



TRANSPORTATION AND CONNECTIVITY



INFRASTRUCTURE AND TRANSPORTATION SYSTEMS DESIGN TEAM

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INTRODUCTION TO TC CREDITS

Regional planning directly impacts the character of local communities and the quality of life for the inhabitants. Good regional planning can help to create beautiful, vibrant communities. Beautiful, vibrant communities help ensure long-term economic prosperity and social sustainability.

A major consideration in regional planning is transportation. A well-planned transportation system enables all members of the community adequate access to housing, places of work, goods and services, and recreation. It also provides regional connectivity, with alternatives to the automobile.

Historically, the Greater Yellowstone region has been rural in nature. Residents in these rural areas have had easy commutes with little or no traffic to impede quick trips. Gas prices have remained comparatively low to the rest of the world. Noise and air pollution have not been an issue. Largely unregulated land-use has enabled rural development, where residents can “escape” from traffic and congestion and live closer to natural landscapes.

But recent, unprecedented growth is creating huge challenges to the Greater Yellowstone region’s rural lifestyle. The region has experienced anywhere from an 11% to a 185% increase in population over the past 10 years. This has created significant traffic congestion. Tourists, with no options other than to rent vehicles, add to the congestion during both the winter and summer seasons. County and state road regulators have not had the time and resources to address these growth pressures. Many stretches of highway across the region do not adequately address the traffic congestion.

In addition to unmanaged growth, rising fuel costs and the evident threat of global warming are adding challenges to transportation in the region. Those residents that must commute to jobs in neighboring communities are paying nearly twice as much in gas prices as they were just four years ago. No mass-transportation options exist for these people in many areas of the region. There has also been a decrease in visitors to the national parks. Gas prices are listed as a major factor in visitors’ decision on where to vacation. Since no regional mass-transportation system exists, this is very likely contributing to the decline in visitation. The world’s leaders are pushing for mandatory greenhouse gas emission reductions in the next ten years, and the Greater Yellowstone region does not yet have a plan in place for the creation of a regional transportation system to help contribute to these reductions.

Therefore, transportation planning is a major component of decision making for developers and designers. The main goal of this credit category is to increase connectivity and human mobility in the Greater Yellowstone Region to improve economic and social sustainability. By working toward this goal, the region will also contribute to reducing its greenhouse gas emissions.

The prerequisite requires the development of a transportation plan for residents and users of the facilities. This will ensure that developers consider internal and regional connectivity in their design and help identify the greatest opportunities to achieve connectivity and mobility.

Other issues addressed in this category include development of amenities that support:

- Alternative transportation modes
- Fleets of vehicles as alternatives to single ownership
- Use of alternative fuels
- Development of trails, pathways, and scenic byways

Innovation is encouraged and exemplary performance will be awarded additional points.



**TC PREREQUISITE 1: TRANSPORTATION PLAN
REQUIRED**

INTENT

To reduce energy consumption and pollution from motor vehicles by encouraging use of pedestrian traffic, public transit, ride sharing/car-pooling, and alternative fuels.

REQUIREMENTS

Create a comprehensive transportation plan for the project that will minimize vehicle traffic to/from and within and from the site and that will promote public health and safety. Address in the plan the following elements, at a minimum:

- Pedestrian safety and accommodation
- Provision for safe bicycling and bike racks
- Ride sharing and carpooling incentives and parking infrastructure
- Safe vehicle speed limits, unobtrusive parking and alternative fuel availability
- Use of public transportation services and accommodation of necessary infrastructure
- Public awareness program promoting alternatives to driving personal vehicles
- Other innovative approaches describing how the prerequisite will be met

For Local Governments: Incorporated Towns, Cities, and Counties:

Have a community transportation plan that evaluates and addresses multiple modes of travel, and that encourages and supports pedestrian and bicycle travel.

Provide or support public transportation in the community, including plans for expansion of service. Establish population ‘triggers’ that will set expansion plans into action. Agree to implement expansion plans when established population triggers are met.

If the community is smaller than 5,000 people, draft a public transportation plan that will be implemented when the population reaches 5,000.

TC CREDIT 1: ALTERNATIVE TRANSPORTATION AMENITIES

1 - 3 POINTS

INTENT

To reduce air pollution, global climate change gas emissions, and inefficient land use patterns by reducing dependence on automobile use.

REQUIREMENTS

Provide at least two of the following amenities (1 point) with 3 points awarded for five or more amenities (2=1 point, 3=2 points, 5+=3 points):



- **Bicycle parking** in highly visible areas that are preferably covered and adjacent to pedestrian activity. Bicycle parking facilities shall be provided in accordance with the following schedule, with fractional requirements for bike parking over .5 to be rounded up:
 - a. Commercial; Industrial, Office, Retail ~ 2 spaces + 15% of number of auto spaces required **(1 point)**
 - b. Multi-Family Residential ~ 1 space per unit for buildings with 3 or more units **(1 point)**
 - c. Public, or Commercial Recreation ~ 35% of auto parking requirement **(1 point)**
 - d. Schools ~ 1 space per 3 students **(1 point)**
 - e. Park and Ride Lots and Transit Centers ~ 35% of auto parking **(1 point)**
 - f. Lodging ~ 1 space per 5 units **(1 point)**
- Access to **Intra-city public transit service** for cities with a population of 10,000+ residents.
- Access to **Inter-town/city public transit service**; connect to regional transportation network.
- Covered and at least partially enclosed bus shelters, adequate to buffer wind, with at least one bench and basic schedule and route information at each transit stop in downtown or neighborhood with an average of 6 or more dwelling units per acre.
- **Alternative Transportation Incentive Policy** that provides incentives for public transit use (such as partial transit pass reimbursement for which tax credits are available), carpooling, walking, or bicycle commuting for all employees or residents of entity.
- **Preferred parking** for carpools, vanpools, and hybrid automobiles.
- **Preservation of railroad passenger depot buildings** and an ownership structure that assures reuse if railroad passenger service can be provided in the future.

For Local Governments: Incorporated Towns, Cities, and Counties:

Pass zoning ordinance requiring bicycle parking per cited schedule.

Provide Intra-city public transit service for cities with a population of 10,000+ residents.

Provide Inter-town/city public transit service that connects to regional transportation network.

Covered and at least partially enclosed shelters, adequate to buffer wind, with at least one bench and basic schedule and route information at each transit stop in downtown or neighborhood with an average of 6 or more dwelling units per acre. Provide Inter-town/city public transit service that connects to regional transportation network.

Alternative Transportation Incentive Policy that provides incentives for public transit use (such as partial transit pass reimbursement), carpooling, walking, or bicycle commuting for all employees or residents of entity.

Preferred parking for carpools, vanpools, and hybrid automobiles.



Preservation of railroad passenger depot buildings and an ownership structure that assures reuse if railroad passenger service can be provided. (1 point)

TC CREDIT 2.1: EFFICIENT VEHICLES: FLEETS

1 - 2 POINTS

INTENT

To reduce air pollution and global climate change gases from vehicle operations by improving average fleet mileage and by purchasing more efficient vehicles.

REQUIREMENTS

A plan and schedule for purchasing 20% of automobiles and pickup trucks owned by the entity shall achieve the U.S. EPA’s SmartWay Green Vehicle designation <http://www.epa.gov/smartway/>, or 10% of automobiles and pickup trucks owned by the entity shall achieve U.S. EPA’s SmartWay Elite Green Vehicle designation. (1 point)

OR

A plan and schedule for purchasing 40% of automobiles and pickup trucks owned by entity shall achieve U.S. EPA’s SmartWay Green Vehicle designation; or 20% of automobiles and pickup trucks owned by entity shall achieve U.S. EPA’s SmartWay Elite Green Vehicle designation. (2 points)

TC CREDIT 2.2: EFFICIENT VEHICLES: ALTERNATIVE FUELS

1 - 2 POINTS

INTENT

To reduce air pollution, green house gasses from vehicle operations, and support transportation alternatives to fossil-based fuels.

REQUIREMENTS

Provide a minimum of B10 Biodiesel blend for use in all diesel vehicles owned by entity.

AND

Provide other alternative fuel or electrical infrastructure that results in a 10% drop in global climate change gas emissions for vehicle operations compared to a baseline of 100% fossil-based fuels. (1 point)

OR

Provide other alternative fuel or electrical infrastructure that results in a 20% drop in global climate change gas emissions for vehicle operations compared to a baseline of 100% fossil-based fuels. (2 points)

For Local Governments: Incorporated Towns, Cities, and Counties:

Implement Biodiesel or alternative fuel programs in city vehicles. (1 point)

Provide incentives for private or public fleet use of alternative fuels. (1 point)



TC CREDIT 3:

TRAILS, WALKABILITY, AND PATHWAYS

1 - 3 POINTS

INTENT

To provide direct and safe connections for pedestrians and bicyclists to local destinations, neighborhood centers, existing trails systems, and publicly owned parks and natural resources and to promote public health through increased physical activity.

REQUIREMENTS

Make continuous provisions for bicycling and walking along all streets within the project. Pedestrian and bicycle facilities shall comply with the American Association of State Highway and Transportation Officials, Guide for the Planning, Design, and Operation of Pedestrian Facilities, The Institute of Transportation Engineers (ITE), Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities, or similar widely accepted standard.

AND

Connect trails, sidewalks, bicycle lanes, and other facilities to adjacent existing or planned facilities to establish or expand larger networks.

AND

Implement 1 of the following (1 point); 3 of the following (2 points);
or at least 5 of the following (3 points)

- Provide at least 200 intersections* per square mile for newly developed land, providing safe crossings for pedestrians and bicycles.
- Include pedestrian or bicycle through-connections between the development and existing trail systems, local destinations, and publicly owned parks and natural resources.
- Design and construct all streets within the project, whether new or existing with traffic calming features intended to slow the traffic to pedestrian safe speeds.
- Plant street trees between the vehicle travel way and sidewalk at intervals of no greater than 50 feet.
- Provide on-street parking.
- In rural or other areas where regular block patterns are not provided due to topographic or natural resource limitations, provide pedestrian and bicycle facilities that connect activities and facilitate travel other than motor vehicles. *The number of intersections required to earn this credit will be prorated for parcels smaller than a square mile.

For Local Governments: Incorporated Towns, Cities, and Counties:

Provide bike lanes and sidewalks alongside new roads and modify existing roads to make pedestrian and bike connections.

Reduce the speed limit and provide safe crossing for bikes and pedestrians.

Increase public awareness through community events, promotions, and programs designed to encourage public transportation, walking, and bicycle use.

Other innovative solutions could be proposed with a narrative describing how the credit intent is met.



Provide adequate maintenance so bike lanes, sidewalks, and trails remain functioning and pleasant to use.