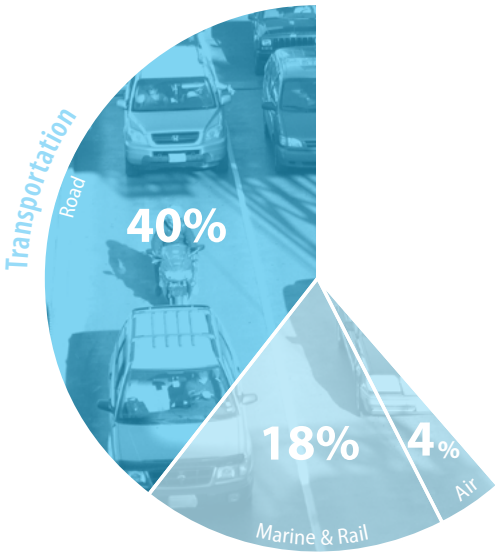
TRANSPORTATION + LAND USE

Where we live, work, and play, and how we access daily services all impact our greenhouse gas emissions. By linking land use policies with transportation policies, Seattle can more effectively address its largest source of GHG emissions: road transportation.

Coordinated transportation and land use policies can facilitate the growth of transit-oriented communities, increase mobility for our growing population, improve access and safety to multiple modes of transportation, and create or support appealing destinations. Together, all of these results can reduce vehicle miles traveled by shortening travel distances and better connecting all the places we live, work and play.

The GRC focused its Transportation + Land Use recommendations in the following areas:

- Funding
- Road Pricing
- Policy & Planning
- Transportation Infrastructure
- Transportation Demand Management
- Parking Management
- Vehicle Fuels & Technologies



City policies and programs can best impact "Road" Transportation Sector emissions. (Source: 2008 Seattle Community Greenhouse Gas Inventory)

Multimodal infrastructure accommodates transit, bicyclists, pedestrians and other vehicles. (Photo: City of Seattle)

05 Sector Recommendations

Transportation + Land Use

OVERARCHING RECOMMENDATIONS

1. Attract a significant portion of the region's growth to the city by focusing on increasing mobility options and creating complete communities that cut travel distances.

Seattle anticipates more than 100,000 new residents and 100,000 jobs over the next 20 years creating opportunities to foster smart growth in an urban setting where residents have lower carbon footprints than suburban residents.

2. Use transportation and land use planning to support diverse, thriving and walkable neighborhoods centered around transit, with convenient services and recreation.

Well coordinated public investment centered on transit service can support lively diverse neighborhoods where residents can meet many of their daily needs by walking, biking, or riding transit. Benefits of these transit-oriented neighborhoods include lower overall household costs, improved public health, thriving local business districts, increased opportunities for housing and jobs, as well as reduced GHG emissions.

3. Reduce the city's reliance on oil and transition our transportation system to clean, low-carbon solutions that are good for our economy.

In 2011, Washington's petroleum consumption drained nearly $15 billion out of the state economy, more than $2,000 per person. Money spent on cars and gasoline creates less than half as many local jobs as money spent on other goods and services. This is not sustainable for our economic or environmental health.

4. **Invest in existing and future transportation infrastructure.**

Over the next few years already inadequate funding levels at the County and City will sharply decline if new or renewed funding sources are not put in place. The result will be significant reductions in existing service levels. At the same time, we have a bold vision for a future where transit service and pedestrian and bicycle infrastructure meet the majority of our passenger transportation needs.

FUNDING

Leadership Actions

1. **Continue to increase the efficiency and equity of transportation investments** and develop funding sources to **sustain existing service levels.**
2. **Identify and prioritize funding to meet the bold vision** of a city crisscrossed with efficient, effective, accessible and well-maintained transit, bicycling, and pedestrian infrastructure and services.
3. **Create a city development authority*,** or similar mechanism, to form public private partnerships in order to use district-based funding mechanisms (e.g. tax increment financing*, tax abatement, simplified local improvement districts) to promote and shape transit communities, and support existing residents and businesses.
4. **Secure local or transit agency authority to levy a motor vehicle excise tax (MVET) with variable rates*** based on the GHG emissions intensity of vehicles. Use revenues for enhanced transit service, speed and reliability improvements or to benefit other transportation choices. Implement an MVET at the City, County or regional level.
5. **Levy a tax on off-street parking***, to supplement the current commercial parking tax authority.

*Actions require legislative changes to implement.

Quick Start Actions

1. **Renew and extend the duration of the Bridging the Gap levy** and prioritize revenues for multimodal transportation strategies, including investments in transit, pedestrian and cycling improvements and system maintenance.

05 Sector Recommendations

Transportation + Land Use

ROAD PRICING

Transportation models and on-the-ground experience in other communities have shown that pricing is a very effective way to advance climate protection and transportation system goals, including reducing greenhouse gas emissions, reducing congestion, increasing system efficiency, and generating revenue to fund the transportation system. These goals can only be fully achieved with a comprehensive pricing system, one that includes all limited access highways, and potentially extends to non-highway arterials.

The Puget Sound region is already implementing road pricing on limited access highways, but is doing so through an incremental approach. As observed with the SR 520 tolling program and as predicted with the SR 99 Tunnel, tolling individual facilities can result in traffic diversion impacts that limit road pricing's effectiveness at achieving climate protection and transportation system goals, and may also create congestion on nearby city roadways.

Leadership Actions

1. **Work with regional partners including PSRC to advocate for state and federal authorization and regional implementation of a comprehensive system of road pricing* on all limited access highways** in Central Puget Sound.
2. **Work to ensure the region has the authority to set transit rates and multimodal transportation planning objectives, and to dedicate revenues to multimodal transportation,** including transit, bicycle, and pedestrian operations, maintenance and improvement projects.

*Actions require legislative changes to implement.

Quick Start Actions

1. **Understand the benefits of pricing policies on climate protection, transportation, and community goals** (such as decreased emissions, reduced congestion, increased system efficiency, revenue generation for transportation choices, and improved air quality), and their potential social equity impacts and solutions, by examining the experience of other communities that have implemented system-wide road pricing.
2. **Evaluate road pricing opportunities on non-highway arterials. Use crowd sourcing** to help identify an area of Seattle that has significant traffic congestion and/or vehicle diversion on to city streets from limited access highways. **Develop a pilot project** to test whether road pricing can help reduce congestion while also reducing emissions and providing funding for transportation choices. The pilot project should explore the impacts of pricing on emission reductions, driver behavior, traffic displacement, congestion, and transportation funding, and to test solutions for mitigating social equity impacts.

POLICY & PLANNING

Leadership Actions

1. **Prioritize transit, walking, and biking over auto travel** while accommodating freight movement and recognizing that specific corridors have different priorities (identified in the Transit, Bicycle, and Pedestrian Master Plans).
2. **Implement land use strategies that provide residents' daily needs within a convenient walk and that create nodes well served by transit and non-motorized transportation options**, in order to attract new residents and jobs.
3. The City, County, PSRC, and State should more strongly **focus transportation and land use planning, and funding decisions, on achieving adopted climate goals**. Integrate climate goals into local and state agency planning efforts.
4. **Consider health outcomes in transportation and land use planning**.
5. **Provide for the retention and creation of affordable commercial space and family-sized housing** in transit communities. Options could include expanded density and height bonuses, tax exemptions, joint development projects*, or code amendments.

*Actions require legislative changes to implement.

The Seattle Streetcar connects downtown Seattle to South Lake Union. Plans for expansion of the streetcar network are in the works, with the next Streetcar line under development now to First Hill. (Photo: Seattle Streetcar)

05 Sector Recommendations

Transportation + Land Use

POLICY & PLANNING

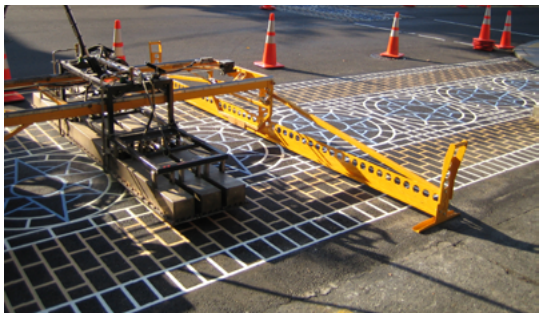
Quick Start Actions

1. **Develop a tool** to embed consideration of GHG emissions impacts and reduction opportunities when updating and implementing transportation and land use plans and policies. The tool should include criteria for evaluating and balancing modal priorities in various corridors to meet mobility goals.

2. **Develop a Freight Master Plan** incorporating goals to improve the efficiency and reduce the GHG emissions impact of goods movement. The efficient movement of freight and goods is vital to our local economy. Seattle is a port city, which must accommodate freight while working to reduce auto-dependent passenger transportation.

The Port of Seattle (Photo: Alicia Daniels Uhlig)

3. **Create a Public Space Management Strategy** to creatively activate the public right-of-way and enliven public spaces, support vibrant streets and neighborhoods, and promote economic activity.



Creative crosswalk pilot project using DuraTherm heat-transfer plastic. (Photo: Seattle Dept. of Transportation)

4. **Seek opportunities to reallocate a portion of the public right-of-way to a public/pedestrian space such as a plaza or parklet.** Portions of the right-of-way can be converted to public uses to enhance public spaces and encourage pedestrian use of the space. A successful example of such a project includes the McGraw Square plaza, which serves as a waiting area for the Streetcar Line.

5. **Develop and implement a comprehensive land use and multimodal corridor plan in a high priority transit and bicycle corridor** with the goal of shifting more trips to travel modes that generate fewer, or no, greenhouse gases. The City has myriad modal and land use plans that are complementary. A corridor approach would allow more effective land use and transportation planning integration; help identify corridor-specific priorities and location-specific opportunities; and reveal barriers to maximizing transportation outcomes.

TRANSPORTATION INFRASTRUCTURE & SERVICE

Enhancing mobility, access and safety through a range of transportation choices is key to reducing auto dependence. Transit is a critical foundational strategy for meeting our land use and transportation goals and supports the viability of walking and bicycling for many trips.

Leadership Actions

1. **Expand transit, pedestrian, and bicycle infrastructure and service consistent** with the modal plan priorities.
2. **Develop a comprehensive, connected network of separated bicycle facilities** in the Center City and Urban Villages.
3. **Develop a citywide network of neighborhood greenways** on traffic calmed residential streets.
4. **Provide fast, frequent and reliable transit** to those who live, work and play in Seattle: Implement the Seattle Transit Master Plan's vision for **high capacity transit.**
5. **Enhance sidewalks, crossings and public places** in Urban Centers and Urban Villages.
6. **Employ green construction practices,** including use of green stormwater infrastructure and low carbon materials, when designing and constructing infrastructure.

Pilot Project:
Fremont Bridge Bicycle Counter
(Photo: Seattle Dept. of Transportation)

Quick Start Actions

1. **Build separated bicycle lanes in the Center City.** Increasing bicycle use through the Center City is an essential step to manage future travel demand and also encourage more people to commute to work via alternate modes. The Bicycle Master Plan update is underway and will identify preferred routes for cycle track and other separated bicycle facilities.

05 Sector Recommendations

Transportation + Land Use

TRANSPORTATION DEMAND MANAGEMENT

Transportation demand management is about improving the efficiency of the transportation system by impacting how, when, and where people travel.

Leadership Actions

1. **Provide incentives, marketing, and imaginative facility enhancements to make transit, walking, and biking more fun and appealing.** Think of basic infrastructure and service as opportunities for creating enriching experiences (e.g. fun station stops, music, interactive features such as musical stairs and touch screens, etc.).

Quick Start Actions

1. **Increase real-time dynamic signage to share up-to-the minute estimates on bus arrivals.** The popularity of the mobile information application, One Bus Away, highlights the value of real time travel information.
2. **Build on the Safe Routes to Schools program and implement Safe Routes projects to improve pedestrian connections to transit and neighborhood business districts.** The Safe Routes to School program is an effective means of encouraging students to walk or bike to school, which helps students choose a healthy alternative to being driven to school.

Children learning in the Safe Routes to School Program.
(Photo: Seattle Dept. of Transportation)

PARKING MANAGEMENT

Leadership Actions

1. **Expand parking policies** to incorporate goals beyond customer access. Consider policies that would allow spending of new revenue to support improvements that further neighborhood livability as well as transit, bicycle, and pedestrian infrastructure and services.
2. **Develop a parking benefit district*** or similar model, in collaboration with area stakeholders, **in an area with high demand for on-street parking. Dedicate a portion of new revenues* to enhance the streetscape and walking, bicycling, and transit access within the district.** Expanding parking policies to meet goals beyond business access requires local community support. Investing a portion of additional revenue generated from increased parking rates or expanded hours in local improvements can help build business support and further land use and transportation goals.

*Actions require legislative changes to implement.

Quick Start Actions

1. **Create a new grant program to support mobility projects** in business districts with paid parking.

Transportation + Land Use

VEHICLE FUELS & TECHNOLOGIES

While the recommended actions for land use planning and transit, bicycling and walking facilities and services will reduce the need for auto travel, cars will remain a portion of our transportation portfolio. In addition, the number of transit vehicles and trips on our roads will grow. Therefore, it is important that we reduce the climate impacts of the remaining cars and transit operations.

Leadership Actions

1. **Make Seattle a leader in transitioning from fossil fuel based transportation to electricity-based transportation.** The city is well positioned to lead this transition with its carbon-neutral electricity.
2. **Develop and implement strategies to help make electric vehicles a viable and desired option for all residents** by reducing barriers, including access to charging infrastructure for households without off-street parking.
3. **Pursue grant funding and partners to develop a network of fast charging stations** that will allow vehicles to charge in under 30-minutes increasing vehicle range, expanding opportunities for charging, and providing commercial opportunities to business owners.
4. **Increase the number of bus route miles planned for conversion to electric bus.**
5. **Upgrade Metro's entire 1,500 bus fleet with hybrid or electric buses by 2018.** King County Metro operates more than 600 diesel-electric buses that are up to 30% more fuel efficient and have saved over 2 million gallons of fuel since 2007.

Quick Start Actions

1. **Replace the entire trolleybus fleet with newer, more energy efficient technology.** Electric trolley buses are remarkably energy-efficient mode of public transport, serving 20% of King County Metro riders on 14 routes.
2. **Pilot test an all-electric battery powered bus.**
3. **Expand the City's electric vehicle (EV) fleet.**
4. **Support private adoption of EVs** through codes, streamlined permitting to facilitate installation of charging stations, and by assessing and planning for demand, access, and utility impacts.

GUIDING PRINCIPLES

1. **Consider the needs of families, an aging population, and lower income residents** in land use and transportation planning in order to make transit-oriented communities work for the full range of current and future Seattle households.

2. **Adopt policies to assist existing residents and businesses to remain and thrive in areas targeted for transit-oriented development** to address the negative effects that gentrification can have on neighborhoods. Investing in transit communities can improve the physical environment and function of these areas but also increase the cost of living and doing business thereby displacing existing residents and businesses.

3. **Design pricing strategies to mitigate direct impacts on lower income residents** (e.g. discounts) to meet social equity and mobility goals. Additionally, **expand the transportation options that people need to get around as new pricing strategies are implemented**, investing revenue from new pricing strategies to enhance travel options.

First tests of a two-car train operating under electrical power.
(Photo: Sound Transit)