

## 2.0 GOALS, PRINCIPLES, AND POLICIES

In 1997, *City Plan* and the *Transportation Master Plan* (TMP) developed a vision, goals, principles, and policies for how transportation and land use planning should occur in the City of Fort Collins. As part of the updates to these plans, the vision, goals, principles and policies were revisited to see if they were still consistent and represent the future of the City. This process started by defining characteristics for Fort Collins that define what the City should look like now and in the future. These characteristics served as the basis for refining the vision, goals, principles, and policies. Revisions to these items then helped shape the direction for changes in other policy related issues. **Appendix B** contains a matrix that shows a comparison between the 1997 goals, principles, and policies and those included in this plan.

In addition to the revisions to the goals, principles, and policies, several issues exist that the City will need to address in the future. These relate to how the City wants to deal with issues related to Adequate Public Facilities, growth in vehicle miles traveled (VMT), maximum street and intersection geometry, constrained street corridors, law enforcement, and development of a transportation system performance measurement system. These issues are discussed in general recognizing that addressing them is outside the parameters of a TMP.

### 2.1 CHARACTERISTICS ANALYSIS

In order to develop a framework for refining the vision, goals, principles, and policies identified in the 1997 *City Plan* and TMP documents, a characteristics analysis was conducted to define the features that the community wanted to see in Fort Collins. These features include:

- Region and Economy
- Open Space and Community Separators
- Development/Redevelopment Patterns
- Neighborhoods and Housing
- Transportation

There were seven transportation characteristics developed that were adopted by City Council and used as the basis for refining the 1997 vision, goals, principles, and policies. These characteristics include:

- TR 1 - Promote the development of a multi-modal transportation system (automobile, transit, bicycle, and pedestrian) that encourages mobility and a variety of safe, efficient travel choices.
- TR 2 - Encourage the development of additional enhanced travel corridors (e.g. Mason Transportation Corridor).
- TR 3 - Encourage partnerships among Colorado Department of Transportation (CDOT), Federal Highway Administration (FHWA), and private developers to build new and/or improve existing interchanges, overpasses, and/or underpasses on I-25 to increase mobility.

- TR 4 - Recognize Transportation Demand Management (SmartTrips) programs (carpool, regional vanpool, telecommuting, etc.) as transportation options.
- TR 5 - Encourage regional transit between Fort Collins and northern Colorado communities.
- TR 6 - Encourage interregional transit between Fort Collins and Denver.
- TR 7 - Promote a local transit system.

Although the other characteristics provided some direction for goal, principle, and policy revisions, the transportation characteristics were the primary focus.

## 2.2 COMMUNITY VISION

As part of the update to *City Plan* and the development of the *Fort Collins Transportation Master Plan 2004*, some minor revisions were made to the community vision. This summary, taken from the *City Plan* update, illustrates how Fort Collins envisions itself over the next twenty years. This vision establishes the framework for the goals, principles, and policies that are developed to ensure the vision can be met.

“Each generation makes its own contribution to the legacy of the community. The City’s dream of a community that can endure for the following generations is embodied in this vision. It is a statement of confidence, optimism and belief that Fort Collins will continue to be a great place to live and work in the future, and that the qualities of the natural surroundings will still be a defining aspect. *City Plan* sets forth this “Vision” which will help direct concerted efforts involving both the public and private sectors. While part of the vision is to continue the qualities people value most about living in Fort Collins today, its focus is on what the community could be like 20 years from now, in the year 2025 despite inevitable change.”

The vision is to make change work for Fort Collins while protecting the best of what we have and recognizing who and what Fort Collins will become by preserving a sense of community identity and pride.

The *City Plan* vision also discusses ideals related to transportation and its role in the City.

“Fort Collins will confront and mitigate the negative impacts of the car on our lives. The vision recognizes the importance of the automobile as a means of transportation, but begins to shift the balance towards a future in which different modes of transportation are also used. Our community will have an overall transportation system and urban form that supports a wide choice of efficient ways to travel, thereby reducing the rate of growth in total daily VMT. Our Master Street Plan (MSP) Capital Improvement Program (CIP) will support the land use goals of the City. New development and redevelopment will be organized and woven into a compact pattern that is conducive to pedestrian, bicycle and public transit travel. All modes of travel will be safe and efficient.

And, the importance of our community's air quality, transportation, and land use goals will be balanced.”

Finally, the vision includes reference to the City's role as a regional leader.

“Fort Collins will share in the region's responsibilities.”

## 2.3 COMMUNITY GOALS

Based on the community vision, a series of community goals was established in 1997 and refined as part of the update to *City Plan* and the development of the *Fort Collins Transportation Master Plan 2004*. The goals are organized into eight categories -- Land Use, Transportation, Community Appearance and Design, Economy, Housing, Environment, Open Lands and Growth Management-- to make it easier to translate them into more specific policies and other planning work, over time, in an organized way. Most of all, the goals have implications that overlap more than just the single category under which they are listed. While the goals focus mostly on our physical surroundings, they contain implications that affect environmental, economic, and social concerns. The following summary lists the specific goals for the eight categories and provides additional detail for the transportation goals.

### Land Use

- Our community will have a compact land use pattern within a well-defined boundary.
- Fort Collins will be a city of cohesive, distinct, diverse, attractive and safe neighborhoods.
- Our community will have a primary downtown center supported by other districts with unique or specialized areas such as employment, civic, mixed-use and commercial.
- Existing, underutilized commercial and industrial areas will be provided opportunities for mixed-use redevelopment, revitalization and economic growth, while improving upon their unique and positive qualities.
- Colorado State University will continue to be one of the city's major activity centers.

### Community Appearance and Design

- Our community's streets and walkways will be planned, built, and maintained as attractive public spaces.
- Housing in many different forms will be included in attractive, safe neighborhoods that encourage walking and social interaction.
- Commercial buildings will contribute to the character of Fort Collins as a unique place.
- Thoughtful design of the total community image and environment will strengthen Fort Collins' identity, security, and livability.

### Economy

- The economic health of our community will be sustainable.
- Fort Collins will maintain its role as a regional economic center.

- Colorado State University will continue to be a major factor in our community's economy.
- Our community will continue to support cultural amenities as an important contributor to our economic health and as a reflection of the importance of the arts and our heritage.

### **Housing**

- Our community will be a place where all of its people will have an opportunity to live in safe, habitable, and affordable housing.
- Our community will provide a mix of housing distributed throughout the city.
- Our community will encourage preservation of existing housing.
- Our community will create an environment that meets the special needs of our residents.
- Our buildings will be environmentally sustainable.

### **Environment**

- Our community will be a responsible steward of the natural environment, such as improving air quality, water quality, conserving resources, and reducing solid wastes.
- Our community will continually improve Fort Collins' air quality as the City grows by applying strong, comprehensive policies and strategies to address the following issues: emissions from vehicles, commerce/industry, and wood burning, visual air quality, certain indoor air pollutants, and greenhouse gases.
- Our community will maintain high standards for ensuring clean water quality.
- The City will have strong resource conservation programs including energy, water, native and restored wildlife habitat areas and urban forests.
- Our community will have a strong waste reduction and management program.
- Our community will be protected from all forms of hazardous materials.

### **Open Lands**

- Our community will have a balanced system of open lands, natural areas, recreation spaces, and parks, including trails and urban streetscapes.
- Valued open lands, natural areas, community separators, and agricultural lands will be preserved and protected through an active, comprehensive, and regional program.
- Our community will continue to acquire and manage land and water to preserve, protect, and enhance locally and regionally valued open lands.

### **Growth Management**

- Our growth management program will be based on creating a city that is livable and sustainable.
- To derive the greatest value possible for its investments in infrastructure, the City will assure critical maintenance of existing capital facilities, gradually remedy deficiencies in

existing facilities over time, and provide facilities adequate to serve new growth in accordance with adopted levels of service for public facilities and services.

- The City will involve citizens in the planning and decision-making processes of government.
- Development will pay its fair share of the cost to provide needed public facilities and services.
- Development will not be permitted where it cannot be adequately served by critical public facilities and services.
- The City's land use regulations will be a primary mechanism for implementing the goals and policies of *City Plan*.
- Regular monitoring and evaluation of actual experience and trends in meeting the goals of the Plan will lead to both *City Plan* amendments and improved ability to project future conditions.
- The plans and policies of the City, other jurisdictions in Northern Colorado, Colorado State University, Poudre and Thompson School Districts, and Larimer County will be closely coordinated.

### **Transportation**

- Our community will develop and sustain a safe, convenient, and efficient transportation system incorporating and integrating many modes of travel including automobiles, transit, bicycles, and pedestrians.
  - The transportation infrastructure will provide a balanced transportation system for pedestrians, bicyclists, public transit, motor vehicles, and van and car-pooling.
  - A well-developed system of connections -- walkways, bikeways, and streets -- throughout the community will link land uses and travel within and beyond Fort Collins.
- Our community's transportation system will improve air quality, manage traffic congestion, and support efficient land use.
  - The City will search for innovative ways to reduce traffic growth (measured in total daily vehicle miles of travel).
  - The City's transportation system will be developed by balancing travel capacity with managing travel demand, preserving an acceptable level of service for all travel modes, and preventing runaway growth in car traffic.
  - Fort Collins will promote mixed-use development so there is less need for people to travel, and so distances traveled are shorter.
  - Neighborhood streets will be extensively interconnected, but designed to protect the neighborhood from excessive cut-through traffic.

- Neighborhood streets will provide an attractive environment and be safe for pedestrians, bicyclists, and drivers, and have a well-designed streetscape, including detached sidewalks, parkways, and well-defined crosswalks.
- The City will develop and implement community-wide, vehicle-trip-reduction measures and other demand management measures that are fair and that address all types of trip purposes. The City will promote the use of electronic communications as a vehicle trip reduction measure.
- The City will encourage the private sector to provide alternative transportation systems that reduce the number of daily trips made by single-occupant vehicles.
- The City's transportation and land use decisions will be mutually supportive.
  - The City will integrate land use and transportation decision-making. Land use decisions regarding the form and character of the City will ensure that our transportation system will support many modes of travel. Also, transportation decisions will be consistent with, and support, our land use goals.
  - The City's walkway, bikeway, transit and street system will allow for safe, efficient travel throughout the City for pedestrians, bicyclists, public transit users, and motor vehicles, and will be considered as a system of transportation corridors providing connectivity within the community.
- Our community's growth will be structured in a compact pattern that facilitates pedestrian, bicycle, and transit travel.
  - Our City will develop in a form that makes comprehensive, convenient, and efficient transit service possible.
  - Our City will manage its development in a manner that minimizes automobile dependence by its population and work force, and maximizes choices among other modes of local and regional travel, and encourages the use of telecommunications.
  - Street standards and site planning requirements for development and redevelopment will ensure direct accessibility by pedestrians, bicycles, public transit vehicles and cars.
- Our community's transportation system will be integrated with nearby county, regional, state, and national systems.
  - Our Transportation Master Plan will provide for connections to county, regional, state, and national transportation corridors, as well as private rail and air transportation systems.
  - Our transportation system will allow easy access to and from Fort Collins and will encourage through-traffic to bypass the City, thus reducing unnecessary congestion and air pollution.

- Walking will be a practical and enjoyable means of travel.
  - Our City will provide a safe and convenient pedestrian system to support all other aspects of the overall transportation system.
  - Pedestrian facilities will elevate the importance of the pedestrian. The pedestrian will be given equal consideration with other modes within the shared public space of the street system. Walking will be encouraged for shorter trips within the City.
- The bicycle will be a practical transportation choice for residents and visitors.
  - The community will have a comprehensive, safe and convenient bikeway system. The bikeway system will be designed to provide continuity and eliminate gaps in the system, while linking to regional systems.
  - Bikeways will provide access to all major activity centers and destinations, by building on combinations of existing and planned commuter and recreational facilities.
- Our community will have a comprehensive public transit system.
  - Our City will promote public transit that offers reliable, accessible service where appropriate throughout Fort Collins and to other cities and towns with frequency of service responsive to demand times. Opportunities for regional and interregional transit connections to Fort Collins will be planned for and encouraged.
  - A combination of services will be offered, such as combining transit-by-demand and fixed- route services, to suit different types of development and travel needs of users.
  - The transportation system will connect public transit to other modes of travel through intersecting routes, shared facilities, schedule timing, and accessories such as bike racks on buses.
  - Key transportation corridors will be identified for intensive transit development.

## 2.4 PRINCIPLES AND POLICIES

Using the revised community vision and goals as a guide, the principles and policies from the 1997 *City Plan* and TMP were modified to provide further direction for Fort Collins' land use and transportation planning efforts.

How a community chooses to manage personal mobility and provide for the safe and efficient movement of people and goods throughout the community has a profound effect on the character of the City and the quality of life enjoyed by its residents. This section includes principles and policies for developing an effective multi-modal transportation system to help achieve Fort Collins' land use and air quality goals.

### 2.4.1 Transportation Principles and Policies

**PRINCIPLE T-1: The physical organization of the City will be supported by a framework of transportation alternatives that balances access, mobility, safety, and emergency response throughout the City, while working towards reducing the rate of growth of vehicle miles traveled and dependence upon the private automobile.**

**Policy T-1.1 Land Use Patterns.** The City will implement land use patterns, parking policies, and demand management plans that support effective transit, an efficient street system, and alternative transportation modes. Appropriate residential densities and non-residential land uses should be within walking distance of transit stops, permitting public transit to become a viable alternative to the automobile.

**Policy T-1.2 Multi-Modal Streets.** Street corridors will provide for safe, convenient, and efficient use of all modes of travel, including motor vehicles, transit, bicycles, and pedestrians.

**Policy T-1.3 Street Design Criteria.** The City will continue developing street design criteria to support vehicular movement, transit, ride-sharing and non-motorized modes of transportation, which minimize conflicts between transportation modes, are compatible with surrounding land uses, and meet the needs of the users.

**Policy T-1.4 Adequate Facilities.** Recognizing the limits of the City's financial resources, the City will ensure the provision of adequate facilities for the movement of goods and people while maintaining the integrity of existing streets and minimizing travel-related impacts within residential neighborhoods. As growth occurs, appropriate transportation investments should be made to support increased demands for travel.

**Policy T-1.5 Targeted Areas.** The City will provide transit services and non-motorized travel opportunities to support development of activity centers and districts in a manner that minimizes single-occupant automobile travel.

**Policy T-1.6 Level of Service Standards.** The City will develop level of service standards for all travel modes.

**Policy T-1.7 Transportation of Information.** The City will encourage the development and sharing of infrastructure to facilitate the movement of information throughout the City.

**Policy T-1.8 Transportation System Performance.** The City will continue to improve the quality, type, and frequency of collecting data to evaluate the performance of the transportation system.

**Policy T-1.9 Interstate Interchange Improvements.** The City will encourage partnerships among the Colorado Department of Transportation, Federal Highway Administration, and private interests to build new and/or improve existing interchanges, overpasses, and/or underpasses on I-25 to increase mobility. (Note: this policy does not commit the City to financial participation in the interchange improvements.)

**Policy T-1.10: Context Sensitive Design.** The City will continue to design transportation projects with consideration for the context or setting through careful planning, consideration of different perspectives, and tailoring designs to particular project circumstances. The intent of the policy is to ensure that transportation projects not only move vehicles, bikes, and pedestrians safely and efficiently, but are sensitive to the environmental, scenic, aesthetic, and historic values of the area.

**PRINCIPLE T-2: Mass transit will be an integral part of the city's overall transportation system.**

**Policy T-2.1 Transit System.** The City's public transit system will be expanded in phases to provide integrated, high-frequency, productivity-based transit service along major transportation corridors, with feeder transit lines connecting all major district destinations, consistent with adopted transit plans.

**Policy T-2.2 Transit Stops.** Transit stops will be integrated into existing and future business districts and Neighborhood Commercial Centers in a way that makes it easy for transit riders to shop, access local services, and travel to work. Transit stops should be provided no more than 1/4-mile walking distance of most residences to the extent feasible. The design and location of transit stops should function as an integral part of these destinations and provide adequate lighting, security, pedestrian amenities and weather protection.

**Policy T-2.3 Transit Route Design.** The City will implement fixed-route transit service through a phased transition to a productivity-based system, where appropriate, consistent with the adopted transit plans.

**PRINCIPLE T-3: City transportation programs will promote the reduction of vehicle miles traveled through strategies that reduce trip generation and length and increase automobile occupancy.**

**Policy T-3.1 Demand Management.** The City will promote travel demand reduction measures that reduce automobile trips and promote alternative travel modes in which results can be measured - such as telecommuting and in-home businesses, electronic communications, variable work weeks, flextime, transit access, bicycle and pedestrian amenities, parking management, and trip reduction programs for large employers.

**Policy T-3.2 Ridesharing Programs.** The City's carpooling and vanpooling programs will be expanded to support the use of ridesharing as an alternative to the single- occupant vehicle, consistent with the adopted local, regional, and long-range plans (e.g. North Front Range Transportation Demand Management Program).

**PRINCIPLE T-4: Bicycling will serve as a practical alternative to automobile use for all trip purposes.**

**Policy 4.1 Bicycle Facilities.** The City will encourage bicycling for transportation through an urban growth pattern that places major activity centers and neighborhood destinations within a

comfortable bicycling distance, that assures safe and convenient access by bicycle, and that reduces the prominence of motorized transportation in neighborhoods and other pedestrian and bicyclist-oriented districts. Facility design will also plan for:

- a. Continuous bicycle facilities that establish system continuity and consistency citywide. Facility design will be incorporated into new development and street construction projects -- linking to adjacent facilities. Bridges and crossings should be provided over arterial streets, railroads, rivers, drainageways, and other features that may be major barriers to a continuous bicycle network. Where bridges and crossings are appropriate, impacts to wildlife and/or plant communities will be mitigated.
- b. Bicycle access should be improved to major activity centers, schools and neighborhoods, and barriers removed in these areas to improve circulation. Facility development, safety and convenience should be established throughout these destinations. Level of service standards for bicyclists should be higher within these areas.

**Policy T-4.2 System Design.** The City will design a city-wide system of on- and off-road bicycle transportation facilities according to adopted standards while maximizing safety, convenience and comfort for bicyclists of all ages and skill levels in conformance with accepted design criteria. Bicycle facility design will also include retrofitting older, existing streets with bike lanes in conjunction with capital improvement and maintenance projects, where feasible. System design will also provide for enjoyable and scenic bicycling routes. Off-street multi-use trails will be implemented to complement the on-street network and improve transportation mobility, while mitigating impacts on wildlife and plant communities.

**Policy T-4.3 Management/Maintenance.** The City's investment in streets and bicycle facilities will be protected through a proactive, high-quality maintenance program that is tailored to the specific needs of people who ride bicycles for transportation, and to risk management considerations.

**Policy T-4.4 Enforcement.** Respect for bicyclists and by bicyclists for traffic laws should be encouraged through effective, on-going enforcement programs. These programs should emphasize safety and educational messages.

**Policy T-4.5 Education.** The City will improve safety and encourage increased transportation bicycling through a comprehensive, on-going set of education programs targeted at motorists, pedestrians and bicyclists of all ages. The City will work with school districts, civic groups, private businesses, and others to help find resources to support this effort and to reach the broadest possible audience. The City will have an environment in which people are actively encouraged to bicycle for transportation through information about facilities and "good streets for bicycling," through positive publicity about bicycling safety and activities, and through publicizing actions by employers, developers and business owners to encourage bicycling.

**PRINCIPLE T-5: The City will acknowledge pedestrian travel as a practical transportation mode and elevate it in importance to be in balance with all other modes.**

**Direct pedestrian connections will be provided from places of residence to transit, schools, activity centers, work and public facilities.**

**Policy T-5.1 Land Use.** The City will promote a mix of land uses and activities that will maximize the potential for pedestrian mobility throughout the community.

**Policy T-5.2 Connections.** Pedestrian connections will be clearly visible and accessible, incorporating markings, signage, lighting and paving materials. Other important pedestrian considerations include:

- a. Building entries as viewed from the street should be clearly marked. Buildings should be sited in ways to make their entries or intended uses clear and convenient for pedestrians.
- b. The location and pattern of streets, buildings and open spaces must facilitate direct pedestrian access. Commercial buildings should provide direct access from street corners to improve access to bus stop facilities. Shopping areas should provide for pedestrian and bicycle connections to adjoining neighborhoods.
- c. Creating barriers which separate commercial developments from residential areas and transit should be avoided. Lot patterns should provide safe and direct pedestrian connections from residential areas to schools, parks, transit, employment centers, and other neighborhood uses.
- d. Direct sidewalk access should be provided between cul-de-sacs and nearby transit facilities.

**Policy T-5.3 Continuity.** The City will provide a safe, continuous and understandable pedestrian network incorporating a system of sidewalks, crossings and trails throughout the community. Bridges and crossings should be provided over railroads, rivers, drainageways, and other features that may be major barriers to a continuous pedestrian network. Where bridges and crossings are appropriate, impacts to wildlife and/or plant communities will be mitigated.

**Policy T-5.4 Sidewalks.** Sidewalks will be designed, constructed, and maintained to provide safety, comfort, and a “walkable” community. New development will follow adopted design standards for sidewalk design. Older, existing streets will be retrofitted to provide improved, widened, or detached sidewalks in conjunction with capital improvement or maintenance projects.

**Principle T-6: Street crossings will be developed to be safe, attractive, and easy to navigate.**

**Policy T-6.1 Street Crossings.** The City will design street crossings consistent with adopted standards with regard to crosswalks, lighting, median refuges, corner sidewalk widening, ramps, signs, signals, and landscaping. Crosswalks should be well marked and visible to motorists. They should be designed to fit and enhance the context and character of the area, and provide for safety for all age groups and ability groups.

**Policy T-6.2 Intersection Improvements.** Traffic calming and sight distance improvements at intersections should be developed where appropriate to enhance the safety of street crossings. Painted intersection “stop bars” should be provided to keep vehicles clear of pedestrian crossings. Curb radii should be minimized to reduce the speed of right turning vehicles and reduce the distance for the pedestrian to cross the street.

**Policy T-6.3 Pedestrian Signalization.** The City will ensure that signals, signs, and markings have clear vehicular and pedestrian indicators for street crossings. Automatic pedestrian phases at high demand intersections and pedestrian buttons at low demand areas should be provided. Protected pedestrian signal phases to improve safety should also be provided in high pedestrian demand areas.

**Principle T-7: The City will encourage the development of attractive and easy to navigate pedestrian facilities to create an interesting pedestrian network.**

**Policy T-7.1 Pedestrian Facilities.** The City will encourage the provision of pedestrian scale improvements that fit the context of the area. The color, materials, and form of pedestrian facilities and features should be appropriate to their surroundings, as well as the functional unity of the pedestrian network, through means such as:

- a. Developing attractive improvements which enhance the character and pedestrian scale of the urban environment including streetscape design, vertical treatments, widened sidewalks, and furnishings.
- b. Incorporating special design features, public art, and site details that can enhance the pedestrian scale of streets and become an urban amenity.
- c. Encouraging outdoor cafes and activity areas that contribute to the character and human scale of the sidewalk environment. Building design and details should support the human scale of the street incorporating such elements as windows and other openings, porches and recesses, awnings, and patios.

**Principle T-8: The City will develop secure pedestrian settings by developing a well-lit inhabited pedestrian network and decreasing the impacts caused by motor vehicles.**

**Policy T-8.1 Security.** Clear and direct lines of sight in pedestrian settings should be provided to enhance security. Streets should appear inhabited to the greatest extent possible. New development should accommodate human activity and pedestrian use. Pedestrian-oriented lighting should be incorporated into neighborhoods, streets and other public places to enhance safety and security.

**Policy T-8.2 Site Improvements.** The City will increase pedestrian safety by identifying and correcting potentially dangerous locations with physical improvements.

**Policy T-8.3 Safety.** The City will enact local policies and ordinances that will enhance pedestrian safety, develop educational programs for all age groups, as well as for bicyclists and motorists, and increase enforcement.

**PRINCIPLE T-9: Private automobiles will continue to be an important means of transportation.**

**Policy T-9.1 Vehicle Miles Traveled (VMT).** The City will continually reduce the growth rate in vehicle miles traveled (VMT) by implementing a comprehensive VMT reduction program that strives to meet or exceed VMT reduction in comparable cities.

**Policy T-9.2 New and Existing Streets.** New streets will be designed and constructed to ensure an acceptable level of service. The City will maintain or enhance the quality of existing streets.

**PRINCIPLE T-10: The City will participate in a coordinated, regional approach to transportation planning.**

**Policy T-10.1 Regional Transportation Planning.** The City will continue to participate in the North Front Range Metropolitan Planning Organization's transportation programs and planning efforts. The City will promote interagency cooperation, encourage regional coordination, and develop private partnerships to facilitate cooperative land use, air quality protection, and transportation decision-making.

**Policy T-10.2 Funding.** The City will continue to actively pursue all available long-term, consistent funding mechanisms from federal, state, and local sources to implement and maintain a multi-modal transportation system and travel demand management program.

**Policy T-10.3 Future Passenger Rail.** The City's public transit system will incorporate future opportunities for commuter passenger rail or other interregional rail transit connections between the North Front Range and Denver.

**Policy T-10.4 Future Regional Transit Service.** The City will work cooperatively with the North Front Range Metropolitan Planning Organization and other northern Colorado communities to identify opportunities to provide regional transit connections along regionally significant transportation corridors.

**Policy T-10.5 Interregional Transit Corridors.** The City will work cooperatively with regional partners to identify opportunities to provide interregional transit connectivity along the Front Range.

**2.4.2 Transportation Corridor Principles and Policies**

Corridors are the linking elements of the City. They provide mobility to our citizens between and among districts. Corridors provide connections between different areas, destinations, and the edges of Fort Collins, as well as to regional destinations. Some corridors exist naturally for water and drainage purposes and have value for habitat, recreation, and educational opportunities, while some are man-made -- streets and rail-routes with access for all means of travel.

There are four types of corridors: Transportation Corridors, Enhanced Travel Corridors, Water Corridors, and the Poudre River Corridor.

Transportation Corridors are developed primarily to increase mobility, provide transportation options, enhance efficiency, improve the aesthetics of the pedestrian/transit interface, and accommodate the flow of goods and people.

**PRINCIPLE TC-1: Transportation Corridors will be developed to provide efficient mobility and cost-effective transport of people and goods between the various districts of the City.**

**Policy TC-1.1 Locating Transportation Corridors.** Transportation Corridors will include the 4- and 6-lane arterials shown on the Master Street Plan. Criteria for locating future Transportation Corridors, such as connections from the Community Commercial District at Summit View/Mountain Vista Drives, will be based on multi-modal routes, and the size and location of Neighborhood Commercial Centers; Employment, Industrial, Community Commercial and Campus Districts; and future Residential Districts, in order that Transportation Corridors provide the most efficient linkages and use the most cost-effective resources.

**Policy TC-1.2 Balanced Network of Transportation Corridors.** The development of a balanced Transportation Corridor network, comprised of a multi-modal transportation system, with access and connectivity to and through corridors, and efficiency and mobility -- will be key in determining future street requirements.

**Policy TC-1.3 Integrated Transportation Systems.** A network of Transportation Corridors will connect to regionally significant facilities in cooperation with neighboring and regional transportation systems, as indicated in adopted regional transportation plans.

**Policy TC-1.4 Use of Existing Railroad Right-of-Ways.** The City will support efforts to explore the use of existing rail right-of-way for interregional transit service including passenger rail service and for other means of transportation such as bicycling, walking, and transit.

**Policy TC-1.5 High Frequency Transit Service.** High frequency transit service will be implemented on Transportation Corridors as shown in adopted transit plans and encouraged on Transportation Corridors with supportive land uses, providing links between activity centers and districts, recognizing target markets within the City.

**Policy TC-1.6 Transit Supportive Design.** The City will implement and integrate Transit Supportive Design strategies with respect to new and infill development opportunities along multi-modal Transportation Corridors where feasible and practical.

**Policy TC-1.7 Interface Between Transportation Corridors and Open Lands.**

Transportation corridors that are adjacent to open lands and community separators will be designed in a manner that avoids impacts on resources. Where avoidance is not possible, impacts will be minimized and mitigated while still maintaining the intended function of the Transportation Corridor.

**PRINCIPLE TC-2: The structure and function of each corridor will assure the highest composite Level of Service (LOS) among the modes of transportation in the corridor.**

**Policy TC-2.1 Efficient Transportation Flow.** The Master Street Plan will support Transportation Corridors by providing efficient multi-modal service.

**Policy TC-2.2 Automobile Congestion.** When automobile congestion decreases the composite LOS of a Transportation Corridor, it will be a trigger so that the City will strengthen and direct efforts towards ensuring an increase in LOS that gives priority to alternative modes within the Corridor, possibly including the use of dedicated right-of-way for future transit use.

**PRINCIPLE TC-3: The essential element in a Transportation Corridor is the pedestrian/transit interface. Convenience, access, safety, and aesthetics should be of priority when designing for pedestrian access.**

**Policy TC-3.1 Pedestrian Plan.** The safety and security of the pedestrian will be a fundamental consideration in the design of a Transportation Corridor. The five principles of the City's adopted Pedestrian Plan -- directness, continuity, street crossings, visual interest and amenity, and security -- as well as the standards, policies and regulations of the Plan, will be implemented in Transportation Corridors.

**Principle TC-4: Transportation Corridors will be developed, and existing ones improved, as densities and demand for services increase.**

**Policy TC-4.1 Integrated Planning.** The important relationship between land use and transportation will be reflected in policy decisions, management strategies, and investments that are coordinated, complementary and support the *City Structure Plan*. The City may provide transit service in advance of demonstrated demand to support development of key districts on high-frequency lines. Such service will be coordinated through future subarea plans.

**Policy TC-4.2 Transportation Corridor Development.** The implementation of new Transportation Corridors will be phased to coincide with new development.

**Policy TC-4.3 Transportation Corridor Improvement.** Strategic improvements to existing facilities, such as the addition of bike lanes, increased transit service and pedestrian access, will be implemented to respond to existing deficiencies and to maintain adopted level of service standards.

**Policy TC-4.4 Density of Development.** A compact land use pattern will guide development of Transportation Corridors by providing densities necessary to support alternative modes of travel, such as transit, walking and bicycling -- as well as efficient automobile use.

**Policy TC-4.5 Infill and Redevelopment.** The City will encourage infill and redevelopment in corridors that complement and support the efficiency of the Transportation Corridor.

**Policy TC-4.6 Facility Design.** Facility design will support all modes of transportation and be matched to appropriately support the surrounding development.

Enhanced Travel Corridors (ETC) provide multi-modal connections between two or more major activity centers. ETCs promote safe, convenient, and comfortable access to high frequency transit service and bicycle and pedestrian facilities. ETCs are multi-modal in nature and emphasize wide sidewalks, bike lanes on designated routes, transit stops, and parking facilities. Where feasible, ETCs should integrate features of adjacent land uses to encourage transit ridership and the ability to walk or ride a bicycle.

**Principle ETC-1: Enhanced Travel Corridors will be established strategically within the City as specialized Transportation Corridors and will contain amenities and designs that specifically promote walking, the use of mass transit, and bicycling. Enhanced Travel Corridors will provide high-frequency/high efficiency travel opportunities linking major activity centers and districts in the city.**

**Policy ETC-1.1 Locating Enhanced Travel Corridors.** Enhanced Travel Corridors include Harmony Road from College Avenue to I-25), the Mason Transportation Corridor (Downtown to ¾ mile south of Harmony Road), the College/Conifer Corridor (from College Avenue to Mountain Vista), and the Timberline Road/Powers Trail (from Harmony to Conifer). Criteria for locating future Enhanced Travel Corridors will be based on the following:

- the feasibility of high-frequency transit or rail service
- the level of activity in connecting districts
- the integration of appropriate land use and development patterns
- the availability of right-of-way
- the need to counteract decreasing automobile levels of service

**Policy ETC-1.2 Integrated Transportation Systems.** A network of Enhanced Travel Corridors will connect to other Transportation Corridors and to regionally significant facilities in cooperation with neighboring and regional transportation systems as indicated in adopted regional transportation plans.

**Policy ETC-1.3 Facility Design.** Facility design will support pedestrians, transit, and bicycles, and will be matched to appropriately support the surrounding development to create a substantially focused pedestrian scale urban design.

**Policy ETC-1.4 Pedestrian/Bicycle and Transit Interface.** Enhanced Travel Corridors will have the highest level of service with respect to the interface of pedestrians, bicyclists, and transit. A fundamental consideration in the design of an Enhanced Travel Corridor will be to make the character of the corridor - and access to transit - safe, secure, and convenient for pedestrians and bicyclists.

**Policy ETC-1.5 Efficient Transportation Flow.** Enhanced Travel Corridors will have the highest level of transit service. Improvements such as signal preemption, High Occupancy Vehicle (HOV) lanes, and curb extensions at transit stops may be used to enhance bus flow and

pedestrian access to transit. Special consideration will be made in the Master Street Plan for transportation flows into and out of Enhanced Travel Corridors.

**Policy ETC-1.6 Economic Opportunity and Development.** Enhanced Travel Corridors will support expanded economic opportunity and development generally, and particularly on infill sites and targeted redevelopment areas within the city.

**Policy ETC-1.7 Corridor Development.** The implementation of new Enhanced Travel Corridors may be phased to coincide with new development.

## 2.5 TRANSPORTATION RELATED POLICY ISSUES

Several other policy related issues that were discussed as part of the development of the *Fort Collins Transportation Master Plan 2004* including Adequate Public Facilities (APF), using vehicle miles traveled as a trigger and indicator, establishing maximum intersection and street geometry standards, addressing design issues on constrained corridors, enhancing law enforcement activities, and developing a performance metric to better measure the effectiveness of the transportation system.

### 2.5.1 Adequate Public Facilities

The APF principle and policy are defined in the community-wide growth management portion of the *City Plan* update and are not expected to change as part of this update. The principle and policy state:

**PRINCIPLE GM-5: The provision of adequate public facilities and the phasing of infrastructure improvements will be important considerations in the timing and location of development.**

**Policy GM-5.1 Phasing of Development.** The provision of public facilities and services will be utilized to direct development in desired directions, according to the following considerations:

- Development will only be permitted where it can adequately be served by critical public facilities and services such as water, sewer, police, transportation, schools, fire, stormwater management, and parks, in accordance with adopted levels of service for public facilities and services.
- New roads and other City services will not be extended to serve development that is inconsistent with *City Plan* or other regional plans as adopted by the City. Moreover, the City will not enter into any agreements with other jurisdictions to jointly fund or construct infrastructure improvements or provide services that might foster growth that is inconsistent with these plans. These policies will not preclude the City from working with other jurisdictions to provide services and facilities that benefit the entire community such as water and wastewater facilities, regional trails, open space and parks.
- Development that occurs within the Growth Management Area will have at least one-sixth of its boundary area contiguous with existing urban development, except as may be otherwise provided by the legislation of the City Council.

- Preferential consideration will be given to the extension and augmentation of public services and facilities to accommodate infill and redevelopment before new growth areas are prepared for development.
- The City will review applications for the creation of new special service agencies and the expansion of existing special service agencies for conformance with these *City Plan Principles and Policies*.
- The City will work with Larimer County to develop plans and policies for public services and facilities required for new and existing development located in unincorporated areas of the City's Growth Management Area, with special consideration to those subareas and neighborhoods where more detailed planning will follow the adoption of these *City Plan Principles and Policies*.
- The City should charge additional fees to non-city residents who utilize City services.

Some of the specific questions and issues related to APF include:

- How to handle APF requirements if the City does not have the funds to address its portion of the improvements?
- Are there some areas that should be exempt from APF requirements?
- Is the traditional peak hour vehicle delay measure the appropriate way to define the LOS for application of APF requirements?
- Should LOS standards be lowered in some areas?
- Should a maximum allowable intersection size be defined?
- Should resulting infrastructure capacity limitation drive land use densities?

The issue regarding City funding availability is pertinent with the Building Community Choices funding expiring in 2005 and no approved funding source taking its place. This situation may increase the burden on private interests to move projects forward.

The other issues are somewhat related. First, there is the question of whether LOS is the appropriate measure for meeting APF requirements. One way of measuring potential impacts could be hours of congestion or a congestion index. One of the other related issues is the LOS standard that is used. In urban areas, LOS D is a typical standard while in rural areas; LOS C is a more typical measure. In areas like the College corridor in the downtown area, LOS E is considered acceptable. An approach that reduces the standard acceptable LOS measure could provide some benefit in balancing the intent of the policy, while recognizing that development needs to pay its fair share. Lowering the LOS standard has other ramifications that must be considered such as the potential affect on air quality. Another potential option is instead of lowering the LOS threshold, develop a maximum intersection size and limit development in certain areas based on building the maximum intersection size. As part of this update, six-lane arterials with double left-turn lanes and a dedicated right-turn lane have been discussed as the most likely maximum intersection the public is willing to accept. This is an issue that needs further evaluation.

### 2.5.2 Using Vehicle Miles Traveled as a Measurement Tool

The use of VMT is a common practice throughout the US to measure the effectiveness of a city's transportation system. In Fort Collins, the vision related to VMT remains to match the growth rate of VMT to the population growth rate. In fact, it is not only a vision, but it is used as a measure to evaluate the effectiveness of *City Plan*. To evaluate the implementation for *City Plan* and to provide a process for reviewing the effectiveness of the *City Plan* vision, a goal was developed that identified a system for monitoring and evaluation. The goals state:

- Regular Monitoring and Evaluation of actual experience and trends in meeting the goals of the plan will lead to both *City Plan* amendments and improved ability to project future conditions.

The review process is defined under Principle GM-9 in the growth management principles and policies in *City Plan* including the definition of performance indicators. The performance indicator categories include population, land use, housing, transportation, employment, and the environment. Specifically for transportation, indicators include VMT and transportation mode split.

The trigger for VMT is "Growth rate of VMT higher than population growth rate. The trigger is calculated as change in VMT divided by change in population greater than 1." The trend continues to be that VMT is growing faster than population growth. While this may not be a bad vision or goal, using it as a trigger continues to ensure that the special review process will be invoked quite often.

Increasing VMT is a trend that is not specific to Fort Collins. Throughout the US, many communities are dealing with similar issues. Tracking VMT is important for air quality purposes and serves as a good measure of the effectiveness of the transportation system. One suggestion for continuing to use VMT as a trigger is to measure it differently. Rather than relating it to population growth, it may be more realistic to look for reductions in VMT in relation to its level the previous year. For example, if the increase last year was 3 percent, the trigger would be to have an increase less than 3 percent for this year.

Another way to address the problems with VMT would be to continue tracking it for air quality purposes, but look for another means of evaluating the efficiency of the transportation system to use as a trigger. Other triggers could include a congestion index that evaluates the amount of congestion throughout the city. Again, the goal would be a reduction in the hours of congestion over a specified time period. The concept of developing a mobility index is discussed in Chapter 5. This measure is an additional way to measure system performance.

The main issue is that while matching VMT growth to population growth remains a vision, it is a trigger that is met every year. The way *City Plan* defines the triggers means that special studies need to be conducted to enact a change. Because this trend is not likely to change, resources will be committed on a regular basis to address this issue. One suggestion is to revisit the VMT indicator as part of the next phase of *City Plan* to see if it still makes sense.

### 2.5.3 Maximum Street and Intersection Geometry

One of the issues of interest throughout the development of this plan was related to the maximum geometry of the streets and intersections in Fort Collins. At what point is the community willing to say “I do not want that size of facility in my community!” Through various public meetings and discussions with the various advisory and appointed boards, most people felt that a six-lane street (e.g. College Avenue) was as large as they would like to see in Fort Collins. This includes three lanes in each direction.

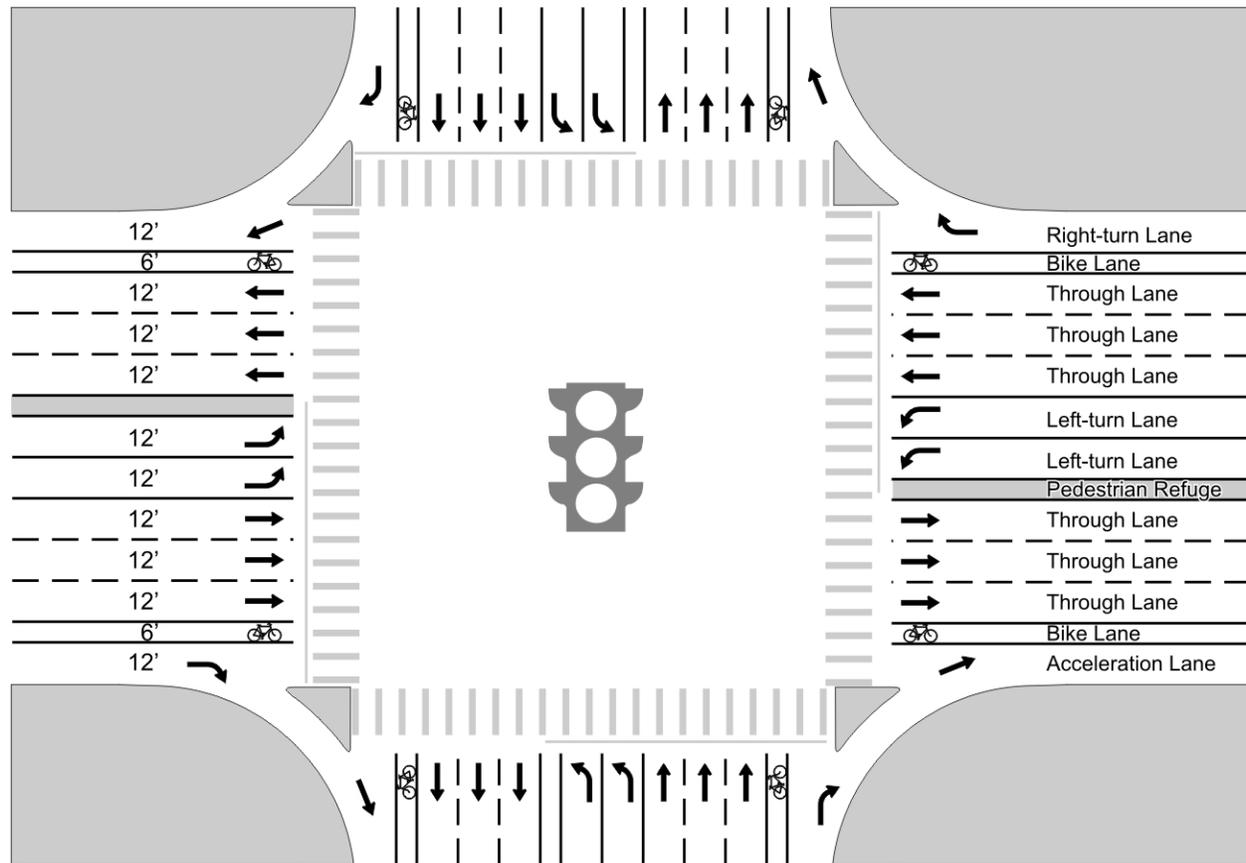
The other issue that was discussed was the size of the intersections. Currently, the largest intersection in Fort Collins is at College Avenue and Harmony Road. It is the intersection of two four-lane facilities with double left-turn lanes and dedicated right-turn lanes. Many feel that with an additional through lane in each direction, this is the largest intersection geometry that should be considered in Fort Collins.

The issue for both intersections and street facilities is balancing the desire to have increased mobility and reduced traffic congestion with the character of the community. Eight-lane streets and grade-separated intersections at arterials may be needed to provide the necessary LOS on the street, but those types of facilities change the look and character of a community.

Decision makers in Fort Collins must decide whether the City should build these types of facilities, or accept decreasing LOS and increased congestion. These questions will need to be addressed as congestion increases, and the City must carefully weigh its priorities in making these decisions. By accepting a higher level of congestion, some forms of transit, bicycle, and pedestrian travel may become more viable options for residents, if travel times are significantly reduced as compared to automobile travel. Conversely, the City may see decreased air quality conditions as a result of greater emission levels from idling vehicles at congested intersections.

Based on the feedback from the outreach that was conducted for this plan, six-lane arterials and intersections with double left-turn lanes and a dedicated right-turn lane seem to be the maximum residents are willing to consider. An example of this geometric condition is shown in Figure 2.1. Based on the transportation demand modeling analysis that was conducted and discussed in Chapter 4, six-lane arterials and the intersection geometry previously discussed will be sufficient for mobility purposes. There are streets like Harmony Road and College Avenue though, that will operate at failing levels of service during peak periods with that geometry.

**Figure 2.1**  
**Potential Maximum Intersection Size**



### 2.5.4 Roundabouts

Another issue related to intersections is the trend throughout the US towards the use of roundabouts instead of traffic signals. There were several issues with the roundabout that was proposed at Mulberry and Lemay that have left City staff and residents with a lot of questions about the future of roundabouts in Fort Collins. There are many traffic situations where the use of a roundabout may be more advantageous than a traffic signal. Roundabouts provide a single direction of travel through an intersection, have fewer conflict points, less pavement areas, and generally incur fewer delays than standard signalized intersections. The City has developed a standard analysis procedure that defines whether a roundabout should be considered at specific locations. Criteria in this analysis include traffic characteristics, available right-of-way, proximity to adjacent traffic controls, and others. By following this procedure, it becomes easier to explore or dismiss the use of a roundabout at specific intersections. It will be important for the public to understand the steps taken in this procedure, as it continues to be used on a case-by-case basis for intersection improvements.

Although the issues related to maximum intersection and street geometry may appear to be substantial, there are only a few transportation facilities that are close to warranting streets or intersections of that magnitude. Also, transportation modeling analysis results show that in the future, only major arterials would need these maximum facilities. So, the City has some time

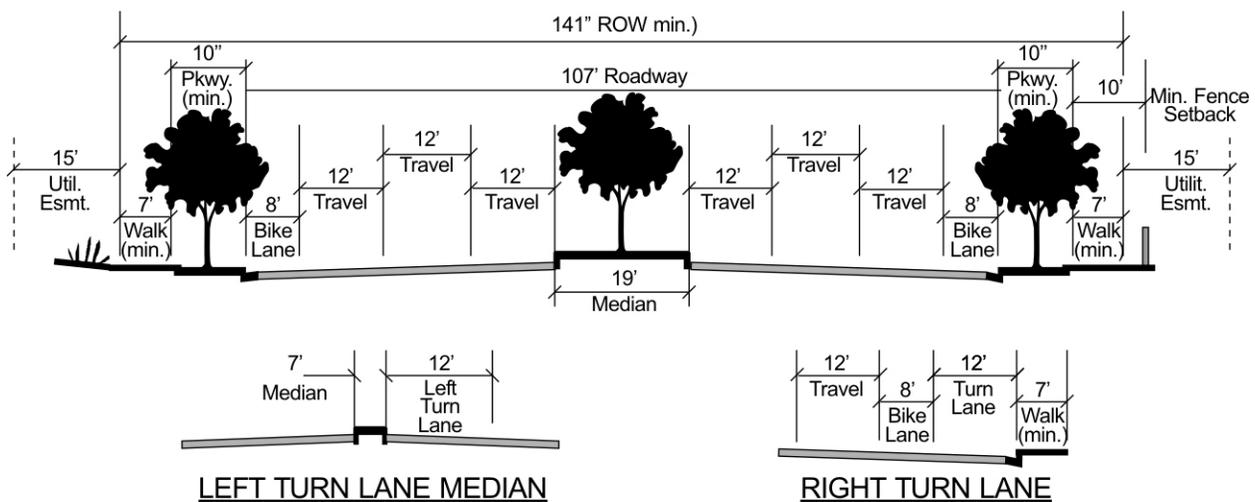
before these issues become the highest priority. In terms of the roundabout issue, the City should continue to use its standard analysis to determine the feasibility of roundabouts at specific intersections, while providing public education as to why a roundabout may or may not work for these locations. It is important to realize that because one intersection in Fort Collins may not make sense for a roundabout, there may be other locations where a roundabout is more feasible than standard intersection improvements.

**2.5.5 Design Issues on Constrained Corridors**

As part of the 1997 *City Plan* and TMP, several recommendations were made for establishing design guidelines for transportation facilities. Since 1997, several design documents were developed that defined appropriate street cross-sections and features including the accommodation of bicycle and pedestrian facilities. While these guidelines assist City staff and developers to design the transportation facilities, they provide little flexibility for variations to meet certain conditions.

Street and intersection geometry is typically defined based on the classification of the facility. Typical classifications for city facilities include six-lane major arterials, four-lane arterials, two-lane minor arterials, collectors, and local streets. Design standards define lane widths, necessary right-of-way (ROW), bike and pedestrian facility widths, whether or not parking is allowed, design speeds, access provisions, and numerous other features. Figure 2.2 shows the six-lane arterial street section from the Larimer County Urban Area Street Standards (LCUASS).

**Figure 2.2  
Six-lane Major Arterial Street Standard**



*Note – adding double left turn lanes, right turn lanes, and pedestrian refuge islands would increase the street and right-of-way width.*

Similar standards exist for the other classification types. While these are helpful guidelines, the issue is what to do when improvements must be made to a facility that has significant constraints. In Fort Collins, the roads in the older areas of the city were not designed to provide

the ROW that the new standards recommend. There needs to be some flexibility in designing improvements while recognizing the need to provide safe facilities.

Many transportation agencies address this issue by developing a process that identifies design variations and then provides a forum for getting them approved. This concept relates to the principles of Context Sensitive Design that is discussed in Chapter 6. Corridors like College Avenue, Shields Street, and Prospect Road in Fort Collins all have significant constraints, but are key to the mobility of the city. Some potential design variations that may be considered on these and other constrained corridors include:

- Reduced lane widths
- Parallel off-system bike and pedestrian facilities
- Reduced median widths
- Reduced design speeds
- Reduced separation from the street to sidewalks
- Modifications to access

These concepts are examples of ways that Fort Collins could modify its current street standards for specific locations where significant constraints exist. These modifications must be addressed on a case-by-case basis for specific improvements within the City. Other alternatives to identifying design variations include a corridor wide approach, as in the case of College, Shields or Prospect Road or in neighborhood specific or subarea plan. In order to develop such a context sensitive design approach, a collaborative process that includes the affected interests and City staff should be implemented. This approach would result in the best design that provides the necessary safety and mobility while maintaining or enhancing the character of the area adjacent to the street.

Another idea that has been suggested is to develop arterial standards for rural areas. For example, in areas adjacent to open space, there is no need for left and right turn lanes, as there is no access to the adjacent property. Separated sidewalks and medians could also be eliminated to minimize any impacts to these areas.

### **2.5.6 Law Enforcement**

An issue that was raised by members of the Transportation Board and is mentioned in other City planning documents is related to the need for increased law enforcement to enhance the safety of the transportation system. Even the best designed transportation system is unsafe if the users break the laws that govern the use of the system. In the budgeting process, the City should consider whether the funding that is allocated to managing the transportation system is adequate to ensure the safety of the system. This decision needs to be balanced with the other numerous needs that City capital must address throughout Fort Collins.

## 2.5.7 Transportation Performance Measurement System

The 1997 TMP introduced the *Multimodal Level of Service Manual* as a new method for analyzing the effectiveness of the transportation system in Fort Collins. Also, as part of *City Plan*, a monitoring approach was identified to evaluate the effectiveness of the implementation of *City Plan*. Finally, the North Front Range Metropolitan Planning Organization (NFRMPO), formerly the North Front Range Transportation and Air Quality Planning Council, published the *Mobility Report Card* that identified travel characteristics for the region. All of these documents have served as methods of collecting data and reporting on the effectiveness of transportation in Fort Collins and the region.

In order to accomplish the need to track the success and failures of the transportation system, many agencies and jurisdictions are pursuing the use of a specific performance measure or index. The intent is to develop a performance measurement system that effectively collects and analyzes travel data to assist City staff in providing decision makers meaningful information about the transportation system, including how well it operates and what improvements are needed throughout the transportation system. This measurement system would greatly aid the City in the development of a transportation system that provides less travel delay, more reliability, more travel options, and affordable travel choices. The performance measurement system would be used to help the City in its decision-making process for capital expenditures. The development of a transportation performance measurement system for Fort Collins should be a work item in the City's future work plan. As such, thoughts from current industry efforts and directions regarding performance based measurement systems are provided in this plan as a starting point for the future analysis.

### 2.5.7.1 Data Collection

The first part of any index is identifying the data that needs to be collected and the process for the data collection. The NFRMPO has moved away from developing the *Mobility Report Card* for the region, so travel surveys and VMT reports for the region are no longer available. It is recommended that to support the development of a performance measurement system, a program is put in place to collect necessary transportation data every two years to correspond with the *City Plan Monitoring Report*.

Types of data that could be collected include traffic volumes (for all modes), accident rates, fuel usage, transit ridership, miles of streets and bike and pedestrian facilities, travel time and speed, intersection and street delay, hours of congestion, segment or trip lengths, and user behaviors. These data sources vary from hard physical data like traffic counts to behavioral surveys that quantify trip types and purposes like user surveys.

### 2.5.7.2 Sources to Consider

Several agencies and educational institutions throughout the US are looking at mobility indicators as means to evaluate transportation systems. Some of these include:

- Texas Transportation Institute (TTI) – TTI has developed the *2003 Annual Urban Mobility Report*, the *Mobility Monitoring Program*, and the Roadway Congestion Index

- Federal Highway Administration (FHWA) – FHWA has developed the *Travel Time Data Collection Handbook*, the *Highway Performance Monitoring Program*, and the *Mobility Goal in the Performance Plan*
- Transportation Research Board (TRB) – TRB has developed the *Highway Capacity Manual – Special Report 209, Third Edition*
- Departments of Transportation (DOT) – Various DOT documents exist including Florida’s *Quality /Level of Service Manual* and the *Urban Roadway Congestion Annual Report* developed by representatives from the DOTs in California, Colorado, Kentucky, Minnesota, New York, Oregon, Pennsylvania, Texas, and Washington
- National Cooperative Highway Research Program (NCHRP) – NCHRP has developed several reports regarding performance monitoring including NCHRP Report 3-70 *Multimodal Level of Service Analysis For Urban Streets*, and NCHRP Report 398 – *Quantifying Congestion – Final Report and User’s Guide*
- Institute of Transportation Engineers (ITE) – ITE has published numerous papers regarding mobility including “Measuring Transportation: Traffic, Mobility and Accessibility” in the October 2003 issue of the ITE Journal

All of these sources should be considered when the City begins its research program to establish its transportation performance measurement system.

### 2.5.7.3 Approaches to Consider

Three basic approaches are used to measure transportation system performance; traffic, mobility, and accessibility. Each has its benefits and concerns.

- Traffic – Traffic refers to vehicle movement and assumes that increased vehicle mileage and speed are important. The traffic approach is heavily weighted towards the automobile and favors solutions that increase road and parking capacity. The traffic approach is the easiest to measure because information like LOS, traffic speeds, congestion delay, and accident rates is simple and cost-effective to collect.
- Mobility – Mobility refers to the movement of people or goods. The mobility approach also favors the automobile, but also recognizes other modes in areas where there is sufficient demand. Mobility is more difficult to measure than traffic because it is usually based on travel surveys to quantify person-miles and travel speeds and traffic data to establish automobile and transit operational features.
- Accessibility – Accessibility refers to the ability to reach desired destinations or activities where goods and services are provided. The accessibility approach treats all modes as viable options based on the ability to meet the user need of getting to destinations. Accessibility is the most difficult of the three to measure because it is based on time, money, and the ease of reaching the destinations.

These three approaches or a combination of the three should be considered when evaluating the benefits of implementing a transportation performance measurement system.

#### **2.5.7.4 Developing the System**

A general process has been identified for the City to follow in developing their transportation performance measurement system. The steps include:

1. Identifying the vision and goals of the system – The vision and goals need to be agreed upon to develop a system that meets everyone’s expectations.
2. Identifying the uses and the audiences – The uses of the system are important to understand so that the right information can be collected. Knowing the audience is important so the information can be communicated effectively.
3. Developing a set of measures – If the correct measures are not selected, the outcomes of the measurement process will not result in a usable tool for decision making.
4. Collecting data – Specific methodologies need to be developed to collect the data necessary to use the system.
5. Comparing measure to potential projects or policies – The system needs to be tested on some upcoming projects to see if it performs as expected.
6. Resolving system problems – If the system does not perform as expected, go back to step 3 and reassess the set of measures.

This six-step process outlines the framework of the measurement system that could be developed. In order to fully develop the system, the City will need to commit the necessary time, budget and staff to initiate the beginning phases to identify system needs and user audiences, while understanding that once completed, data management and ongoing support is critical to the success of this undertaking. The final result should be a transportation performance measurement system that supports the City’s need to monitor the success of the transportation and serves as a tool to assist in the decision-making process for defining future capital improvement priorities. The development of a transportation performance measurement system is included in the 2004 Transportation Planning work plan and should remain a high priority among the action items identified in Chapter 8 of this study.