

# Sustainable Transportation



*John Horsley, Executive Director, AASHTO  
11<sup>th</sup> Biennial Conference on Transportation  
Energy and Environmental Policy  
Pacific Grove, California*

# Transportation Vision Summit

To Provide the National Surface Transportation Policy and Revenue Study Commission with a long range vision for transportation



# Transportation Vision Summit

## 9 Key Topics Addressed

- Big Picture
- Highways
- Railroads
- Transit
- Metro Mobility
- **Sustainable Transportation**
- Advanced Technology
- Safety
- Funding



# Sustainable Transportation

## Panel

- **Hal Kasso**, Chair  
PB: Sr. VP & Highway Market Leader
- **Barry Barker**  
Louisville Transit: Exec Director
- **Gordon Bell**  
Writer
- **Douglas Foy**  
DIF Enterprises: President
- **David Greene**  
Nat'l Transp Resrch Ctr: Research Fellow
- **David Burwell**
- **Jack Lettiere**  
Transportation Consultant
- **Ian Lockwood**  
Gladding Jackson
- **Gary McVoy**  
NYSDOT: Director of Operations
- **Dan Sperling**  
UC Davis: Director, Inst of Transp Studies
- **Gary Toth**  
NJ DOT: Director, Project Planning & Devel

*Support: Janet Oakley: AASHTO, Kathryn Harrington-Hughes: Upper Great Plains Inst.*

# Sustainable Transportation Vision

- **Reduce the Transportation System Environmental Footprint**

**WHILE**

- **Expanding Transportation System Capability to Serve Communities, Economy and Growth**

# THE TRIPLE BOTTOM LINE

**Build Strong Communities  
with Sustainable  
Transportation Strategies  
That Result In...**

- Robust Economic Growth
- Better Than Before Health of the Environment
- Improved Quality of Life for All Citizens



# **Robust Economic Growth**

**Use sustainable practices in improving the existing transportation system**

- Fulfill expectations of transportation to serve economic growth
- Improve system performance through operations and ITS
- Use Asset Management to preserve, extend life, restore and enhance the existing system
- Improve network connectivity within and between modes for passenger and freight traffic
- Leverage existing capacity with better highway and street grid integration

# **Robust Economic Growth**

## **Manage Highway Travel Demand**

- Cut the growth in VMT -- from 3 trillion in 2006 to 5 trillion (rather 7 trillion) by 2055
- Reduce the number of commuters who drive alone
- Increase percentage who ride bikes, walk or work at home
- Double transit ridership by 2030
- Expand the potential for intercity passenger and freight railroads to serve a greater share of their markets



# Robust Economic Growth

**Apply sustainable approaches  
when delivering new capacity**

- Expand system capacity judiciously
- Use Context Sensitive Solutions to achieve program and project outcomes that fit into and enhance their settings while fulfilling transportation objectives
- Replace “Wider, Straighter, Faster” with Context Sensitive Solutions that enhance safety

# **Better Than Before Natural Environment**

## **Reduce Carbon Dioxide Conserve Energy**

- Reduce transportation-related oil consumption by 20% in ten years, through increasing CAFE standards and use of renewable fuels.
- Double the fuel efficiency of new passenger cars and light trucks by 2030.
- Cut in half the projected rate of growth of vehicle travel through 2055.
- Double transit ridership by 2030.
- Reduce automobile and truck carbon dioxide emissions by 20% by 2020.
- Launch long-term national research on non-carbon-based fuels.

# **Better Than Before Natural Environment**

## **Use Environmental Stewardship Principles**

- Go beyond mitigation to enhancement -- air, water, wildlife habitats
- Measure end results so that the natural environment is better than before project by project
- Expand the reuse and recycling of materials
- Create long lasting materials to conserve resources

# Improved Quality of Life for All Citizens

Expand Sustainable Life Style Choices by  
Coordinating Land Use and Transportation

- Cities
- Suburbs
- Small Towns
- Rural Areas
- Rail
- Bus
- Streets
- Highways





# **Improved Quality of Life for All Citizens**

## **Coordinate Land Use and Transportation**

- Encourage collaborative land use and transportation planning
- Promote infill development in central cities and close in suburbs
- Encourage new development in outlying suburban areas to be mixed-use and friendly to transit, walking and biking
- Preserve small towns
- Reduce sprawl and consumption of open space and farmland

# Triple Bottom Line

Economic, Environment, Quality of Life Objectives

“Adopt the triple bottom line as a yardstick for evaluating the sustainability of surface transportation system policies and performance and as a way of advancing projects.”

# Sustainable Transportation

- A. *Embrace environmental stewardship as a preeminent approach to delivering transportation services that result in a zero carbon footprint and a "better than before" environment for all.*

## **Voting Result:**

■	<i>Strong Support</i>	<i>39%</i>
■	<i>Some Support</i>	<i>15%</i>
■	<i>Neutral</i>	<i>12%</i>
■	<i>Not Much Support</i>	<i>15%</i>
■	<i><u>Do Not Support</u></i>	<i><u>20%</u></i>
•	<b><i>Strong or Some Support:</i></b>	<b><i>54%</i></b>
•	<b><i>Little or No Support:</i></b>	<b><i>35%</i></b>
<hr/>		
■	<b><i>Average Score:</i></b>	<b><i>3.4</i></b>

# Sustainable Transportation

*B. Deliver a sustainable, high-performance transportation system in support of a robust economy by first optimizing existing infrastructure, then managing demand, and lastly, expanding capacity judiciously.*

## **Voting Result:**

■	Strong Support	43%
■	Some Support	18%
■	Neutral	10%
■	Not Much Support	10%
■	<u>Do Not Support</u>	<u>19%</u>
•	<b>Strong or Some Support:</b>	<b>61%</b>
•	<b>Little or No Support:</b>	<b>29%</b>
■	<b>Average Score:</b>	<b>3.6</b>



# Sustainable Transportation

- C. *Enhance quality of life by integrating transportation with the built and social environments by using the full tool kit, including context sensitive solutions, land use policy, and modal options.*

## **Voting Result:**

■	<i>Strong Support</i>	44%
■	<i>Some Support</i>	15%
■	<i>Neutral</i>	20%
■	<i>Not Much Support</i>	9%
■	<u><i>Do Not Support</i></u>	<u>12%</u>
•	<b><i>Strong or Some Support:</i></b>	<b>59%</b>
•	<b><i>Little or No Support:</i></b>	<b>21%</b>
■	<b><i>Average Score:</i></b>	<b>3.7</b>

# Sustainable Transportation

## Sustainable Transportation Goals/Strategies:

### IN SUM:

- *From 54% to 61% were supportive – clear majority*
- *Form 21% to 35% were NOT supportive – clearly troubling*
- *Score of 3.9 or higher placed in top 10 of 27*
- *All top 10 were “hard core” transportation issues*
- *Sustainable Transportation scored 3.4 to 3.7*
- *Sustainable Transportation made it to the “mainstream”  
(among transportation professionals while “competing” with hard-core transportation issues)*

# A Big Step Forward

## *A New Vision for the 21<sup>st</sup> Century*

- *National Surface Transportation Policy and Revenue Study Commission*
- *Congress*
- *[www.transportation.org](http://www.transportation.org)*

