**Circulation Framework** 

## **Overview**

The circulation framework identifies and provides for a wide range of current and future circulation needs. It builds upon and improves existing systems to ensure efficient access to, and mobility through, the downtown.

The circulation framework:

- Anticipates growth of residential, employment, retail, commercial and visitor uses over the next 25 years–The planned network provides sufficient capacity to meet these land use needs
- Provides direction for addressing critical shortterm needs for major roadway corridors–In particular, design recommendations are provided for Higgins and Broadway
- Balances transportation modes–While recognizing that auto and truck access will continue to be the primary mode choice for the next 25 years, the framework also provides transportation network improvements for pedestrians, bicycles and mass transit that will greatly increase their use
- Establishes a premier investment environment– The framework is more than a functional transportation network, it also establishes a safe, inviting public *place*, ensuring that the retail environment will continue to grow and residential neighborhoods will remain healthy





**Pedestrians** 



Feder Federation

Transit

**Automobiles and Trucks** 



Primary Circulation Diagram

# **Pedestrians**

Memorable and economically vibrant downtowns provide great pedestrian access, convenience, safety, and delight. To ensure that downtown Missoula thrives, improvements to the pedestrian environment must be of highest transportation priority.

Key pedestrian facility improvements include:

- Clark Fork Riverfront loop–A continuous multiuse pedestrian and bicycle path on both sides of the river
- **Retail/commercial loop–**Streetscape improvements that support a high quality pedestrian environment within the Retail Hot Spot and connecting the Depot Square to the Hip Strip
- Arts and culture loop–Streetscape improvements that link existing arts and culture uses such as the Children's Theatre, and the library along with proposed uses such as a performing arts center or UM Museum to the Retail Hot Spot
- Key neighborhood connections—Ensure safe, direct and comfortable pedestrian routes from neighborhoods to key destinations in the downtown with an emphasis on enhanced and safe pedestrian crossings along Broadway

The pedestrian circulation system:

- Builds upon existing successful infrastructure
- Provides a variety of experiences, ranging from busy retail streets to quiet greenway trails along the Clark Fork River
- Links surrounding neighborhoods to downtown and provides access to all major downtown destinations



Retail/Commercial Streets



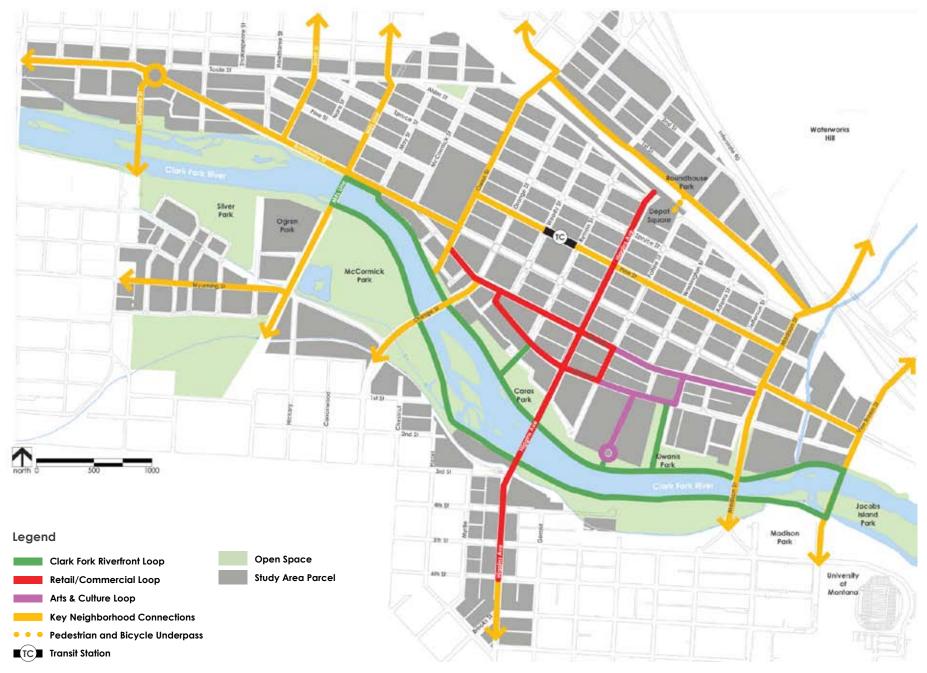
**Neighborhood Connections** 



Arts and Culture Streets



**Clark Fork Riverfront Loop** 



Primary Pedestrian Circulation

# **Bicycles**

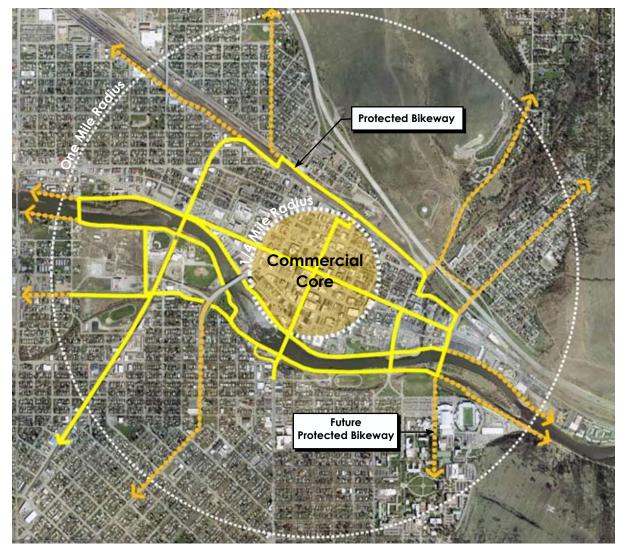
Increased ridership should be fostered by providing a connected system that is safe for riders of all ages and skill levels.

The bicycle system includes:

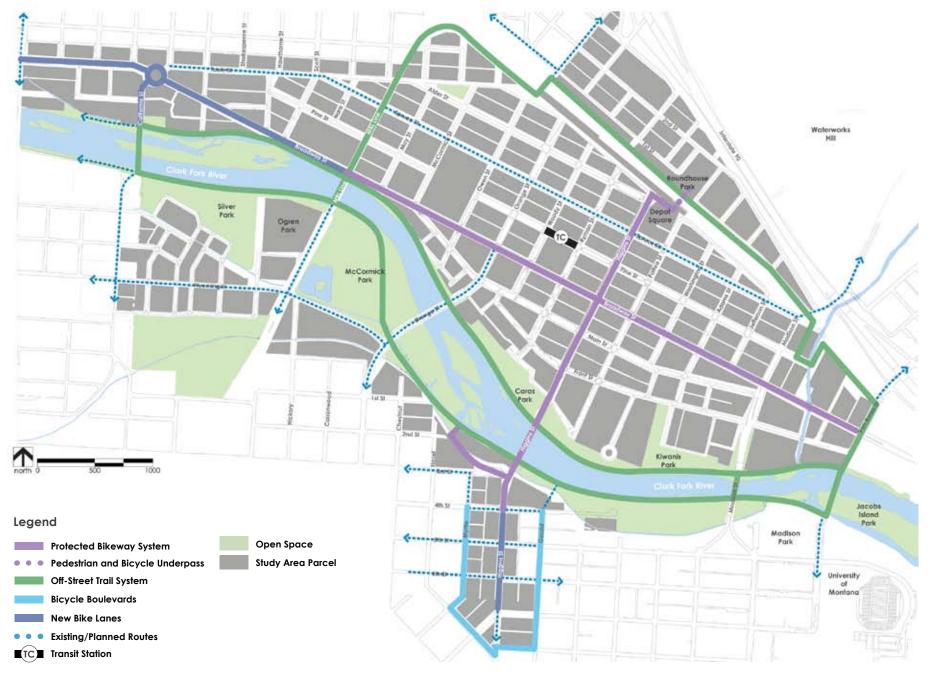
- Protected bikeways
- Off-street trail system
- Bicycle boulevards
- New bike lanes
- Bicycle parking/storage

A complete bicycle system meets the following criteria:

- Prevalent protected bikeways; bike lanes are appropriate only where protected bikeways cannot be immediately implemented
- Direct connections between key downtown destinations
- Direct and convenient connections between the Commercial Core, that includes the Retail Hot Spot, commercial, and employment areas downtown to, neighborhoods and outlying destinations
- Supporting facilities, such as bike stations and onstreet bike parking
- A convenient bike-share program



**Bicycle Circulation Supports Balanced-Center Development** 



Primary Bicycle Circulation

### Protected Bikeway System

The protected bikeways along Higgins Avenue and Broadway Street provide for local downtown circulation to key destinations and neighborhood connections to the Retail Hot Spot and commercial areas.

Protected bikeways are located off-street between the sidewalk and parking lanes and are a preferred method for increasing bicycle ridership. Bike lanes are appropriate only where protected bikeways cannot be immediately implemented.

The system includes:

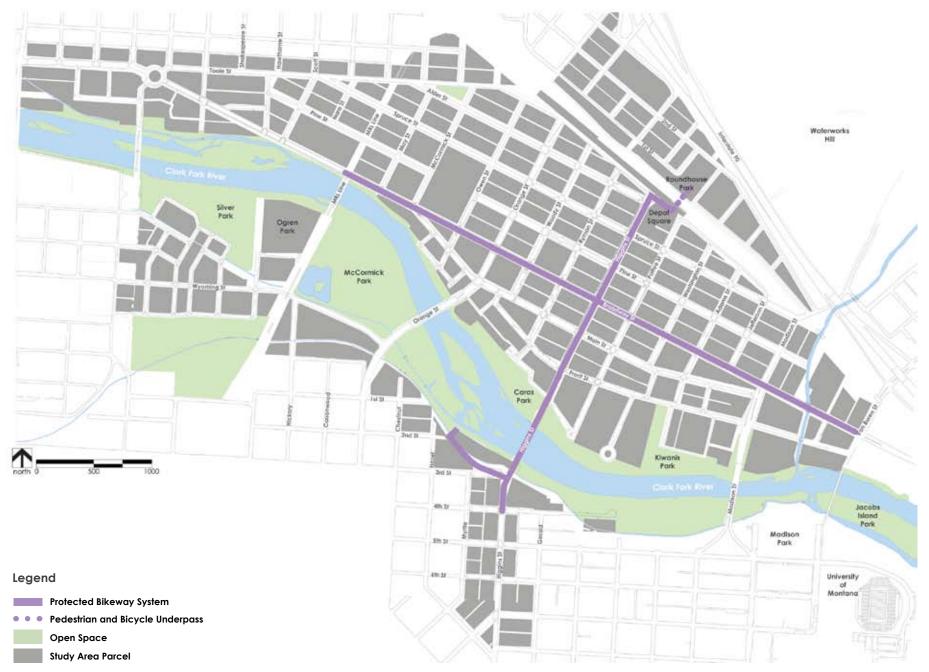
- Wide bike lanes located between the sidewalk and on-street parking
- Either single-direction travel on both sides of the street or bi-directional travel on one side of the street
- Special intersection design treatments that minimize auto-bicycle conflicts and provide safe bicycle crossings and left-turn movements





**Protected Bike Lane** 

**Standard Bike Lane** 



Protected Bikeway System

### **Off-Street Trail System**

# The off-street trail system should provide recreational and commuter access to downtown.

The system should separate pedestrians and bicyclists where possible. However, a limited number of welldesigned multi-use trails are acceptable where trails are constrained.

- The existing system should be completed, missing segments should be acquired, indirect routes should be straightened
- Where riverfront routes are constrained, possibilities for constructing within the river should be explored with the Army Corps of Engineers and other regulating entities





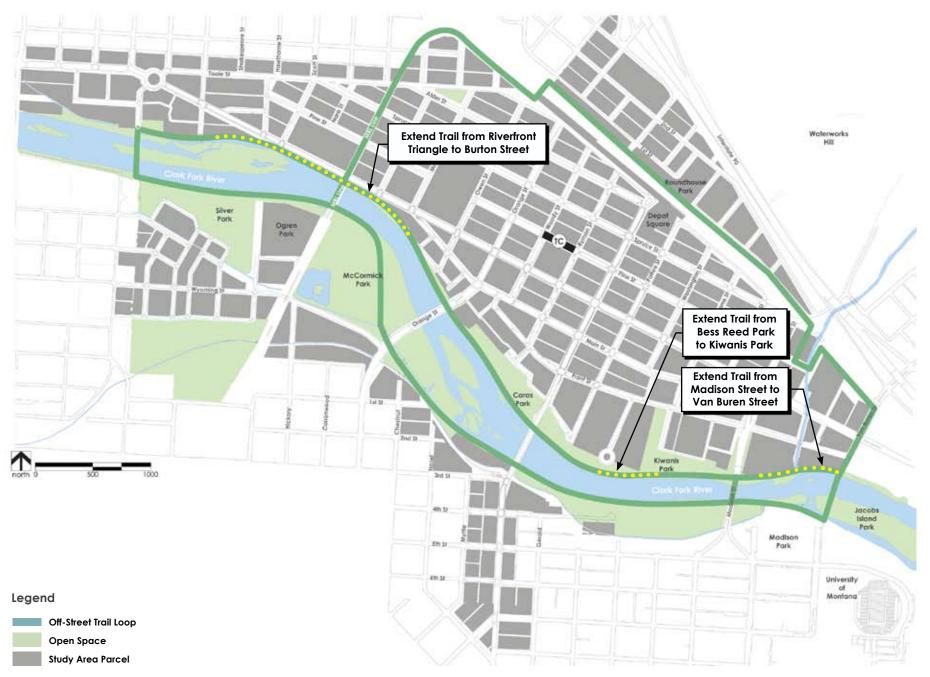
**Multi-Use Trail** 



**Floating Trail** 

**Separated Trail** 

**Riverfront Trail** 



Off-Street Trail Loop

# Transit

Downtown growth and rising oil costs will make complete transit systems increasingly desirable.

Local circulators and regional rail transit should complement the existing community-wide bus service to link the downtown and regional destinations.

Transit components should include:

- Bus-existing route maintenance and existing transit station improvements
- **Streetcar**–a local circulator linking major downtown destinations, potential future connections to the University, Airport and other Missoula destinations
- **Regional Rail**–consideration for commuter rail that links downtown to the region along the I-90 and Hwy. 93 corridors, including redevelopment of the existing depot as the downtown Missoula station for the regional system





Bus

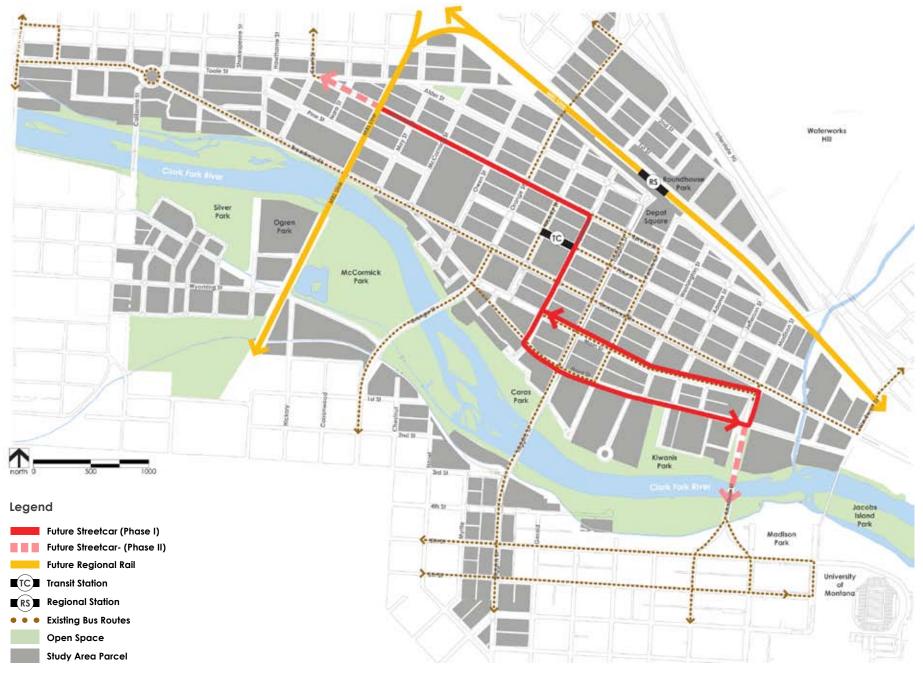


**Regional Rail** 

Streetcar



**Train Station** 



**Transit Circulation** 

### Streetcar

#### Downtown streetcars provide premium local service, attracting riders who otherwise may not be transit patrons.

The proposed initial streetcar route would:

- Connect the east and west ends of downtown providing local access to St Patrick Hospital, County offices and the University of Montana
- Link the downtown retail and arts and culture districts

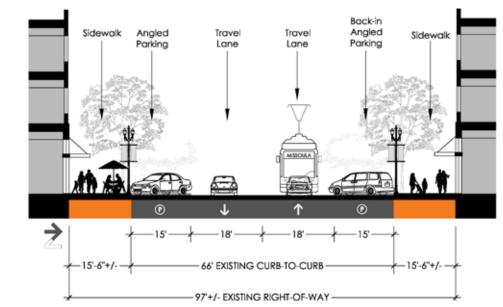
Future phases of the streetcar should:

- Consider extending routes west to Russell Street and the airport
- Identify preferred routes to UM, UM South Campus and Mid-Town

Advantages of the streetcar system include:

- The permanence of rail–fixed alignments and stations can effectively induce development by creating a distinctive living and investment environment that in turn attracts residents and businesses
- **Streetcars attract tourists and 'occasional riders'** The streetcar system provides a unique experience that may become a downtown attraction
- A daily local circulator

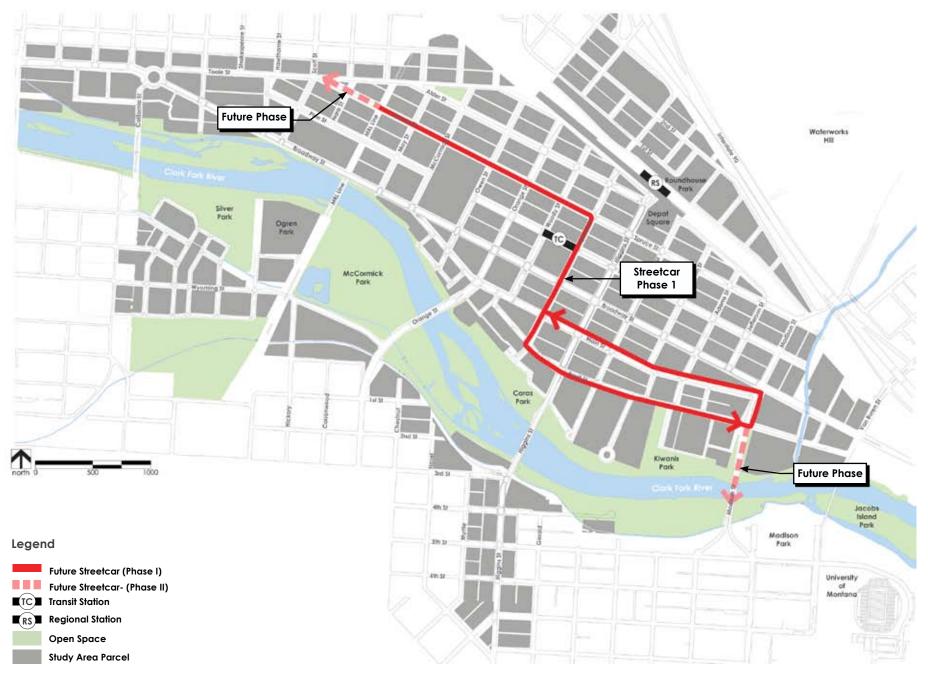
   The streetcar system provides local service for daily downtown users such as employees, residents and students



Streetcar on Main Street



Streetcar in Traffic



#### Streetcar

# **Automobiles and Trucks**

Auto and truck vehicles are currently the primary access modes into the downtown. Acceptable access and movement into and through the downtown will be improved.

The automobile and truck element includes:

- Major Automobile and Truck Streets– improvements to current major traffic circulation and planning for projected future capacity
- One-way to Two-way Street Conversions– facilitation of local traffic circulation by reducing out-of direction travel and improve access to key destinations
- New Streets-provision of access to new and existing development and extend the historic Missoula street grid





**Higgins Avenue** 

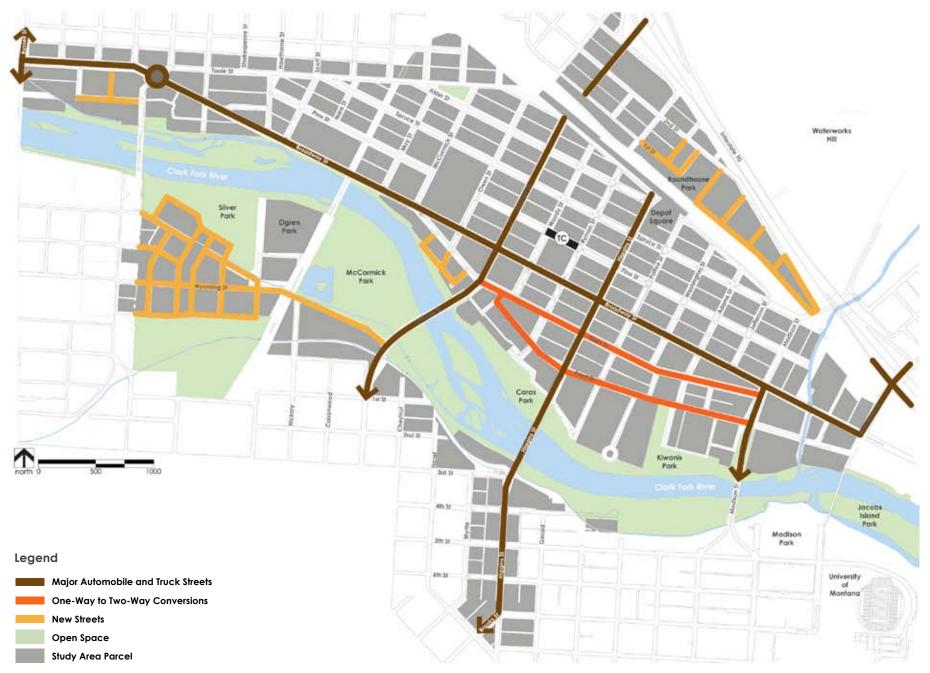
**Broadway Street** 



Main Street



**Front Street** 



Automobile and Truck Circulation

### Major Automobile and Truck Streets

Downtown Missoula's high-traffic major arterial streets will require improvement in order to accommodate traffic volume increases created by planned development.

The Downtown Streets Plan and the West Broadway Corridor Community Vision Plan include recommendations for improvements to Higgins Avenue and Broadway Street. The following recommendations are not consistent with some components of these plans. Revisions to these plans and recommendations for other streets include:

#### **Higgins** Avenue

- Initiate a public process for design and review of alternatives for Higgins Avenue as a four-lane or a three-lane street between Brooks and Railroad streets
- Coordinate design and signalization with two-way conversion of Front and Main streets

#### Broadway

- Once conditions require and funding is available, design Broadway as a four-lane street between Russell and Van Buren streets with context sensitive best practices and public involvement to ensure that the pedestrian, bike, auto and business constituents are included in the planning, design and construction of the improvements
- Create a roundabout at Broadway, California and Toole streets and/or at Broadway and Burton Street (The feasibility of either one or both of these options should be reviewed by appropriate agencies)

### Orange Street

- Improve the intersection of Broadway and Orange streets by adjusting channelization and providing turn-lane improvements
- A left turn pocket on Orange Street for access to Alder Street

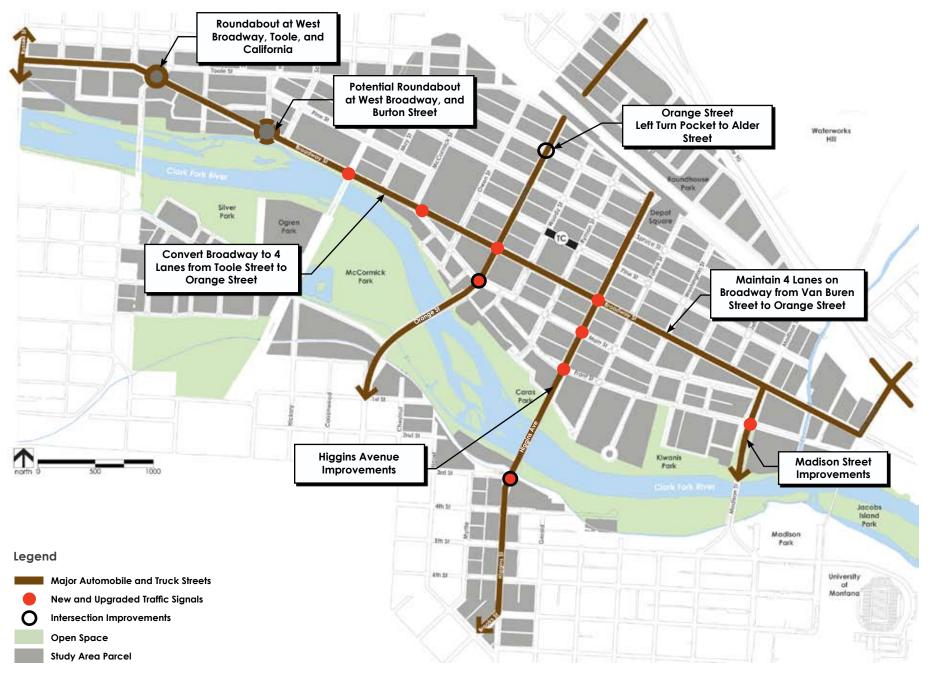
#### Madison Street

 Improve the intersection of Madison and Front streets by adjusting channelization and providing turn-lane improvements

Upgrade and add signals at a number of major intersections.

Improvements would result in:

- Improved mobility through downtown along Higgins Avenue and Broadway Street and access to Interstate 90 and other regional roadways
- Improved turning access to retail, employment, and service uses along Higgins Avenue, Main Street and Front Street



Major Automobile and Truck Streets

### One-Way to Two-Way Street Conversions

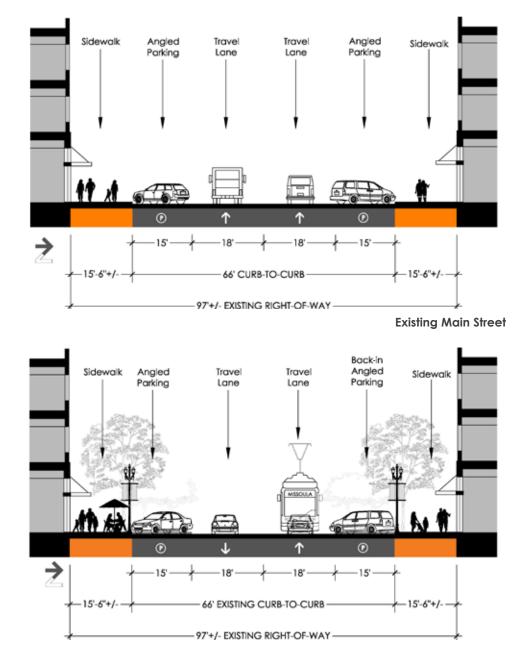
Conversion of Main and Front streets to two-way traffic flow will improve accessibility, reduce auto trip length, and improve downtown business visibility.

The Main and Front streets conversion includes:

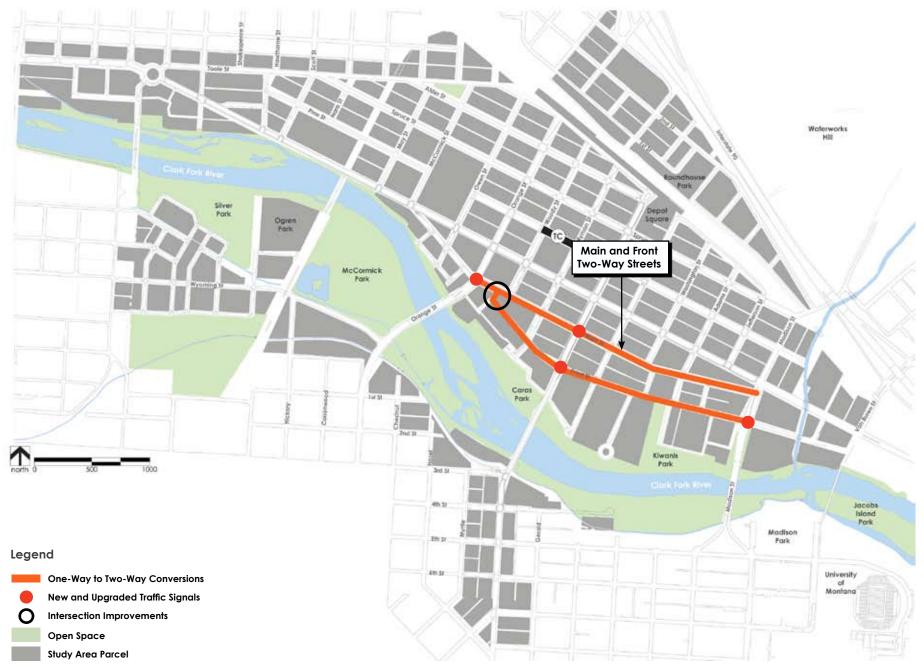
- Two-way traffic on Main and Front streets between Madison Street and Orange Street
- Realignment of the intersection of Front Street and Main Street; rerouting of utilities may be necessary
- Existing parking locations and quantities; direction will be reversed on one side of the street
- New and upgraded signals at the intersections of Orange and Main, Higgins and Main, Front and Higgins, Front and Madison
- No changes to sidewalks or crosswalks
- No changes to roadway capacity; no lanes will be added or removed

Benefits of the conversion include:

- A reduction in vehicle miles traveled-trip lengths are typically one and a half times longer on one-way systems than on two-way systems.
- With a two-way system–drivers spend less time driving out of direction, resulting in improvements to air quality and reduction of fuel consumption



**Proposed Main Street** 



One-Way to Two-Way Conversions

### **New Streets**

#### New streets improve auto, pedestrian, and transit access; expand the city's historic grid; and establish appropriately-scaled development blocks.

Riverfront Triangle streets include:

 A series of local access streets that expand the grid south of Front Street

Old Mill Site streets include

- An extension of the Wyoming Street collector through the development
- A grid of local access streets

Railyard district streets include:

• Local access streets that expand the existing grid pattern north of the MRL tracks

West Broadway streets include:

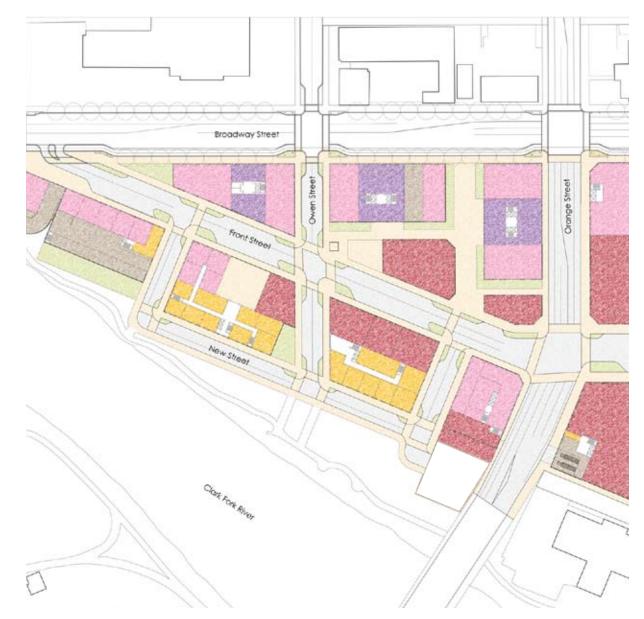
• Local access streets that expand the existing grid pattern south of Broadway

Arts and Culture district streets include:

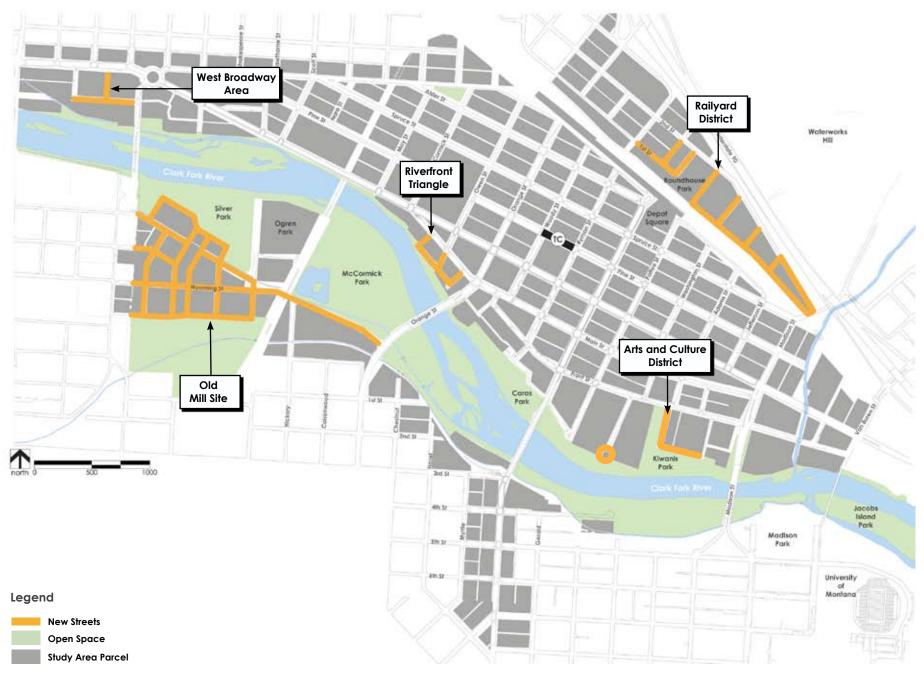
• Local access streets that expand the existing grid pattern south of Front Street

New streets should be designed to include:

- On-street parking
- Landscaped curb extensions at corners
- Sidewalks on each side of the street
- Canopy street trees and other landscaping



Proposed Triangle Street Plan



**New Streets**