

XXIVth World Road Congress Mexico 2011 Mexico City 2011.

EVOLVING CONCEPTS OF TRANSPORTATION SUSTAINABILITY: U.S. EXPERIENCE

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Brundtland Commission

A sustainable condition for this planet is one in which there is stability for both social and physical systems, achieved through meeting the needs of the present without compromising the ability of future generations to meet their own needs.



1997 TRB Report on Sustainability and U.S. Transportation

•GHG emissions/climate change

•Disruptions of natural habitats/biodiversity



"Sustainable Transportation" Characteristics (circa 2000)

- Increased bicycle/pedestrian use
- More public transportation options
- Pricing of highways (including external costs)



Interrelated, Almost Interchangeable Terms (circa 2011)

- Sustainable transportation
- Smart transportation
- •Smart growth
- Livable communities
- Context-sensitive design



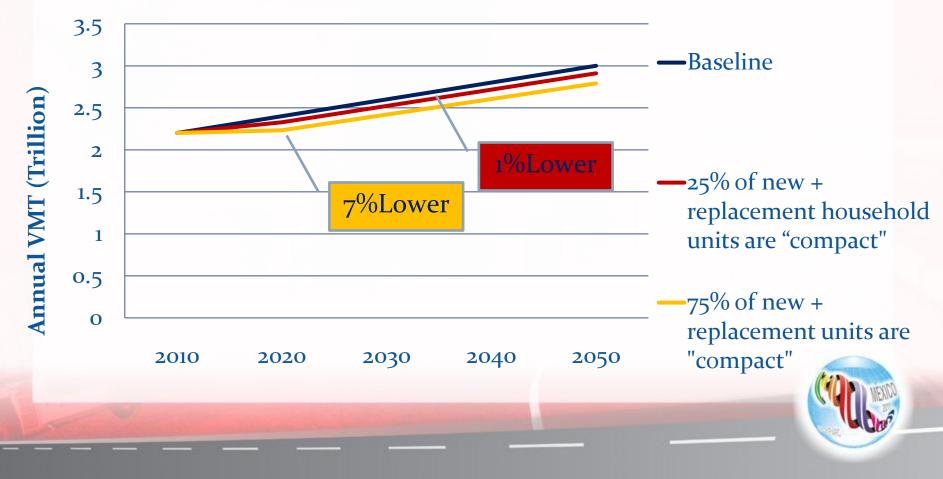
SHRP 2 Planning Tools and Models

Transportation for Communities

www.TransportationForCommunities.com

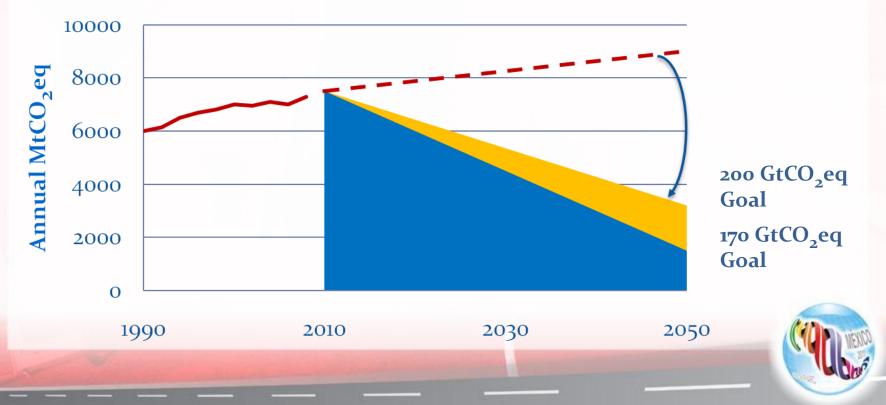


Marginal Effect on Metropolitan Auto Travel from Gradually Increasing Density of Land Use



The Challenge of Limiting Climate Change

Slowing Growth in Fossil Fuel Use Will Not Be Sufficient



Conclusions

• "Sustainability" concepts applied with different meanings

•Locally, "sustainable transportation" consistent with planning and policy trends already under way

 Nationally, limited support for policies to address planetwide sustainability challenges