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#### **Commuter Space Required**

Subway 12.6 m² per passenger Bus 12.7 Walking 12.8 Light Rail ■ 8.3 Biking ■ 9.3 Bus Rapid Transit 20.5 Vanpool 32.4 Car I **161.1** 

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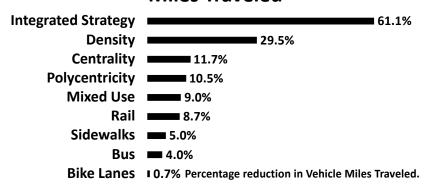
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urbancruiseship.org Exhibit Research by Michael Goff and Andrew Evans, initial graphics and selection by Lee Nelson, final selection by John van der Harst, and final graphics by Richard Burd, 2/24/2023

### **Urban Form Strategies to Reduce Vehicle** Miles Traveled



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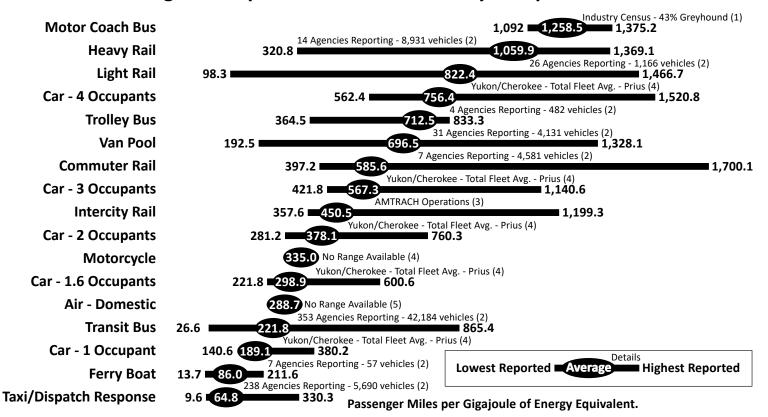
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### Passenger Transportation Mode Efficiency Comparisons - U.S.

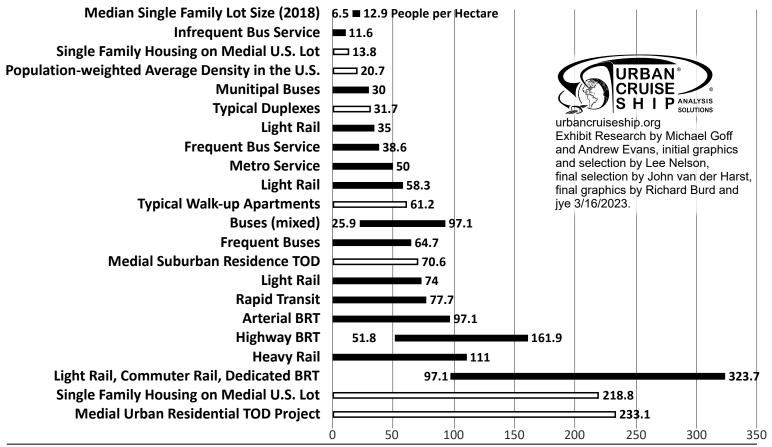


Source: M.J. Bradley & Associates: "Comparison of Energy Use & CO2 Emissions from Different Transportation Modes" - Submitted to American Bus Association (May 2007)

- 1.) Motor Coach Bus figures drawn from self-reported industry census (2005)
- 2.) National Transit Database (2005)
- 3.) Bureau of Transportation Statistics (2001)
- Car Averages are the total fleet averages derived from the Bureau of Transportation Statistics (2005) and car ranges display the fuel economy reports from (2001)
- 5.) National Research Council.Driving and the Built Environment: The Effects of Compact Development on MotorizedTravel, Energy Use, and CO2 Emissions--Special Report 298. Washington, DC: The National Academies Press. 2009
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## **Mass Transit Density Thresholds for Financial Viability**



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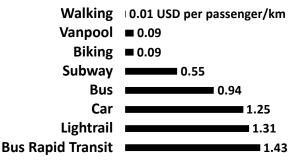
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## Road Damage Compared to a Typical Passenger Car

