Mobility Management Development Guidebook

Executive Summary

Mobility Management is a concept that focuses on using all available resources to augment and advance mobility for all people, rather than concentrating on a particular mode of transportation, such as the automobile. The goal of mobility management is to increase the efficiency of various modal options. The Federal Transit Administration has established a policy that tasks state and local governments with meeting the transportation needs of the most vulnerable citizens, including the elderly, persons with disabilities, and those with low-incomes.

State and local governments can meet the objectives of mobility management through a combination of strategies to evaluate unmet needs, develop new transportation projects, coordinate existing transportation resources, and implement transportation plans. Key to effective mobility management is establishing partnerships and collaboration throughout the community with an emphasis on customer focus. In Idaho this requires the coordination and collaboration of many land use, transportation, and social service agencies.

The Mobility Management Development Guidebook is a resource manual of best practices for incorporating transit access and mobility enhancements into subdivision, site, and road design. The guidebook was developed with input from the various stakeholders, including the elderly, persons with disabilities, those with low incomes, transportation providers, land developers, and local governments. Feedback from these groups highlights potential successes and existing hindrances to mobility and transportation access.

This guidebook is comprised of seven sections which illustrate mobility management in practice. Section 1 introduces the concept of mobility management, with additional information about how land use and transportation are connected and how increased accessibility promotes mobility.
Section 2 discusses how affected populations (persons with disabilities, elderly, low-incomes, refugees and immigrants, non-drivers, and rural populations) benefit from additional mobility options. Section 3 shows how developing land with accessibility in mind can improve mobility. Section 4 inventories a variety of transportation options. Section 5 shows real-world examples of developments which exemplify the development principles previously mentioned. A list of transit funding programs and funding issues are discussed in Section 6.

The guidebook concludes with a checklist for local governments, developers, and others to incorporate access and mobility into land use decisions, such as subdivision and site design. This checklist (on page 48-49) is to be used as a guideline or reference and not necessarily a requirement of all development applications (that is, elements of the checklist may or may not be required by local land use agencies).

The Community Planning Association of Southwest Idaho (COMPASS) and Valley Regional Transit will be working with local governments in the area during 2009-2010 in developing model land use and zoning ordinances to promote mobility management. Using examples of local and national development codes, design standards, and innovative planning programs, the intent of these ordinances is to assist communities in transportation and transit planning. Potential model ordinances could include agricultural land preservation, infill and redevelopment, affordable housing, pedestrian-friendly development, and street design. These model ordinances will be replicable for use in other areas. These model ordinances will supplement the guidebook and help implement many of the principles introduced here.

The Mobility Management Development Guidebook was funded by the federal Strategies Job Access and Reverse Commute (JARC) and New Freedom grants.
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Mobility Management Development Guidebook
Section 1: Introduction

Mobility Management is a concept that focuses on using all available resources to augment and advance mobility for all people, rather than concentrating on a particular mode of transportation, such as the automobile. The Federal Transit Administration has established a policy that tasks state and local governments with meeting the transportation needs of the most vulnerable citizens, including the elderly, persons with disabilities, and those with low-incomes.

Mobility management is an approach for state and local governments to meet that objective. Mobility management combines strategies to evaluate unmet needs, develop new transportation projects, coordinate existing transportation resources, and implement transportation plans. The goal of mobility management is to leverage all available resources to increase the efficiency of various modal options. Mobility management establishes partnerships and collaboration throughout the community and emphasizes a customer focus in meeting the transportation needs. In Idaho this requires the coordination and collaboration of many land use, transportation, and social service agencies.
The *Mobility Management Development Guidebook* is a resource manual of best practices for incorporating transit access/mobility enhancements into subdivision, site, and road design. These guidelines can help enhance mobility and access to transportation services for disadvantaged populations in rural, suburban, and urban areas. Information was collected from Ada, Canyon, Elmore, Gem, Boise, and Owyhee Counties. The guidebook was developed with input from the various stakeholders, including transportation providers, developers and elderly, disabled, and those with low incomes and local governments, to discuss access integration and existing hindrances to mobility and transportation access.

Other mobility management strategies contributing to this guidebook included:

**Accessibility Options**
A report was prepared that documents means of accessing “typical” services without having to travel to (get) them. An inventory of accessibility options that are currently available or that could be made available (technology exists).

**Technology Options**
A report was prepared that documents existing technologies and Intelligent Transportation Systems (ITS) that can be used to improve transportation access, including travel training applications.

**Services Web Site**
A web site design for providing a link to transportation services in Ada, Canyon, Elmore, Gem, Boise and Owyhee Counties was developed.

**GIS Service Capacity Analysis**
Mapping and GIS analysis of available transportation services, especially in Ada and Canyon counties and for the disadvantaged populations was created.

**Performance Measurement**
Development of performance measures for evaluation transportation services were compiled.

Please contact the Community Planning Association of Southwest Idaho (COMPASS) or Valley Regional Transit for more information regarding these other strategies.
Organization of the Guidebook

**Section 1: Introduction**
The first section provides a definition of mobility management, describes the purpose and organization of the guidebook, and shows how mobility management strategies combine transportation and land use principles to better provide accessibility and mobility options to better serve the needs of targeted populations.

**Section 2: Served Populations**
This section highlights populations that often rely on public transportation for their mobility needs. These populations include elderly, persons with disabilities, individuals with low-incomes, non-drivers, and ethnic minorities. This section describes applications and benefits of serving these populations.

**Section 3: Development Principles**
This section highlights different land use principles that enable successful mobility management strategies including open space preservation, design, diversity, and density. These best practices help identify ways that land use and transportation planning can better provide for different populations (as discussed in Section 2).

**Section 4: Mobility Options**
This section shows mobility options for targeted populations including self-reliant mobility options, mobility substitutes, public service providers, and community-based services. The transit options listed here show how some travel can either be eliminated, done without a vehicle, or served by a transportation provider.

**Section 5: Land Use Examples**
Does any of this really work? Are there real examples of communities, neighborhoods, and systems that promote mobility management? This section attempts to answer those questions of how best practices have been implemented to serve urban, suburban, and rural populations. While these highlight some of the development principles of Section 3, none of these examples are perfect. Rather, these are viable examples of what has been done in other places to promote mobility options.

**Section 6: Transit Funding**
The Idaho Transportation Department has provided an overview of various funding programs related to public transportation.

**Section 7: Land Use and Development Checklist**
The guidebook concludes with a checklist for local governments, developers, and others to incorporate access into land use decisions, such as subdivision and site design (page 48-49). This checklist should be used as a guideline or reference, not necessarily a requirement for all development applications.
Land Use and Transportation Choice

Land development patterns influence travel behavior in at least four ways:

“Low density can increase distances between origins and destinations. Its relationship to travel is intuitive: higher density levels increases the probability that destinations and origins will be close together, theoretically increasing the incentive to walk and bike. Another benefit of high-density strategies is that it is easy to measure density. For these reasons, density is perhaps the most-studied land development variable. Much of the research on density and travel has centered on motorized travel modes.

The relative mix of land uses in a given area also affects the distances between trip origins and destinations. The separation of uses into residential, commercial, and industrial zones increases travel distances, with similar dampening effects on non-motorized travel behavior. While its relationship to travel is easily conceptualized, land use mix is not as easy to measure as density. Still, a body of scholarly literature on the effects of land use mix on travel has emerged.

Motorized travel is encouraged if trip destinations are widely dispersed at the regional level. For example, if jobs are located far from housing, commuting by bicycle or on foot will be nearly impossible. While recognition is widespread that regional development patterns such as the mixture of jobs and housing are important, this particular measure has difficulties. Among other problems is the limited availability of data accurately portraying the number and types of jobs and households in sub-regional locations.

Building design, orientation, and setback, along with other aesthetic considerations, will create environments that are either attractive or unattractive for non-motorized travel. Not many empirical studies have attempted to isolate the effects of site design on travel behavior.”

Source: How Land Use and Transportation Systems Impact Public Health
Accessibility via Mobility

The cornerstone of the need for mobility management is how mobility affects the quality of life for everyone. Mobility ultimately affects how well an individual can access resources to meet various needs. This section briefly discusses the relationship between accessibility and mobility.

Accessibility is a quality of how easily an individual obtains, reaches, or uses something to meet his or her needs and wants. All forms of accessibility require effort to obtain an item. Therefore, determining the accessibility of an object is a means of identifying how much energy and/or effort a person must expend to get what she/he is seeking.

Mobility is the capability of moving or of being moved from one place to another. The level of an individual’s mobility can be measured along a continuum based on the amount of energy, effort, and speed by which someone can freely move or be moved from one place to another. The energy expended to move from one place to another could be generated by the person who is moving or the energy can be expended by someone else. For example, an individual who needs to go to the store can expend the energy by walking or by using his/her own car. Or, the individual could ride to the store with a friend. A level of mobility allows an individual to freely and effortlessly move from one place to another whenever the individual wants to move. Conversely, low mobility means an individual is not able to freely and effortlessly move whenever he/she wants to move somewhere.

Accessibility is a function of mobility because many items or services that a person may want or need require the person to physically move from one place to another to obtain them. If a person is not very mobile (i.e. different mobility options are not available or come with a high cost) many items or services will not be very accessible to that person. For example, a moderate income individual who is not disabled can choose between using a car, scooter, motorcycle, bicycle, walking, riding public transit, riding with a friend, or paying for someone to deliver a good to his/her house.
However, an individual with low income and/or with disabilities may be limited to only riding with a friend or paying someone to deliver a good, when affordable. So the issue is that some may have to choose to go without goods and services because of the high cost of mobility. The challenge is to find appropriate options that enable these individuals to get the desired goods and services. Thus, mobility management is a process of providing “options,” so that all individuals can choose the options based on their preferences and unique circumstances.

Individuals with severe mobility barriers sometimes encounter alternative-decision situations. When mobility/travel options are available, they may have to choose between paying a high mobility cost and obtaining a desired good or not paying the high mobility cost and foregoing the desired good or service—they don’t have the option of obtaining the good or service at a low mobility cost.

There are three general categories of mobility options:

Personal Mobility: Self-Reliant
These options are based on an individual’s ability to move him/herself through independent modes such as walking, biking, or using a wheelchair or automobile.

Personal Mobility: Reliant on Others
Like the other personal mobility option, this one consists of the individual moving but instead of independent modes, the individual moves through the assistance of others, such as public transit, taxi, carpool, or a ride with friends or family.

Non-Personal Mobility
These options consists of the product or service delivered to the individual instead of the individual moving, such as home delivery or on-site service.

Source: COMPASS Accessibility Options Report
Connection to **Communities in Motion**

**Communities in Motion Regional Long-Range Transportation Plan 2030**

Few regions in the country have experienced growth as rapid as the Treasure Valley in recent decades. This growth resulted in more communities, residents, businesses, and opportunities. Growth, however, is not without its challenges. The potential downside of rapid growth includes the loss of agricultural land, worsening traffic congestion, and the degradation of natural resources.

**Communities in Motion** (CIM) is the regional long-range transportation plan for Southwest Idaho for Ada, Boise, Canyon, Elmore, Gem, and Payette Counties. The CIM planning process looked at how our region might develop by evaluating projected population and employment growth, current and future transportation needs, safety, financial capacity, and preservation of the human and natural environment.

**Communities in Motion** offers a vision for a more cost-effective, multi-modal transportation system.

CIM addresses:
- How land use affects transportation
- How investments in transportation influence growth
- What the transportation system is supposed to achieve
- How transportation projects are selected
- How transportation projects serve regional needs
Communities in Motion Implementation Guidebook

By the adoption of CIM in August 2006, the region has agreed on a common vision. However, as stated in CIM, “a plan is not a solution.” Leadership in the region must act to put the regional plan into action.

The Communities in Motion Implementation Guidebook was developed to provide more specific strategies for land use and transportation in order to move this vision into action. The guidebook illustrates strategies of how to direct mixed uses such as jobs, shopping, services, and housing. The guidebook also shows a variety of land use principles, examples of developments, and descriptions of transit types. These examples illustrate the spectrum of high quality choices at higher densities, and show the type of transit systems supported by the different developments. The transit section features various transit technologies with visual descriptions and pertinent information.

Mobility Management Development Guidebook

The Communities in Motion Implementation Guidebook and the Mobility Management Development Guidebook complement each other by demonstrating how mobility (moving people) can be accomplished through appropriate land use decisions and transportation options.

The Communities in Motion Implementation Guidebook focuses on urban development patterns which create a critical mass of homes, jobs, and other attractions necessary for fixed-route transit services (see graphic right). The Communities in Motion Implementation Guidebook is available at communitiesinmotion.org

The Mobility Management Development Guidebook focuses on how to improve mobility in urban, suburban, and rural settings through land use and design considerations that provide for a variety of transportation and mobility options.
Persons with disabilities face a number of personal transportation and mobility challenges. These challenges vary by the type and severity of the disability (or disabilities) that the person may have. The Americans with Disabilities Act (ADA) has put a number of measures in place to help alleviate some of the transportation barriers for persons with disabilities by improving mobility infrastructure and services. The affordability of mobility services is also a major consideration.

The following are objectives of transit systems in meeting the needs of persons with disabilities:

- Making information readily available to people with disabilities through accessible systems and use of technology.
- Ensuring that transit employees, such as drivers and dispatchers, are trained to serve riders with disabilities.
- Maintaining wheelchair lifts and other resources to make vehicles accessible to people with disabilities.
- Provide paratransit services that are comparable to the services provided to persons without disabilities in a fixed-route system.
Elderly Populations

Independent living can be a struggle for the elderly. The process of aging can limit an individual’s ability to take care of many functions that require mobility. Driving, biking, walking, and other modes of transportation can become inhibited if the physical or mental health of an individual deteriorate with aging. Transit opportunities can have a positive impact on the mobility of elderly people, and can assist the elderly in carrying out functions that are vital to independent living.

Transit providers can use a range of tools and strategies to adapt services to elderly customers’ needs. These strategies include:

- Allowing same-day scheduling for patrons of paratransit services through computerized scheduling and dispatching systems.
- Extending service hours for paratransit and fixed-route transit services to weekend and evening times.
- Providing neighborhood circulator services, such as smaller shuttle buses serving senior centers.
- Purchasing low-floor buses, which are easier for older adults to board and reduce waiting times.
- Using walkability audits to identify and prioritize pedestrian improvements (see the Land Use and Development Checklist, page 44).
- Improving roadway design and signage.
- Providing safety programs and refresher courses for older drivers.
- Making transit services more flexible and customer responsive.
- Supporting volunteer driver programs.
- Providing brighter stop lights and pavement markings.
- Installing larger lettering on street-name and directional signs.
- Using protected left-turn signals.
- Converting two-way-stop intersections to four-way-stop intersections.

Source: http://www.vtpi.org/tdm/tdm15.htm
Persons with Low Incomes

Single occupancy vehicle travel continues to be the most prevalent form of transportation in the United States. However, low-income families and individuals may not have the resources to purchase or operate a vehicle.

The nature of urban sprawl can further perpetuate these difficulties as more jobs move away from city centers. As a result, transportation becomes a more prominent barrier for access to job opportunities. Many occupations also require working hours which may not coincide with public transit schedules. The two maps below and on page 13 illustrate how housing affordability can change when transportation costs are taken into account. The first map shows housing affordability without transportation costs included (green areas indicate affordability, red areas are not affordable). The second image illustrate the housing affordability when transportation costs are included.
The housing affordability maps display the significant reduction in affordability when commuting costs are considered. On the “Housing Affordability” maps, areas with affordable housing (less than the median housing prices) are shown in yellow and green. Affordable housing diminishes significantly in areas far from transit routes.

Mobility management strategies can help:

- Identify transportation needs and patterns of low-income populations.
- Enhance public involvement opportunities to identify and address the needs of low-income populations in making transportation decisions.
- Identify resources, potential strategies, and other technical opportunities to advance the transportation options for low-income populations.
Refugees and Immigrants

Obtaining a drivers license and gaining access to a vehicle can be a barrier for ethnic minorities in the United States. Language difficulties, customs, and unfamiliar locations may make self-reliant transportation options unattainable. Public transportation options are necessary for those who may not have access to a vehicle. Due to the sometimes complex nature of the system, transit use can often be confusing and difficult to understand.

The following mobility management strategies can help eliminate cultural and language barriers that exist with transit use among refugees and immigrants.

- Collaborate with social service and community organizations
- Conduct travel training programs that transcend across different cultures and languages.
- Engage foreign-born populations in transportation decision-making.
- Research geographic locations of ethnic minorities and transit use and behaviors to develop strategies that assist with ethnic mobility.
- Implement transit technology that improves communication between the provider and rider.
Non-Driver Strategies to enhance mobility for non-drivers.

- Collaborating with government officials and non-government organizations to evaluate policy recommendations and support transportation options and innovations.
- Making urban communities more friendly to walkers, cyclists, and motorized mobility devices (i.e. wheelchairs).
- Making existing public transport services (including taxis) more user friendly to all people.
- Raising the awareness of non-drivers about transport alternatives and providing information and training on how to use different forms of transportation.
Rural Areas

Mobility in rural areas is just as vital and significant as mobility in urban areas. Rural communities tend to have less emphasis on public transit than urban centers because there are often infrastructure constraints in rural communities that limit the feasibility of certain forms of public transportation. Considering the dispersed nature of rural communities, people may have a greater reliance on transportation just to meet the day-to-day needs. Business districts, services, and residential areas may be far apart and transit-dependent people rely on transportation resources to take care of essential needs.

Planning strategies can be used to evaluate and address mobility needs in rural communities.

- Evaluate the needs of the transit dependent and others who don’t drive.
- Increase public participation in rural areas as a vital component in rural transit development. Bring stakeholders, citizens, and service providers together with government agencies to develop a transportation plan.
- Formulate strategies that link transportation and land use in rural areas.
- Use transportation strategies to help spur economic development and increase employment opportunities.

Source: http://www.vtpi.org/tdm/tdm15.htm
Open Space Preservation

Open space preservation is defined as “natural areas both in and surrounding localities that provide important community space, habitat for plants and animals, recreational opportunities, farm and ranch land (working lands), places of natural beauty and critical environmental areas (e.g. wetlands).”

There are many reasons to preserve open space, including to avoid service costs of residential and commercial developments related to transportation infrastructure, education, public works services, etc.

“The availability of open space also provides significant environmental quality and health benefits. Open space protects animal and plant habitat, places of natural beauty, and working lands by removing the development pressure and redirecting new growth to existing communities. Additionally, preservation of open space benefits the environment by combating air pollution, attenuating noise, controlling wind, providing erosion control, and moderating temperatures. Open space also protects surface and groundwater resources by filtering trash, debris, and chemical pollutants before they enter a water system.”

Pedestrian Oriented Development

Pedestrian oriented development can be a vital component for retaining accessibility to essential services and a means for healthy living. Pedestrian infrastructure is a significant element of transportation in a well-planned community. Alternative travel options, such as walking or biking, will help alleviate congestion of other transportation modes.

There are a multitude of detailed strategies that can be applied to pedestrian oriented development. Some key elements are:

- Appropriate infrastructure such as adequate bike lanes or paths, bike racks, well-maintained and accessible sidewalks.
- Mixed development that is walking friendly including schools, markets, shopping centers, religious organizations.
- Higher density development-condensed development can make walking a manageable option. Corridor designs, services distances, etc.
- Slower traffic – fewer vehicle lanes make the presence of biking and walking more welcoming.
- Appropriate parking facilities.
- Interconnectivity is vital component of pedestrian friendly developments.
Mixed Use Development

The distance between services, employment centers, and residential regions has a direct impact on transportation choices. Mixed-use development is an effective land use strategy for improving transportation and accessibility to meet the essential needs of independent living. Appropriate mixed-use development can help concentrate essential services and reduce the need for automobile travel.

Mixed-use development can have a positive affect on travel and accessibility in several ways. Multi-use centers can accommodate a variety of essential services and will concentrate the service providers into a more accessible location. The close proximity and fusion of residential areas to these centers will better enable people to use the condensed space and promote walking and biking.

Combining land uses for retail, office, recreational, residential, and various service providers can decrease congestion due to the varying hours of activity that each of these uses typically have. Isolated employment centers offer just a limited activity period (usually 9am to 5pm) and traffic congestion increases in single land use developments.
Density

Land use planning plays a pivotal role in shaping mobility options for a community. Density can directly impact the distance between necessary services and residential areas. A lack of transit options in low density regions will, in effect, create a greater reliance on the automobile. Concentrated land use strategies will help reduce service distances and can relieve traffic and congestion. A well designed community can reduce the scale of roads as the traffic demand is decreased. This allows for greater room to design appropriate infrastructure for pedestrian, transit, cycling and other forms of transportation. The motor vehicle becomes less of a factor in high density developments, and multimodal forms of transportation can be implemented. Land use strategies that support infill development and prevent urban sprawl will reduce environmental impacts of growth and will preserve the rural environment outside an urbanized area. The cost of transit infrastructure can be decreased with the implementation of appropriate high density development, as the distance between various services is reduced.

Locating services close together also makes them more accessible for elderly, low-income, and disabled populations. Hospital districts where several doctors’ offices are located together eliminate the need for several buses and reduce the amount of walking or bicycling between locations.

The benefits of high density development include:

- Increase in rural farmland and woodlands with the promotion of open space.
- Reduction of automobile travel which reduces traffic and congestion, promotes energy efficient living, and limits pollution.
- Decrease in the distance of service areas and residential dwellings, which would in effect lower the cost of transportation infrastructure.
- Increase in pedestrian activity such as walking and cycling which can improve the health of the community.
- Better accessibility options to services and retail which can help spur economic development.
Self-Reliant Mobility Options

Automobile
The automobile is the preferred mode of transportation for most people. However, in an automobile-dependent community virtually every adult needs a personal automobile. Non-drivers must be chauffeured whenever they travel, and it becomes difficult to withdraw driving privileges for people who are physically, mentally, or emotionally unfit, since there are few viable transportation alternatives. Automobile dependency can make it difficult to address problems such as traffic congestion, road and parking facility costs, crashes, and pollution. Inadequate transport options often limit personal and economic opportunities of people who are physically, economically or socially disadvantaged. Increasing transportation options can help achieve equity objectives.

Personal Scooters & Walkers
Personal scooters and walkers improve mobility for people who have difficulty walking. Also, skates, skateboards, scooters and Segways can be used for trips that would otherwise be made by automobile and are particularly appropriate for accessing public transit. For example, a push scooter can double travel speeds for short distances, significantly expanding the area within 10 minutes of a transit stop. While scooters and walkers can reduce automobile traffic and increase sidewalk activity, some pedestrians consider them a nuisance.

Best Practices
- Identify obstacles and barriers as part of non-motorized transportation planning.
- Implement pedestrian improvements, and use universal design standard such as curb cuts, ramps and paths that are adequately smooth and wide.
- Avoid restrictive policies. If small wheeled transport creates conflicts with other path or road users, use standards of behavior, education, and enforcement programs rather than banning them.
- Implement transit improvements that facilitate carrying foldable scooters, skates and skateboards on buses and trains.
- Provide changing rooms and storage lockers at worksites (bicycle parking).

Bicycling and Walking
Bicycling and walking can substitute directly for automobile trips. For example, each mile of bikeway per 100,000 residents increases bicycle commuting roughly one percentage point.

There are many benefits to bicycle and pedestrian transportation:
- **Mobility Benefits**: Increased travel choice and mobility, which particularly benefits non-drivers. Cycling and walking are often the most affordable transportation options.
- **Traffic Benefits**: Congestion reduction, road and parking facility savings, consumer savings, environmental protection, and increase community livability. Non-motorized transportation supports other alternative modes (public transit and ridesharing) and smart growth land use objectives.
- **Safety and Health Benefits**: Non-motorized transportation can provide significant aerobic fitness and health benefits.
- **Economic Development Benefits**: Pedestrian and bicycling improvements directly improve the livability of a community and can increase property values and economic development.
- **Recreation Benefits**: Many people enjoy walking or cycling and the healthy exercise they provide. A significant portion of motor vehicle travel is for recreation, such as traveling to parks, outdoors/nature, and health clubs to use stationary bikes or treadmills.
- **Other Benefits**: Lower-income and transportation disadvantaged people often rely heavily on non-motorized transportation, and so benefit significantly by non-motorized improvements.

**Best Practices**
- Educate all transportation professionals in bicycle planning principles.
- Ensure that all roads are suitable for cycling unless it is specifically prohibited and suitable alternatives are available.
- Use current planning practices and design standards.
- Include non-motorized travel in transportation surveys and models.
- Perform user surveys to identify problems and barriers to bicycle travel.
- Use traffic calming and other traffic control measures to make street environments safer and more pleasant for cycling.
- “Leading Pedestrian Interval Signal Phase” is one technique that can be used to separate pedestrians and turning vehicles. This technique permits pedestrian traffic to begin crossing several seconds before the release of potentially conflicting motor vehicles.

Mobility Substitutes

Physical Home Delivery

Many services people need do not require transportation from the client and can be provided by the provider. Grocery store home-delivery, at-home movie deliveries, fast-food delivery, and others can bring a product or service to a client.

Health care services have the potential for home delivery depending on the medical need. For example, simple medical exams consisting of blood work, temperature, and heart monitoring can be delivered at home.

Books, music, and games can be delivered by public libraries or private-sector businesses to improve quality of life without travel.

Some benefits of this method include:
- Improving the quality of life: more independence for users as delivery time and location can be adjusted to personal routine; less traffic-induced pollution in the inner-city.
- Improving efficiency of transport to reduces trips.
- Providing more alternatives for individuals.

Digital Home Delivery

There are several ways of providing a service on-site but without generating transportation trips. Employers, service providers, and others can consider providing services in this method:

Services:
Some services do not require the physical delivery of a product or service. As with the on-demand movies, many providers are now delivering their product electronically. This enables the client to eliminate travel and often receive the services sooner, if not instantly.
Social Interaction:
Social interaction is important for the overall well-being of individuals. The internet provides many opportunities for interaction via online community groups and video-phone services. Social network sites can provide

Employment:
There are several alternative work schedules that enable employees additional mobility options to fulfill work demands.

- Flextime allows for some flexibility in daily work schedules. For example, rather than all employees working 8:00 to 4:30, some might work 7:30 to 4:00, and others 9:00 to 5:30.
- Compressed workweeks enable employees to work fewer but longer days, such as four 10-hour days each week. In this situation, fewer trips are needed to get to and from work.
- Staggered shifts reduce the number of employees arriving and leaving a worksite at one time. For example, some shifts may be 8:00 to 4:30, others 8:30 to 5:00, and others 9:00 to 5:30. This has a similar affect on traffic as flextime, but does not give individual employees as much control over their schedules.

These alternative work schedules reduce peak period congestion directly, and can make ridesharing and transit use more feasible. One survey of commuters found that it could reduce automobile commutes by 7-10%, making it among the most effective commute trip reduction strategies available. Many economically and physically disadvantaged workers (e.g., single parents, non-drivers, and people with physical disabilities) place a particularly high value on optional alternative work schedules.

Best Practices
- Develop policies that identify job categories suitable for alternative work schedules, what employees must do to qualify for alternative schedules, and how it will be reviewed.
- Develop standard agreements between employees and managers for alternative schedules.
- Develop appropriate performance measures for employees working alternative work schedules.
- Allow flextime to help commuters match transit and ridesharing schedules.
- Structure schedules to insure adequate coverage of client services.

Fixed Route/Flex Route Bus Service

Fixed route bus services operate on a set schedule and either have specified bus stop locations or some sort of flag down system to pick up passengers. Fixed route services are best used in regions with higher population densities where there is constant transportation demand and need. Fixed route services are usually subsidized through government funds, but often require a fare to ride. Fixed route systems typically include bus systems, trolleys, light rail, subways, heavy rail, etc. Fixed route systems can be used for local (city) transportation, commuter transportation, and intercity transportation systems.

Flex route service usually operates in conjunction with a fixed route system. Flex route services have certain zones in which the route can be deviated to provide a broader coverage of service. Usually flex route services will accommodate a specific need, such as hospitals, schools, and major employment centers.

**Use:** Used in most metropolitan areas as well as in many suburban and rural areas.

**Cost:** Varies greatly depending on type of system (rail, bus, etc.), number of locations, and frequency of stops.

**Curbside Service:** Typically fixed route systems typically do not; flex route services may provide curbside service.
Demand Response Service/Paratransit

Demand response systems (DRS) do not operate on regular schedules like fixed route services do. While DRS often accompany fixed route services, they typically work within a coverage zone, operate door-to-door, and require the person in need of transportation to contact a dispatcher for a ride. DRS typically have specific hours of operation with an on-call approach to transportation. DRS usually operate smaller vans and buses to accommodate a door-to-door pick up and drop off operation. DRS can be private or publicly operated and often serve a specific purpose, as is the case for medical transport and paratransit services.

Paratransit: The Americans with Disabilities Act (ADA) requires that paratransit services be available where Federal Transit Administration 5311 or 5307 funds are allocated. ADA compliance is not exclusively contingent upon the transportation entity receiving federal funding, however that is one of the conditions of the ADA. Paratransit services are required as an accompaniment to fixed-route services.

**Use:** Used almost everywhere either formally or informally, but typically this is best suited for smaller regions where fixed route service is not feasible.

**Cost:** Paratransit and demand response costs are roughly 8% to 15% higher than the cost to transport a person by fixed route services. Depending on the fixed route system, the number of paratransit trips is relatively small.

**Curbside Service:** Yes.
Carpool and Ride Sharing

Ride sharing is a mobility management strategy that can be used in a variety of ways. Participants are able to network and coordinate with other individuals to find common destinations and establish a carpool or vanpool. Ride sharing can range from a group of individuals establishing a carpool agreement, or it can be administered by an organization that provides for networking, accessible vehicles, established parking regions, fuel, car insurance, maintenance, and other various operational duties. The greater collaboration involved in the ride sharing system the greater the use of the system. Businesses, government organizations, and non-profit groups support ride sharing programs with the incentive of increasing accessibility and transportation options for both employees and clients.

Benefits:

- Employers can reduce the need for parking. Some studies show that each parking space cost an employer roughly $700.
- Users of carpooling have less commute-related stress, increased personal time to read, sleep, etc.
- Carpoolers save on gas, wear and tear of vehicles, and depreciation of vehicles.

Use: Used almost everywhere either formally or informally.

Cost: Same as traditional vehicle use but shared among riders.

Curbside Service: Depends on the carpool arrangement.
Carsharing

Carsharing refers to automobile rental services intended to substitute for private vehicle ownership. Carsharing is a middle option between having no vehicle and owning a private automobile. It makes occasional use of a vehicle affordable, even for low-income households, while providing an incentive to minimize driving and rely on alternative travel options as much as possible. It requires these features:

- Accessible (located in or near residential neighborhoods).
- Affordable (reasonable rates, suitable for short trips).
- Convenient (vehicles are easy to check in and out at any time).
- Reliability (vehicles are usually available and have minimal mechanical failures).

**Benefits**

- Increased consumer choice and financial savings.
- Increased affordability for lower-income drivers who occasionally need a vehicle.
- Reduced per capita annual mileage, resulting in reduced congestion, road and parking facility costs, crashes, pollution and energy use.
- Reduced residential parking requirements and support for higher density residential development.
- Increased equity by improving the mobility options of people who are transportation disadvantaged, and by allowing lower-income drivers significant financial savings compared with vehicle ownership.
- Potential to implement in commercial centers and industrial parks
- Potential to implement as part of location efficient development and car-free housing. Station cars are located at major transit stations, particularly in suburban areas where a car is often needed to reach destinations.

**Barriers To Implementation**

A major barrier is the need to establish and maintain a critical mass of users (typically 30 members or more) in individual neighborhoods. Carsharing cannot develop until enough potential users in each area are familiar with the concept, understand how it can benefit them, and are willing to commit themselves to a carshare organization. This often requires education and marketing. Carshare organizations often require seed money to become established.

Source: www.vtpi.org/tdm/tdm7.htm

**Use:** Carsharing is generally available to anyone who meets basic requirements, although only people who live in neighborhoods with such services are likely to use it.

**Cost:** Typically savings over car ownership as costs are split amongst various individuals.

**Curbside Service:** Depending on the carsharing arrangement.
Park and Ride Lots

Park and Ride lots are parking facilities at transit stations, bus stops, and highway onramps, particularly at the urban fringe, to facilitate transit and rideshare use. Some include bicycle parking. Parking is generally free or significantly less expensive than in urban centers. By encouraging shifts to transit and ridesharing, Park & Ride facilities reduce urban highway traffic congestion and worksite parking demand. These benefits can be significant since park and ride tends to be most effective where traffic congestion and parking problems are worst. Shopping centers adjacent to park and ride facilities tend to benefit from additional shopping by the commuters who park there. Park and ride is likely to be progressive with respect to income, since lower-income commuters rely more on public transit and ridesharing than people with higher incomes.

Best Practices
- Develop as part of an overall transit and rideshare improvement program.
- Locate within view of businesses or homes, for better security.
- Include bike storage lockers, or other secure bike storage if demand exists.
- Provide motorists with convenient information on Park & Ride facility location, space availability, train departures and downstream roadway conditions.
- Adequate lighting, landscaping, and other amenities (bus shelters, garbage cans, etc.).
- Disperse several smaller park and ride facilities in different locations, rather than have one large station.

Use: Used in most metropolitan areas as well as in many suburban and rural areas.

Cost: Typically, several thousand dollars per space.

Curbside Service: No

http://www.vtpi.org/tdm/tdm27.htm
Transit Density Thresholds

The following table displays varying levels of density and location requirements different public transportation modes.

This table of typical transit density requirements is based on research by Pushkarev and Zupan (1977), indicates typical residential densities needed for various types of transit service. Such requirements are variable depending on other geographic, demographic and management factors.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Service Type</th>
<th>Minimum Density (Dwelling Units Per Acre)</th>
<th>Area and Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand Response</td>
<td>Demand response serving general public (not just people with disabilities)</td>
<td>3.5 to 6</td>
<td>Community-wide</td>
</tr>
<tr>
<td>“Minimum” Local Bus</td>
<td>1/2-mile route spacing, 20 buses per day</td>
<td>4</td>
<td>Neighborhood</td>
</tr>
<tr>
<td>“Intermediate” Local Bus</td>
<td>1/2-mile route spacing, 40 buses per day</td>
<td>7</td>
<td>Neighborhood</td>
</tr>
<tr>
<td>“Frequent” Local Bus</td>
<td>1/2-mile route spacing, 120 buses per day</td>
<td>15</td>
<td>Neighborhood</td>
</tr>
<tr>
<td>Express Bus – Pedestrian Access</td>
<td>Five buses during two-hour peak period</td>
<td>15</td>
<td>Average density over 20-square-mile area within 10 to 15 miles of a large downtown</td>
</tr>
<tr>
<td>Express Bus – Auto Access</td>
<td>Five to ten buses during two-hour peak period</td>
<td>15</td>
<td>Average density over 20-square-mile tributary area, within 10 to 15 miles of a large downtown</td>
</tr>
<tr>
<td>Light Rail</td>
<td>Five minute headways or better during peak hour</td>
<td>9</td>
<td>Within walking distance of transit line, serving large downtown</td>
</tr>
<tr>
<td>Rapid Transit</td>
<td>Five minute headways or better during peak hour</td>
<td>12</td>
<td>Within walking distance of transit stations serving large downtown</td>
</tr>
<tr>
<td>Commuter Rail</td>
<td>Twenty trains a day</td>
<td>1 to 2</td>
<td>Serving very large downtown</td>
</tr>
</tbody>
</table>

http://www.vtpi.org/tdm/tdm45.htm
Daybreak is a planned community near South Jordan, Utah (about 15 miles south of Salt Lake City). Comprising over 4,000 acres, this development will ultimately host more than 20,000 homes, and 9.1 million square feet of commercial space.

Daybreak will be served by light rail, linking the neighborhood to downtown Salt Lake City and the Salt Lake Airport, and other sites in the Salt Lake Valley.

**Mobility Management Land Use Strategies:**

- TRAX, the Salt Lake light rail, will serve the community in 2011.
- The first community center has a gym and is located adjacent to Daybreak Elementary School. More community centers are planned to serve the residents.
- Community gardens offer a place for social interaction and enables smaller home sites without reducing opportunities to grow local foods.
- An arrangement has been made with the school district to allow facilities to be available to residents after school hours.
  - A nearly equal balance of jobs to homes reduces needs to travel outside of the community.
  - Daybreak provides roundabouts and neckdowns which slow traffic. Neckdowns are curb extensions at intersections that reduce the roadway width slows traffic and decreases the distance that a pedestrian must travel to cross the street.

New Columbia is an 852 unit, affordable, mixed-income townhouse development in North Portland, Oregon. This development replaced the former Columbia Villa within a dense urban location.

Mobility Management Land Use Strategies:

- More than 70% of the housing units are affordable.
- A density of 10.4 dwelling units per acre makes this transit-supportive. Access to the light rail station is 1.5 miles away.
- Streets have been laid out on a grid pattern with pedestrian paths bisecting the longer blocks.
- Automobile parking is located in alleys behind housing.
- Four small parks and one centralized park provide plenty of outdoor space which is not dependent on automobile transportation for access.
- Mature trees were preserved in the rebuild, providing shade and a nice walking environment.
- A variety of housing, including townhouses, garden-style apartments and single family dwellings, provide options for many different groups.

Source: Housing Authority of Portland, Design Advisor
Portland Place is a small (four acre) subdivision, just south of downtown Minneapolis. The redevelop turned substandard rental housing into owner-occupied single-family homes, twinhomes, and townhomes. There is a bus stop adjacent to the neighborhood, providing transportation to jobs, health and social services, and other areas in the city.

**Mobility Management Land Use Strategies:**

- 26 residential units with social service office space and recreation space. Support services include a daycare, employment training, and personal growth services.
- A transit-supportive density (8 dwelling units per acre) is provided for on the site and a bus stop is adjacent to the neighborhood.
- Abbott Northwestern Hospital is a 1/2 mile walk from Portland Place.

Source: City of Minneapolis, Metropolitan Design Center of the University of Minnesota
Prairie Crossing is located in Grayslake, Illinois about 40 miles north of Chicago, and is easily accessed by a light rail station adjacent to the community.

Its innovative design allows for rural development but with more density, including apartments in the village square. There are nearby forest preserves, agricultural land, and 70 percent of the area’s 677 acres has been preserved as open space, including wetlands, a lake, and an organic farm.

**Mobility Management Land Use Strategies:**

- More than 10 miles of trails, a stable, and a large lake with beach and dock provide opportunities for healthy outdoor exercise.
- There is rail service to downtown Chicago and O’Hare airport from two stations adjoining the community.
- Construction materials used in the homes reduce energy consumption by half.
- A wide variety of housing choices provide options for many different residents.
- Clustered homes preserve wetlands, grasslands, and farmland and demonstrate appropriate development of rural landscapes.

Source: Prairie Crossing, Rural Smart Growth, Chicago Wilderness Magazine
Seaside is a master planned community developed on 80 acres. Began in 1981, Seaside is on the Florida panhandle between Fort Walton Beach and Panama City. It was also the site for many scenes in the movie, *The Truman Show*. When completed, Seaside will contain 350 houses and a population of 2,000.

**Mobility Management Land Use Strategies:**

- The size of Seaside (80 acres or a quarter-mile radius) was found to be the distance a person would comfortably walk on a daily basis to go to work, to shop, or out to eat.
- At buildout, Seaside is projected to have a population density of 25 persons per acre, a density suitable for transit.
- Seaside has narrow porch-lined streets, which allow for cars, but make walking more convenient and pleasing. Porches are setback 16 feet from fences so that residents and people walking by can have conversations without raising their voices.
- Streets lead to the beach or the town center and are laid out in a network without cul-de-sacs.
- Within a short walking distance from most houses is a centralized downtown which has a variety of shops, restaurants, and a theater.
- A wide housing mix, from cottages to apartments to large estates allow for a diversity of residents.
- Small playgrounds, typically within 1/8 mile of residents, allow for access without transportation.
- Seaside was designed using the charrette model which enabled all stakeholders to participate in the design.

Source: The Seaside Institute and Smart Communities Network
The Woodlands, Texas
Surburban Development

The Woodlands, approximately 30 miles north of Houston, is a 28,000 acre suburban community. The Woodlands are served by full-range of transportation options, including 162 miles of hiking and biking paths. It also has a mix of housing, jobs, and recreation pursuits.

**Mobility Management Land Use Strategies:**

- Nine residential village and two commercial areas each provide variety and options for homeowners, renters, and businesses. Approximately 10% of all work trips remain within The Woodlands due to the balance of jobs and housing provided.
- “Life cycle” housing enable renters, first-time homeowners, and established families to have financial mobility within the neighborhood. Federally subsidized housing is also well-integrated into the master plan.
- One hundred sixty-two miles of hiking and biking paths, most of which are under a mature tree canopy, provide shade to users. A waterway taxi and trolley serve the commercial section.
- Nearly 6,000 acres are devoted to green space which include 110 parks, ponds, seven golf courses, and an outdoor amphitheater.
- The Woodlands is served by a park-and-ride lot and 19 express buses (which navigate on separated high-occupancy vehicle lanes) providing access to Houston employment centers. About 1,200 commuters use the service each weekday.

Source: Smart Communities Network, Environmental Protection Agency, Google Earth
Village Homes, Davis, CA
Suburban Development

The concept for Village Homes originated as a way to offer residents a greater sense of community. On the 68-acre site there are almost 250 housing units. Davis is located about 15 miles west of Sacramento in an agricultural part of the region.

**Mobility Management Land Use Strategies:**

- Community open spaces and shared gardens provide social opportunities and reduce the need for privately-maintained yards.
- There are fewer roads than there are walking and biking paths.
- Streets are narrow (20-25 feet) and building setbacks are 15 feet which encourages biking and walking. Narrower roads also absorb less summertime heat.
- All homes have rooftop solar water heaters, reducing monthly energy costs. Solar energy contributes 50-75% of heating needs.
- The average walking time to the local grocery store is 10 minutes.
- A red “pot luck” flag in the front yard is the signal for neighbors to bring a dish and share with a new friend.
- Village Homes are less than 2 miles from the University of California at Davis.

Source: Smart Communities Network, Cal Poly San Luis Obispo, Solano Magazine
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Funding for public transportation in Idaho is used for three things:

1. Buying vehicles and other capital improvements
2. Operating vehicles and administrating services
3. Planning related to public transportation

This funding comes from three sources:

- **Local funding** comes from a variety of sources, such as fare boxes, general fund appropriations (i.e., local property tax or other tax), and donations of money and volunteer time. Typically, local funding is used as the match required to access federal funds, though the local match cannot include fare box revenue.

- **State funding** is extremely limited. The Idaho Transportation Department (ITD) has an annual budget of almost $450 million and spends $312,000 per year on a program created in 1999 called the Vehicle Investment Program (or VIP). This money is used to help buy vehicles for rural transit providers and special providers such as senior centers. This amount is limited because much of ITD’s funding comes from the state gas tax. This revenue can not be used for public transportation. Also, neither the department nor the legislature has made funding for public transportation a high priority.

- **Federal funding** for public transportation seriously increased in the 1980’s and again in the 1990’s. Across the country, ridership has risen with this increased investment. All federal funding for public transportation goes through the Federal Transit Administration (funding for roads goes through the Federal Highway Administration). The Intermodal Surface Transportation and Efficiency Act (ISTEA) passed in 1991 and TEA-21 passed in 1998 continued the separate transit funding programs outlined below.
The Match Game

Three percentages are important to know:

- **7.34%** is the local match required for federal Congestion Mitigation and Air Quality (CMAQ), Surface Transportation Program (STP), and road improvement projects in general. This percentage is low due to the large proportion of land in Idaho that is in federal ownership. CMAQ has been a popular program for transit providers because of this attractive match rate. Local match for federal transit funding does not enjoy such a favorable match.

- **20%** is generally the local match for transit funding used for capital, planning, and administrative expenses.

- **50%** is generally the local match for transit funding required for operating expenses.

Public transportation in small cities and rural areas have more flexibility when it comes to meeting match requirements. They can count time donated by volunteer drivers, for example, as part of the local match. They can also use other non-transportation related federal funding as match. In contrast, local match in urban areas must come from local governments.

The Players

- **Idaho Task Force on Public Transportation** – a task force was created in mid 2003 and is currently studying options for increasing transit funding in Idaho.

- **Interagency Working Group** – This group’s mission is to “provide leadership in coordinating safe, efficient and accessible public transportation services to Idaho.” Members include representatives from the Idaho Transportation Department, Division of Medicaid, Community Transportation Association of Idaho, Commission on Aging, Department of Health and Welfare, Division of Vocational Rehabilitation, Department of Labor, Department of Education, Council on Developmental Disabilities, Friends of Children and Families, Inc., and the Office of the Governor.

- **Public Transit Advisory Council (PTAC)** – All members of this council are appointed by the Idaho Transportation Board and come from all six regions of the state. The PTAC reviews funding recommendations from staff and provides recommendations to the Idaho Transportation Department regarding public transportation needs.

- **Community Transportation Association of Idaho** – This organization is made up of rural and urban area transit providers across the state. (www.ctai.org)

- **ITD Division of Public Transportation** – This division at ITD that provides assistance to transit providers related to federal funding and otherwise works to improve public transportation.

Source: Idaho Department of Transportation. Transit Funding 101
Transit Funding Programs

With the passing of TEA-21 in 1998, federal funds were made available to the programs listed below. Most of these programs were already in existence, some with different names. Many of the programs described in this section are federally funded, but state administered.

**Metropolitan Planning – 5303 Program.** These planning funds only go to the state’s six urbanized areas (areas with 50,000 population or more) and are distributed based on the population of each area.

**Urbanized Area Formula Program – 5307 Program.** Again, only urbanized areas receive these funds. These funds can be used for planning, operations, and capital purchase, at the discretion of the urbanized areas. Urbanized areas over 200,000 population cannot use this funding for operating expenses. With the Boise urbanized area population surpassing 200,000 with the 2000 Census, the transit system may lose significant federal dollars that have been used for operating expenses for many years.

**Demonstration Funds – 5309 Program.** This is “discretionary” funding that the Idaho delegation has successfully earmarked in the annual appropriations process for three consecutive years. No 5309 funds came to Idaho until the ITD Division of Public Transportation, transit providers, and congressional staff got together in 1999 to decide how to bring forth requests for funds. The delegation has bee supportive of subsequent request from the Idaho Transit Coalition ever since because it relieves the delegation of the unpleasant task of choosing between competing earmark requests from individual transit providers.

**Elderly and Persons with Disabilities Program – 5310 Program.** Funding is allocated to the state and is distributed based on elderly and disabled populations in the state. The funds may be used for capital acquisitions for private nonprofit organizations or public agencies that provide public transportation to the elderly and persons with disabilities.

**Nonurban Area Formula Program – 5311 Program.** This is the small city and rural equivalent of the 5307 Program. Like 5307, funds can be used for capital, operations, administration, and planning costs.

**Intercity Bus Service – 5311(f) Program.** This program can only be used to provide public transportation to connect small cities and rural areas with nation public transportation services (e.g. Greyhound).
Rural Transit Assistance Programs (RTAP) – 5311(h) Program. Funding used by the state for transit research, technical assistance, training, and related support services to assist Section 5311 rural transit providers.

State Planning and Research – 5313 Program. These funds are allocated to the state and used to perform statewide transit planning and assistance.

Congestion Mitigation and Air Quality (CMAQ). These funds are Federal Highway Administration funds allocated to the state for projects that improve air quality—including but not limited to public transportation. Any government entity in the state is eligible for CMAQ funds but most funding goes to areas where air quality concerns are greatest.

Job Access and Reverse Commute Program (JARC). A newer program authorized in TEA-21 to provide transportation in partnership with the welfare to work initiatives around the country. Used extensively in more urban states but generally not in Idaho. Pocatello has completed the required JARC plan to establish eligibility, but has thus far not received funding.

Surface Transportation Program (STP) Flexible Funds. Perhaps the least known but also difficult to achieve opportunity to increase transit funding. The STP is the primary source of federal funding for road improvement projects. They can also be used for transit if deemed appropriate by the Idaho Transportation Department. To date, the IT Board has not approved use of significant STP funds for transit because Idahoans are not asking them to do so and because doing so requires diverting money away from road improvement projects.

Source: Idaho Department of Transportation. Transit Funding 101
The Mobility Management Checklist provides guidelines to better integrate transportation access into local land use and development decisions, and helps enhance mobility for disadvantaged groups. This checklist is to be used as a guideline or reference and not necessarily a requirement of all development applications (that is, elements of the checklist may or may not be required by local land use agencies).

**Location**
- Is the site adjacent to an existing, fixed-route transit stop or a Park and Ride lot? within a ¼ mile? *(see Transit Audit, page 46)*
- Is the site within the boundaries of a paratransit service provider?

For Residential Developments:
- Is the site within a ¼ mile of a shopping center providing basic services (i.e. grocery store, school, daycare, recreation centers)?
- Is the site within a ¼ mile of a public school?
- Is the site within a ¼ mile of a public park?
- Are there major roadways between the site and transit stops, Park and Ride lots, shopping centers, schools, or parks? *(See Pedestrian Audit, page 47)*

**Collaboration**
- Was a meeting conducted with the surrounding neighborhood?
- For Residential projects was there a meeting conducted with school district?
- For large projects (approximately 250 housing units or 250,000 sq. ft. of commercial or office space) was a meeting conducted with regional transportation and transit authorities:
  - Valley Regional Transit
  - Treasure Valley Transit
  - Community Planning Association (COMPASS)
  - Idaho Transportation Department Safe Routes-to-Schools
- Is there a plan to provide transportation information to owner/occupants?

**Mixed Use Development**
- Is this a mixed-used development (retail, office, residential, government, or public uses)? Or, for small, infill or single use projects, does the project add to the diversity of uses within 1/4 mile?
- If mixed-use, does it propose neighborhood services?
  - Grocery store
  - Pharmacy
  - Restaurant, bakery, coffee shop
  - Entertainment
  - Library
  - Post office
  - Bank
  - Indoor fitness facility
  - Health care/doctor office
- Do any stores offer home delivery service?
Housing Options
□ Is there a mix of housing types (single family, multi-family, retirement community, etc.)? Or, if the project is small does the proposal increase the diversity of housing options in the immediate neighborhood?
□ Does it provide affordable housing? Or, if the project is small does the housing provided diversity of housing prices in the surrounding neighborhood?
□ Is there a transit-supportive density (more than 7 dwelling units per acre)?
□ Are the units sited in a compact pattern, maximizing open space, and enabling transit services to make limited stops?
□ Is it designed to accommodate Accessory Dwelling Units?
□ Do housing types have side or rear-access garages?
□ Do some of the housing types have elements of Universal Design (entrances without steps, door widths a minimum of 32 inches, at least one bedroom, kitchen, and full bathroom on main floor)
□ Does the development propose recreational facilities?
□ Park
□ Off-road walking/biking trail
□ Sports/playing field
□ Basketball/tennis/volleyball court
□ Playground
□ Outdoor pool
□ Other:
□ Are there public spaces within ¼ mile

Parking Orientation
□ Is parking shared among different types of land uses?
□ Is parking located to the side or to the rear of buildings in general?
□ Is there a parking agreement that allows for park and ride or other transit services to use parking spaces?
□ Do parking lots have clear travel patterns?
□ Is the site area devoted to parking minimized? Are parking spaces close and accessible to buildings?
□ Is there ample, convenient, sheltered, and secure bicycle parking?

Streets and sidewalks
□ Is there a transportation demand management plan or a plan to reduce reliance on the single-occupant vehicle?
□ Is there a differentiated street hierarchy?
□ Is there a grid-based street network with small blocks (300–500 feet)?
□ Are there minimal dead-end cul-de-sacs? If cul-de-sacs are included, are pedestrian/bike paths provided to connect mid-block, etc.?
□ Are access or rights-of-way to connect with future developments, neighborhoods, or trails?
□ Are there shared driveways/access?
□ Are there tree(s) and other landscaping?
□ Are there trails, sidewalks, bike lanes, or transit routes from the proposed development to typical destinations (e.g., schools, trail system)?
□ Is there pedestrian scaled lighting?
□ Is the pedestrian network part of a network of trails?
Land Use and Development Checklist

**Transit Audit**
Transit audits would be conducted by the applicant to demonstrate that transit services are within close proximity and provide adequate service.

During the community audit, take photographs and note features such as:
- Services more than once/hour?
- Service more than 10 hours/day?

Does the transit stop have the following amenities?
- A structure with seat, roof and schedule information?
- Adequate room for a wheelchair?
- Benches/seating?
- A drinking fountain?
- Public art (e.g., statues, sculptures)?
- Tree shade on the walking area?
- Other amenities?____________

Does the transit stop have the following problems?
- Graffiti or broken/boarded windows?
- Litter or broken glass?
- Steep slope along walking area?
Pedestrian Audit
Pedestrian audits would be conducted by the applicant to demonstrate that transit, parks, schools, and necessary services are within close proximity and accessible.

During the community audit, take photographs and note features such as:
- Are sidewalks or pathways continuous along the routes?
- Are sidewalks or pathways in good condition?
- Are there crosswalks and pedestrian signals to help people cross busy streets and intersections?
- Are curb ramps present at intersection crosswalks?
- Are there obstacles blocking the sidewalk?
- Are the sidewalks, pathways, and curb ramps ADA-compliant?
- Are sufficient sight distances and visibility provided, especially for pedestrians less than five feet tall?
- Are there adequate and visible signing and pavement markings?
- Is there enough lighting?
- Are there any "gaps" in discontinuous sidewalks
- Are there any damaged sidewalks or pathways

What is the adjacent street information?
- Enter posted speed limit:
- Enter total number of lanes on street:
- Median or pedestrian island?
- Crosswalk for crossing this segment?
- “Walk” / “Don’t Walk” signals?