

FORTAG Construction Energy Use Calculations

Construction Activity	Source	CalEEMod CO2e	Fuel Type	Factor (kg CO2/gallon)	Gallons
Site Preparation	Offroad Equipment	134.8	Diesel	10.21	13,203
	Hauling	0	Diesel	10.21	-
	Vendor	0	Diesel	10.21	-
	Worker	8.4	Motor Gasoline	8.78	957
Grading	Offroad Equipment	227	Diesel	10.21	22,233
	Hauling	59.7	Diesel	10.21	5,847
	Vendor	0	Diesel	10.21	-
	Worker	10.7	Motor Gasoline	8.78	1,219
Wall and Bridge Construction	Offroad Equipment	150.1	Diesel	10.21	14,701
	Vendor	27.9	Diesel	10.21	2,733
	Worker	12.6	Motor Gasoline	8.78	1,435
Paving	Offroad Equipment	102.5	Diesel	10.21	10,039
	Vendor	0	Diesel	10.21	-
	Worker	10.5	Motor Gasoline	8.78	1,196
Coating	Offroad Equipment	2.6	Diesel	10.21	255
	Worker	0.6	Motor Gasoline	8.78	68
<b>Total</b>					<b>73,885</b>

Source for conversion factor: U.S. Environmental Protection Agency. "Emissions Factors for Greenhouse Gas Inventories". Last Modified March 9, 2018.

1 MT = 1,000 kg

**Total Diesel Use By Phase**

Phase	CO2e Emissions	Gallons	Gallons Per Mile	Total For Trail
Site Preparation	135	13,203	1,656.55	46,383.54
Grading	287	28,080	3,523.25	98,651.04
Wall and Bridge Construction	178	17,434	2,187.44	61,248.29
Paving	103	10,039	1,259.62	35,269.38
Coating	3	255	31.95	894.64
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<b>Total All Phases</b>	<b>705</b>	<b>69,011</b>	<b>8,658.82</b>	<b>242,446.88</b>

**Total Vehicle Fuel Use By Phase**

Phase	CO2e Emissions	Gallons	Gallons Per Mile	Total For Trail
Site Preparation	8	957	120.04	3,361.12
Grading	11	1,219	152.91	4,281.43
Wall and Bridge Construction	13	1,435	180.06	5,041.69
Paving	11	1,196	150.05	4,201.40
Coating	1	68	8.57	240.08
<b>Total All Phases</b>	<b>43</b>	<b>4,875</b>	<b>611.63</b>	<b>17,125.72</b>