

## **Appendix E**

# **Projections of Transportation Energy Use in the Reference Case**

**Table E1. World Total Energy Consumption for Transportation by Region, Reference Case, 1990-2020**  
 (Million Barrels of Oil per Day)

Region/Country	History		Projections					Average Annual Percent Change, 1996-2020
	1990	1996	2000	2005	2010	2015	2020	
<b>Industrialized Countries</b>								
<b>North America</b> .....	<b>12.5</b>	<b>13.9</b>	<b>15.1</b>	<b>16.9</b>	<b>18.6</b>	<b>20.0</b>	<b>21.4</b>	<b>1.8</b>
United States <sup>a</sup> .....	11.0	12.1	13.2	14.7	16.1	17.0	18.0	1.7
Canada .....	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.3
Mexico .....	0.6	0.7	0.8	1.0	1.3	1.6	2.0	4.4
<b>Western Europe</b> .....	<b>6.2</b>	<b>6.9</b>	<b>7.4</b>	<b>7.9</b>	<b>8.4</b>	<b>8.7</b>	<b>9.1</b>	<b>1.1</b>
United Kingdom .....	1.0	1.0	1.1	1.2	1.3	1.4	1.5	1.5
France .....	0.9	1.0	1.1	1.2	1.2	1.3	1.3	1.2
Germany .....	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.2
Italy .....	0.7	0.8	0.9	0.9	1.0	1.0	1.0	0.8
Netherlands .....	0.4	0.5	0.5	0.5	0.6	0.6	0.6	1.0
Other Western Europe .....	2.0	2.3	2.4	2.6	2.7	2.8	2.9	1.1
<b>Industrialized Asia</b> .....	<b>2.1</b>	<b>2.5</b>	<b>2.6</b>	<b>2.8</b>	<b>2.9</b>	<b>3.1</b>	<b>3.2</b>	<b>1.1</b>
Japan .....	1.6	1.9	1.9	2.1	2.2	2.2	2.3	0.9
Australasia .....	0.5	0.6	0.7	0.7	0.8	0.8	0.9	1.7
<b>Total Industrialized</b> .....	<b>20.9</b>	<b>23.3</b>	<b>25.2</b>	<b>27.6</b>	<b>29.9</b>	<b>31.8</b>	<b>33.7</b>	<b>1.6</b>
<b>EE/FSU</b>								
Former Soviet Union .....	2.7	1.3	1.4	1.7	1.9	2.1	2.2	2.4
Eastern Europe .....	0.6	0.5	0.7	0.8	1.0	1.0	1.1	3.1
<b>Total EE/FSU</b> .....	<b>3.3</b>	<b>1.8</b>	<b>2.1</b>	<b>2.6</b>	<b>2.9</b>	<b>3.1</b>	<b>3.3</b>	<b>2.6</b>
<b>Developing Countries</b>								
<b>Developing Asia</b> .....	<b>3.1</b>	<b>4.8</b>	<b>5.7</b>	<b>7.5</b>	<b>9.4</b>	<b>11.7</b>	<b>12.9</b>	<b>4.2</b>
China .....	0.8	1.2	1.6	2.4	3.7	5.3	5.9	6.7
India .....	0.5	0.8	1.1	1.4	1.5	1.7	1.8	3.5
South Korea .....	0.3	0.7	0.8	0.9	1.1	1.2	1.3	3.0
Other Asia .....	1.4	2.1	2.3	2.7	3.1	3.5	3.9	2.6
<b>Middle East</b> .....	<b>1.2</b>	<b>1.7</b>	<b>1.9</b>	<b>2.2</b>	<b>2.6</b>	<b>3.1</b>	<b>3.7</b>	<b>3.2</b>
Turkey .....	0.2	0.3	0.3	0.4	0.5	0.5	0.6	3.0
<b>Africa</b> .....	<b>0.9</b>	<b>1.0</b>	<b>1.1</b>	<b>1.3</b>	<b>1.5</b>	<b>1.8</b>	<b>2.1</b>	<b>3.1</b>
<b>Central and South America</b> .....	<b>1.6</b>	<b>2.0</b>	<b>2.1</b>	<b>2.7</b>	<b>3.4</b>	<b>4.3</b>	<b>5.4</b>	<b>4.2</b>
Brazil .....	0.7	0.8	0.9	1.1	1.4	1.7	2.1	3.8
Other Central/South America .....	0.9	1.2	1.3	1.6	2.1	2.6	3.3	4.5
<b>Total Developing</b> .....	<b>6.8</b>	<b>9.6</b>	<b>10.8</b>	<b>13.6</b>	<b>17.0</b>	<b>20.9</b>	<b>24.2</b>	<b>3.9</b>
<b>Total World</b> .....	<b>31.0</b>	<b>34.6</b>	<b>38.1</b>	<b>43.8</b>	<b>49.9</b>	<b>55.8</b>	<b>61.3</b>	<b>2.4</b>

<sup>a</sup>Includes the 50 States and the District of Columbia. U.S. Territories are included in Australasia.

Notes: EE/FSU = Eastern Europe/Former Soviet Union. Totals may not equal sum of components due to independent rounding.

Sources: **History:** Derived from Energy Information Administration (EIA), *International Energy Annual 1996*, DOE/EIA-0219(96) (Washington, DC, February 1998). **Projections:** EIA, World Energy Projection System (1999).

**Table E2. World Total Gasoline Consumption for Transportation by Region, Reference Case, 1990-2020**  
 (Million Barrels of Oil per Day)

Region/Country	History		Projections					Average Annual Percent Change, 1996-2020
	1990	1996	2000	2005	2010	2015	2020	
<b>Industrialized Countries</b>								
North America .....	7.6	8.5	9.3	10.3	11.1	11.7	12.4	1.6
United States <sup>a</sup> .....	6.7	7.4	8.1	8.9	9.6	9.9	10.3	1.4
Canada .....	0.5	0.6	0.6	0.6	0.7	0.7	0.7	1.1
Mexico .....	0.4	0.5	0.6	0.7	0.9	1.1	1.3	4.3
Western Europe .....	2.6	2.7	2.9	3.0	3.0	3.0	3.0	0.5
United Kingdom .....	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.7
France .....	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.3
Germany .....	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.5
Italy .....	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Netherlands .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.8
Other Western Europe .....	0.7	0.8	0.9	0.9	0.9	0.9	0.9	0.4
Industrialized Asia .....	1.0	1.1	1.2	1.2	1.3	1.3	1.3	0.6
Japan .....	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.3
Australasia .....	0.3	0.3	0.3	0.4	0.4	0.4	0.4	1.1
Total Industrialized .....	11.3	12.3	13.4	14.5	15.4	16.1	16.7	1.3
<b>EE/FSU</b>								
Former Soviet Union .....	1.1	0.3	0.5	0.6	0.7	0.7	0.8	3.4
Eastern Europe .....	0.3	0.3	0.3	0.4	0.5	0.5	0.5	2.7
Total EE/FSU .....	1.3	0.6	0.8	1.0	1.1	1.2	1.2	3.1
<b>Developing Countries</b>								
Developing Asia .....	1.0	1.6	2.0	2.7	3.7	4.7	5.0	4.9
China .....	0.4	0.7	0.9	1.5	2.3	3.3	3.5	7.1
India .....	0.1	0.1	0.1	0.2	0.2	0.2	0.2	2.5
South Korea .....	0.1	0.2	0.2	0.2	0.3	0.3	0.3	2.6
Other Asia .....	0.4	0.6	0.7	0.8	0.9	0.9	1.0	2.0
Middle East .....	0.6	0.8	0.8	0.9	1.1	1.4	1.6	3.3
Turkey .....	0.1	0.1	0.1	0.1	0.2	0.2	0.2	2.4
Africa .....	0.4	0.5	0.5	0.6	0.7	0.8	0.9	3.0
Central and South America .....	0.6	0.9	0.9	1.2	1.5	1.9	2.4	4.5
Brazil .....	0.1	0.2	0.2	0.3	0.4	0.4	0.6	3.9
Other Central/South America .....	0.5	0.6	0.7	0.9	1.2	1.5	1.9	4.6
Total Developing .....	2.5	3.6	4.2	5.4	7.0	8.8	10.0	4.3
Total World .....	15.1	16.5	18.3	20.9	23.6	26.1	27.9	2.2

<sup>a</sup>Includes the 50 States and the District of Columbia. U.S. Territories are included in Australasia.

Notes: EE/FSU = Eastern Europe/Former Soviet Union. Totals may not equal sum of components due to independent rounding.

Sources: **History:** Derived from Energy Information Administration (EIA), *International Energy Annual 1996*, DOE/EIA-0219(96) (Washington, DC, February 1998). **Projections:** EIA, World Energy Projection System (1999).

**Table E3. World Total Diesel Fuel Consumption for Transportation by Region, Reference Case, 1990-2020**  
 (Million Barrels of Oil per Day)

Region/Country	History		Projections					Average Annual Percent Change, 1996-2020
	1990	1996	2000	2005	2010	2015	2020	
<b>Industrialized Countries</b>								
North America .....	2.4	2.7	2.9	3.3	3.7	4.0	4.3	1.9
United States <sup>a</sup> .....	2.0	2.3	2.5	2.8	3.1	3.3	3.5	1.8
Canada .....	0.2	0.2	0.2	0.3	0.3	0.3	0.3	1.6
Mexico .....	0.2	0.2	0.2	0.3	0.3	0.4	0.5	4.0
Western Europe .....	2.2	2.6	2.9	3.1	3.2	3.4	3.5	1.2
United Kingdom .....	0.3	0.3	0.4	0.4	0.4	0.4	0.5	1.6
France .....	0.4	0.5	0.5	0.6	0.6	0.7	0.7	1.4
Germany .....	0.4	0.5	0.5	0.6	0.6	0.7	0.7	1.4
Italy .....	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.8
Netherlands .....	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.9
Other Western Europe .....	0.7	0.9	0.9	1.0	1.0	1.1	1.1	0.9
Industrialized Asia .....	0.6	0.8	0.8	0.9	1.0	1.0	1.1	1.3
Japan .....	0.5	0.7	0.7	0.8	0.8	0.8	0.9	1.1
Australasia .....	0.1	0.1	0.1	0.2	0.2	0.2	0.2	2.0
<b>Total Industrialized</b> .....	<b>5.2</b>	<b>6.1</b>	<b>6.6</b>	<b>7.3</b>	<b>7.9</b>	<b>8.4</b>	<b>8.8</b>	<b>1.5</b>
<b>EE/FSU</b>								
Former Soviet Union .....	0.6	0.3	0.4	0.5	0.5	0.6	0.7	3.1
Eastern Europe .....	0.2	0.2	0.2	0.3	0.3	0.4	0.4	3.3
<b>Total EE/FSU</b> .....	<b>0.8</b>	<b>0.5</b>	<b>0.6</b>	<b>0.8</b>	<b>0.9</b>	<b>1.0</b>	<b>1.1</b>	<b>3.2</b>
<b>Developing Countries</b>								
Developing Asia .....	1.2	2.1	2.5	3.2	3.9	4.6	5.0	3.8
China .....	0.2	0.3	0.4	0.6	1.0	1.4	1.7	7.3
India .....	0.4	0.6	0.8	1.1	1.2	1.3	1.4	3.2
South Korea .....	0.2	0.3	0.4	0.5	0.5	0.6	0.6	2.7
Other Asia .....	0.5	0.8	0.9	1.1	1.2	1.3	1.4	2.3
Middle East .....	0.3	0.5	0.6	0.7	0.8	0.9	1.1	3.3
Turkey .....	0.1	0.1	0.2	0.2	0.2	0.2	0.3	2.7
Africa .....	0.3	0.3	0.3	0.3	0.4	0.5	0.6	3.2
Central and South America .....	0.6	0.7	0.7	0.9	1.2	1.5	1.9	4.1
Brazil .....	0.3	0.4	0.4	0.5	0.6	0.8	1.0	3.8
Other Central/South America .....	0.2	0.3	0.3	0.4	0.6	0.7	0.9	4.4
<b>Total Developing</b> .....	<b>2.4</b>	<b>3.6</b>	<b>4.1</b>	<b>5.2</b>	<b>6.3</b>	<b>7.5</b>	<b>8.6</b>	<b>3.7</b>
<b>Total World</b> .....	<b>8.4</b>	<b>10.2</b>	<b>11.4</b>	<b>13.2</b>	<b>15.0</b>	<b>16.8</b>	<b>18.4</b>	<b>2.5</b>

<sup>a</sup>Includes the 50 States and the District of Columbia. U.S. Territories are included in Australasia.

Notes: EE/FSU = Eastern Europe/Former Soviet Union. Totals may not equal sum of components due to independent rounding.

Sources: **History:** Derived from Energy Information Administration (EIA), *International Energy Annual 1996*, DOE/EIA-0219(96) (Washington, DC, February 1998). **Projections:** EIA, World Energy Projection System (1999).

**Table E4. World Total Jet Fuel Consumption for Transportation by Region, Reference Case, 1990-2020**  
 (Million Barrels of Oil per Day)

Region/Country	History		Projections					Average Annual Percent Change, 1996-2020
	1990	1996	2000	2005	2010	2015	2020	
<b>Industrialized Countries</b>								
North America .....	1.7	1.8	2.0	2.3	2.8	3.1	3.5	2.8
United States <sup>a</sup> .....	1.6	1.6	1.9	2.2	2.5	2.8	3.1	2.7
Canada .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.4
Mexico .....	0.0	0.0	0.1	0.1	0.1	0.2	0.2	6.3
Western Europe .....	0.6	0.8	0.9	1.0	1.2	1.4	1.7	3.3
United Kingdom .....	0.1	0.2	0.2	0.2	0.3	0.3	0.4	3.4
France .....	0.1	0.1	0.1	0.1	0.1	0.2	0.2	2.9
Germany .....	0.1	0.1	0.1	0.2	0.2	0.2	0.3	3.4
Italy .....	0.0	0.1	0.1	0.1	0.1	0.1	0.1	3.2
Netherlands .....	0.0	0.1	0.1	0.1	0.1	0.1	0.1	3.4
Other Western Europe .....	0.2	0.3	0.3	0.4	0.4	0.5	0.6	3.4
Industrialized Asia .....	0.2	0.3	0.3	0.3	0.4	0.5	0.5	2.5
Japan .....	0.1	0.2	0.2	0.2	0.2	0.3	0.3	2.2
Australasia .....	0.1	0.1	0.1	0.1	0.1	0.2	0.2	3.1
<b>Total Industrialized</b> .....	<b>2.5</b>	<b>2.8</b>	<b>3.2</b>	<b>3.7</b>	<b>4.4</b>	<b>5.0</b>	<b>5.7</b>	<b>2.9</b>
<b>EE/FSU</b>								
Former Soviet Union .....	0.4	0.2	0.2	0.2	0.2	0.3	0.3	1.6
Eastern Europe .....	0.0	0.0	0.0	0.1	0.1	0.1	0.1	5.6
<b>Total EE/FSU</b> .....	<b>0.5</b>	<b>0.3</b>	<b>0.2</b>	<b>0.3</b>	<b>0.3</b>	<b>0.4</b>	<b>0.5</b>	<b>2.4</b>
<b>Developing Countries</b>								
Developing Asia .....	0.3	0.5	0.5	0.7	1.0	1.4	2.0	6.1
China .....	0.0	0.1	0.1	0.1	0.2	0.3	0.5	8.7
India .....	0.0	0.0	0.1	0.1	0.1	0.2	0.3	7.2
South Korea .....	0.0	0.0	0.0	0.1	0.1	0.1	0.2	6.3
Other Asia .....	0.2	0.3	0.3	0.4	0.6	0.8	1.0	5.0
Middle East .....	0.1	0.2	0.2	0.2	0.3	0.4	0.5	5.5
Turkey .....	0.0	0.0	0.0	0.0	0.1	0.1	0.1	6.0
Africa .....	0.1	0.1	0.1	0.2	0.2	0.3	0.3	4.7
Central and South America .....	0.1	0.1	0.2	0.2	0.3	0.4	0.6	5.7
Brazil .....	0.0	0.0	0.0	0.1	0.1	0.1	0.2	5.2
Other Central/South America .....	0.1	0.1	0.1	0.2	0.2	0.3	0.4	5.9
<b>Total Developing</b> .....	<b>0.6</b>	<b>0.9</b>	<b>1.0</b>	<b>1.4</b>	<b>1.9</b>	<b>2.5</b>	<b>3.4</b>	<b>5.8</b>
<b>Total World</b> .....	<b>3.6</b>	<b>4.0</b>	<b>4.4</b>	<b>5.4</b>	<b>6.6</b>	<b>7.9</b>	<b>9.5</b>	<b>3.7</b>

<sup>a</sup>Includes the 50 States and the District of Columbia. U.S. Territories are included in Australasia.

Notes: EE/FSU = Eastern Europe/Former Soviet Union. Totals may not equal sum of components due to independent rounding.

Sources: **History:** Derived from Energy Information Administration (EIA), *International Energy Annual 1996*, DOE/EIA-0219(96) (Washington, DC, February 1998). **Projections:** EIA, World Energy Projection System (1999).

**Table E5. World Total Residual Fuel Consumption for Transportation by Region, Reference Case, 1990-2020**  
 (Million Barrels of Oil per Day)

Region/Country	History		Projections					Average Annual Percent Change, 1996-2020
	1990	1996	2000	2005	2010	2015	2020	
<b>Industrialized Countries</b>								
North America .....	0.6	0.5	0.5	0.5	0.6	0.6	0.7	1.4
United States <sup>a</sup> .....	0.5	0.5	0.4	0.5	0.6	0.6	0.7	1.5
Canada .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Mexico .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Western Europe .....	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.3
United Kingdom .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
France .....	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.3
Germany .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Italy .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Netherlands .....	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Other Western Europe .....	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
Industrialized Asia .....	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.5
Japan .....	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.5
Australasia .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
<b>Total Industrialized</b> .....	<b>1.3</b>	<b>1.3</b>	<b>1.2</b>	<b>1.3</b>	<b>1.4</b>	<b>1.4</b>	<b>1.5</b>	<b>0.8</b>
<b>EE/FSU</b>								
Former Soviet Union .....	0.2	0.1	0.1	0.1	0.1	0.1	0.1	1.0
Eastern Europe .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9
<b>Total EE/FSU</b> .....	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>1.3</b>
<b>Developing Countries</b>								
Developing Asia .....	0.3	0.5	0.5	0.6	0.6	0.7	0.8	1.6
China .....	0.0	0.1	0.1	0.1	0.1	0.1	0.1	2.3
India .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
South Korea .....	0.0	0.1	0.1	0.1	0.2	0.2	0.2	1.6
Other Asia .....	0.3	0.3	0.3	0.3	0.4	0.4	0.4	1.4
Middle East .....	0.2	0.3	0.3	0.3	0.4	0.4	0.4	1.4
Turkey .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Africa .....	0.1	0.1	0.1	0.1	0.2	0.2	0.2	1.2
Central and South America .....	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.8
Brazil .....	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.9
Other Central/South America .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.8
<b>Total Developing</b> .....	<b>0.8</b>	<b>1.1</b>	<b>1.1</b>	<b>1.2</b>	<b>1.3</b>	<b>1.4</b>	<b>1.5</b>	<b>1.4</b>
<b>Total World</b> .....	<b>2.3</b>	<b>2.4</b>	<b>2.4</b>	<b>2.6</b>	<b>2.8</b>	<b>2.9</b>	<b>3.1</b>	<b>1.1</b>

<sup>a</sup>Includes the 50 States and the District of Columbia. U.S. Territories are included in Australasia.

Notes: EE/FSU = Eastern Europe/Former Soviet Union. Totals may not equal sum of components due to independent rounding.

Sources: **History:** Derived from Energy Information Administration (EIA), *International Energy Annual 1996*, DOE/EIA-0219(96) (Washington, DC, February 1998). **Projections:** EIA, World Energy Projection System (1999).

**Table E6. World Total Other Fuel Consumption for Transportation by Region, Reference Case, 1990-2020**  
 (Million Barrels of Oil per Day)

Region/Country	History		Projections					Average Annual Percent Change, 1996-2020
	1990	1996	2000	2005	2010	2015	2020	
<b>Industrialized Countries</b>								
North America .....	0.5	0.6	0.6	0.6	0.7	0.8	0.8	1.5
United States <sup>a</sup> .....	0.4	0.4	0.4	0.5	0.5	0.5	0.6	1.4
Canada .....	0.1	0.1	0.2	0.2	0.2	0.2	0.2	1.5
Mexico .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9
Western Europe .....	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5
United Kingdom .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
France .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Germany .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Italy .....	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.5
Netherlands .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Other Western Europe .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5
Industrialized Asia .....	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.8
Japan .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.6
Australasia .....	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.3
<b>Total Industrialized</b> .....	<b>0.9</b>	<b>1.0</b>	<b>1.0</b>	<b>1.1</b>	<b>1.2</b>	<b>1.2</b>	<b>1.3</b>	<b>1.2</b>
<b>EE/FSU</b>								
Former Soviet Union .....	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.9
Eastern Europe .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
<b>Total EE/FSU</b> .....	<b>0.5</b>	<b>0.4</b>	<b>0.4</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>1.0</b>
<b>Developing Countries</b>								
Developing Asia .....	0.4	0.3	0.3	0.3	0.4	0.4	0.4	1.3
China .....	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.0
India .....	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.9
South Korea .....	0.0	0.0	0.1	0.1	0.1	0.1	0.1	2.5
Other Asia .....	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.9
Middle East .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
Turkey .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
Africa .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
Central and South America .....	0.1	0.2	0.2	0.2	0.3	0.3	0.4	3.8
Brazil .....	0.1	0.1	0.1	0.2	0.2	0.3	0.4	3.9
Other Central/South America .....	0.0	0.0	0.0	0.0	0.1	0.1	0.1	3.8
<b>Total Developing</b> .....	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.6</b>	<b>0.7</b>	<b>0.8</b>	<b>0.9</b>	<b>2.4</b>
<b>Total World</b> .....	<b>1.9</b>	<b>1.9</b>	<b>1.9</b>	<b>2.1</b>	<b>2.3</b>	<b>2.5</b>	<b>2.7</b>	<b>1.5</b>

<sup>a</sup>Includes the 50 States and the District of Columbia. U.S. Territories are included in Australasia.

Notes: EE/FSU = Eastern Europe/Former Soviet Union. Totals may not equal sum of components due to independent rounding.

Sources: **History:** Derived from Energy Information Administration (EIA), *International Energy Annual 1996*, DOE/EIA-0219(96) (Washington, DC, February 1998). **Projections:** EIA, World Energy Projection System (1999).

**Table E7. World Total Road Use Energy Consumption by Region, Reference Case, 1990-2020**  
 (Million Barrels of Oil per Day)

Region/Country	History		Projections					Average Annual Percent Change, 1996-2020
	1990	1996	2000	2005	2010	2015	2020	
<b>Industrialized Countries</b>								
North America .....	9.4	10.6	11.7	13.0	14.2	15.0	16.0	1.7
United States <sup>a</sup> .....	8.1	9.2	10.1	11.2	12.1	12.6	13.2	1.5
Canada .....	0.7	0.7	0.8	0.9	0.9	1.0	1.0	1.3
Mexico .....	0.6	0.7	0.8	0.9	1.2	1.4	1.8	4.3
Western Europe .....	4.6	5.1	5.5	5.8	6.1	6.2	6.3	0.9
United Kingdom .....	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.1
France .....	0.7	0.8	0.9	0.9	1.0	1.0	1.0	1.0
Germany .....	1.0	1.1	1.2	1.3	1.3	1.4	1.4	0.9
Italy .....	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.6
Netherlands .....	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.0
Other Western Europe .....	1.4	1.6	1.7	1.8	1.8	1.8	1.9	0.7
Industrialized Asia .....	1.6	1.9	2.0	2.1	2.2	2.3	2.3	0.9
Japan .....	1.2	1.4	1.5	1.6	1.7	1.7	1.7	0.7
Australasia .....	0.4	0.5	0.5	0.5	0.6	0.6	0.6	1.4
Total Industrialized .....	15.6	17.6	19.2	21.0	22.5	23.5	24.6	1.4
<b>EE/FSU</b>								
Former Soviet Union .....	1.5	0.5	0.7	0.9	1.1	1.2	1.3	3.8
Eastern Europe .....	0.5	0.4	0.6	0.7	0.8	0.9	0.9	3.0
Total EE/FSU .....	2.0	0.9	1.3	1.7	1.9	2.1	2.1	3.5
<b>Developing Countries</b>								
Developing Asia .....	2.0	3.3	4.2	5.6	7.2	8.9	9.6	4.5
China .....	0.5	0.8	1.2	1.9	3.1	4.5	4.9	7.8
India .....	0.4	0.7	0.9	1.2	1.3	1.4	1.5	3.3
South Korea .....	0.2	0.4	0.6	0.7	0.8	0.8	0.9	2.9
Other Asia .....	0.9	1.4	1.5	1.8	2.0	2.1	2.3	2.2
Middle East .....	0.8	1.3	1.4	1.6	1.9	2.3	2.8	3.3
Turkey .....	0.2	0.2	0.3	0.3	0.4	0.4	0.4	2.7
Africa .....	0.6	0.7	0.7	0.9	1.1	1.2	1.4	3.2
Central and South America .....	1.3	1.7	1.7	2.2	2.9	3.6	4.6	4.3
Brazil .....	0.6	0.7	0.7	0.9	1.2	1.5	1.8	3.9
Other Central/South America .....	0.7	0.9	1.0	1.3	1.7	2.2	2.8	4.6
Total Developing .....	4.7	6.9	8.0	10.3	13.1	16.1	18.4	4.2
Total World .....	22.3	25.5	28.5	33.0	37.4	41.7	45.2	2.4

<sup>a</sup>Includes the 50 States and the District of Columbia. U.S. Territories are included in Australasia.

Notes: EE/FSU = Eastern Europe/Former Soviet Union. Totals may not equal sum of components due to independent rounding.

Sources: **History:** Derived from Energy Information Administration (EIA), *International Energy Annual 1996*, DOE/EIA-0219(96) (Washington, DC, February 1998). **Projections:** EIA, World Energy Projection System (1999).

**Table E8. World Total Air Use Energy Consumption by Region, Reference Case, 1990-2020**  
 (Million Barrels of Oil per Day)

Region/Country	History		Projections					Average Annual Percent Change, 1996-2020
	1990	1996	2000	2005	2010	2015	2020	
<b>Industrialized Countries</b>								
North America .....	1.7	1.8	2.1	2.4	2.8	3.1	3.5	2.8
United States <sup>a</sup> .....	1.6	1.7	1.9	2.2	2.6	2.9	3.2	2.7
Canada .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.4
Mexico .....	0.0	0.0	0.1	0.1	0.1	0.2	0.2	6.3
Western Europe .....	0.6	0.8	0.9	1.0	1.2	1.4	1.7	3.3
United Kingdom .....	0.1	0.2	0.2	0.2	0.3	0.3	0.4	3.4
France .....	0.1	0.1	0.1	0.1	0.2	0.2	0.2	2.9
Germany .....	0.1	0.1	0.1	0.2	0.2	0.2	0.3	3.4
Italy .....	0.0	0.1	0.1	0.1	0.1	0.1	0.1	3.2
Netherlands .....	0.0	0.1	0.1	0.1	0.1	0.1	0.1	3.4
Other Western Europe .....	0.2	0.3	0.3	0.4	0.4	0.5	0.6	3.4
Industrialized Asia .....	0.2	0.3	0.3	0.3	0.4	0.5	0.5	2.5
Japan .....	0.1	0.2	0.2	0.2	0.2	0.3	0.3	2.2
Australasia .....	0.1	0.1	0.1	0.1	0.1	0.2	0.2	3.1
Total Industrialized .....	2.5	2.9	3.2	3.8	4.4	5.0	5.7	2.9
<b>EE/FSU</b>								
Former Soviet Union .....	0.4	0.2	0.2	0.2	0.2	0.3	0.3	1.6
Eastern Europe .....	0.0	0.0	0.0	0.1	0.1	0.1	0.1	5.6
Total EE/FSU .....	0.5	0.3	0.2	0.3	0.3	0.4	0.5	2.4
<b>Developing Countries</b>								
Developing Asia .....	0.3	0.5	0.5	0.7	1.0	1.4	2.0	6.1
China .....	0.0	0.1	0.1	0.1	0.2	0.3	0.5	8.7
India .....	0.0	0.0	0.1	0.1	0.1	0.2	0.3	7.2
South Korea .....	0.0	0.0	0.0	0.1	0.1	0.1	0.2	6.3
Other Asia .....	0.2	0.3	0.3	0.4	0.6	0.8	1.0	5.0
Middle East .....	0.1	0.2	0.2	0.2	0.3	0.4	0.5	5.5
Turkey .....	0.0	0.0	0.0	0.0	0.1	0.1	0.1	6.0
Africa .....	0.1	0.1	0.1	0.2	0.2	0.3	0.4	4.7
Central and South America .....	0.1	0.1	0.2	0.2	0.3	0.4	0.6	5.7
Brazil .....	0.0	0.0	0.0	0.1	0.1	0.1	0.2	5.2
Other Central/South America .....	0.1	0.1	0.1	0.2	0.2	0.3	0.4	5.9
Total Developing .....	0.6	0.9	1.0	1.4	1.9	2.6	3.4	5.8
<b>Total World</b> .....	3.7	4.0	4.4	5.4	6.6	8.0	9.6	3.7

<sup>a</sup>Includes the 50 States and the District of Columbia. U.S. Territories are included in Australasia.

Notes: EE/FSU = Eastern Europe/Former Soviet Union. Totals may not equal sum of components due to independent rounding.

Sources: **History:** Derived from Energy Information Administration (EIA), *International Energy Annual 1996*, DOE/EIA-0219(96) (Washington, DC, February 1998). **Projections:** EIA, World Energy Projection System (1999).

**Table E9. World Total Other Transportation Use Energy Consumption by Region, Reference Case,  
1990-2020**  
(Million Barrels of Oil per Day)

Region/Country	History		Projections					Average Annual Percent Change, 1996-2020
	1990	1996	2000	2005	2010	2015	2020	
<b>Industrialized Countries</b>								
<b>North America</b>	<b>1.5</b>	<b>1.4</b>	<b>1.4</b>	<b>1.5</b>	<b>1.7</b>	<b>1.8</b>	<b>2.0</b>	<b>1.3</b>
United States <sup>a</sup>	1.3	1.2	1.2	1.3	1.4	1.6	1.7	1.3
Canada	0.2	0.2	0.2	0.2	0.2	0.2	0.3	1.2
Mexico	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
<b>Western Europe</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.1</b>	<b>1.1</b>	<b>1.1</b>	<b>1.1</b>	<b>0.3</b>
United Kingdom	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
France	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Germany	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Italy	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Netherlands	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
Other Western Europe	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.3
<b>Industrialized Asia</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.5</b>
Japan	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.5
Australasia	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.7
<b>Total Industrialized</b>	<b>2.7</b>	<b>2.8</b>	<b>2.7</b>	<b>2.9</b>	<b>3.1</b>	<b>3.2</b>	<b>3.4</b>	<b>0.9</b>
<b>EE/FSU</b>								
Former Soviet Union	0.8	0.5	0.5	0.6	0.6	0.6	0.7	0.8
Eastern Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.1
<b>Total EE/FSU</b>	<b>0.8</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.7</b>	<b>0.7</b>	<b>0.7</b>	<b>0.8</b>
<b>Developing Countries</b>								
<b>Developing Asia</b>	<b>0.9</b>	<b>1.0</b>	<b>1.0</b>	<b>1.1</b>	<b>1.2</b>	<b>1.3</b>	<b>1.4</b>	<b>1.3</b>
China	0.3	0.4	0.4	0.4	0.4	0.5	0.5	1.2
India	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.8
South Korea	0.1	0.2	0.2	0.2	0.2	0.2	0.2	1.5
Other Asia	0.4	0.4	0.4	0.5	0.5	0.5	0.6	1.3
<b>Middle East</b>	<b>0.2</b>	<b>0.3</b>	<b>0.3</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>1.4</b>
Turkey	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
<b>Africa</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>1.1</b>
<b>Central and South America</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>0.9</b>
Brazil	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.9
Other Central/South America	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.9
<b>Total Developing</b>	<b>1.5</b>	<b>1.8</b>	<b>1.8</b>	<b>1.9</b>	<b>2.1</b>	<b>2.2</b>	<b>2.4</b>	<b>1.2</b>
<b>Total World</b>	<b>5.0</b>	<b>5.1</b>	<b>5.1</b>	<b>5.4</b>	<b>5.8</b>	<b>6.1</b>	<b>6.5</b>	<b>1.0</b>

<sup>a</sup>Includes the 50 States and the District of Columbia. U.S. Territories are included in Australasia.

Notes: EE/FSU = Eastern Europe/Former Soviet Union. Totals may not equal sum of components due to independent rounding.

Sources: **History:** Derived from Energy Information Administration (EIA), *International Energy Annual 1996*, DOE/EIA-0219(96) (Washington, DC, February 1998). **Projections:** EIA, World Energy Projection System (1999).