

**Vehicle Fuels**

<b>Construction Phase (gallons/construction period)</b>	<b>Gasoline</b>	<b>Diesel</b>
Construction Vehicles		174,173
Worker Trips	477	1
Vendor Trips	220	4
Haul Trucks	125	9,890
Total	821	184,068

<b>Operations Phase (gallons/year)</b>	<b>Gasoline</b>	<b>Diesel</b>	<b>Natural Gas (kBTU/yr)</b>	<b>Electricity (kWh/yr)</b>
City Park	0	0	9,701,050	5,305,650
Junior College (2Yr)	386,099	76,111	936,900	1,799,316

All Land Uses	386,099	76,111	10,637,950	7,104,966
---------------	---------	--------	------------	-----------

Offroad VehicleFuel Use

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Horsepower Category	Load Factor	Num Days	Year	Fuel Consumption Rate (gal/hour)	Total Fuel Consumption (gal/construction period)
Stu Center Demolition	Concrete/Industrial Saws	1	8.00	81	100	0.73	210	2019	4.7	5,781
Stu Center Demolition	Excavators	3	8.00	158	175	0.38	210	2019	2.9	5,525
Stu Center Demolition	Rubber Tired Dozers	2	8.00	247	300	0.40	210	2019	4.5	5,992
Park R and Tennis Fine Grading	Excavators	2	8.00	158	175	0.38	27	2019	2.9	474
Park R and Tennis Fine Grading	Graders	1	8.00	187	175	0.41	27	2019	3.1	279
Park R and Tennis Fine Grading	Rubber Tired Dozers	1	8.00	247	300	0.40	27	2019	4.5	385
Park R and Tennis Fine Grading	Scrapers	2	8.00	367	300	0.48	27	2019	5.6	1,155
Park R and Tennis Fine Grading	Tractors/Loaders/Backhoes	2	8.00	97	100	0.37	27	2019	1.6	254
Park R and Tennis Building Cont	Cranes	1	7.00	231	300	0.29	269	2019	3.3	1,802
Park R and Tennis Building Cont	Forklifts	3	8.00	89	100	0.20	269	2019	2.0	2,582
Park R and Tennis Building Cont	Generator Sets	1	8.00	84	100	0.74	269	2019	5.2	8,311
Park R and Tennis Building Cont	Tractors/Loaders/Backhoes	3	8.00	97	100	0.37	269	2019	1.6	3,796
Park R and Tennis Building Cont	Welders	1	8.00	46	50	0.45	269	2019	2.4	2,337
Demolition	Concrete/Industrial Saws	1	8.00	81	100	0.73	158	2019	4.7	4,350
Demolition	Excavators	3	8.00	158	175	0.38	158	2019	2.9	4,157
Demolition	Rubber Tired Dozers	2	8.00	247	300	0.40	158	2019	4.5	4,508
Park S Demolition	Concrete/Industrial Saws	1	8.00	81	100	0.73	39	2019	4.7	1,074
Park S Demolition	Excavators	3	8.00	158	175	0.38	39	2019	2.9	1,026
Park S Demolition	Rubber Tired Dozers	2	8.00	247	300	0.40	39	2019	4.5	1,113
Park S Grading	Excavators	2	8.00	158	175	0.38	38	2019	2.9	667
Park S Grading	Graders	1	8.00	187	175	0.41	38	2019	3.1	392
Park S Grading	Rubber Tired Dozers	1	8.00	247	300	0.40	38	2019	4.5	542
Park S Grading	Scrapers	2	8.00	367	300	0.48	38	2019	5.6	1,626
Park S Grading	Tractors/Loaders/Backhoes	2	8.00	97	100	0.37	38	2019	1.6	357
Park S Building Construction	Cranes	1	7.00	231	300	0.29	260	2019	3.3	1,742
Park S Building Construction	Forklifts	3	8.00	89	100	0.20	260	2019	2.0	2,496
Park S Building Construction	Generator Sets	1	8.00	84	100	0.74	260	2019	5.2	8,033
Park S Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	100	0.37	260	2019	1.6	3,210
Park S Building Construction	Welders	1	8.00	46	50	0.45	260	2019	2.4	2,259
Stu Center Site Preparation	Rubber Tired Dozers	1	8.00	247	300	0.40	627	2020	4.5	8,958
Stu Center Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	100	0.37	627	2020	1.6	2,948
Stu Center Grading	Excavators	2	8.00	158	175	0.38	79	2020	2.9	1,386
Stu Center Grading	Graders	1	8.00	187	175	0.41	79	2020	3.1	815
Stu Center Grading	Rubber Tired Dozers	1	8.00	247	300	0.40	79	2020	4.5	1,129
Stu Center Grading	Scrapers	2	8.00	367	300	0.48	79	2020	5.6	3,383
Stu Center Grading	Tractors/Loaders/Backhoes	2	8.00	97	100	0.37	79	2020	1.6	743
Park R and Tennis Paving	Pavers	2	8.00	130	100	0.42	22	2020	1.7	256
Park R and Tennis Paving	Paving Equipment	2	8.00	132	100	0.36	22	2020	1.6	207
Park R and Tennis Paving	Rollers	2	8.00	80	100	0.38	22	2020	1.7	227
Park R and Tennis Architectural	Air Compressors	1	6.00	78	100	0.48	21	2020	1.3	80
Stu Center Building Construction	Cranes	1	7.00	231	300	0.29	523	2020	3.3	3,516
Stu Center Building Construction	Forklifts	3	8.00	89	100	0.20	523	2020	2.0	5,023
Stu Center Building Construction	Generator Sets	1	8.00	84	100	0.74	523	2020	5.2	16,129
Stu Center Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	100	0.37	523	2020	1.6	6,455
Stu Center Building Construction	Welders	1	8.00	46	50	0.45	523	2020	2.4	4,542
Park S Architectural Coating	Air Compressors	1	6.00	78	100	0.48	21	2020	1.3	80
Vball Demolition	Concrete/Industrial Saws	1	8.00	81	100	0.73	48	2020	4.7	1,321
Vball Demolition	Excavators	1	8.00	158	175	0.38	48	2020	2.9	421
Vball Demolition	Rubber Tired Dozers	1	8.00	247	300	0.40	48	2020	4.5	686
Vball Grading	Excavators	1	8.00	158	175	0.38	48	2021	2.9	421
Vball Grading	Graders	1	8.00	187	175	0.41	48	2021	3.1	496
Vball Grading	Rubber Tired Dozers	1	8.00	247	300	0.40	48	2021	4.5	686
Vball Grading	Scrapers	1	8.00	367	300	0.48	48	2021	5.6	1,024
Vball Grading	Tractors/Loaders/Backhoes	1	8.00	97	100	0.37	48	2021	1.6	226
Vball Site Preparation	Rubber Tired Dozers	1	8.00	247	300	0.40	48	2020	4.5	686
Vball Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	100	0.37	48	2020	1.6	226
Bookstore Site Preparation	Rubber Tired Dozers	1	8.00	247	300	0.40	78	2021	4.5	1,115
Bookstore Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	100	0.37	78	2021	1.6	367
Bookstore Grading	Excavators	2	8.00	158	175	0.38	78	2021	2.9	1,369
Bookstore Grading	Graders	1	8.00	187	175	0.41	78	2021	3.1	805
Bookstore Grading	Rubber Tired Dozers	1	8.00	247	300	0.40	78	2021	4.5	1,115
Bookstore Grading	Scrapers	0	8.00	367	300	0.48	78	2021	5.6	0
Bookstore Grading	Tractors/Loaders/Backhoes	2	8.00	97	100	0.37	78	2021	1.6	734
Stu Center Paving	Pavers	2	8.00	130	100	0.42	45	2021	1.7	524
Stu Center Paving	Paving Equipment	2	8.00	132	100	0.36	45	2021	1.6	426
Stu Center Paving	Rollers	2	8.00	80	100	0.38	45	2021	1.7	463
Bookstore Building Construction	Cranes	1	7.00	231	300	0.29	312	2021	3.3	2,083
Bookstore Building Construction	Forklifts	3	8.00	89	100	0.20	312	2021	2.0	2,999
Bookstore Building Construction	Generator Sets	1	8.00	84	100	0.74	312	2021	5.2	9,610
Bookstore Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	100	0.37	312	2021	1.6	3,852
Bookstore Building Construction	Welders	1	8.00	46	50	0.45	312	2021	2.4	2,706
Bookstore Paving	Pavers	1	8.00	130	100	0.42	338	2021	1.7	1,970
Bookstore Paving	Paving Equipment	1	8.00	132	100	0.36	338	2021	1.6	1,600
Bookstore Paving	Rollers	2	8.00	80	100	0.38	338	2021	1.7	3,480
Stu Center Architectural Coating	Air Compressors	1	6.00	78	100	0.48	80	2021	1.3	305
Communication Tower Paving	Pavers	0	8.00	130	100	0.42	36	2022	1.7	0
Communication Tower Paving	Paving Equipment	1	8.00	132	100	0.36	36	2022	1.6	170
Communication Tower Paving	Rollers	1	8.00	80	100	0.38	36	2022	1.7	185

**Immediate Improvements**

Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length
Stu Center Demolition	15	0	344	15	7	20
Park R and Tennis Fine Grad	20	0	0	15	7	20
Park R and Tennis Building C Demolition	100	156	0	15	7	20
Park S Demolition	15	0	74	15	7	20
Park S Grading	15	0	208	15	7	20
Park S Building Construction	20	0	0	15	7	20
Stu Center Site Preparation	100	156	0	15	7	20
Stu Center Grading	5	0	0	15	7	20
Park R and Tennis Paving	20	0	2500	15	7	20
Park R and Tennis Architectu	15	0	0	15	7	20
Stu Center Building Construct	80	0	0	15	7	20
Park S Architectural Coating	80	0	0	15	7	20
Vball Demolition	8	0	17	15	7	20
Vball Site Preparation	13	0	0	15	7	20
Vball Site Preparation	5	0	0	15	7	20
Bookstore Site Preparation	5	0	0	15	7	20
Bookstore Grading	15	0	0	15	7	20
Stu Center Paving	15	0	0	15	7	20
Bookstore Building Construct	100	156	0	15	7	20
Bookstore Paving	10	0	0	15	7	20
Stu Center Architectural Coat	80	0	0	15	7	20
Communication Tower Paving	5	0	0	15	7	20
Vball Grading	13	0	0	15	7	20

**Total Trips and VMT**

Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length
All Trips	854	624	3,143	15	7	20

**Fuel Consumption (Gasoline)**

**Fuel Consumption (Diesel)**

Phase Name	Fuel Consumption (Gasoline)			Fuel Consumption (Diesel)		
	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
All Trips	477	220	125	1	4	9,890
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
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
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
0	0	0	0	0	0	0
<b>Total</b>	<b>477</b>	<b>220</b>	<b>125</b>	<b>1</b>	<b>4</b>	<b>9,890</b>

**Gallons of Gasoline and Diesel**

Year 2027

Vehicle Types	MPG by Fuel Type			Population by Fuel Type			
	GAS	DSL	ELEC	GAS	DSL	ELEC	Total
LDA	33.8	44.8		6,523,088	79,143	608,818	6,602,231
LDT1	28.8	33.6		550,688	423	308	551,111
LDT2	26.3	34.4		2,508,832	5,295		2,514,126
LHDT1	11.2	21.4		84,043	103,467		187,510
LHDT2	10.5	19.7		22,369	47,001		69,370
MCY	34.8			339,736			339,736
MDV	19.2	26.5		1,474,976	34,329		1,509,306
MH	7.5	10.4		33,033	9,165		42,198
MHDT	7.2	8.9		19,832	164,672		184,504
HHDT	4.9	6.3		963	97,431		98,394
OBUS	7.3	7.5		9,716	6,644		16,360
SBUS	11.5	7.3		3,000	5,216		8,217
UBUS	5.2	5.1		2,664	3,682		6,346

Trips/Day	Trips/day	Trips/day	Trips/day
Land Use	Weekday	Saturday	Sunday
City Park	0	0	0
Junior College (2Yr)	5,611	2,291	245
Unenclosed Parking with Elevator	0	0	0
<b>Total</b>	<b>5,611</b>	<b>2,291</b>	<b>245</b>

Fleet Mix	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHDT	OBUS	UBUS	MCY	SBUS	MH	Total
City Park	0.543646	0.044284	0.209381	0.116714	0.014227	0.006316	0.02104	0.033117	0.002601	0.001862	0.005277	0.000709	0.000827	100.0%
Junior College (2Yr)	0.904015	0.012054	0.012054	0.001205	0.012054	0.007613	0.025361	0.012054	0.003135	0.002244	0.006361	0.000855	0.000997	100.0%
Unenclosed Parking with Elevator	0.543646	0.044284	0.209381	0.116714	0.014227	0.006316	0.02104	0.033117	0.002601	0.001862	0.005277	0.000709	0.000827	100.0%
														0.0%
														0.0%

Vehicle Trips	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHDT	Obus	Ubus	MCY	Sbus	MH	Total
Weekday Trips														
City Park	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Junior College (2Yr)	5072	68	68	7	68	43	142	68	18	13	36	5	6	5,611
Unenclosed Parking with Elevator	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
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>5072</b>	<b>68</b>	<b>68</b>	<b>7</b>	<b>68</b>	<b>43</b>	<b>142</b>	<b>68</b>	<b>18</b>	<b>13</b>	<b>36</b>	<b>5</b>	<b>6</b>	<b>5,611</b>

Saturday Trips	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHDT	Obus	Ubus	MCY	Sbus	MH	Total
City Park	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Junior College (2Yr)	2071	28	28	3	28	17	58	28	7	5	15	2	2	2,291
Unenclosed Parking with Elevator	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
<b>Total</b>	<b>2071</b>	<b>28</b>	<b>28</b>	<b>3</b>	<b>28</b>	<b>17</b>	<b>58</b>	<b>28</b>	<b>7</b>	<b>5</b>	<b>15</b>	<b>2</b>	<b>2</b>	<b>2,291</b>

Sunday Trips	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHDT	Obus	Ubus	MCY	Sbus	MH	Total
City Park	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Junior College (2Yr)	221	3	3	0	3	2	6	3	1	1	2	0	0	245
Unenclosed Parking with Elevator	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
<b>Total</b>	<b>221</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>245</b>

Gallons of Fuel	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHDT	Obus	Ubus	MCY	Sbus	MH	Total
Gasoline														
City Park	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Junior College (2Yr)	349,040	5,512	6,043	811	6,357	3,079	5,025	315	3,365	2,411	2,413	357	1,370	386,099
Unenclosed Parking with Elevator	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
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>349,040</b>	<b>5,512</b>	<b>6,043</b>	<b>811</b>	<b>6,357</b>	<b>3,079</b>	<b>5,025</b>	<b>315</b>	<b>3,365</b>	<b>2,411</b>	<b>2,413</b>	<b>357</b>	<b>1,370</b>	<b>386,099</b>

Diesel	LDA	LDT1	LDT2	MDV	OBUS	LHDT2	MHDT	HHDT	Obus	Ubus	MCY	Sbus	MH	Total
City Park	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Junior College (2Yr)	3,194	4	10	14	4,101	3,462	33,452	25,032	2,233	3,361	0	975	275	76,111
Unenclosed Parking with Elevator	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
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>3,194</b>	<b>4</b>	<b>10</b>	<b>14</b>	<b>4,101</b>	<b>3,462</b>	<b>33,452</b>	<b>25,032</b>	<b>2,233</b>	<b>3,361</b>	<b>0</b>	<b>975</b>	<b>275</b>	<b>76,111</b>

462,210