Creating A Business Case For Transportation

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Victoria Transport Policy Institute

Making Connections
Improving Mobility and Design in the Treasure Valley
6 February 2015
Boise, Idaho
Issues to Discuss

- How are travel demands changing?
- What are the benefits of meeting these demands?
- What evidence is there to justify more transportation investment (and therefore more funding)?
- What are sources of opposition?
- How can you overcome that opposition?
- What would an optimal investment package look like?
“Demands,” how and how much do people want to travel.

<table>
<thead>
<tr>
<th>Demands</th>
<th>Drivers</th>
<th>Non-Drivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freight and service vehicles</td>
<td>Drive</td>
<td></td>
</tr>
<tr>
<td>Commuting to work and school</td>
<td>Drive</td>
<td>Walk, bike, rideshare and public transit</td>
</tr>
<tr>
<td>Neighborhood errands</td>
<td>Drive</td>
<td>Walk, bike and taxi</td>
</tr>
<tr>
<td>Social and recreation</td>
<td>Drive</td>
<td>Walk, bike and taxi</td>
</tr>
<tr>
<td>Tourism</td>
<td>Drive</td>
<td>Walk, bike, and public transit</td>
</tr>
<tr>
<td>Intercity travel</td>
<td>Drive</td>
<td>Rideshare and public transit</td>
</tr>
<tr>
<td>Mobility for people with disabilities</td>
<td>Drive</td>
<td>Walk, rideshare, public transit, taxi</td>
</tr>
</tbody>
</table>
Past Visions of Future Transport

1949 ConvAIRCAR Flying Car

Jet Pack

Audi Self-Driving Car

Segways

Supersonic Concord
2001 A Space Odyssey
Wheeled Luggage
Paradigm Shifts

- **Growth** - expanding, doing more.
- **Development** - improving, doing better.

- **Mobility** - physical movement.
- **Accessibility** - obtaining desired goods, services and activities.
### Paradigm Shift

<table>
<thead>
<tr>
<th></th>
<th>Old Paradigm</th>
<th>New Paradigm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition of</strong></td>
<td><strong>Mobility</strong> (physical travel)</td>
<td><strong>Accessibility</strong> (people’s overall ability to reach services and activities)</td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport planning</td>
<td>Maximize travel speeds and minimize user costs</td>
<td>Optimize transport system efficiency and equity</td>
</tr>
<tr>
<td>-goals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modes considered</td>
<td>Mainly automobile</td>
<td>Multi-modal: Walking, cycling, public transport, and automobile</td>
</tr>
<tr>
<td>Performance</td>
<td>Vehicle traffic speeds, roadway Level-of-Service</td>
<td>Quality of transport options. Multi-modal LOS. Land use accessibility. Quality of accessibility for disadvantaged groups. Various costs to users and society.</td>
</tr>
<tr>
<td>indicators</td>
<td>(LOS), distance-based crash and emission rates</td>
<td></td>
</tr>
<tr>
<td>Favored transport</td>
<td>Road and parking facility expansion.</td>
<td>Improve transport options. TDM. More accessible land development.</td>
</tr>
<tr>
<td>improvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>strategies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health impacts</td>
<td>Per-kilometer traffic crash and pollution</td>
<td>Per capita crash, emission and physical activity rates, and basic access</td>
</tr>
<tr>
<td>considered</td>
<td>emission rates</td>
<td></td>
</tr>
</tbody>
</table>
Motor Vehicle Travel is Peaking

Vehicle travel grew steadily during the Twentieth Century but stopped about 2003.

- Motor vehicle saturation.
- Aging population.
- Rising fuel prices.
- Increased urbanization.
- Increased traffic and parking congestion
- Improved transport options
- Changing consumer preferences
- Health Concerns
- Environmental concerns
Motor Vehicle Travel is Peaking

When people retire they typically reduce driving by half, and their annual mileage continues to decline each subsequent year.
Recent U.S. (left) and British (right) travel forecasts have failed to predict actual travel activity. This reflects a failure in understanding travel demands.
### Idaho Travel Trends (Baxendall 2013)

<table>
<thead>
<tr>
<th>State</th>
<th>Vehicle-miles traveled per person in 2011</th>
<th>Percent change in annual per-person vehicle miles traveled, 2005 to 2011</th>
<th>Peak year for annual vehicle miles per person</th>
<th>Peak year annual vehicle miles traveled per person</th>
<th>Reduction in annual vehicle miles traveled per person since peak year</th>
<th>Percent decline in vehicle miles traveled per person since peak year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>13,516</td>
<td>3.26%</td>
<td>2011</td>
<td>13,516</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Alaska</td>
<td>6,355</td>
<td>-16.23%</td>
<td>2001</td>
<td>7,639</td>
<td>1,284</td>
<td>16.8%</td>
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<tr>
<td>Arizona</td>
<td>9,190</td>
<td>-8.72%</td>
<td>2006</td>
<td>10,131</td>
<td>941</td>
<td>9.3%</td>
</tr>
<tr>
<td>Arkansas</td>
<td>11,216</td>
<td>-2.50%</td>
<td>2006</td>
<td>11,743</td>
<td>526</td>
<td>4.5%</td>
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<tr>
<td>California</td>
<td>8,511</td>
<td>-6.61%</td>
<td>1999</td>
<td>9,244</td>
<td>733</td>
<td>7.9%</td>
</tr>
<tr>
<td>Colorado</td>
<td>9,108</td>
<td>-11.40%</td>
<td>2005</td>
<td>10,281</td>
<td>1,172</td>
<td>11.4%</td>
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<tr>
<td>Connecticut</td>
<td>8,713</td>
<td>-3.45%</td>
<td>2007</td>
<td>9,152</td>
<td>439</td>
<td>4.8%</td>
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<tr>
<td>Delaware</td>
<td>9,952</td>
<td>-11.71%</td>
<td>2005</td>
<td>11,272</td>
<td>1,320</td>
<td>11.7%</td>
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<tr>
<td>D.C.</td>
<td>5,774</td>
<td>-14.40%</td>
<td>2003</td>
<td>7,371</td>
<td>1,597</td>
<td>21.7%</td>
</tr>
<tr>
<td>Florida</td>
<td>10,067</td>
<td>-11.13%</td>
<td>2005</td>
<td>11,328</td>
<td>1,261</td>
<td>11.1%</td>
</tr>
<tr>
<td>Georgia</td>
<td>11,050</td>
<td>-11.68%</td>
<td>2001</td>
<td>13,249</td>
<td>2,199</td>
<td>16.6%</td>
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<tr>
<td>Hawaii</td>
<td>7,322</td>
<td>-7.46%</td>
<td>2007</td>
<td>8,061</td>
<td>739</td>
<td>9.2%</td>
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<tr>
<td>Idaho</td>
<td>10,055</td>
<td>-3.34%</td>
<td>1999</td>
<td>11,171</td>
<td>1,116</td>
<td>10.0%</td>
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<tr>
<td>Illinois</td>
<td>8,022</td>
<td>-4.94%</td>
<td>2004</td>
<td>8,585</td>
<td>562</td>
<td>6.6%</td>
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<tr>
<td>Indiana</td>
<td>11,736</td>
<td>2.52%</td>
<td>2004</td>
<td>13,113</td>
<td>1,377</td>
<td>10.5%</td>
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<tr>
<td>Iowa</td>
<td>10,213</td>
<td>-2.47%</td>
<td>2004</td>
<td>10,594</td>
<td>381</td>
<td>3.6%</td>
</tr>
</tbody>
</table>
Per Capita Vehicle Travel by State

Total Annual Vehicle Miles Traveled (VMT) Per-Capita, 2011

Baxendall (2013), Moving Off the Road
A State-by-State Analysis of the National Decline in Driving, PIRG.
New and Latent Travel Demands

- Many rural and small town seniors want to “age in place” in their communities, but are unsafe drivers. They will need suitable mobility options, including pedestrian improvements, and improved bus services.

- Many traffic safety strategies, including graduated driver’s licenses, senior driver skill testing and anti-impaired driving campaigns become more successful and publically acceptable if target audiences have suitable alternatives to driving.

- Many children, and their parents, prefer to walk and bicycle, rather than be chauffeured to school and other local destinations. This saves money and improve fitness and health.
Many college and universities have parking and traffic congestion problems, and automobile ownership is a major financial burden to many students. In response, many campuses are implementing transportation management programs that improve affordable travel options (walking, cycling and public transit) and encourage use of these modes instead of driving.
Memo From Future Self

Hope for the best but prepare for the worst:

- **Physical disability** – diverse and integrated transport with universal design (accommodates people with disabilities and other special needs).
- **Poverty and inflation** – affordable housing in accessible, multi-modal locations.
- **Higher energy prices** – improve efficient modes (walking, cycling and public transport).
- **Isolation and loneliness** – community cohesion (opportunities for neighbors to interact in positive ways).
Transportation improvements can support economic development in several ways:

- Freight delivery and industrial activities
- Reducing costs (vehicles, road and parking, accidents, etc.)
- Commuter access to jobs
- Making an area more attractive to live and visit.
- Tourism activity
- Land use development

- The greatest benefits occur when inadequate transportation constrains economic activities or imposes high costs. Where this occurs, transportation improvements tend to increase productivity.
Goods flow out, money flows in

$33 \, B$ outgoing trade in 2013; $22 \, B$ by truck & truck-rail

**OUTGOING TRADE BY MODE**

- Pipeline: mostly natural gas
- Air
- Rail
- Other

**Truck & truck-rail:** 64%

**BY TRUCK OUTGOING**

<table>
<thead>
<tr>
<th>Commodity</th>
<th>2013 $B</th>
<th>CAGR 2013-2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed freight (wholesale)</td>
<td>3.7</td>
<td>5.6%</td>
</tr>
<tr>
<td>Other prepared food (e.g. dairy)</td>
<td>2.6</td>
<td>1.2%</td>
</tr>
<tr>
<td>Electronics</td>
<td>1.4</td>
<td>2.5%</td>
</tr>
<tr>
<td>Other agriculture</td>
<td>1.3</td>
<td>0.2%</td>
</tr>
<tr>
<td>Wood products</td>
<td>1.1</td>
<td>0.0%</td>
</tr>
<tr>
<td>Machinery</td>
<td>0.8</td>
<td>3.8%</td>
</tr>
<tr>
<td>Miscellaneous manufacturing</td>
<td>0.5</td>
<td>2.3%</td>
</tr>
<tr>
<td>Motorized vehicles</td>
<td>0.5</td>
<td>0.8%</td>
</tr>
<tr>
<td>Metallic ores</td>
<td>0.5</td>
<td>0.6%</td>
</tr>
<tr>
<td>Cereal grains</td>
<td>0.5</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

**Total outgoing** $16.8 \, B

**Road dependence**

**Wholesale, dairy, manufacturing, agriculture**

Source: TREDIS

Economic Development Research Group
Costs of Inadequate Transport

- Traffic congestion increases travel times and wastes fuel.
- Restricted bridges limit commerce by increasing travel distances.
- Rough roads and bridge decks increase vehicle wear and tear and jeopardize public safety.
- Delaying road and bridge preservation projects forces the need for more costly restoration projects.
- Inadequate transport options (walking, cycling and public transit) reduce non-drivers’ economic opportunities, increases chauffeuring burdens on drivers, increase crash risk and reduce tourism.

Efforts to reduce impaired driving are more successful if implemented with improved travel options.
Raise My Taxes, Please!

What is the case for raising transportation taxes?

• Although traffic growth is slowing, infrastructure is aging.
• There are new travel demands.
• Construction and maintenance costs are increasing.
• Tax revenue per vehicle-mile is declining.
State Fuel Tax Revenues

- Nominal Dollars
- Current (inflation adjusted) Dollars

Revenue Per 100 Vehicle-Miles

<table>
<thead>
<tr>
<th>Period</th>
<th>Revenue Per 100 Vehicle-Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976-1981</td>
<td>$2.50</td>
</tr>
<tr>
<td>1981-1982</td>
<td>$2.00</td>
</tr>
<tr>
<td>1982-1983</td>
<td>$1.80</td>
</tr>
<tr>
<td>1983-1988</td>
<td>$1.60</td>
</tr>
<tr>
<td>1988-1991</td>
<td>$1.40</td>
</tr>
<tr>
<td>1991-1996</td>
<td>$1.20</td>
</tr>
<tr>
<td>1997-present</td>
<td>$1.00</td>
</tr>
</tbody>
</table>
Preventive maintenance reduces costs over the long run.

Well-maintained infrastructure maintains value and leaves a healthy legacy for the future.
Idaho’s Roads and Bridges are Aging

- Idaho made progress in improving its pavement condition since it was 60% good or fair in 1992.

- However, after achieving 85% in 2002, Idaho’s percentage of good or fair pavement began decreasing again. In 2010, approximately 82% of pavement on the state highway system was in good or fair condition.

- Approximately 35% of Idaho’s bridges were built in the 1950s and 1960s during the interstate construction era.

- About half of Idaho’s bridges will be 50 years old or older within the next eight years. Almost 370 bridges were built prior to World War II.

- These old bridges will require an infusion of funds for rehabilitation, reconstruction, and replacement.
Deferring maintenance increases long-run costs.
Key Survey Findings

Idaho has a significant and growing transportation funding shortfall:

- $155 million annually for operation, preservation and restoration of the state system
- $107 million annually for operation, preservation and restoration of the local system
- $207 million annually for capacity and safety enhancement for the state system
- $74 million annually for capacity and safety enhancement for the local system
- Idaho was the fifth-fastest-growing state in the nation between 2001 and 2009. During that time Highway Distribution Account revenue decreased by 0.4%
- Public transit demand is growing and requires more funding
Surrounding States Fees and Taxes

State Reg. $47.75  
(Total Reg. $102.75)  
Gas Tax 37.6¢  
Diesel 37.6¢

State Reg. $226.00  
(Total Reg. $299.23)  
Gas Tax 27.75¢  
Diesel 28.50¢

State Reg. $49.25  
(Total Reg. $73.08)  
Gas Tax** 25¢  
Diesel** 25¢

State Reg. $15.00  
(Total Reg. $320.00)  
Gas Tax 14¢  
Diesel 14¢

State Reg. $362.00  
(Total Reg. $362.00)  
Gas Tax 33.41¢  
Diesel 37.16¢

State Reg. $176.00  
(Total Reg. $189.00)  
Gas Tax 24.51¢  
Diesel 24.51¢

Annual State Fees and Taxes to Operate a 2007 Camry

<table>
<thead>
<tr>
<th>State</th>
<th>Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEVADA</td>
<td>$562.46</td>
</tr>
<tr>
<td>MONTANA</td>
<td>$392.50</td>
</tr>
<tr>
<td>UTAH</td>
<td>$323.00</td>
</tr>
<tr>
<td>WASHINGTON</td>
<td>$273.35</td>
</tr>
<tr>
<td>IDAHO</td>
<td>$205.25</td>
</tr>
<tr>
<td>OREGON</td>
<td>$189.25</td>
</tr>
<tr>
<td>WYOMING</td>
<td>$99.00</td>
</tr>
</tbody>
</table>

(12,000 miles/year at 20 mpg)  
Does not include local fees

NOTE
Some surrounding states have additional funding sources such as general funds, extraction taxes, local option taxes, gross-vehicle-weight fees, rental car taxes, toll taxes, royalties, severance taxes, etc.

Governor's Taskforce on Modernizing Transportation Funding, April 2010


** An additional 1¢ per gallon is added for the Petroleum Clean Water Trust Fund (effective 10-1-07)
Voter Opinions

(Wulfhorst, Reyna and McNamee 2014)
Raise My Taxes, Please!

- What are the main obstacles to raising transportation funding?
- What do stakeholders need to overcome those obstacles?
- What messages resonate with voters?
Addressing Voter Objections

• Taxpayers will receive a positive return on investment.

• More efficient transportation supports businesses, increasing employment and economic development

• Differed maintenance will increase long-run costs and leave a debt in the future.

• More traffic deaths.

• Without sufficient funding the system will need to contract:
  – Quality of maintenance will decline.
  – Some paved roads will revert to gravel.
  – More bridges will be limited.
More balanced transport policy is no more “anti-car” than a healthy diet is anti-food. Motorists have every reason to support these reforms:

- Reduced traffic and parking congestion.
- Improved safety.
- Improved travel options.
- Reduced chauffeuring burden.
- Often the quickest and most cost effective way to improve driving conditions.
Comparing Expenditures

- Regional transit: $26
- AAA Membership: $120
- National transit: $189
- Roadways: $623
- Parking: $750
- Vehicles: $3,111

Annual Expenditures Per Capita

- Insurance
- Repairs
- Ownership
- Fuel & oil
What is “The” Transportation Problem?

- Traffic congestion?
- Road construction costs?
- Parking congestion or costs?
- Excessive costs to consumers?
- Traffic crashes?
- Lack of mobility for non-drivers?
- Poor freight services?
- Environmental impacts?
- Inadequate physical activity?
- Others?
Current planning tends to be reductionist: each problem is assigned to a single agency with narrowly defined responsibilities. For example:

- Transport agencies deal with congestion.
- Environmental agencies deal with pollution.
- Welfare agencies deal with the needs of disadvantaged people.
- Public health agencies are concerned with community fitness.
- Etc.
Reductionist planning can result in public agencies implementing solutions to one problem that exacerbate other problems facing society, and tends to undervalue strategies that provide multiple but modest benefits.
Win-Win Solutions

Put another way, more comprehensive planning helps identify “Win-Win” strategies: solutions to one problem that also help solve other problems facing society.

Ask:
“Which congestion-reduction strategy also reduces parking costs, saves consumers money, and improves mobility options for non-drivers.”
2009 National Household Travel Survey respondents ranked the “Price of Travel” most important of the six transport issues considered.
Most vehicle expenses (purchase, lease, registrations, insurance, and regular maintenance) are fixed – not directly affected by the amount a vehicle is driven. As a result, transportation affordability requires that households be able to reduce their vehicle ownership so they avoid fixed costs.
Households can save thousands of dollars annually by reducing their vehicle ownership.

This requires:

- Good walking and cycling conditions and convenient public transit and taxi services.
- Compact, mixed neighborhoods with services and activities near homes.
- Convenient vehicle rental services (such as carsharing)
### Table 110

**Persons Killed, Licensed Drivers, Registered Vehicles, Population, and Fatality Rates by State**

<table>
<thead>
<tr>
<th>State</th>
<th>Licensed Drivers (Thousands)</th>
<th>Fatalities per 100,000 Drivers</th>
<th>Registered Vehicles (Thousands)</th>
<th>Fatalities per 100,000 Registered Vehicles</th>
<th>Population (Thousands)</th>
<th>Fatalities per 100,000 Population</th>
<th>Total Killed</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
<td>3,828</td>
<td>22.60</td>
<td>4,845</td>
<td>17.85</td>
<td>4,822</td>
<td>17.94</td>
<td>865</td>
</tr>
<tr>
<td>AK</td>
<td>526</td>
<td>11.21</td>
<td>775</td>
<td>7.61</td>
<td>731</td>
<td>8.07</td>
<td>59</td>
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<tr>
<td>AZ</td>
<td>4,698</td>
<td>17.56</td>
<td>5,163</td>
<td>15.98</td>
<td>6,553</td>
<td>12.59</td>
<td>825</td>
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<tr>
<td>AR</td>
<td>2,109</td>
<td>26.10</td>
<td>2,840</td>
<td>22.26</td>
<td>2,949</td>
<td>18.72</td>
<td>552</td>
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<tr>
<td>CA</td>
<td>24,201</td>
<td>11.81</td>
<td>27,706</td>
<td>10.31</td>
<td>38,041</td>
<td>7.51</td>
<td>2,857</td>
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<tr>
<td>CO</td>
<td>3,808</td>
<td>12.40</td>
<td>4,562</td>
<td>10.35</td>
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<td>8.72</td>
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<td>632</td>
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<td>15.47</td>
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<td>12.02</td>
<td>1,192</td>
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<td>HI</td>
<td>915</td>
<td>13.77</td>
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<td>10.23</td>
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<td>9.05</td>
<td>126</td>
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<td>ID</td>
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<td>11.53</td>
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<td>IL</td>
<td>8,236</td>
<td>13.91</td>
<td>10,172</td>
<td>9.44</td>
<td>12,875</td>
<td>7.43</td>
<td>956</td>
</tr>
<tr>
<td>IN</td>
<td>5,376</td>
<td>14.40</td>
<td>6,094</td>
<td>12.67</td>
<td>6,537</td>
<td>11.92</td>
<td>779</td>
</tr>
<tr>
<td>IA</td>
<td>2,217</td>
<td>16.46</td>
<td>3,511</td>
<td>10.40</td>
<td>3,074</td>
<td>11.87</td>
<td>355</td>
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<tr>
<td>KS</td>
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<td>20.07</td>
<td>2,449</td>
<td>16.54</td>
<td>2,886</td>
<td>14.03</td>
<td>405</td>
</tr>
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**USA** | **211,815** | **15.84** | **265,647** | **12.63** | **313,914** | **10.69** | **33,561** | **Total Killed** | **589** |

**Total Killed**
U.S. Crash Rates

Traffic Fatalities Per 100,000 Pop.

Per Capital Annual Vehicle Mileage

Rural
Urban
What Gets People Moving?

Walking is a natural and essential activity. If you ask sedentary people what physical activity they will most likely to stick with, walking usually ranks first.
Rural Transportation Management

- Improve affordable transport options (walking, cycling, public transit, delivery services, particularly for non-drivers groups (people with disabilities, low incomes, adolescents and visitors).
- Improve walking and cycling facilities for transport, recreation, and public health.
- Improve user information concerning transport options.
- Preserve special community and environmental features through context sensitive design.
- Create attractive bus and rail stations and shelters where residents can wait in comfort and security.
- Address traffic congestion and parking problems associated with tourism and special events.
- Use investments to support strategic objectives, such as redeveloping downtowns and supporting industries such as tourism and retirement communities.
# Roadway Shoulder Standards

## Highway Bikeway Width By Traffic Volume (Metres) (ODOT, 1995)

ADT = Average Daily Traffic

DHV = Design Hour Volume (0.6 = 2 ft; 1.2 = 4 ft.; 1.8 = 6 ft; 2.4 = 8 ft.)

<table>
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<tr>
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<th>ADT &lt; 250</th>
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</table>
Where state highways pass through small towns and villages, it is important to apply complete streets principles which ensures that they are designed to accommodate diverse users and uses, including walking, cycling, driving, public transit, parking and commercial activities.
Walkability

Boise City is a Car-Dependent city

Most errands require a car.

Most errands require a car in Boise City.
A Complete Street is designed for all activities, abilities, and travel modes. Complete Streets provide safe and comfortable access for pedestrians, cyclists, transit users and motorists, and a livable environment for visitors, customers, employees and residents in the area.
Linking the Centers across US29
by Dan Burden, Walkable & Livable Communities Institute
Ped/bike bridge from mall to transit stop/garage
Mixed-use redevelopment on mall parking lot
Landscaping matures
Additional redevelopment
Landscaping matures over time
Public Transit Improvements

- Quality service (convenient, fast, comfortable).
- Low fares.
- Support (walkable communities, park & ride facilities, commute trip reduction programs).
- Convenient information.
- Incentives such as commute trip reduction programs and parking cash out.
- Positive Image
Transit’s Roles

Public transit plays various roles in an efficient and equitable transportation system:

• Basic mobility for non-drivers. A portion of community residents (typically 20-40%) cannot or should not drive and so depend on walking, cycling, public transit and ridesharing. Without public transit they either lack mobility or require chauffeuring. Transit therefore reduces chauffeuring burdens.

• Affordable mobility, including fuel savings for longer trips and allows some households to reduce their vehicle ownership.

• Reducing traffic congestion on major corridors, and reducing parking problems (e.g., downtown and at university).

• Supports certain industries, such as higher education (colleges and universities), tourism, retirement industries, and businesses that require numerous lower-wage employees.

• Can be a catalyst for compact urban development (transit-oriented development).
User Information

Provide information when and were users need it:

- Transit route, schedule and fares
- Discounts and incentives.
- Real-time arrival.
- Navigation to bus stops, train stations and destinations.
- Travel times for various modes (e.g., transit vs. driving).
- Special problems (warnings of delays).
- On-board wifi services.
- Parking availability and price.
Tourist Transport Management

• Improve alternative modes (walking, cycling and public transit) to tourist destinations.

• Organize special programs and services to accommodate non-drivers and promote “car free” tourism.

• Implement transport management for workers and visitors during peak tourist seasons.
Walking and Cycling Improvements

- More investment in sidewalks, crosswalks, paths and bike lanes.
- Improved roadway shoulders.
- More traffic calming.
- Bicycle parking and changing facilities.
- Encouragement, education and enforcement programs.
There is too much traffic for Billy to walk to school; so we drive him.

Traffic Inducing Traffic
Programs that encourage parents and students to use alternative modes to travel to schools, colleges and universities.
Affordable-Accessible Housing

- Locate affordable housing in accessible areas (near services and jobs, walkable, public transit).
- Diverse, affordable housing options (secondary suites, rooms over shops, loft apartments).
- Reduced parking requirements.
- Reduces property taxes and utility fees for infill housing, reflecting their lower public service costs.

“More accessible development is equivalent to increased roadway capacity by reducing the need to drive.

“Yes in my backyard!”
Washington State’s Olympic Peninsula has numerous towns and villages located in six counties each with its own public transit system. It possible to travel between these communities by public transit.

- Terminals in each town.
- Convenient user information.
- Integrating schedules.
- Bike racks on all buses.
- Sidewalks and highway shoulders for cyclists.
Olympic Peninsula Transit Services
New Planning Resources
“If Health Matters: Evaluating Transport Health Impacts”
“The New Transportation Planning Paradigm”
“Transportation Cost and Benefit Analysis”
“The Future Isn’t What It Used To Be”
“Evaluating Smart Growth Benefits”
“Online TDM Encyclopedia”
and more...

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