

# Transportation Efficiency

How far can you travel on 1,000 Calories of energy?



**ELF (w/ elec assist)**  
30 mph

93 miles



**Racing velomobile**  
(human powered)  
20 mph

69 miles



**Commuter bike**  
4 mph

62 miles



**Commuter bike**  
10 mph

41 miles



**Racing velomobile**  
(human powered)  
30 mph

40 miles



**Racing bike**  
20 mph

38 miles



**ELF**  
(human powered)  
20 mph

27 miles

**Walker**  
4 mph



12 miles

**Runner**  
10 mph



8 miles



**Car & driver**  
(gas powered)  
30 mph

1.2 miles



**Car & driver**  
(gas powered)  
60 mph

0.8 miles

Efficiency calculations assume vehicles travel at constant speed over flat terrain. Solar energy use is not accounted for in the efficiency calculation for the electric assist ELF.

Data adapted by Andrew Grieshop and Joe DeCarolis (NC State University) from Van De Walle, 2004, The Velomobile as a Vehicle for More Sustainable Transportation and <http://exploratorium.edu/cycling/humanpower1.html>