

# 2012 TIGER Application -- Highway 71, Sebastian County, Greenhouse Gas and Fuel Consumption Worksheet

Existing Route (Route 1)

## Travel Times

Route 1	Distance	Speed	Time (Min)
US 71	4.28	45	8.464
I-540	12.10	65	13.169
I-40	4.77	70	5.089
	<b>21.15</b>		<b>26.72 Total Time</b>

## Emissions

Route 1	ADT	VMT	VOC	NO <sub>x</sub>	
Highways	23900	102292	65467	130934	Arterial
Interstates	23900	403193	241916	387065	Freeway
			307383	517999	
			<b>VOC</b>	<b>NO<sub>x</sub></b>	<b>Tons/year</b>
			<b>123.4</b>	<b>208.0</b>	

## Diesel Savings

About 5000 Trucks per day use this corridor

\*Estimated MPG

Route 1	*MPG	Gallons Used
US 71	3.6	1.2
I-540	5.5	2.2
I-40	6.0	0.8
		4.2

**7,635,597**

# Arkansas

## New Location Route (Route 2)

min delay expected)

Route 2	Distance	Speed	Time (Min)
New 71	6.03	70	6.169
Proposed	13.81	70	12.837
	<b>19.84</b>		<b>19.01</b>

VOC Emission Rate	NO <sub>x</sub> Emission Rate
0.64 grams per mile	0.96 grams per mile
0.60 grams per mile	1.28 grams per mile

Route 2	ADT	VMT	VOC
Interstate	23900	474176	284506

**VOC**  
**114.2**

Route 2	*MPG	Gallons Used
New 71	6.0	1.0
Proposed	6.0	2.3
		3.3

**6,034,667**

+1 min expected travel time  
+1 min expected travel time  
**Total Time**

<b>NO<sub>x</sub></b>		<b>VOC Emission Rate</b>	<b>NO<sub>x</sub> Emission Rate</b>
455209	Freeway	0.60 grams per mile	1.28 grams per mile

**NO<sub>x</sub>**  
**182.8 Tons/year**

Percent Reduction

**1,600,931** Gallons of Diesel Saved per year

**VOC**

**NO<sub>x</sub>**

7.44%

12.12%