

WORKING TOGETHER TO SUPPORT TRANSPORTATION EFFICIENT COMMUNITIES



Department of Commerce
Innovation is in our nature.



Washington State
Department of Transportation

WHAT IS A TRANSPORTATION EFFICIENT COMMUNITY?

Transportation efficient communities support health, prosperous economies, energy conservation and a sustainable environment by requiring less driving to meet daily needs.

How can cities and counties plan for all transportation modes?

Which transportation modes should cities and counties address in their plans?

Cities and counties should plan for all transportation modes available in their communities, such as walking, biking, driving, sharing a ride, or taking a bus, streetcar, train, boat, ferry, or airplane. They should also consider the needs of different types of travelers such as commuters, students, tourists, farmers, freight haulers and people with disabilities.

What are the benefits of planning for all modes?

Planning for all the ways people travel improves people's transportation choices and their ability to access jobs, shopping, health care and other services efficiently and safely. Some modes of travel, like walking and biking, can also improve the health and economic vitality of the community and reduce environmental impacts.

Because travelers typically use more than one mode to make a trip, connecting the modes is also important. For example, bus riders are pedestrians for a portion of their travel (e.g. walking to the bus stop from their house). So planning for connected sidewalks, trails



and crossings near bus stops is an important step to ensure bus riders can safely access their stops. In fact, good walking and biking connections improve transit ridership as well as walk-on ferry trips.

Thinking through how each mode connects to another highlights opportunities to help people travel more efficiently. Park and ride lots that serve vanpools and carpools, railways that regionally connect people with places and airports that provide access to more distant locations are all important pieces of the overall transportation system. Safe and efficient transportation choices are especially important to youth, seniors, people with low income, and people with disabilities.

How do you integrate planning for all modes?

There are many ways to integrate planning for walking, biking, driving, transit, and marine and air transport. Outlined in the following pages are some options — cities and counties can select the approaches that best fit the context of their communities.

KEY TAKEAWAYS

- Planning for all the ways people travel sets the stage for greater transportation efficiency, reduces environmental impacts, and improves the safety, health and economic vitality of the community.
- Collaborate with partner agencies and organizations.
- Adopt policies that support development of an integrated, multimodal network.
- Select performance measures that balance available or planned transportation modes and evaluate the best investments across the network.
- Use models, maps, field surveys, and other data collection tools to identify connection opportunities for each transportation mode and gaps in the multimodal network.
- Identify strategies and analyze alternatives.
- Establish agreements to improve connectivity among the different transportation modes.

Invite Partners

Invite partners responsible for or interested in other transportation modes into your planning process.

For example, encourage walking and biking advocates, local health and community planning departments, active living groups, regional and state transportation agencies, advocates for seniors and people with disabilities schools, transit agencies, trucking associations, and private transportation providers to be involved in your planning process. Review partners' visions, policies, and plans to identify conflicts and opportunities to improve connections.

Adopt Policy Goals

Engage the public and other stakeholders to develop goals and adopt policies that support an integrated, multimodal network. Here are some examples:

- Develop a network of walking and biking facilities that connect residential, employment, community, and regional destinations, rather than stand-alone or spot improvements.
- Provide easily identifiable, safe, comfortable, efficient and universally accessible connections between modes.
- Connect walking and biking facilities to transit stops, transit stations, rail stations, ferry terminals, airports, and park and ride lots.
- Reduce the time it takes walkers, bikers, and transit riders to reach their destinations by reducing crossing distances, increasing safe crossing opportunities, providing strategic shortcuts, and implementing pedestrian prioritized signal timing at crosswalks.
- Provide adequate amenities to improve safety and comfort at transit stops, transit stations, rail stations, ferry terminals, airports, and park and ride lots (e.g. covered bike parking, street furniture, lighting, landscaping, shade, traffic calming).
- Work with transit agencies and private transportation providers to provide frequent, reliable transit, shuttle, and bike/car share and bike/car rental services at rail stations, ferry terminals, airports, and park and ride lots.
- Support the development and expansion of commute trip reduction (CTR) incentive programs to encourage modes of transport other than driving alone.
- Establish local programs to educate citizens on alternatives to automobile use, encourage carpooling and use of transit, and promote walking and bicycling.
- Provide signage and wayfinding (e.g. transit signage and maps, time-to-destination signage, real-time signage adjacent to stations and terminals, smart technologies, in-pavement markings).
- Encourage economic development opportunities and aviation related uses adjacent to airports.
- Improve economic vitality by connecting people and goods to regional markets.
- Ensure buses and trains are equipped to transport bikes, especially in dense urban areas.
- Address Americans with Disabilities Act (ADA) requirements when planning walking and biking improvements.
- Manage demand and improve transportation system operations to optimize the performance of existing multimodal transportation infrastructure and services.

Select Performance Measures

Select performance measures that balance available or planned transportation modes and evaluate the best investments across the network.

- Identify a limited set of key measures to best support goals and objectives, guide investment decisions, and evaluate progress.
- Include both mode-neutral and mode-specific performance mea-

sure to gauge total effects on the system and specific deficiencies in individual modes.

- Build on required performance-based approaches such as state asset management and safety plans, regional congestion management processes, and transit asset management and safety plans.
- Include measures that address both freight and people movement.
- Include measures that consider the mobility and accessibility needs of different members of the community.
- Engage the public and stakeholders to identify issues residents care about and ensure measures are easy to understand and resonate with your community.
- Establish a specific performance target for each measure.
- Collect baseline data and establish an appropriate time frame for evaluation.
- Provide context for performance results. Tell a story and combine data with pictures and interviews to explain performance results.
- Identify and remove institutional and organizational obstacles to performance-based decision making.

Map Existing Infrastructure and Collect Data

Use models, maps, field surveys and other data collection tools to identify connection opportunities for each transportation mode and gaps in the multimodal network.

- Map walking and biking facilities (e.g. bike lanes, shared use paths, paved road shoulders, sidewalks, crossings), transit and ferry connections (transit stops and routes, transit stations and ferry terminals), rail stations, airports, and park and ride lots.
- Map the street grid and identify freight routes and roadways with high vehicular speeds that would cause safety concerns for bikers and walkers.
- Identify 1/2-mile walk sheds and 3-mile bike sheds around transit and rail stations, ferry terminals, and airports.
- Identify existing state, regional and local designated walking, biking, transit, rail, and freight routes, including high frequency transit corridors.
- Identify points of interest likely to generate walking, biking, and transit trips (e.g. schools, health care facilities, event centers, public institutions, parks, large employers).
- Identify locations with a history of collisions, identified by mode.
- Collect statistics on average block length, intersection density, walk score, density, employment, journey to work, and health.
- Assess the existing condition and characteristics of walking and biking facilities, transit stops, transit and rail stations, ferry terminals, and airports.
- Overlay the maps to identify areas that lack connectivity or present other obstacles to travel.
- Identify opportunities to link transportation facilities in your jurisdiction to those in adjacent jurisdictions.

Identify Strategies and Analyze Alternatives

- Designate which modes have priority on which transportation facilities in your overall transportation network.
- Allocate streetspace and adjust traffic operations based on modal priorities.
- Evaluate how modal priorities will affect other modes. For example, design roadways prioritized for bikers and walkers for slower vehicle speeds. Conversely, accommodate bikers and walkers on parallel routes where freight is a roadway priority.
- Identify supportive transportation system management and operations strategies such as traffic management and channelization, intersection modifications, access management, improved traffic control devices, and parking management.

- Prioritize walking, biking and transit improvements for:
 - Corridors designated as walking, biking or transit priorities.
 - Locations with a history of safety problems.
 - Locations expected to generate walking, biking and transit trips, especially those serving youth, seniors, low-income and disabled individuals (e.g. schools and medical facilities).
 - Areas where the community design is supportive (e.g. land zoned for mixed-use and compact development).
 - Transit corridors with frequent service (15 minutes or less).
 - Urban centers, high employment centers, high capacity transit connections, and infill areas.
- Involve the public in identifying and ranking different solutions, especially engaging underrepresented populations.

Implement the Plan

- Develop a work plan and agreements with other agencies to implement solutions.
- Form an implementation advisory committee.
- Implement walking and biking improvements in conjunction with the development of other roadway and transit improvements.
- Develop a plan to communicate with customers (e.g. brand frequent transit services, provide signage and wayfinding, distribute walk and bike route maps).
- Provide real-time travel information to the public for all modes.

Supportive Community Design

Where communities locate residential, employment, community, and regional destinations and how building, parking and street infrastructure are designed make a big difference to people's transportation choices. For example, people walk and bike more often if their desired destinations are within walking and biking distance. People take buses, ferries and trains more often if there are stops near where they live and work. Compact, mixed use growth brings destinations closer together and encourages walking, biking and transit. Community design factors that encourage active transportation include:

- Buildings facing the street.
- Buildings built in relation to street-width to create a feeling of enclosure.
- Visually appealing block faces with minimal blank wall space.
- Design elements that define pedestrian space, such as art, landscaping or pavement type, and pedestrian weather protection structures.
- Careful consideration of access points and circulation, to ensure safety for all modes.

It is also important to engage your community to encourage an understanding of the linkage between land use and transportation policy, regulatory, and funding decisions.

Supportive Street Network

A grid-style street network (streets connect to other streets instead of dead-ending) and short block lengths improve accessibility for all modes by reducing the distance people travel to reach their destinations. Considering walking, biking, driving and transit needs when planning street operations also helps optimize the network for the most efficient travel. In urban environments:

- Connect street networks where gaps exist.
- Where streets cannot be connected, at least provide walking and biking paths where appropriate.
- Prevent the use of cul de sacs and dead ends in new developments, with few exceptions.
- Adjust traffic operations strategies in a corridor (e.g. traffic signal timing) to favor high priority modes.
- Acknowledge there will be traffic congestion at intersections and look at broader indicators of transportation performance. Planning community transportation systems solely based on vehicular delay negatively affects the viability of other modes.

Tools and Resources:

General

- [Active Community Toolkit \(Washington Department of Health\)](#)
- [Bicycling in Washington \(WSDOT\)](#)
- [Building Healthy Places \(ULI\)](#)
- [Community Context Tools \(Center for Transportation and the Environment\)](#)
- [Complete Streets Local Policy Workbook \(Smart Growth America\)](#)
- [Complete Streets Policy Analysis \(Smart Growth America\)](#)
- [Complete Streets Ordinances \(MRSC\)](#)
- [Context Sensitive Solutions \(FHWA\)](#)
- [Demand Management – A Primer for Transportation Planners and Engineers \(WSDOT\)](#)
- [Designing Walkable Urban Thoroughfares: A Context Sensitive Approach \(ITE\)](#)
- [Integrating Demand Management into the Transportation Planning Process: A Desk Reference \(FHWA\)](#)
- [Integrating Operations into Planning and Programming \(FHWA\)](#)
- [Parking Spaces/Community Places: Finding the Balance through Smart Growth Solutions \(EPA\)](#)
- [Pedestrian and Transit-Friendly Design: A Primer for Smart Growth \(EPA\)](#)
- [Restructuring the Commercial Strip: A Practical Guide for Planning the Revitalization of Deteriorating Strip Corridors \(EPA\)](#)
- [Smart Growth and Transportation \(EPA\)](#)
- [Transit Supportive Planning Toolkit \(PSRC\)](#)
- [Urban Bikeway Design Guide \(NACTO\)](#)
- [Urban Street Design Guide \(NACTO\)](#)
- [Walking in Washington \(WSDOT\)](#)

Performance Measures

- [Community Vision Metrics Web Tool \(FHWA\)](#)
- [Evaluating Complete Streets Projects: A guide for practitioners \(AARP\)](#)
- [Guide to Sustainable Transportation Performance Measures \(EPA\)](#)
- [Model Long-Range Transportation Plans: A Guide for Incorporating Performance-Based Planning \(FHWA\)](#)
- [Performance Based Planning and Programming Guidebook \(FHWA\)](#)
- [A Performance-Based Approach to Addressing Greenhouse Gas Emissions through Transportation Planning \(FHWA\)](#)
- [Practitioners Guide to Incorporating Greenhouse Gas Emissions into the Collaborative Decision-Making Process \(TRB\)](#)

Considerations for Rural Areas

While rural areas may not have as many or as frequent freight and passenger transport options as more populated centers, the benefits of multimodal planning are significant. Directing compact growth to small town centers with nearby housing makes walking and biking easier and supports small town economies. Coordinating rural transit services provided by public, nonprofit, tribal or private entities can improve service coverage and reduce duplication. Rural transit services include fixed-route transit service in small urban areas, intercity bus service connecting rural communities, paratransit service for rural areas, especially for elderly or disabled residents, vanpool programs, and specially tailored services such as farm worker shuttles. Rural areas may also benefit from planning to improve farm-to-market connections (truck, rail, and water) and to serve tourism and recreational transportation needs. Park & Pool lots at rural crossroads and improved trail connectivity through participation in regional trails planning and implementation efforts are other useful strategies to enhance additional modes in rural areas.

Considerations for Freight

The transportation of goods in Washington State plays a critical role in fostering economic vitality and enhancing competitiveness. Freight transportation systems, including roads, bridges, highways, railroads, pipelines, ports, factories, warehouses, and terminals are critical to supporting and growing jobs, regional domestic product, and a larger tax base. Our multimodal freight transportation system allows businesses in Washington to compete effectively in regional and global markets.

When planning for freight transportation, consider:

- How freight loading and unloading affects bike lanes and car access.
- Improving intermodal connections and access to ports, truck terminals, distribution centers and rail yards to help freight transporters get to their destinations more freely and quickly, alleviating freight congestion on our roads and improving our economy.
- Discouraging development encroachment at intermodal freight terminals.
- Adjusting delivery windows to remove freight vehicles from peak hour congestion (e.g. allowing night delivery).
- Developing urban freight facilities (e.g. urban freight distribution centers, local freight stations, or designated delivery parking areas).
- Encouraging the use of bikes, electric vehicles, or other low-impact strategies for deliveries made on last mile trips.
- Designating different routes for freight traffic than those routes prioritized as bicycle, pedestrian and transit corridors.

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Tools and Resources:

Maps and Data

- [EJSCREEN \(EPA\)](#)
- [Livability Index \(AARP\)](#)
- [OnTheMap \(U.S. Census\)](#)
- [Smart Location Mapping \(EPA\)](#)
- [WalkScore \(Walk Score\)](#)
- [WSDOT Community Planning Portal \(WSDOT\)](#)

Identifying and Analyzing Strategies

- [Streetplan](#)
- [Streetmix](#)

Rural Areas

- [Smart Growth in Small Towns and Rural Communities \(EPA\)](#)

Freight

- [Freight Transportation \(WSDOT\)](#)
- [Freight Planning \(FHWA\)](#)

Examples:

- [Bellevue Pedestrian and Bicycle Implementation Initiative](#)
- [Bellevue Transit Master Plan](#)
- [Bellevue Transportation Element](#)
- [Bellingham Complete Networks](#)
- [Downtown Colville US-395 Context Sensitive Design Project](#)
- [Everett Evergreen Way Revitalization Plan](#)
- [Issaquah Transportation Element](#)
- [Issaquah Walk 'n' Roll Plan](#)
- [Kendall Yards](#)
- [Kirkland 10 Minute Neighborhood Analysis](#)
- [Lacey Woodland District Plan](#)
- [Redmond Transportation Master Plan](#)
- [Seattle Pedestrian Master Plan](#)
- [Shoreline Transit Oriented Development](#)
- [Sustainable Thurston Plan](#)
- [Vista Field Redevelopment Plan](#)
- [Wenatchee Waterfront Subarea Plan](#)
- [Whatcom County Smart Trips](#)

For More Information:

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