Transportation sector energy consumption

Transportation sector consumption by mode
AEO2022 Reference case
quadrillion British thermal units

Transportation sector consumption by fuel
AEO2022 Reference case
quadrillion British thermal units

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)

www.eia.gov/aeo
Transportation sector consumption of minor petroleum and alternative fuels

AEO2022 Reference case
quadrillion British thermal units

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)
Transportation sector delivered electricity and natural gas

Delivered electricity by mode
AEO2022 Reference case
quadrillion British thermal units

Delivered compressed and liquefied natural gas by mode
AEO2022 Reference case
quadrillion British thermal units

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)
Passenger and freight travel by mode

**Vehicle travel**
AEO2022 Reference case
trillion vehicle-miles

2021 projections

- **light-duty vehicles**
- **heavy-duty trucks**

**Passenger travel**
AEO2022 Reference case
trillion revenue passenger-miles

2021 projections

- **air**
- **bus**
- **passenger rail**

**Rail and domestic shipping**
AEO2022 Reference case
trillion ton-miles traveled

2021 projections

- **freight rail**
- **domestic marine**

Energy intensity by transportation mode

Passenger travel energy intensity by mode
AEO2022 Reference case
thousand British thermal units per passenger-mile

Freight travel energy intensity by mode
AEO2022 Reference case
thousand British thermal units per ton-mile

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)
Indexed travel indicators and energy use by mode

Indexed light-duty vehicle travel and energy use
AEO2022 Reference case
2019 = 1.0

Indexed freight and commercial truck travel and energy use
AEO2022 Reference case
2019 = 1.0

Indexed aircraft travel and energy use
AEO2022 Reference case
2019 = 1.0

Note: Indexed freight and commercial truck energy efficiency is weighted by each vehicle type’s relative share of energy consumption.

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)
New light-duty vehicle sales by type

**Light-duty vehicle sales**
AEO2022 Reference case
percentage share

- **2021**
  - projections
  - truck
  - car

- 2020     2030     2040     2050

**Car sales by size class**
AEO2022 Reference case
percentage share

- **2021**
  - crossover utility
  - midsize
  - compact
  - large
  - subcompact
  - other

- 2020     2030     2040     2050

**Light truck sales by size class**
AEO2022 Reference case
percentage share

- **2021**
  - crossover utility
  - large pickup
  - utility
  - vans
  - small pickup

- 2020     2030      2040      2050

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)
On-road vehicle fuel economy

Light-duty fuel economy by vehicle type
AEO2022 Reference case

<table>
<thead>
<tr>
<th>Year</th>
<th>Car</th>
<th>Combined</th>
<th>Light Truck</th>
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<tbody>
<tr>
<td>2010</td>
<td>22</td>
<td>25</td>
<td>21</td>
</tr>
<tr>
<td>2020</td>
<td>25</td>
<td>27</td>
<td>23</td>
</tr>
<tr>
<td>2030</td>
<td>28</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>2040</td>
<td>31</td>
<td>33</td>
<td>27</td>
</tr>
<tr>
<td>2050</td>
<td>35</td>
<td>37</td>
<td>29</td>
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</tbody>
</table>

Heavy-duty fuel economy by class
AEO2022 Reference case

<table>
<thead>
<tr>
<th>Year</th>
<th>Classes 2b–3</th>
<th>Classes 4–6</th>
<th>Classes 7–8</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>10</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>2020</td>
<td>11</td>
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</tr>
<tr>
<td>2050</td>
<td>14</td>
<td>16</td>
<td>19</td>
</tr>
</tbody>
</table>

Note: Combined represents the average of light-duty vehicles.

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)
Light-duty vehicle fuel economy and per capita travel

Light-duty vehicle average fuel economy
AEO2022 Reference case
miles per gallon

Light-duty vehicle miles traveled per licensed driver
AEO2022 Reference case
thousand miles

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)
Air travel energy use by travel type

Energy use by air mode
AEO2022 Reference case
quadrillion British thermal units

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)
Passenger aircraft sales and jet fuel efficiency

U.S. passenger jet sales by body type
AEO2022 Reference case
individual aircraft sold

2021

narrow body aircraft

regional aircraft

wide body aircraft

2010 2020 2030 2040 2050

history projections

2019 = 1.0

revenue passenger-miles

revenue passenger-miles per gallon

energy consumption

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)
Passenger travel demand and aircraft stock

Revenue passenger-miles
AEO2022 Reference case
trillion passenger-miles

Average passenger
load factors
percentage

Active versus parked passenger and cargo stock
AEO2022 Reference case
thousand aircraft

Note: Load factors are weighted by domestic and U.S.-originating or U.S.-bound flights’ relative share of revenue passenger-miles.