

# Chapter 7 - Transportation Sustainability

It is a goal of this Regional Transportation Plan to incorporate sustainability measures into the practice of transportation planning, programming and project implementation to the extent possible.

## A. Defining Sustainability

There is no standard definition for Sustainability nor is there a standard definition for Sustainable Transportation. According to the Oregon Transportation Plan Update (2006), sustainability is creating a balance between the economy, social needs, and the environment in order to ensure healthy and equitable lifestyles and resources for future human, plant and animal communities. The Oregon Revised Statutes (ORS 184.421) defines sustainability as follows:

*“Sustainability” means using, developing and protecting resources in a manner that enables people to meet current needs and provides that future generations can also meet future needs, from the joint perspective of environment, economic and community objectives.*

However, three distinctive characteristics distinguish Sustainable Transportation Planning from the traditional transportation planning. These are Stewardship of the Environment, Social Equity and Economic Vitality of the community.

The Stewardship of the Environment includes:

1. Measures that reduce depletion of non-renewable resources
2. Measures that reduce air pollution, particularly Greenhouse Gases (GHG)
3. Measures that reduce noise pollution
4. Measures that reduce water pollution
5. Measures that reduce hydrologic impacts
6. Measures that reduce habitat and ecological degradation.

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The Social Equity includes:

1. Fair and equitable disbursement of transportation services to all people
2. Providing for the mobility of disadvantaged people
3. Affordability of services
4. Community cohesion
5. Aesthetics of built environment.

The Economic Vitality includes:

1. Creation of jobs

## **B. Recommended Sustainability Strategies**

The Sustainability recommendations of this Regional Transportation Plan are mainly derived from the transportation-related measures recommended in the Oregon Transportation Plan.

These are:

### **1. Environmentally Responsible Transportation System**

#### **Strategy 1.1**

Practice stewardship of air, water, land, wildlife and botanical resources. Take into account the natural environments in the planning, design, construction, operation and maintenance of the transportation system. Create transportation systems compatible with native habitats and species and help restore ecological processes, considering such plans as the *Oregon Conservation Strategy* and the *Oregon Plan for Salmon and Watersheds*. Where adverse impacts cannot reasonably be avoided, minimize or mitigate their effects on the environment. Work with state and federal agencies and other stakeholders to integrate environmental solutions and goals into planning for infrastructure development and provide for an ecosystem-based mitigation process.

#### **Strategy 1.2**

Encourage the development and use of technologies that reduce greenhouse gas emissions.

#### **Strategy 1.3**

Evaluate the impact of geological hazards and natural disasters including earthquakes, floods, landslides and rockfalls, on the efficiency and sustainability of the location and design of new or improved transportation facilities as appropriate.

#### **Strategy 1.4**

Work collaboratively to streamline permit procedures and gain efficiencies to transportation system improvements while meeting or exceeding environmental benefits or regulations.

#### **Strategy 1.5**

In the construction and maintenance of transportation infrastructure and facilities, reduce the consumption of non-renewable construction materials, promote their efficient use and reuse, and reduce other environmental impacts such as stormwater impacts where appropriate.

#### **Strategy 1.6**

To determine the most cost-effective investments, consider using life-cycle costs in transportation maintenance, purchase of equipment, selection of materials, and design and engineering of infrastructure where appropriate.

#### **Strategy 1.7**

To accomplish environmental stewardship and increase efficiencies, use environmental management systems.

## **2. Energy Supply**

### **Strategy 2.1**

Support efforts to develop a long range plan for moving toward a diversified and cleaner energy supply. Work with federal, state, regional and local jurisdictions and agencies as well as transportation providers, shippers and the general public.

### **Strategy 2.2**

Support the conversion of passenger vehicles and public transportation fleets to more fuel-efficient and alternative fuel vehicles, especially to those using renewable and cleaner fuels. Review and change the tax credit provisions to encourage these activities as appropriate.

### **Strategy 2.3**

Work with federal, state, regional and local jurisdictions and agencies as well as transportation providers, shippers and the general public to develop a contingency plan for fuel shortages affecting passenger and freight transportation.

## **3. Creating Communities**

### **Strategy 3.1**

Support the sustainable development of land with a mix of uses and a range of densities, land use intensities and transportation options in order to increase the efficiency of the transportation system. Support travel options that allow individuals to reduce vehicle use.

### **Strategy 3.2**

Promote safe and convenient bicycling and walking networks in communities.

- Fill in missing gaps in sidewalk and bikeway networks, especially to important community destinations such as schools, shopping areas, parks, medical facilities and transit facilities.
- Enhance walking, bicycling and connections to public transit through appropriate community and main street design.
- Promote facility designs that encourage walking and biking.

### **Strategy 3.3**

Promote location-efficient incentives to help increase the opportunities for individuals and families to purchase homes and businesses within areas well-served by transit.

### **Strategy 3.4**

Promote transportation facility design, including context sensitive design, which fits the physical setting, serves and responds to the scenic, aesthetic, historic and environmental resources, and maintains safety and mobility.

### **Strategy 3.5**

Reduce transportation barriers to daily activities for those who rely on walking, biking, rideshare, car-sharing and public transportation by providing:

- Access to public transportation and the knowledge of how to use it.
- Facility designs that consider the needs of the mobility-challenged including seniors, people with disabilities, children and non-English speaking populations.

### **Strategy 3.6**

Consider the proximity and availability of public transportation when siting public facilities and services.

## **4. Economic Vitality**

### **Strategy 4.1**

Consider ways to promote economic vitality through:

- Considerations of infrastructure costs
- Consideration of costs to consumers
- Efforts to reduce traffic congestions
- Consideration of impacts on non-renewable resources.