

**Table L2. Transportation sector passenger transport energy consumption by region and mode, Reference case**

quadrillion British thermal units

Region and mode	2022	2025	2030	2035	2040	2045	2050	Average annual percentage change, 2022–2050
<b>Americas</b>								
Light-duty vehicles	19.3	18.9	17.8	16.9	16.5	16.5	17.0	-0.4%
Air	3.7	4.1	4.3	4.6	4.9	5.3	5.6	1.5%
Buses	1.0	1.2	1.2	1.3	1.3	1.3	1.4	1.0%
Two- and three-wheeled vehicles	0.3	0.4	0.5	0.6	0.7	0.8	0.9	4.2%
Rail	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.2%
<b>Total</b>	<b>24.4</b>	<b>24.6</b>	<b>23.9</b>	<b>23.5</b>	<b>23.5</b>	<b>24.0</b>	<b>25.1</b>	<b>0.1%</b>
<b>Europe and Eurasia</b>								
Light-duty vehicles	8.9	8.2	6.9	6.0	5.5	5.2	5.0	-2.1%
Air	2.5	3.2	3.4	3.7	3.9	4.1	4.3	1.9%
Buses	1.3	1.3	1.3	1.3	1.2	1.2	1.1	-0.6%
Two- and three-wheeled vehicles	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4%
Rail	0.2	0.2	0.1	0.1	0.1	0.1	0.1	-1.2%
<b>Total</b>	<b>13.0</b>	<b>12.9</b>	<b>11.9</b>	<b>11.2</b>	<b>10.8</b>	<b>10.6</b>	<b>10.6</b>	<b>-0.7%</b>
<b>Asia Pacific</b>								
Light-duty vehicles	12.7	13.5	14.4	15.1	15.8	16.8	17.9	1.2%
Air	2.2	3.9	4.8	5.6	6.4	7.1	7.9	4.6%
Buses	2.5	2.5	2.6	2.7	2.7	2.7	2.7	0.3%
Two- and three-wheeled vehicles	2.1	2.4	2.7	3.0	3.3	3.5	3.7	2.0%
Rail	0.3	0.3	0.3	0.3	0.2	0.2	0.2	-0.5%
<b>Total</b>	<b>19.8</b>	<b>22.6</b>	<b>24.8</b>	<b>26.6</b>	<b>28.3</b>	<b>30.4</b>	<b>32.4</b>	<b>1.8%</b>
<b>Africa and Middle East</b>								
Light-duty vehicles	4.5	4.6	4.7	4.8	5.0	5.3	5.6	0.8%
Air	1.0	1.3	1.5	1.8	2.0	2.3	2.6	3.6%
Buses	1.8	2.1	2.5	2.9	3.5	4.1	4.8	3.5%
Two- and three-wheeled vehicles	0.1	0.1	0.1	0.2	0.3	0.3	0.5	5.9%
Rail	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3%
<b>Total</b>	<b>7.4</b>	<b>8.1</b>	<b>8.8</b>	<b>9.8</b>	<b>10.8</b>	<b>12.0</b>	<b>13.5</b>	<b>2.2%</b>
<b>World</b>								
Light-duty vehicles	45.5	45.2	43.8	42.9	42.7	43.7	45.6	0.0%
Air	9.4	12.5	14.1	15.6	17.2	18.8	20.4	2.8%
Buses	6.6	7.1	7.6	8.2	8.7	9.3	9.9	1.4%
Two- and three-wheeled vehicles	2.6	3.0	3.4	3.9	4.4	4.8	5.2	2.5%
Rail	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-0.3%
<b>Total</b>	<b>64.5</b>	<b>68.2</b>	<b>69.4</b>	<b>71.0</b>	<b>73.4</b>	<b>77.1</b>	<b>81.6</b>	<b>0.8%</b>

Data source: U.S. Energy Information Administration, World Energy Projection System (2023), run r\_230822.081459 and Annual Energy Outlook 2023 (March 2023), [www.eia.gov/aeo](http://www.eia.gov/aeo)

Note: Totals may not equal sum of components due to independent rounding.