

TLU 2 - LRR TIRES - CALCULATION SUMMARY

Introduction

TLU 2 was analyzed using the Vehicle Energy and Greenhouse Gas Assessment Tool (VEGA Tool). The following pages summarize the parameters, data sources, calculations, and results of the analysis.

TLU 2 - LRR TIRES - CALCULATION SUMMARY

General Parameters

Baseline Parameters

Parameter	Source
VMT Forecasts	Florida Inventory & Forecast (based on linear regression of historic data).
VMT Distribution by Vehicle Classes	Florida Vehicle Registration Data.
VMT Distribution by Vehicle Age	Fleet turnover rate based on Florida Vehicle Registration Data, combined with Mobile 6 default mileage accumulation rates.
Fuel Economy by Vehicle Class	Assume fuel economies (mpg) maximize at levels specified by new Federal CAFÉ standards.

TLU 7 Policy Option Parameters

Parameter	Source
VMT Forecasts	Same as Baseline.
VMT Distribution by Vehicle Classes	Same as Baseline.
VMT Distribution by Vehicle Age	Same as Baseline.
Fuel Economy by Vehicle Class	Same as Baseline PLUS ADJUSTMENT (see next page).

TLU 2 - LRR TIRES - CALCULATION SUMMARY
Affect of LRR Tires on Fuel Economy

2011 start year
 4 % improvement in
 20 years
 2030 End Year
 45000 Average Tire Life (miles)

LIGHT DUTY VEHICLES (LDGV & LDDV)

Calendar Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Vehicle Age (as of July 1)	Policy Year 1	Policy Year 2	Policy Year 3	Policy Year 4	Policy Year 5	Policy Year 6	Policy Year 7	Policy Year 8	Policy Year 9	Policy Year 10	Policy Year 11	Policy Year 12	Policy Year 13	Policy Year 14	Policy Year 15
1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
5	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
6	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
7	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%
8	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
9	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
10	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
11	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%
12	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
13	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
14	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
15	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%
16	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%
17	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%
18	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%
19	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
20	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
21	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
22	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%
23	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%
24	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%
25	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%

Year in which tire replacement occurs, assuming 45,000 mile average tire life and Mobile 6 default mileage accumulation rates.

TLU 2 - LRR TIRES - CALCULATION SUMMARY
Affect of LRR Tires on Fuel Economy (CONTINUED)

2011 start year
 4 % improvement in
 20 years
 2030 End Year
 45000 Average Tire Life (miles)

LIGHT DUTY GAS TRUCKS (0-6000 lbs)

Calendar Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Vehicle Age (as of July 1)	Policy Year 1	Policy Year 2	Policy Year 3	Policy Year 4	Policy Year 5	Policy Year 6	Policy Year 7	Policy Year 8	Policy Year 9	Policy Year 10	Policy Year 11	Policy Year 12	Policy Year 13	Policy Year 14	Policy Year 15
1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
3	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
4	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
5	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
6	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
7	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
8	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
9	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
10	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
11	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
12	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%
13	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%
14	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
15	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
16	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
17	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%
18	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%
19	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%
20	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%
21	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%
22	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%
23	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
24	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
25	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%

Year in which tire replacement occurs, assuming 45,000 mile average tire life and Mobile 6 default mileage accumulation rates.

TLU 2 - LRR TIRES - CALCULATION SUMMARY
Affect of LRR Tires on Fuel Economy (CONTINUED)

2011 start year
 4 % improvement in
 20 years
 2030 End Year
 45000 Average Tire Life (miles)

LIGHT DUTY GAS TRUCKS (6000 - 8500 lbs)

Calendar Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Vehicle Age (as of July 1)	Policy Year 1	Policy Year 2	Policy Year 3	Policy Year 4	Policy Year 5	Policy Year 6	Policy Year 7	Policy Year 8	Policy Year 9	Policy Year 10	Policy Year 11	Policy Year 12	Policy Year 13	Policy Year 14	Policy Year 15
1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
3	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
4	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
5	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
6	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
7	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
8	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%
9	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
10	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
11	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
12	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%
13	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
14	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
15	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
16	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%
17	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%
18	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%
19	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
20	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
21	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
22	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%
23	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%
24	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%
25	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%

Year in which tire replacement occurs, assuming 45,000 mile average tire life and Mobile 6 default mileage accumulation rates.

TLU 2 - LRR TIRES - CALCULATION SUMMARY
Affect of LRR Tires on Fuel Economy (CONTINUED)

2011 start year
 4 % improvement in
 20 years
 2030 End Year
 45000 Average Tire Life (miles)

LIGHT DUTY DIESEL TRUCKS (0 - 6000lbs)

Calendar Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Vehicle Age (as of July 1)	Policy Year 1	Policy Year 2	Policy Year 3	Policy Year 4	Policy Year 5	Policy Year 6	Policy Year 7	Policy Year 8	Policy Year 9	Policy Year 10	Policy Year 11	Policy Year 12	Policy Year 13	Policy Year 14	Policy Year 15
1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
3	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
4	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
5	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
6	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
7	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
8	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
9	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
10	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%
11	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
12	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
13	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
14	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%
15	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%
16	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%
17	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%
18	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
19	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
20	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
21	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%
22	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%
23	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%
24	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%
25	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%

Year in which tire replacement occurs, assuming 45,000 mile average tire life and Mobile 6 default mileage accumulation rates.

TLU 2 - LRR TIRES - CALCULATION SUMMARY
Affect of LRR Tires on Fuel Economy (CONTINUED)

2011 start year
 4 % improvement in
 20 years
 2030 End Year
 45000 Average Tire Life (miles)

LIGHT DUTY DIESEL TRUCKS (6000 - 8500 lbs)

Calendar Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Vehicle Age (as of July 1)	Policy Year 1	Policy Year 2	Policy Year 3	Policy Year 4	Policy Year 5	Policy Year 6	Policy Year 7	Policy Year 8	Policy Year 9	Policy Year 10	Policy Year 11	Policy Year 12	Policy Year 13	Policy Year 14	Policy Year 15
1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
3	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
4	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
5	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
6	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
7	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
8	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
9	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
10	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
11	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
12	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
13	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%
14	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%
15	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
16	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
17	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
18	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%
19	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%
20	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%
21	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%	3.0%
22	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%	2.8%
23	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%	2.6%
24	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%	2.4%
25	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.8%	2.0%	2.2%

Year in which tire replacement occurs, assuming 45,000 mile average tire life and Mobile 6 default mileage accumulation rates.

TLU 2 - LRR TIRES - CALCULATION SUMMARY
Baseline: Fuel Consumption by Year and Vehicle Type

Calendar Year	LDGV	LDDV	LDGT1	LDGT2	LDGT3	LDGT4	LDLT12	LDLT34
2008	4,172,141,266	91,098,453	1,784,593,042	1,784,593,042	1,636,601,904	204,575,238	44,432,840	389,526,475
2009	4,324,196,150	94,418,562	1,825,258,032	1,825,258,032	1,671,964,787	208,995,598	45,435,885	397,915,622
2010	4,482,810,216	97,881,891	1,863,366,251	1,863,366,251	1,705,973,214	213,246,652	46,369,596	405,975,535
2011	4,578,390,989	99,968,891	1,889,756,117	1,889,756,117	1,728,638,587	216,079,823	46,956,912	411,217,155
2012	4,640,248,857	101,319,554	1,901,951,202	1,901,951,202	1,737,960,964	217,245,120	47,152,081	413,187,300
2013	4,690,873,217	102,424,934	1,903,293,356	1,903,293,356	1,735,203,233	216,900,404	47,055,866	412,241,857
2014	4,734,925,349	103,386,809	1,901,505,572	1,901,505,572	1,728,284,020	216,035,502	46,910,263	410,350,537
2015	4,764,600,635	104,034,767	1,898,622,734	1,898,622,734	1,721,080,463	215,135,058	46,765,622	408,447,129
2016	4,799,080,956	104,787,643	1,895,529,497	1,895,529,497	1,714,842,871	214,355,359	46,644,514	406,836,592
2017	4,833,644,794	105,542,342	1,888,167,834	1,888,167,834	1,706,331,227	213,291,403	46,418,975	404,699,509
2018	4,853,163,661	105,968,536	1,875,088,677	1,875,088,677	1,692,762,446	211,595,306	46,050,563	401,362,654
2019	4,861,556,153	106,151,785	1,857,388,155	1,857,388,155	1,674,809,366	209,351,171	45,568,254	396,988,401
2020	4,857,783,028	106,069,399	1,835,536,641	1,835,536,641	1,654,346,907	206,793,363	44,987,444	392,006,247
2021	4,860,399,382	106,126,527	1,817,318,139	1,817,318,139	1,637,231,934	204,653,992	44,531,947	387,889,565
2022	4,867,281,212	106,276,791	1,804,449,104	1,804,449,104	1,627,130,325	203,391,291	44,244,396	385,516,928
2023	4,875,925,809	106,465,546	1,797,217,706	1,797,217,706	1,621,469,107	202,683,638	44,123,274	384,283,267
2024	4,888,928,893	106,749,467	1,794,308,697	1,794,308,697	1,621,655,664	202,706,958	44,126,489	384,481,867
2025	4,905,336,481	107,107,726	1,795,579,249	1,795,579,249	1,626,489,097	203,311,137	44,241,372	385,811,456
TOTAL	84,991,287,047	1,855,779,623	33,328,930,004	33,328,930,004	30,242,776,116	3,780,347,015	822,016,294	7,178,738,095

Corresponds to sample calculations shown on next page.

TLU 2 - LRR TIRES - CALCULATION SUMMARY
Baseline: Sample Fuel Consumption Calculation

2011 Calendar Year - Baseline Conditions

Vehicle Age (as of July 1)	Model Year	LDGV				LDDV			
		VMT Distribution	VMT (millions)	MPG	Gallons	VMT Distribution	VMT (millions)	MPG	Gallons
1	2008	9.69%	10,142	24.00	422,585,586	9.69%	221	24.00	9,227,131
2	2007	10.38%	10,868	21.04	516,550,527	10.38%	237	21.04	11,278,850
3	2006	9.09%	9,510	21.04	451,985,315	9.09%	208	21.04	9,869,072
4	2005	7.86%	8,223	23.40	351,411,659	7.86%	180	23.40	7,673,052
5	2004	7.71%	8,067	23.40	344,740,420	7.71%	176	23.40	7,527,386
6	2003	7.08%	7,407	23.30	317,915,759	7.08%	162	23.30	6,941,671
7	2002	6.38%	6,681	23.50	284,289,927	6.38%	146	23.50	6,207,453
8	2001	6.53%	6,830	23.10	295,671,458	6.53%	149	23.10	6,455,968
9	2000	5.33%	5,574	23.20	240,249,902	5.33%	122	23.20	5,245,842
10	1999	4.54%	4,756	23.10	205,897,911	4.54%	104	23.10	4,495,768
11	1998	4.30%	4,504	23.00	195,821,325	4.30%	98	23.00	4,275,747
12	1997	3.70%	3,875	22.90	169,201,594	3.70%	85	22.90	3,694,507
13	1996	3.77%	3,942	23.00	171,406,920	3.77%	86	23.00	3,742,660
14	1995	2.95%	3,085	23.40	131,829,857	2.95%	67	23.40	2,878,497
15	1994	2.56%	2,675	23.40	114,334,802	2.56%	58	23.40	2,496,494
16	1993	1.93%	2,024	23.30	86,877,600	1.93%	44	23.30	1,896,967
17	1992	1.52%	1,587	23.40	67,817,866	1.52%	35	23.40	1,480,799
18	1991	1.22%	1,280	23.30	54,929,772	1.22%	28	23.30	1,199,388
19	1990	0.99%	1,033	23.50	43,937,467	0.99%	23	23.50	959,372
20	1989	0.74%	770	23.10	33,336,260	0.74%	17	23.10	727,895
21	1988	0.56%	584	23.40	24,937,473	0.56%	13	23.40	544,508
22	1987	0.42%	436	23.30	18,725,682	0.42%	10	23.30	408,874
23	1986	0.30%	316	23.70	13,318,151	0.30%	7	23.70	290,801
24	1985	0.47%	497	24.10	20,617,756	0.47%	11	24.10	450,187
25	1984	0.00%	0	23.80	0	0.00%	0	23.80	0
TOTAL		100.00%	104,666		4,578,390,989	100.00%	2,285		99,968,891

2012 Calendar Year - Baseline Conditions

Vehicle Age (as of July 1)	Model Year	LDGV				LDDV			
		VMT Distribution	VMT (millions)	MPG	Gallons	VMT Distribution	VMT (millions)	MPG	Gallons
1	2009	9.69%	10,387	25.28	410,891,301	9.69%	227	25.28	8,971,787
2	2008	10.38%	11,131	24.00	463,794,291	10.38%	243	24.00	10,126,920
3	2007	9.09%	9,740	21.04	462,916,243	9.09%	213	21.04	10,107,748
4	2006	7.86%	8,422	21.04	400,280,454	7.86%	184	21.04	8,740,100
5	2005	7.71%	8,262	23.40	353,077,711	7.71%	180	23.40	7,709,431
6	2004	7.08%	7,587	23.40	324,212,844	7.08%	166	23.40	7,079,168
7	2003	6.38%	6,842	23.30	293,664,539	6.38%	149	23.30	6,412,147
8	2002	6.53%	6,995	23.50	297,667,634	6.53%	153	23.50	6,499,555
9	2001	5.33%	5,709	23.10	247,125,362	5.33%	125	23.10	5,395,967
10	2000	4.54%	4,871	23.20	209,968,444	4.54%	106	23.20	4,584,648
11	1999	4.30%	4,613	23.10	199,688,905	4.30%	101	23.10	4,360,195
12	1998	3.70%	3,968	23.00	172,540,158	3.70%	87	23.00	3,767,404
13	1997	3.77%	4,038	22.90	176,318,872	3.77%	88	22.90	3,849,912
14	1996	2.95%	3,159	23.00	137,366,204	2.95%	69	23.00	2,999,383
15	1995	2.56%	2,740	23.40	117,099,904	2.56%	60	23.40	2,556,869
16	1994	1.93%	2,073	23.40	88,598,420	1.93%	45	23.40	1,934,541
17	1993	1.52%	1,625	23.30	69,756,094	1.52%	35	23.30	1,523,120
18	1992	1.22%	1,311	23.40	56,017,788	1.22%	29	23.40	1,223,145
19	1991	0.99%	1,058	23.30	45,386,329	0.99%	23	23.30	991,008
20	1990	0.74%	789	23.50	33,561,324	0.74%	17	23.50	732,809
21	1989	0.56%	598	23.10	25,872,262	0.56%	13	23.10	564,919
22	1988	0.42%	447	23.40	19,096,589	0.42%	10	23.40	416,973
23	1987	0.30%	323	23.30	13,874,408	0.30%	7	23.30	302,947
24	1986	0.47%	509	23.70	21,472,776	0.47%	11	23.70	468,857
25	1985	0.00%	0	24.10	0	0.00%	0	24.10	0
TOTAL		100.00%	107,197		4,640,248,857	100.00%	2,341		101,319,554

TLU 2 - LRR TIRES - CALCULATION SUMMARY
Policy Option: Fuel Consumption by Year and Vehicle Type

Calendar Year	LDGV	LDDV	LDGT1	LDGT2	LDGT3	LDGT4	LDLT12	LDLT34
2008	4,172,141,266	91,098,453	1,784,593,042	1,784,593,042	1,636,601,904	204,575,238	44,432,840	389,526,475
2009	4,324,196,150	94,418,562	1,825,258,032	1,825,258,032	1,671,964,787	208,995,598	45,435,885	397,915,622
2010	4,482,810,216	97,881,891	1,863,366,251	1,863,366,251	1,705,973,214	213,246,652	46,369,596	405,975,535
2011	4,576,673,979	99,931,400	1,888,717,172	1,888,717,172	1,727,572,330	215,946,541	46,924,001	410,906,190
2012	4,634,983,021	101,204,575	1,898,929,580	1,898,929,580	1,734,918,440	216,864,805	47,057,711	412,300,457
2013	4,680,398,757	102,196,224	1,897,543,369	1,897,543,369	1,729,823,423	216,227,928	46,886,603	410,655,167
2014	4,718,072,281	103,018,824	1,892,901,864	1,892,901,864	1,720,320,183	215,040,023	46,662,068	408,066,037
2015	4,741,119,998	103,522,069	1,887,099,193	1,887,099,193	1,710,609,783	213,826,223	46,437,447	405,451,625
2016	4,768,448,969	104,118,795	1,881,100,680	1,881,100,680	1,701,838,318	212,729,790	46,236,553	403,136,283
2017	4,795,689,684	104,713,595	1,870,845,101	1,870,845,101	1,690,806,406	211,350,801	45,931,109	400,296,941
2018	4,808,314,990	104,989,268	1,854,906,752	1,854,906,752	1,674,717,024	209,339,628	45,485,888	396,284,041
2019	4,809,724,646	105,020,047	1,834,462,744	1,834,462,744	1,654,372,220	206,796,528	44,929,450	391,262,789
2020	4,798,663,993	104,778,539	1,809,991,713	1,809,991,713	1,631,614,097	203,951,762	44,277,962	385,665,171
2021	4,794,034,106	104,677,445	1,789,256,496	1,789,256,496	1,612,330,079	201,541,260	43,755,309	380,963,398
2022	4,794,147,562	104,679,923	1,773,982,706	1,773,982,706	1,600,145,696	200,018,212	43,398,965	377,983,391
2023	4,796,363,602	104,728,310	1,764,276,828	1,764,276,828	1,592,363,284	199,045,410	43,207,188	376,127,344
2024	4,802,803,291	104,868,920	1,758,854,502	1,758,854,502	1,590,331,488	198,791,436	43,136,995	375,672,830
2025	4,812,587,326	105,082,554	1,757,568,971	1,757,568,971	1,592,849,440	199,106,180	43,175,815	376,323,822
TOTAL	84,311,173,836	1,840,929,392	33,033,654,996	33,033,654,996	29,979,152,115	3,747,394,014	813,741,384	7,104,513,119

Corresponds to sample calculations shown on next page.

TLU 2 - LRR TIRES - CALCULATION SUMMARY
Policy Option: Sample Fuel Consumption Calculation

2011 Calendar Year with Policy Option

Vehicle Age (as of July 1)	Model Year	LDGV				LDDV			
		VMT Distribution	VMT (millions)	MPG	Gallons	VMT Distribution	VMT (millions)	MPG	Gallons
1	2008	9.69%	10,142	24.00	422,585,586	9.69%	221	24.00	9,227,131
2	2007	10.38%	10,868	21.04	516,550,527	10.38%	237	21.04	11,278,850
3	2006	9.09%	9,510	21.04	451,985,315	9.09%	208	21.04	9,869,072
4	2005	7.86%	8,223	23.45	350,710,239	7.86%	180	23.45	7,657,737
5	2004	7.71%	8,067	23.40	344,740,420	7.71%	176	23.40	7,527,386
6	2003	7.08%	7,407	23.30	317,915,759	7.08%	162	23.30	6,941,671
7	2002	6.38%	6,681	23.50	284,289,927	6.38%	146	23.50	6,207,453
8	2001	6.53%	6,830	23.15	295,081,295	6.53%	149	23.15	6,443,082
9	2000	5.33%	5,574	23.20	240,249,902	5.33%	122	23.20	5,245,842
10	1999	4.54%	4,756	23.10	205,897,911	4.54%	104	23.10	4,495,768
11	1998	4.30%	4,504	23.00	195,821,325	4.30%	98	23.00	4,275,747
12	1997	3.70%	3,875	22.95	168,863,866	3.70%	85	22.95	3,687,132
13	1996	3.77%	3,942	23.00	171,406,920	3.77%	86	23.00	3,742,660
14	1995	2.95%	3,085	23.40	131,829,857	2.95%	67	23.40	2,878,497
15	1994	2.56%	2,675	23.40	114,334,802	2.56%	58	23.40	2,496,494
16	1993	1.93%	2,024	23.30	86,877,600	1.93%	44	23.30	1,896,967
17	1992	1.52%	1,587	23.40	67,817,866	1.52%	35	23.40	1,480,799
18	1991	1.22%	1,280	23.30	54,929,772	1.22%	28	23.30	1,199,388
19	1990	0.99%	1,033	23.55	43,849,768	0.99%	23	23.55	957,457
20	1989	0.74%	770	23.10	33,336,260	0.74%	17	23.10	727,895
21	1988	0.56%	584	23.40	24,937,473	0.56%	13	23.40	544,508
22	1987	0.42%	436	23.30	18,725,682	0.42%	10	23.30	408,874
23	1986	0.30%	316	23.70	13,318,151	0.30%	7	23.70	290,801
24	1985	0.47%	497	24.10	20,617,756	0.47%	11	24.10	450,187
25	1984	0.00%	0	23.80	0	0.00%	0	23.80	0
TOTAL		100.00%	104,666		4,576,673,979	100.00%	2,285		99,931,400

2012 Calendar Year with Policy Option

Vehicle Age (as of July 1)	Model Year	LDGV				LDDV			
		VMT Distribution	VMT (millions)	MPG	Gallons	VMT Distribution	VMT (millions)	MPG	Gallons
1	2009	9.69%	10,387	25.28	410,891,301	9.69%	227	25.28	8,971,787
2	2008	10.38%	11,131	24.00	463,794,291	10.38%	243	24.00	10,126,920
3	2007	9.09%	9,740	21.04	462,916,243	9.09%	213	21.04	10,107,748
4	2006	7.86%	8,422	21.12	398,685,711	7.86%	184	21.12	8,705,278
5	2005	7.71%	8,262	23.45	352,372,965	7.71%	180	23.45	7,694,042
6	2004	7.08%	7,587	23.40	324,212,844	7.08%	166	23.40	7,079,168
7	2003	6.38%	6,842	23.30	293,664,539	6.38%	149	23.30	6,412,147
8	2002	6.53%	6,995	23.59	296,481,707	6.53%	153	23.59	6,473,660
9	2001	5.33%	5,709	23.15	246,632,098	5.33%	125	23.15	5,385,197
10	2000	4.54%	4,871	23.20	209,968,444	4.54%	106	23.20	4,584,648
11	1999	4.30%	4,613	23.10	199,688,905	4.30%	101	23.10	4,360,195
12	1998	3.70%	3,968	23.09	171,852,747	3.70%	87	23.09	3,752,394
13	1997	3.77%	4,038	22.95	175,966,938	3.77%	88	22.95	3,842,227
14	1996	2.95%	3,159	23.00	137,366,204	2.95%	69	23.00	2,999,383
15	1995	2.56%	2,740	23.40	117,099,904	2.56%	60	23.40	2,556,869
16	1994	1.93%	2,073	23.40	88,598,420	1.93%	45	23.40	1,934,541
17	1993	1.52%	1,625	23.30	69,756,094	1.52%	35	23.30	1,523,120
18	1992	1.22%	1,311	23.40	56,017,788	1.22%	29	23.40	1,223,145
19	1991	0.99%	1,058	23.39	45,205,507	0.99%	23	23.39	987,060
20	1990	0.74%	789	23.55	33,494,335	0.74%	17	23.55	731,347
21	1989	0.56%	598	23.10	25,872,262	0.56%	13	23.10	564,919
22	1988	0.42%	447	23.40	19,096,589	0.42%	10	23.40	416,973
23	1987	0.30%	323	23.30	13,874,408	0.30%	7	23.30	302,947
24	1986	0.47%	509	23.70	21,472,776	0.47%	11	23.70	468,857
25	1985	0.00%	0	24.10	0	0.00%	0	24.10	0
TOTAL		100.00%	107,197		4,634,983,021	100.00%	2,341		101,204,575

TLU 2 - LRR TIRES - CALCULATION SUMMARY
Change in Onroad Transportation Fuel Consumption
and GHG Emissions due to Policy Option

Calendar Year	FUEL CONSUMPTION (Gallons)			GHG EMISSIONS (MMTCO2e)		
	Baseline	Change	With Policy Option	Baseline	Change	With Policy Option
2008	12,075,647,310	0	12,075,647,310	104.82	0.00	104.82
2009	12,485,018,692	0	12,485,018,692	108.49	0.00	108.49
2010	12,894,408,998	0	12,894,408,998	112.29	0.00	112.29
2011	13,320,162,857	-5,375,807	13,314,787,050	115.70	-0.05	115.66
2012	13,729,808,984	-15,828,110	13,713,980,874	119.22	-0.13	119.09
2013	14,139,736,706	-30,011,383	14,109,725,323	122.86	-0.25	122.60
2014	14,559,244,360	-45,920,482	14,513,323,879	126.60	-0.39	126.22
2015	14,971,586,437	-62,143,611	14,909,442,826	130.47	-0.52	129.95
2016	15,386,722,599	-78,896,861	15,307,825,738	133.94	-0.66	133.28
2017	15,804,062,650	-95,785,181	15,708,277,469	137.51	-0.80	136.71
2018	16,223,494,430	-112,136,175	16,111,358,255	141.18	-0.94	140.24
2019	16,644,863,595	-128,170,270	16,516,693,325	144.95	-1.08	143.87
2020	17,067,973,691	-144,124,721	16,923,848,970	148.82	-1.21	147.60
2021	17,495,709,569	-159,655,036	17,336,054,533	152.38	-1.34	151.04
2022	17,923,438,120	-174,399,991	17,749,038,129	156.03	-1.46	154.57
2023	18,351,146,388	-188,997,262	18,162,149,126	159.78	-1.59	158.19
2024	18,778,822,239	-203,952,768	18,574,869,471	163.62	-1.71	161.91
2025	19,206,454,303	-219,192,690	18,987,261,613	167.56	-1.84	165.72
TOTAL	281,058,301,927	-1,664,590,347	279,393,711,580	2,446.23	-13.99	2,432.24