265006035	70	4-Str Hydro Power Units	1
2265007010	72	4-Str Shredders > 6 HP	1
2265007015	73	4-Str Forest Eqp - Feller/Bunch/Skidder	1
2265008005	74	4-Str Airport Support Equipment	1
2265010010	75	4-Str Other Oil Field Equipment	1
2267001060	5	LPG - Specialty Vehicle Carts	4
2267002003	6	LPG - Pavers	4
2267002015	9	LPG - Rollers	4
2267002021	10	LPG - Paving Equipment	4
2267002024	11	LPG - Surfacing Equipment	4
2267002030	13	LPG - Trenchers	4

2267002033	14	LPG - Bore/Drill Rigs	4
2267002039	15	LPG - Concrete/Industrial Saws	4
2267002045	17	LPG - Cranes	4
2267002054	18	LPG - Crushing/Proc. Equipment	4
2267002057	19	LPG - Rough Terrain Forklift	4
2267002060	20	LPG - Rubber Tire Loaders	4
2267002066	21	LPG - Tractors/Loaders/Backhoes	4
2267002072	22	LPG - Skid Steer Loaders	4
2267002081	24	LPG - Other Construction Equipment	4
2267003010	25	LPG - Aerial Lifts	4
2267003020	26	LPG - Forklifts	4
2267003030	27	LPG - Sweepers/Scrubbers	4
2267003040	28	LPG - Other General Industrial Eqp	4
2267003050	29	LPG - Other Material Handling Eqp	4
2267003070	31	LPG - Terminal Tractors	4
2267004066	50	LPG - Chippers/Stump Grinders (com)	4
2267005055	62	LPG - Other Agricultural Equipment	4
2267005060	63	LPG - Irrigation Sets	4
2267006005	64	LPG - Generator Sets	4
2267006010	65	LPG - Pumps	4
2267006015	66	LPG - Air Compressors	4
2267006025	68	LPG - Welders	4
2267006030	69	LPG - Pressure Washers	4
2267006035	70	LPG - Hydro Power Units	4
2267008005	74	LPG - Airport Support Equipment	4
2268002081	24	CNG - Other Construction Equipment	3
2268003020	26	CNG - Forklifts	3
2268003030	27	CNG - Sweepers/Scrubbers	3
2268003040	28	CNG - Other General Industrial Eqp	3
2268003060	30	CNG - ACRefrigeration	3
2268003070	31	CNG - Terminal Tractors	3
2268005055	62	CNG - Other Agricultural Equipment	3
2268005060	63	CNG - Irrigation Sets	3
2268006005	64	CNG - Generator Sets	3
2268006010	65	CNG - Pumps	3
2268006015	66	CNG - Air Compressors	3
2268006020	67	CNG - Gas Compressors	3
2268006035	70	CNG - Hydro Power Units	3
2268010010	75	CNG - Other Oil Field Equipment	3
2270001060	5	Dsl - Specialty Vehicle Carts	23
2270002003	6	Dsl - Pavers	23
2270002006	7	Dsl - Tampers/Rammers	23
2270002009	8	Dsl - Plate Compactors	23
2270002015	9	Dsl - Rollers	23
2270002018	76	Dsl - Scrapers	23
2270002021	10	Dsl - Paving Equipment	23
2270002024	11	Dsl - Surfacing Equipment	23
2270002027	12	Dsl - Signal Boards/Light Plants	23
2270002030	13	Dsl - Trenchers	23
2270002033	14	Dsl - Bore/Drill Rigs	23
2270002036	77	Dsl - Excavators	23
2270002039	15	Dsl - Concrete/Industrial Saws	23
2270002042	16	Dsl - Cement & Mortar Mixers	23
2270002045	17	Dsl - Cranes	23
2270002048	78	Dsl - Graders	23
2270002051	79	Dsl - Off-highway Trucks	23
2270002054	18	Dsl - Crushing/Proc. Equipment	23
2270002057	80	Dsl - Rough Terrain Forklifts	23
2270002060	20	Dsl - Rubber Tire Loaders	23
2270002066	21	Dsl - Tractors/Loaders/Backhoes	23
2270002069	81	Dsl - Crawler Tractor/Dozers	23
2270002072	22	Dsl - Skid Steer Loaders	23
2270002075	82	Dsl - Off-Highway Tractors	23
2270002078	23	Dsl - Dumpers/Tenders	23
2270002081	24	Dsl - Other Construction Equipment	23
2270003010	25	Dsl - Aerial Lifts	23
2270003020	26	Dsl - Forklifts	23
2270003030	27	Dsl - Sweepers/Scrubbers	23
2270003040	28	Dsl - Other General Industrial Eqp	23
2270003050	29	Dsl - Other Material Handling Eqp	23
2270003060	30	Dsl - ACRefrigeration	23
2270003070	31	Dsl - Terminal Tractors	23
2270004031	41	Dsl - Leafblowers/Vacuums (com)	23
2270004036	43	Dsl - Snowblowers (com)	23
2270004046	83	Dsl - Commercial Mowers (com)	23
2270004056	49	Dsl - Lawn & Garden Tractors (com)	23
2270004066	50	Dsl - Chippers/Stump Grinders (com)	23
2270004071	51	Dsl - Commercial Turf Equipment (com)	23
2270004076	53	Dsl - Other Lawn & Garden Eqp. (com)	23
2270005010	54	Dsl - 2-Wheel Tractors	23

2270005015	55	Dsl - Agricultural Tractors	23
2270005020	56	Dsl - Combines	23
2270005025	57	Dsl - Balers	23
2270005030	58	Dsl - Agricultural Mowers	23
2270005035	59	Dsl - Sprayers	23
2270005040	60	Dsl - Tillers > 6 HP	23
2270005045	61	Dsl - Swathers	23
2270005055	62	Dsl - Other Agricultural Equipment	23
2270005060	63	Dsl - Irrigation Sets	23
2270006005	64	Dsl - Generator Sets	23
2270006010	65	Dsl - Pumps	23
2270006015	66	Dsl - Air Compressors	23
2270006020	67	Dsl - Gas Compressors	23
2270006025	68	Dsl - Welders	23
2270006030	69	Dsl - Pressure Washers	23
2270006035	70	Dsl - Hydro Power Units	23
2270007010	72	Dsl - Shredders > 6 HP	23
2270007015	73	Dsl - Forest Eqp - Feller/Bunch/Skidder	23
2270008005	74	Dsl - Airport Support Equipment	23
2270009010	84	Dsl - Other Underground Mining Equip	23
2270010010	75	Dsl - Other Oil Field Equipment	23
2282005010	85	2-Str Outboard	1
2282005015	86	2-Str Personal Water Craft	1
2282010005	87	4-Str Inboard/Sterndrive	1
2282020005	87	Dsl - Inboard/Sterndrive	24
2282020010	85	Dsl - Outboard	24
2285002015	88	Dsl - Railway Maintenance	23
2285004015	88	4-Str Railway Maintenance	1
2285006015	88	LPG - Railway Maintenance	4

Calculation of Census Population-Based Factors for Scaling County-Level to LMP Maintenance Area Emissions
(using GIS analysis of census block-level data from 2010 U.S. Census)

	Anchorage County	Eagle River Maint Area	Scaling Factor
Census Blocks:	4,337	137	-
Population:	291,826	9,885	**0.0339**