



AltWheels

Creating a Sustainable Transportation Vision for the 21st Century



# Overview of Transportation Choices

*"You can't get there from here."*

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## Overviews...

- Saturday – Overview of  
**Transportation Technologies**
- Sunday – Overview of  
**Transportation Choices**
- Sunday Panels
  - » *Creating a Sustainable Transportation Vision for New England*
  - » *Winning the Oil Endgame: Innovations for Transportation*
  - » *Urban Development: Creating a More Sustainable Landscapes*
  - » *Greenways, Bikeways and Rails-to-Trails for "Traditional Landscapes"*



## Traffic - Texas Style

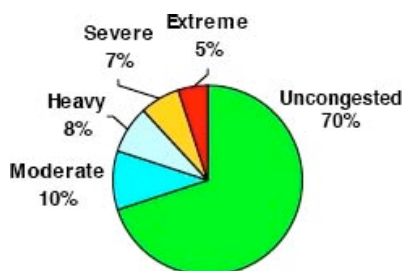
- **2005 Urban Mobility Report** (May05)
  - › Texas Transportation Institute (mobility.tamu.edu)
  - › Congestion affects more of the roads, trips and time of day. The worst congestion levels increased from 12% to 40% of peak period travel. And **free-flowing travel is less than half of the amount in 1982**.
  - › **Congestion has grown in areas of every size**. Measures in all of the population size categories show more severe congestion that lasts a longer period of time and affects more of the transportation network in 2003 than in 1982. The average annual delay for every person using motorized travel in the peak periods in the 85 urban areas studied climbed from 16 hours in 1982 to 47 hours in 2003.
  - › Major projects, programs and funding efforts take 10 to 15 years to develop. In that time, congestion endured by travelers and businesses grow to those of the next largest population group. So **in ten years, medium-sized regions will have the traffic problems that large areas have now, if trends do not change**.



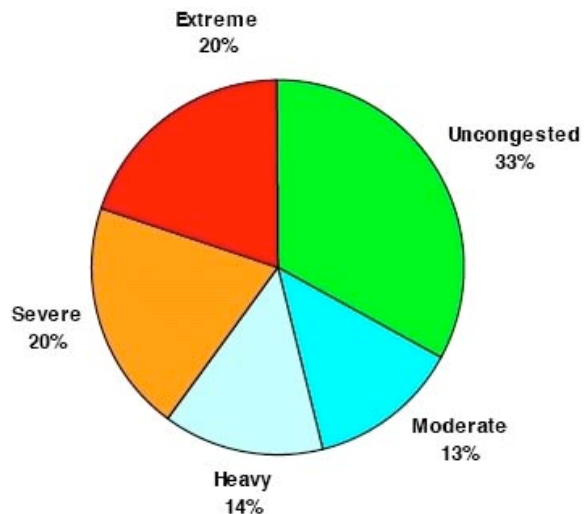
## TTI—Stuck in Traffic

### **Percent of Travel in Each Congestion Level / Total Delay**

1982—0.7 Billion Hrs



2003—3.7 Billion Hrs





## Solutions–Texas Style?

- “A Balanced Approach” (TTI)
  - » Begin to plan and design major capacity increasing projects, plans or policy changes
  - » Immediately relieving critical bottlenecks or chokepoints
  - » Aggressively pursuing operations improvements and demand management options that are available
- Which means... (TTI)
  - More capacity, including public transportation
  - Greater efficiency, including information to travelers
  - Manage the demand, including telecommuting
  - Development patterns, including re-urbanization
  - Realistic expectations, by the traveling public.
- A Good Start (Need to look at additional dimensions)



## Newton Rules!!!



Vehicle efficiency is just part of the story.

- Transportation is Different!
  - » Energy = Work
  - » Work = Force x a Distance
  - » Force = Mass x Acceleration
- Can't Get Around It
  - » Mass = Vehicle Size/Weight
  - » Distance = Trip Length(s)
  - » Acceleration = Driving Style, Congestion
- There's No Getting Around It

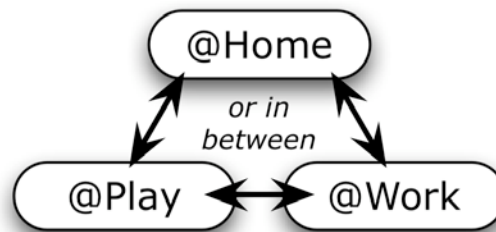


# The Demand for Transport

## The Three "Ats"

- At Home
- At Work
- At Play

## And in Between



The Most Environmentally Responsible?

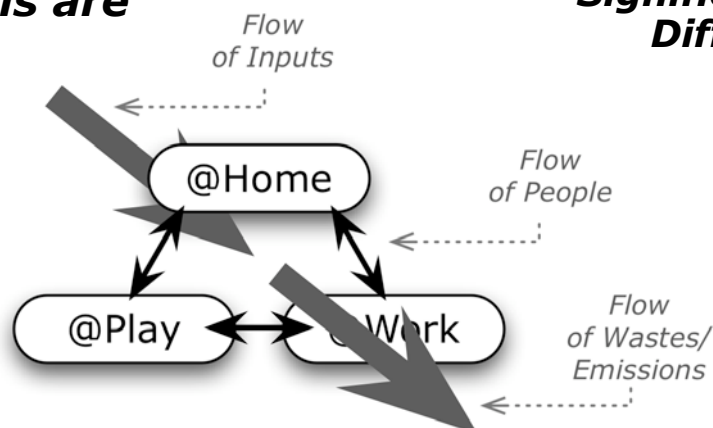
**Having Fun Working  
at Home!**



# A Life-Cycle Perspective

**But, Flows of People  
and Materials are  
Different**

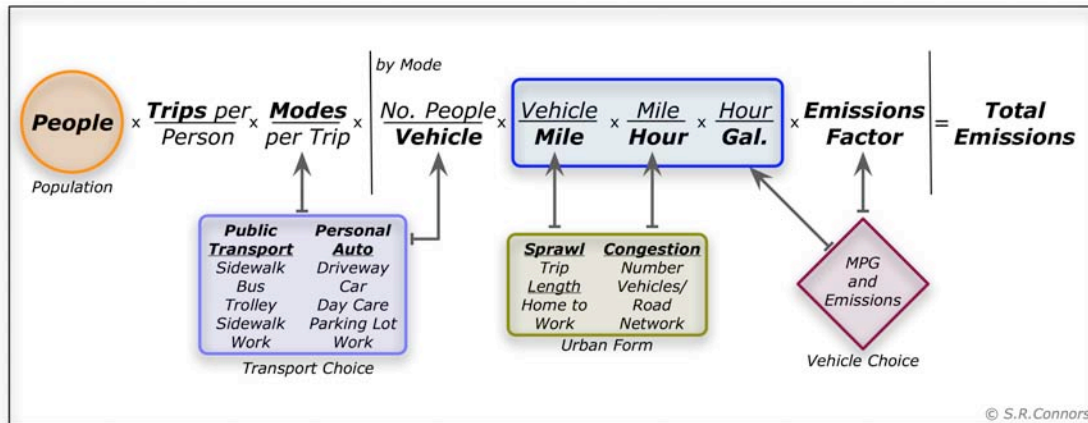
**Those Material Flows are  
Significantly  
Different**



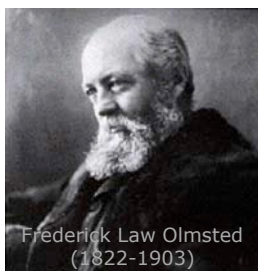


# Magical Mobility Equation...

- Which Is the Most Important?
- Can Any Be Ignored?



# Olmstead Creates!!!



Long-Term  
Urban Form  
(Utilization)  
Trumps  
Efficiency  
Improvement

- Land Use is Crucial !!!
  - > Mixed Use
  - > Foot & Bikeways
  - > Conservation & Recreation
  - > Transportation Carrots & Sticks
- Ignore Them to Everyone's Detriment
  - > Finding the Vision(s)
  - > Devoting the Resources to Implement Them



## So, How Do We..

- *Get You Out of Your Cars and On To*
  - » Public Transportation
  - » Sidewalks and Bike Paths
  - » Around the Neighborhood
- *"Design" Challenges*
  - » Providing 'Easier' Alternatives
    - > Respecting people's hectic lifestyles
    - > Acknowledging that this already an expensive place to live
  - » Building upon Boston/New England's reputation as a compact, livable city/region
- *Couch Potato/Mouse Potato/Traffic Spud*



## Today's Panels

### 10:30 **Creating a Sustainable Transportation Vision for New England**

- Stephen CONNORS, MIT (moderator)
- Andrew BRENNAN, Director of Environmental Affairs, MBTA
- Scott GRIFFITH, CEO & President, ZIPCAR
- Sonia HAMEL, Special Assistant, MASSACHUSETTS OFFICE FOR COMMONWEALTH DEVELOPMENT
- Steve RUSSELL, Fleet Superintendent, CITY OF KEENE NH

### 12:00 **Winning the Oil Endgame: Innovations for Transportation**

- Nathan Glasgow, ROCKY MOUNTAIN INSTITUTE

### 1:15 **Urban Development: Creating More Sustainable Landscapes for the 21st Century. Green Cities - Future urban spaces designed for people.**

- Peter SMITH, Principal, GLOBAL URBAN SOLUTIONS, Co-chair BSA Urban Design Committee (moderator)
- Phil GOFF, Urban Designer, ELKUS/MANFREDI ARCHITECTS
- Kathryn LEAHY, Director of MASS AUDUBON SOCIETY's North Shore Advocacy Office

### 2:35 **Greenways, Bikeways and Rails-to-Trails: Simple, Sensible Improvements for Traditional Landscapes**

- Wayne MACEYKA, SEVEN CYCLES (moderator)
- Craig Della PENNA, Executive Director, NORTHEAST GREENWAY SOLUTIONS
- Lauren HEFFERON, Founder and President, CICLISMO CLASSICO
- Dave LOUTZENHEISER, Board Member, MASSBIKE
- Jeff Rosenblum, Coordinator, BOSTON BICYCLE PLANNING INITIATIVE