

## Pedestrian Improvements Downtown

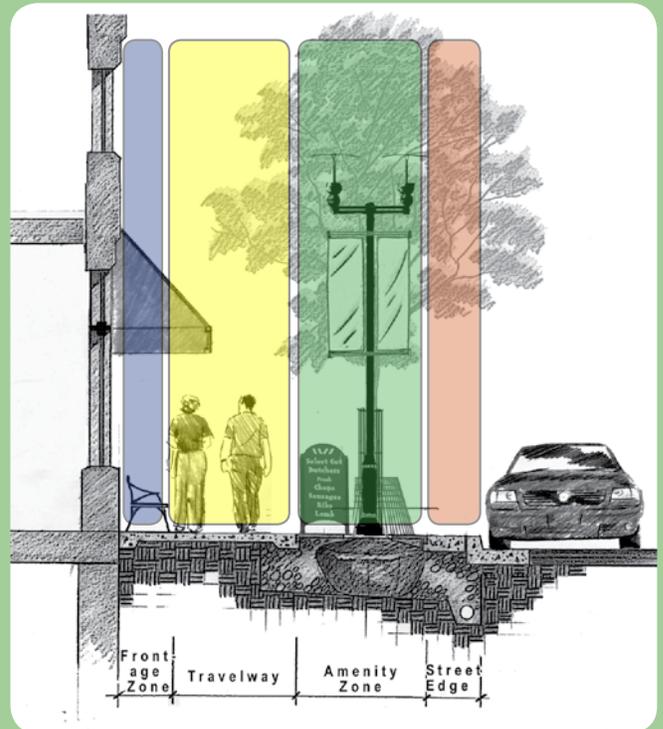
Creating a pedestrian friendly Downtown has long been a City goal. The Downtown and School Campus Detail suggests enhanced pedestrian zones on 145th street, Lower 147th Street, Highway 3 and Burma Ave. Recent installation of pedestrian scale lighting, banners and special crosswalk treatments have improved pedestrian conditions Downtown.

### Creating Pedestrian Friendly Streets

Today, space constraints Downtown have resulted in sidewalks that, in places, are too narrow for walking and street amenities. When redevelopment occurs, the sidewalk area can be widened to create a more vibrant pedestrian place.

There are four zones in a balanced streetscape, as depicted in the adjacent figure.

- **Street Edge.** A clear space next to the curb to separate pedestrian and vehicular traffic and to allow room for vehicle door openings.
- **Amenity Zone.** The amenity zone serves three functions: buffering pedestrians from the street; providing aesthetic values by including landscaping to “green” the street; and accommodating utilities (hydrants, trash/recycling receptacles, signage, light fixtures, benches and bike parking).
- **Travelway.** The travelway is used for pedestrian movement. It should be free of all obstacles and wide enough to allow pedestrians to pass one another with ease.
- **Frontage Zone.** This area next to the building is for ingress and egress between the walkway and the building. In certain locations the building frontage zone should be designed to create gathering places such as outdoor seating, plazas and pocket parks.



### Downtown Sidewalk Widths

The recommended width of these zones and the overall width of the walkway varies with the type of street and is influenced by space availability.

Zone	Constrained	Recommended
Street Edge	1.5 ft.	2.5 ft.
Amenity	4 ft.	8 ft.
Travelway	6 ft.	10 ft.
Building Frontage	2.5 ft.	3 ft. + for outdoor seating, plazas, etc.

Strategies to continue improving the pedestrian experience include:

- Continue to install streetscape amenities such as pedestrian scale lighting, benches, plantings and special crosswalk treatments.
- Increase the sidewalk width when opportunities arise with redevelopment.
- Separate the parking and pedestrian zone with planting areas and/or fencing to reduce sidewalk obstruction.
- Implement traffic calming techniques where appropriate.
- Provide additional pedestrian crossings where appropriate.

### **Bicycle Improvements Downtown**

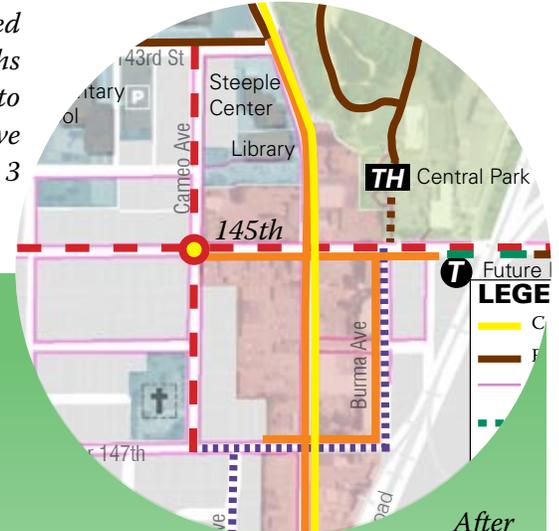
Today, there are no bicycle facilities in Downtown. Though most businesses front Highway 3, space constraints, high traffic volumes and speeds all make biking on Highway 3 challenging. Therefore, this plan recommends that bike circulation occur on streets parallel to Highway 3.

Strategies for improving the biking of Downtown include:

- Explore the use of bike lanes on 145th between Diamond Path Road and CR42 (see Figure 3.4) and on Cameo Avenue.
- Sign Cambrian Avenue, Burma Avenue and Lower 147th, through Downtown, as bike routes.
- Monitor use and explore the potential for a stop sign or other traffic calming measures at 145th and Cameo Avenue for safer pedestrian and bicycle movements through this intersection, after bike lanes/routes are established. This is the intersection of two important walk-bike routes to the School Complex, Downtown and Rosemount Crossings. Slowing or stopping traffic at this intersection would provide a safer environment for pedestrians and cyclists.

Figure 3.4:  
Visualization of the Proposed Bike Lane on 145th - Before and After

This visualization conceptually demonstrates how bike lanes can be added to 145th Street within the existing 42' roadway by reducing lane widths and eliminating one on-street parking on one side of the street. Due to space constraints and current intersection design, the bike lane may have to transition to a shared bike-vehicle lane at the 145th Street/Highway 3 intersection.



Before



2-Lane Road with On-Street Parking  
42' road: two 9' parking lanes, two 12' travel lanes

After



Parking removed on one-side of street

One 11' vehicle travel lane in each direction.

8' On-street parking remains on one side of the street.

6' Bike lane

6' Bike lane



# BEST PRACTICE RECOMMENDATIONS

The previous section outlined a walk-bike route network to make biking and walking convenient. Equally important to increasing and encouraging walking and biking is making the system safe and pleasant; if it is not fun, people will not use the system. This section outlines best practices that can move the Rosemount's bike and walk network beyond functional to enjoyable.

## Complete Streets

Adoption of a Complete Streets Policy is one way for a city to formally encourage multi-modal street access. The emerging Complete Streets movement strives to plan streets to accommodate pedestrians, transit riders, bicyclists and all other users regardless of age or ability instead of focusing solely on optimizing automobile travel. The movement recognizes that as many as 30% of residents in a community may not or cannot drive due to age (young or old), physical limitations or economic challenges. Complete Street policies do not prescribe that all modes be equally accommodated on all streets but that the overall transportation network be a safe and accessible environment for foot, bike or transit.

Instituting a Complete Streets policy ensures transportation agencies design and operate the entire right-of-way to enable safe access for all users. As with other practices that support walking and biking, Complete Streets are beneficial in numerous ways, including providing safer streets and business districts, creating more predictable non-motorized and motorized interactions, reducing air pollution, creating vibrant neighborhoods and lessening transportation costs for families.

Mn/DOT's Complete Streets Report, published in December 2009, found that although there are incremental costs associated with implementing Complete Streets, the benefits and end product provided a better long-term value. Potential additional costs include the purchase of additional right-of-way, increased travel time for motor vehicles, shifting of traffic to other routes in the network and additional infrastructure to maintain and operate. For urban projects with spatial constraints, the primary issue is not cost but the allocation of available space among the various transportation modes. The report also notes that costs can be reduced by changes in the planning and design process that integrate transportation and land use planning across all jurisdictions early in the process. Nevertheless, detailed engineering analysis will be necessary when evaluating Complete Streets projects to insure each project

balances these potential additional costs with the City's other transportation and economic development goals.

It is important to note that having a Complete Streets policy does not necessitate the redirection of funds to retrofit projects. Instead, a typical Complete Streets process focuses on new construction and reconstruction to be most cost-efficient. Opportunities do exist to implement Complete Streets on existing facilities, such as through restriping.

The number of Complete Streets policies in the United States is rapidly increasing. According to the National Complete Streets Coalition, by mid-2010 there were nearly 150 jurisdictions that have adopted policies or have written commitments to do so. The State of Minnesota passed a Complete Streets bill in May 2010 (Sec. 52 MN Statutes 2010 Section 174.75 Complete Streets). The City of Rosemount adopted Resolution 2010-10 in February 2010 expressing its support of this statewide Complete Streets policy.

Complete Streets policies exist at every governmental level. Several Minnesota cities and counties, including Albert Lea, Duluth, Independence, Rochester, St. Paul and Hennepin County, have adopted policies or ordinances. Rosemount should explore adopting a Complete Streets ordinance/policy to assure that as streets and bridges are rebuilt either by the City, County or State, provisions are made to accommodate all modes of movement safely and conveniently. According to the National Complete Streets Coalition (NCSC), an ideal policy has the following elements:

- Vision for how and why the community wants to complete its streets.
- Specifies that "all users" includes pedestrians, bicyclists, trucks, buses and automobiles.
- Encourages street connectivity and aims to create a comprehensive, integrated, connected network for all modes.
- Is adoptable by all agencies to cover all roads.
- Applies to both new and retrofit projects, including design, planning, maintenance, and operations, for the entire right of way.
- Makes any exceptions specific and sets a clear procedure that requires high-level approval of exceptions.
- Directs the use of the latest and best design criteria and guidelines while recognizing the need for flexibility in balancing user needs.
- Directs complete streets solutions to complement the context of the community.
- Establishes performance standards with measurable outcomes.
- Includes specific next steps for implementation of the policy.

### Complete Streets Resources

- National Complete Streets Coalition - [www.completestreets.org](http://www.completestreets.org)
- Minnesota Complete Streets Coalition - [www.mncompletestreets.org](http://www.mncompletestreets.org)
- Mn/DOT Complete Streets - [www.dot.state.mn.us/planning/completestreets/](http://www.dot.state.mn.us/planning/completestreets/)



## Traffic Calming

A key element of bicycle and pedestrian friendly routes and bicyclist's safety is lower traffic speeds. Lower traffic speeds can be accomplished through use of proven traffic calming measures. Techniques include:

- Lowering and enforcing speed limits.
- Physical devices.
- "Road diets" where lanes widths are reduced or lanes are eliminated create space for bike lanes and slow traffic.

The Federal Highway Administration (FHWA) defines traffic calming as a combination of mainly physical measures that reduce the negative effects of motor vehicle use and improve conditions for non-motorized street users. For the purpose of bike and walk planning, the objective is to provide physical improvements that will create safe and pleasant conditions for motorists, bicyclists and pedestrians. Some successful traffic-calming techniques are included in the table on the following page.

In Rosemount, traffic calming would be beneficial to pedestrians and cyclists on all suggested routes where speed limits exceed 30 MPH. These streets include: CR 42, Highway 3, McAndrew's Road, Shannon Parkway, Connemara Trail, Dodd Blvd, Bonaire Path, Chippendale Ave and Biscayne Ave. Detailed engineering study that closely examines traffic patterns, pedestrian and bicycle needs as well as coordination with each road's jurisdictional agency is recommended to determine appropriate traffic calming devices.

### Vehicle Speeds and Safety

In Minnesota, most speed limits on collector streets and arterial roads are set by MnDOT. To set the speed limit, an 85th percentile study, where drivers are observed during free flowing traffic conditions, is conducted. The speed that 85 percent of drivers are traveling under becomes the speed limit.

This method of determining speed limit does not take pedestrian and bicyclist safety into consideration. Many roads, including Shannon Parkway, Connemara Trail, Bonaire Path and CR 42, are posted at 40 mph or higher—the speed at which 85% of pedestrians struck by a car are killed. If, in the future, State speed-limit policy changes, lowering and enforcing the speed on pedestrian and bicycle routes would significantly increase safety for pedestrians and cyclists.

### Pedestrian Survival Rates - Vehicle/Pedestrian Crashes

Vehicle Speed (MPH)	Pedestrian Survival Rate
20	95%
30	55%
40	15%

Traffic Calming Devices (adapted from Federal Highway Administration - FHWA information)

Device	Descriptions	Pictures
<p>Bulbouts/ Neckdowns/ Chokers</p>	<p>Curb extensions at intersections that reduce curb-to-curb roadway travel lane widths.</p>	 <p><i>Photo Credit: pedbikeimgaes.org-Dan Burden</i></p> <p><i>Bulbout used in conjunction with a neighborhood-scale roundabout.</i></p>
<p>Medians / Center Islands</p>	<p>Raised islands located along the centerline of a roadway that narrow the width at that location.</p>	 <p><i>Photo Credit: pedbikeimgaes.org-Dan Burden</i></p> <p><i>This planted median slows traffic and creates a pedestrian refuge.</i></p>
<p>Chicanes/ Lateral Shifts</p>	<p>Curb extensions that alternate from one side of the roadway to the other, forming s-shaped curves.</p>	 <p><i>Photo Credit: pedbikeimgaes.org-Dan Burden</i></p> <p><i>Chicanes can be used to slow traffic on local streets.</i></p>



Traffic Calming Devices Continued (adapted from Federal Highway Administration - FHWA information)

Device	Descriptions	Pictures
<p>Diagonal Diverters</p>	<p>Barriers placed diagonally across an intersection, blocking certain movements.</p>	 <p><i>Photo Credit: steetswiki.com burden</i></p> <p><i>Diverters can be used to block vehicle through traffic but allow pedestrian and bicycle through movements.</i></p>
<p>Forced Turn Lanes</p>	<p>Raised islands located on approaches to an intersection that block certain movements.</p>	 <p><i>Photo Credit: pedbikeimgaes.org Dan Burden.</i></p> <p><i>Raised islands, like the one on the far left of this photo, direct traffic movements and can be used to block through movements for vehicles. For traffic calming, these are best used in conjunction with high visibility crosswalks.</i></p>
<p>Median Barriers</p>	<p>Raised islands located along the center-line of a roadway and continuing through an intersection to block cross traffic.</p>	 <p><i>Photo Credit: pedbikeimgaes.org- Adam Fukushima</i></p> <p><i>This median barrier requires cars to turn but allows bicycles to travel through the intersection.</i></p>

Traffic Calming Devices Continued (adapted from Federal Highway Administration - FHWA information)

Device	Descriptions	Pictures
<p>Roundabouts /Traffic Circles</p>	<p>Circular barriers placed in the middle of an intersection, directing all traffic in the same direction.</p>	 <p><i>Photo Credit: peabikeingaes.org-Adam Fukushima</i></p> <p><i>Cyclist in a roundabout.</i></p>  <p><i>Photo Credit: peabikeingaes.org-Adam Fukushima</i></p> <p><i>Small roundabouts can be used on local streets to slow traffic and strengthen neighborhood identity.</i></p>
<p>Speed Tables/ Textured Pavement/ Raised Crossings</p>	<p>Flat-topped speed humps often constructed with a brick or other textured material to slow traffic</p>	 <p><i>Photo Credit: peabikeingaes.org-Dan Burden.</i></p> <p><i>Speed tables slow traffic and create high visibility crosswalks.</i></p>



## A Road Diet

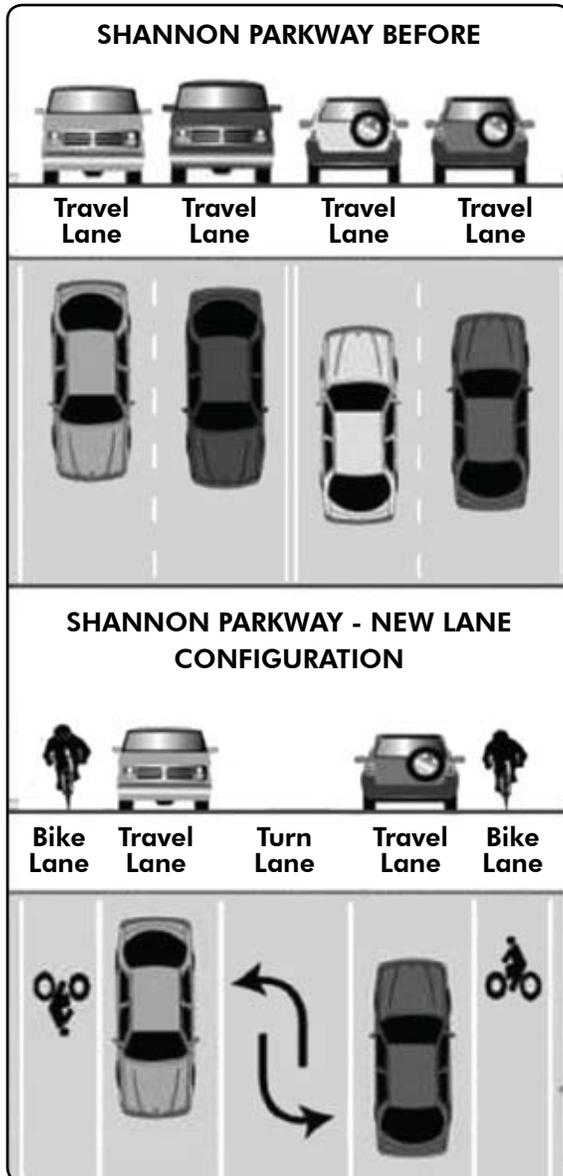
One way to achieve the dual goals of creating a complete street and calming traffic within in the existing right-of-way and/or road pavement is “a road diet”. The purpose of a road diet is to “slim down” it’s existing footprint by reducing lane widths and/or eliminating lanes to improve safety, mobility and access for all modes of transportation, including biking and walking.

A typical road diet would achieve a series of the following initiatives:

- Reclaim street space for bikeway treatments or sidewalks.
- Reduce the number of lanes of traffic & conflict points.
- Reduce motorized vehicle speeds.
- Improve bicycle and pedestrian safety.
- Increase visibility and sight distance.
- Encourage an active streetscape and support the pedestrian realm.
- Improve the roadways aesthetics and visual qualities.

Recent improvements to Shannon Parkway, illustrated to the left, are a local application of the road diet concept. Figure 3.5 illustrates how the west end of Connemara Trail could be configured to calm traffic and accommodate bike lanes by reducing the number of traffic travel lanes from four to two and adding a center median / turn lane with landscaping to define the street.

This technique has potential to be applied on any existing street where a bike lane and/or traffic calming is desired. Streets recommend for bike lanes that may have potential for reduced lane widths include: McAndrews Road W., Chippendale Ave., 145th Street, Cameo Ave., and Connemara Trail.



Improvements to Shannon Parkway from 145th to Connemara Trail achieve the dual goals of calming traffic and better accommodating cyclists.



Shannon Parkway with the new 3 lane configuration. Before bike lane pavement markings have been added.

Figure 3.5: "Road Diet" Visualization on Connemara Trail - Before and After

This visualization conceptually illustrates the road diet concept applied to Connemara Trail east of Shannon Parkway. Here, the four lane road is reduced to two lanes with a center turn lane/ planted median and bike lanes are added all within the existing road 50' road width.



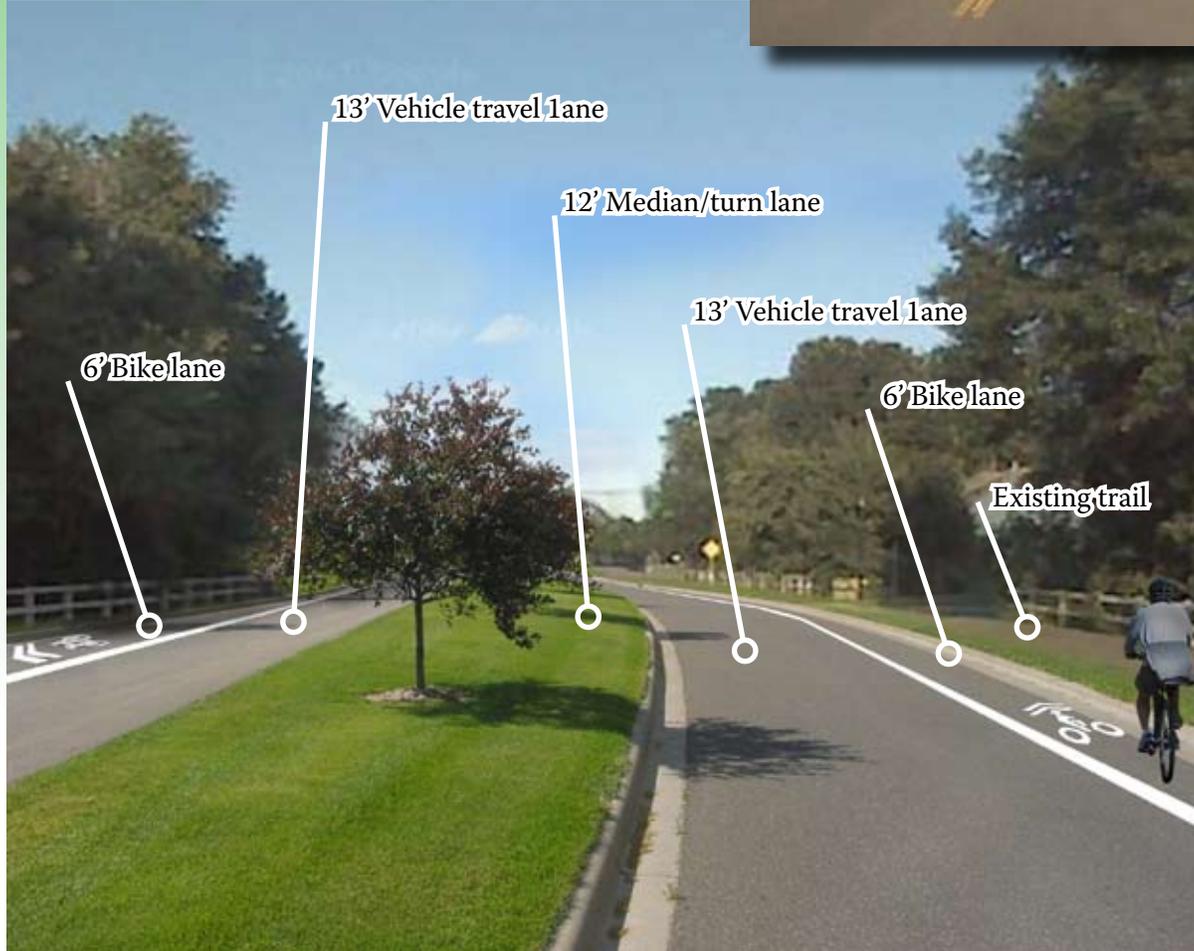
Before

4 Lane Road

2 travel lanes in each direction 12'-13' each.



After





*Underpass*



*Bike lane continues to crosswalk*

## Safe Crossings

The safest place for pedestrians to cross is at intersections with stop signs or traffic signals. In Rosemount, these are often spaced further apart than most pedestrians and cyclists are willing to travel. This means that to cross at a safe, designated crossing pedestrians and cyclists must go out of their way or they must cross at locations where vehicles are not required to stop, which may not be safe, particularly for the young and old. Perceived safety is equally important to actual safety. If people do not feel that a crossing is safe they may choose not to bike or walk at all. According to surveys done in Rosemount Schools as part of the Dakota County Safe Routes to School Comprehensive Plan, safety of intersections is one of the top factors which affects the decision to walk or bike and is the most important improvement that would increase walking and biking. Speed of traffic, amount of traffic, sight-lines, amount of lighting and vehicle awareness of pedestrians and cyclists all contribute to actual and perceived safety. When pedestrians and cyclists do not feel safe crossing streets, it makes biking and walking less convenient and enjoyable, affecting the decision to walk or bike. Without safe crossings, collector roads, particularly Highway 3 and CR 42, act as major barriers for non-motorized transportation across the city. The following strategies are recommended for consideration in improving crossing conditions.

### Underpasses

Underpasses are recommended to make safe connections across CR 42 and Highway 3. As new collector and arterial roads are constructed, opportunities for additional underpasses should be thoroughly explored. Underpasses not only provide for safe pedestrian and bicycle crossings but can also be designed to achieve other community goals such as stormwater movement and habitat connectivity.

### Improvements to signalized intersections

Improvements for pedestrians and bicyclists at signalized intersections are needed. Long crossing distances, free right turns on red, vehicle speeds, crossing time, lighting and sight-lines all contribute to real and perceived safety at signalized intersections. Though detailed design and engineering is needed to balance vehicle and bicycle movement needs, the following techniques can be considered



*Pedestrian signal*



*Bicycle signal*

to reduce crossing distances, increase walk-bike crossing times, slow vehicle speeds and make drivers more aware of pedestrians and cyclists.

- High visibility pavement markings such as zebra, ladder, continental or triple four.
- Increase signal time for pedestrians and separate vehicle movements from pedestrian-cyclist crossings.
- Pedestrian countdown signals.
- Where bicycle lanes exist, extend them to the crosswalk.
- Bicycle signal.
- Adequate driver visibility through proper sight distance triangles.
- Design for slow vehicle right turn movements (tighter turning radii: 5-25 ft).
- Eliminate right-turn on red.
- Break up complex intersections with pedestrian refuge islands.
- Adequate lighting.

### Improvements at uncontrolled intersections

Uncontrolled crosswalks can be used where distances to controlled intersections are too far to be convenient for pedestrians and cyclists to reach desired destinations. New uncontrolled crosswalks can be used to concentrate crossings at the safest locations, where there is a high level of pedestrian activity or a history of conflict. Crosswalks should be designed in accordance with the Manual on Uniform Traffic Control Devices (MUTCD). Key to making these crossings safe is slowing traffic and making pedestrians more visible to drivers. The following guidelines are recommended for consideration of placement of unsignalized or mid-block crosswalks.

Marked pedestrian crosswalks may be used under the following conditions:

- Crossings in designated school zones. Use of adult crossing guards, school signal and markings, and /or traffic signals with pedestrian signals (when warranted) should be used in conjunction with the marked crosswalks, when needed.
- At non-signalized locations where engineering judgement dictates the number of vehicle lanes, pedestrian exposure, average daily traffic (ADT), posted speed limit and geometry of the location would make the use of specially designated crosswalks desirable for traffic and pedestrian safety and mobility. Locations to be considered include:
  - » Locations where a marked crosswalk can concentrate pedestrian crossings.
  - » Crossings at a park.
  - » Crossings to a bus stop.
  - » At intersections of identified walk - bike routes (framework plan) so that a safe crossing (combination of grade separated, signalized,

*“When considering marked crosswalks at uncontrolled locations, the question should not simply be: “Should I provide a marked crosswalk or not?” Instead, the question should be: “Is this a appropriate tool for getting pedestrians across the street?” Regardless of whether marked crosswalks are used, there remains the fundamental obligation to get pedestrians safely across the street.”*

- Safety effects of Marked -vs.- Unmarked Crosswalks at Uncontrolled Locations: Executive Summary and Recommended Guidelines.





Photo Credit: pedbikeingaes.org- Dan Burden  
 Pedestrian safe crossing reminders



Photo Credit: pedbikeingaes.org- MitchellFrederick  
 Pedestrian activated flashing lights



Photo Credit: pedbikeingaes.org- Dan Burden  
 In-street crossing signs



Photo Credit: pedbikeingaes.org- Dan Burden  
 Refuge island

stop signs) of collector roads or higher is provided approximately every 1/4 -1/2 mile.

- » Downtown, where pedestrian activity is encouraged.
- » Other locations with high numbers of pedestrian/cyclist crossings and/or pedestrian/vehicle conflicts. A higher priority should be placed on locations with a minimum of 20 pedestrian crossings per peak hour or 15 or more elderly and/or child pedestrians per peak hour.

Marked crosswalks alone are not always sufficient without traffic calming treatments, traffic signals or pedestrian signals and should not be used alone under the following conditions:

- Where the speed limit exceeds 40 mph.
- On roadways with four or more lanes without a raised median or crossing island that has an ADT of 12, 000 or greater.
- On roadways with four or more lanes with a raised median or crossing island that as an ADT of 15,000 or greater.

Where a marked crosswalk alone is insufficient to provide pedestrian safety, the following treatments can be considered to reduce vehicle speeds, shorten crossing distance, or increase the likelihood of motorists stopping and yielding.

- Pedestrian activated flashing lights.
- Speed limit enforcement.
- In-street crossing signs.
- Refuge islands.
- Split pedestrian crossover.
- Overhead signs.
- Speed limit reduction.
- Speed limit enforcement.
- Dynamic driver feedback signs.
- Roundabouts – to reduce vehicle speeds and improve pedestrian safety.
- Street narrowing measures, such as curb extensions.
- Providing adequate lighting for night visibility.

**Want to know more about crossings at uncontrolled intersections?**

Information on this topic was adapted from the U.S. Department of Transportation Federal Highway Administration's publication *Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations: Executive Summary and Recommended Guidelines*. This publication is available at: <http://www.fhwa.dot.gov/publications/research/safety/04100/ref.cfm>

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IMPROVEMENTS - BACK - BLANK**

## Universal Design

Universal design means designing the walk-bike network to be usable by all people, regardless of age or ability to the greatest extent possible. Good pedestrian and bicycle system design must account for the needs of all ages, including the young and old and those with physical or mental limitations. If the system is designed for the most vulnerable populations, it will better meet the needs of all users. Universal Design goes beyond meeting the requirements of the American's with Disabilities Act. Just over 26 percent of Rosemount's population is under 16 years of age and cannot drive. In addition, 6.2 percent of the population is over 65. Together these groups represent over 1/3 of the citizens of Rosemount that either cannot legally drive or choose to drive less and less as they age. Most importantly, these groups represent growing demographics. Strategies outlined in this chapter for traffic calming, safe crossings and providing support facilities such as shade, benches and restrooms enhance the system for all.

## Well Maintained Walkways and Bikeways

Sidewalks and bikeways cleared of snow encourage winter use. Efforts to regularly maintain trails, bike lanes and walks can be done with a combination of enhanced public and private efforts. The City has the following ordinances and policies that support winter use currently in place:

- Plowing the street fully to the curb, wherever possible, to maximize bike and vehicle travel. Loss of three to four feet of travel space is especially detrimental to winter bike travel.
- A snow shoveling ordinance to ensure that sidewalks are clear in winter.
- Paved trails are plowed after the streets.

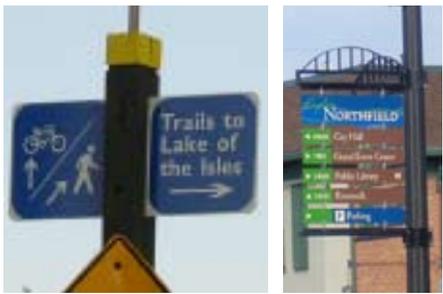
Changes in the City's street, trails and sidewalk maintenance policies will likely impact the current budget and level of service in these areas.



## Wayfinding

Wayfinding is the way in which people orient themselves and navigate from place to place and is a vital component of an effective bicycle and walkway system. People need to be able to easily understand and navigate bikeways and walkways in order to conveniently and safely get to their destination.

Wayfinding signs for pedestrians and bicyclists typically show destination, direction and distance. Signs are placed where routes change or there is a change of direction and periodically along the route. For cyclists, pavement markings can be easier to see and can be used to supplement signage. Types of wayfinding signs are described below.

SIGN EXAMPLE	SIGN TYPE	ROLE	PLACEMENT
	Informational Kiosk	Route maps and additional information about the destination such as nearby businesses or historic interpretation.	Trail heads on Main and Local routes and destinations such as community parks and Downtown.
	Directional Sign	Identify turns, route destination choices and distance.	Route intersections and decision points along main and local routes and destinations such as Downtown.
	Route Sign	Identify route name and major destination.	Every 1/2 mile along on-road bike routes and at major intersections.
	Button	Identify bikeways.	On existing street signs along bikeway routes.
	Pavement markings	Identify on-road bike routes, in addition to route signs.	Pavement.

Wayfinding is recommended to improve system awareness throughout Rosemount. This plan recommends installing signs in a pilot area on 145th Street. The diagram below conceptually illustrates sign types and placement on 145th Street and in the Downtown area.

Figure 3.6: Conceptual wayfinding plan for 145th Street and Downtown area.





*Kiosk with trail information*



Photo Credit: [pedbikemages.org](http://pedbikemages.org)  
Dan Burden

*Bike Parking*

## Support Facilities

Pedestrian and bicycle support facilities such as trailheads, benches, showers, and bicycle parking are recommended to enhance the walk-bike experience and make it fun. Adequate pedestrian scale lighting is also essential for safety and visibility.

### Bicycle Parking and Support Facilities

Safe, secure bike parking and support facilities such as showers supports increased bicycle use. Short-term parking (1-4 hours) should be provided in bike racks near the front door of destinations. Long-term bike parking for commuters, employees and residents can occur in bike lockers or inside of buildings. Potential strategies:

- Develop an ordinance requiring bicycle parking and shower facilities for new construction. A sample ordinance is included in Appendix B.
- Continue to install bike racks at all parks and public buildings.
- Provide bike lockers at the transit station (existing and future Downtown). Consider providing locker and shower facilities at the new transit station.
- Develop a cost-share program to encourage existing businesses to install bike racks.

## Trailheads and Rest Stops

Trailheads are recommended at Schwarz Pond Park and Central Park.

Amenities at trailheads include:

- Vehicle parking
- Bike parking
- Kiosk with trail information
- Benches
- Water
- Restrooms

Rest stops are smaller-scale than trailheads and typically include benches, water, bike parking, and landscaping. Installation of benches along walk-bike routes at parks, overlooks and natural areas is recommended.

## Lighting

Pedestrian-cyclist scale lighting is essential to creating a safe and pleasant environment, particularly in the winter months when days are short. Lighting improvements are recommended on Biscayne Ave from 145th Street to Connemara Trail and Connemara Trail from Biscayne Ave to Bloomfield Path.



*Bike Storage*



*Benches, landscaping and interpretive signage*





## Education, Programs, Marketing and Promotion

Improvements to the physical environment are most effective if coupled with on-going marketing, promotion and awareness efforts. Walk-bike information should be provided in digital format on the City's website. If people are aware of the amenities already in Rosemount, they will use them more. The City should also create and widely distribute walk-bike maps with existing routes, safety information and events.

Programs and events to generate local enthusiasm and support and can be an important component attracting visitors.

Ideas for potential programs and activities include:

- Hold walk/bike with the Mayor/City Council days.
- School and community education classes.
- Classes for bike safety, bike commuting, bike maintenance and bike purchasing.
- Hold weekly/monthly rides of Rosemount through local walk and bike clubs.
- Coordinate events with non-profit groups.
- Hold quarterly bike events. Events could include: Rides with the Mayor, National Bike Month, Leprechaun Days Ride, International Walk to School day.
- Hold walk/bike rodeos/carnivals – theme contests, art/costumed bikes, tricycle racing, bike light/pedometer giveaways, bike parade, walking parade, dog walking parade.
- Promote walking and biking to local businesses with a “live local-work local” campaign.





The pedestrian and bicycle plan (Section 3) outlines the long term (25 years or more) goals for the walk-bike network in the City. This section focuses on moving from plan to reality. It first recommends priorities to be undertaken in the near term (1-10 years) and ways to measure progress and then identifies on-going actions needed to complete the plan. Lastly, it identifies potential funding sources and partnership opportunities.



# PRIORITIES & MEASURING PROGRESS

## Tools for Success

Essential to success in implementing is dedicating staff time to pedestrian and bicycle issues, providing citizen oversight and dedicated funding.

### Pedestrian- Bicycle Coordination

Coordination of pedestrian and bicycle responsibilities should be assigned to an interdepartmental group made up of representatives from planning, engineering and parks and recreation. It will be the responsibility of this group to implement the programs and projects in the pedestrian and bicycle plan. Other duties may include:

- Reviewing development proposals to ensure that local bicycle/pedestrian requirements are incorporated.
- Developing and implementing programs.
- Securing grant funding.
- Serving as the public contact for walk-bike issues and complaints.
- Coordinating the walk-bike projects across city departments.
- Coordinating with adjacent cities, other jurisdictions and support groups.

### Parks and Recreation Commission Oversight

The existing Parks and Recreation Commission should be assigned as the advisory board to the City Council that would help with the implementation of the walk-bike network. Other functions of the Commission may include:

- Provide technical advice on safe walking and bicycling.
- Encourage and support walking and bicycling as transportation.
- Assist in promotion of walk-bike events.
- Instituting an annual walk-bike count program to track progress.

## Policy Changes and Funding

To accomplish a pedestrian and bicycle network of the scope and magnitude that would result from the current Plan, a dedicating funding source to design, build, and maintain the system would be necessary. Currently the City operating budget includes approximately \$120,000 annually to allow for small scale project implementation. These funds coupled with installation during new development will allow installation and restoration of trails and sidewalks in a reasonable time frame. However, it is not intended that full implementation of the Plan will occur in all developed areas of the community. Rather, implementation will occur as opportunities and resources are available.

For more significant improvements envisioned in the plan, such as highway underpasses, complete streets reconstruction, or County Road 42 intersection improvements, additional funds outside of the City's operating budget would need to be identified. In most instances, it is anticipated that partnerships and grant opportunities will allow for these installations. Unless outside sources are identified and obtained for large capital projects, it is possible that many components of the Plan will not be realized.

Along with funding for capital projects like trails and bike lanes, implementation of the Plan will also require on-going funding for operations and long-term maintenance. In addition to identifying physical projects, this plan suggests a number of policy changes that may have cost implications. These are:

- Plowing trails at the same time as streets for winter use.
- Plowing streets their full width may require additional space for snow storage on new streets.
- Increasing the standard trail width from 8' to 10'.
- Formalizing the subdivision ordinance to require 5' sidewalks on one or both sides of the street, unless deemed unnecessary.
- Bike lanes, and landscaping may necessitate additional right-of-way acquisition on new streets.
- Establishment of a bike parking and support facilities ordinance for new construction.

Prior to implementation individual recommendations in this plan, detailed analysis of development, capital, maintenance and operation costs should be conducted and compared to available funding.

Pedestrian and bicycle projects and programs can be funded from numerous sources including general funds and tax measures approved by voters, such as a bond issue. Additional funding sources and strategies are discussed in the potential funding sources of this chapter.

