

## CHAPTER 8: IMPLEMENTATION OF THE PLAN

Champaign Moving Forward is the first comprehensive plan for transportation the City has undertaken in over 15 years. It builds on the efforts of current planning and on-going efforts with neighboring jurisdictions, Champaign County, CUUATS, the University of Illinois, and CU-MTD and integrates all travel modes and plans into a single plan.

Champaign Moving Forward also provides input to the much larger planning effort of the City's Land Use Plan. Relationships between transportation and land use are identified in this Plan, and will be refined and implemented further as part of the Land Use Plan update.

### RECOMMENDED POLICIES AND ACTIONS

Although Champaign Moving Forward provides a long-range 2030 and Post-2030 vision for the City's transportation system, planning is an on-going process that must evolve to meet the needs of Champaign's residents as the City changes with regard to demographics, regional travel, environment, funding, and other factors. As a result, Champaign Moving Forward like other City plans, standards, and codes must be monitored and updated periodically. The Champaign Moving Forward transportation policies are presented in Table 3.

**TABLE 3: CHAMPAIGN MOVING FORWARD POLICIES**

Chapter		Policy Descriptions
Roadway	RP-1	Coordinate regional travel issues and plans with, IDOT, CUUATS, Urbana, Champaign County, Savoy, and the University of Illinois.
	RP-2	Reduce impacts to the arterial street system by requiring new development to provide internal circulation and connections between developments using collectors at ¼ mile intervals.
	RP-3	Adhere to Complete Streets roadway standards and requirements and not waive development requirements.
Transit	TP-1	Coordinate with CU-MTD to identify strategies for providing transit to targeted development nodes from their MIP study.
	TP-2	Work with CU-MTD to recognize additional opportunities to grow the local bus system (e.g., increased frequency and coverage) and to identify corridors where transit-oriented developments would be desired.
	TP-3	Coordinate site design and multi-modal access with CU-MTD and include in City's standards and codes.
	TP-4	Emphasize transit oriented design in new development at key nodes, especially at the Curtis Road interchange, at Country Fair and on Olympian Drive.

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Chapter		Policy Descriptions
Bicycle	BP-1	Coordinate local bicycle improvements with the planning and construction of the regional trail system.
	BP-2	Identify locations where vehicle lanes can be eliminated or reduced in order to create bike lanes.
	BP-3	Increase the use of Sharrows and other education opportunities to identify facilities, connections, directions, etc. and to enhance bicycle use and safety.
	BP-4	When resurfacing streets, incorporate striping for bicycle facilities as identified on the Bicycle Vision Plan map.
Pedestrian	PP-1	Identify needed pedestrian improvements in pedestrian districts and focus resources for improvements.
	PP-2	Continue to identify and complete missing segments of the sidewalk system on the City's existing arterial streets
	PP-3	Elevate the pedestrian travel mode in the community with increased education and signage identifying pedestrian rights and enhancing safety.
	PP-4	Implement the University District Streetscape Master Plan.
	PP-5	Improve downtown intersections to improve pedestrian safety by incorporating bump-outs and enhanced pedestrian crosswalk facilities.

While the recommendations and policies of Champaign Moving Forward are necessary to achieve the transportation vision and goals, the actions are definable objectives to achieve. Table 4 presents the recommended Champaign Moving Forward Five Year Action Plan. These actions should be achieved within five years of adoption of this Plan.

### TRANSPORTATION IMPROVEMENT IMPLEMENTATION

Implementing the transportation improvements in Champaign Moving Forward can be a complex process due to the many transportation providers involved with planning, funding, and constructing projects. IDOT will lead efforts to implement projects on the state and federal highway system, such as the I-57 Curtis Interchange and will be involved in other projects such as improvements at Prospect and I- 74. Champaign County has a stake in improving county roads in and around the City. Finally, several projects will include private sector funding.

Those projects that will be funded in part or entirely with City funds or impact fees will be brought through the Capital Improvement Program (CIP) process periodically as appropriate. The CIP is a City planning document that identifies capital infrastructure improvements scheduled for the next five years. The CIP process allows for projects to be coordinated between departments and with other agencies. It is meant to help citizens and the City Council focus on the general direction in which the City is developing in the short-term and can be amended as necessary to reflect current priorities. The CIP process assures that new projects coincide with the City's adopted master plans and related policies and includes operating and maintenance costs for on-going budget items.

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**TABLE 4: CHAMPAIGN MOVING FORWARD FIVE YEAR ACTION PLAN**

Chapter		Action Descriptions
Roadway	RA-1	Identify a program where development pays its fair share of roadway improvements based on a nexus between new traffic and impacts.
	RA-2	Modify current street standards to Complete Streets which integrates automobile, transit, bicycle, and pedestrian multi-modal facilities.
	RA-3	Update codes and standards to require multi-modal transportation assessments for all new proposed developments which address connections, access, and mobility for auto, transit, bicycle, and pedestrian modes.
	RA-4	Update parking demand rates, within nodes with both minimum and maximum standards, including requirements for shared parking analysis.
Transit	TA-1	Modify the City's Land Use Plan toward higher-density, mixed-use, transit-supportive land uses node at locations such as downtown and mixed-use centers.
	TA-2	Modify standards and codes to require pedestrian and bicycle connections to bus stops, park and ride lots, and transit stations.
	TA-3	Modify standards and codes to require new development provide street connectivity and facility design that supports transit.
Bicycle	BA-1	Develop an early implementation action plan to do some quick striping projects to get a bicycle network started. The action plan should identify logical bike lanes and Sharrow projects that can be done now.
	BA-2	Revise standards and codes for new development to require on and off street bicycle facilities to connect with City Bike Vision Plan.
	BA-3	Revise standards and codes for new development to require on site bicycle parking.
	BA-4	Launch a bicycle network campaign to introduce a comprehensive bicycle network.
	BA-5	Complete at least one east-west and one north-south bicycle facility that traverses the City as a priority for completion of the system.
	BA-6	Modify standards and codes to require bicycle facilities and secure bicycle storage for non-residential and multi-family development projects.
Pedestrian	PA-1	Modify standards and codes for new developments to include pedestrian access to activities within the site, to transit stops near the site, and sidewalks along streets bordering the site.
	PA-2	Coordinate with CU-MTD to incorporate changes in standards and codes to integrate sidewalks into the site design which provide pedestrian connections to transit stations and to bus stops.
	PA-3	Implement safe street crossing improvements for crucial intersections.
	PA-4	Incorporate a safe pedestrian crossing checklist when proposing intersection widenings.

Projects that are eligible for federal or state transportation programs selected by CUUATS, serving as the Metropolitan Planning Organization (MPO) for the Champaign region, will be submitted for funding consideration accordingly. These programs include the Surface Transportation Program (STP), the Congestion Mitigation and Air Quality Improvement Program (CMAQ), Transportation Enhancements, and others. On a periodic basis, CUUATS issues a Call for Projects in order to evaluate projects and program funds for specific funding programs. Local governments, including Champaign, then submit detailed information and make local funding commitments (usually 20%) in order to attempt to obtain federal funding for their project. With significant reductions in state and federal funding for capacity improvements, this opportunity will be less than the past.

### ARTERIAL STREET FUNDING



The success of Champaign Moving Forward is contingent on having adequate revenues to construct the complete streets arterial roadway improvements that serve cars, buses, bicycles, and pedestrians. With the lack of sufficient transportation revenues from the federal, state and City, additional local funding sources will be required.

The total arterial roadway needs are presented in Figure 22. As indicated on this map, there are 28 roadway or overcrossing improvements necessary to accommodate 2030 growth.

These 28 projects are listed in Table 5. Improvements currently needed to address existing deficiencies are projects 1 to 19. Projects 21 to 28 are required for future development.

The estimated total project costs, City of Champaign costs, and the amount unfunded are identified for each project. As indicated in this table, the current City of Champaign transportation improvements is approximately \$56 million. About \$10 million of these improvements have funding with an estimated existing unfunded amount of \$42.5 million.

Future arterial improvements are an additional \$34 million. The total existing and future arterial costs, which are unfunded, is approximately \$76 million.

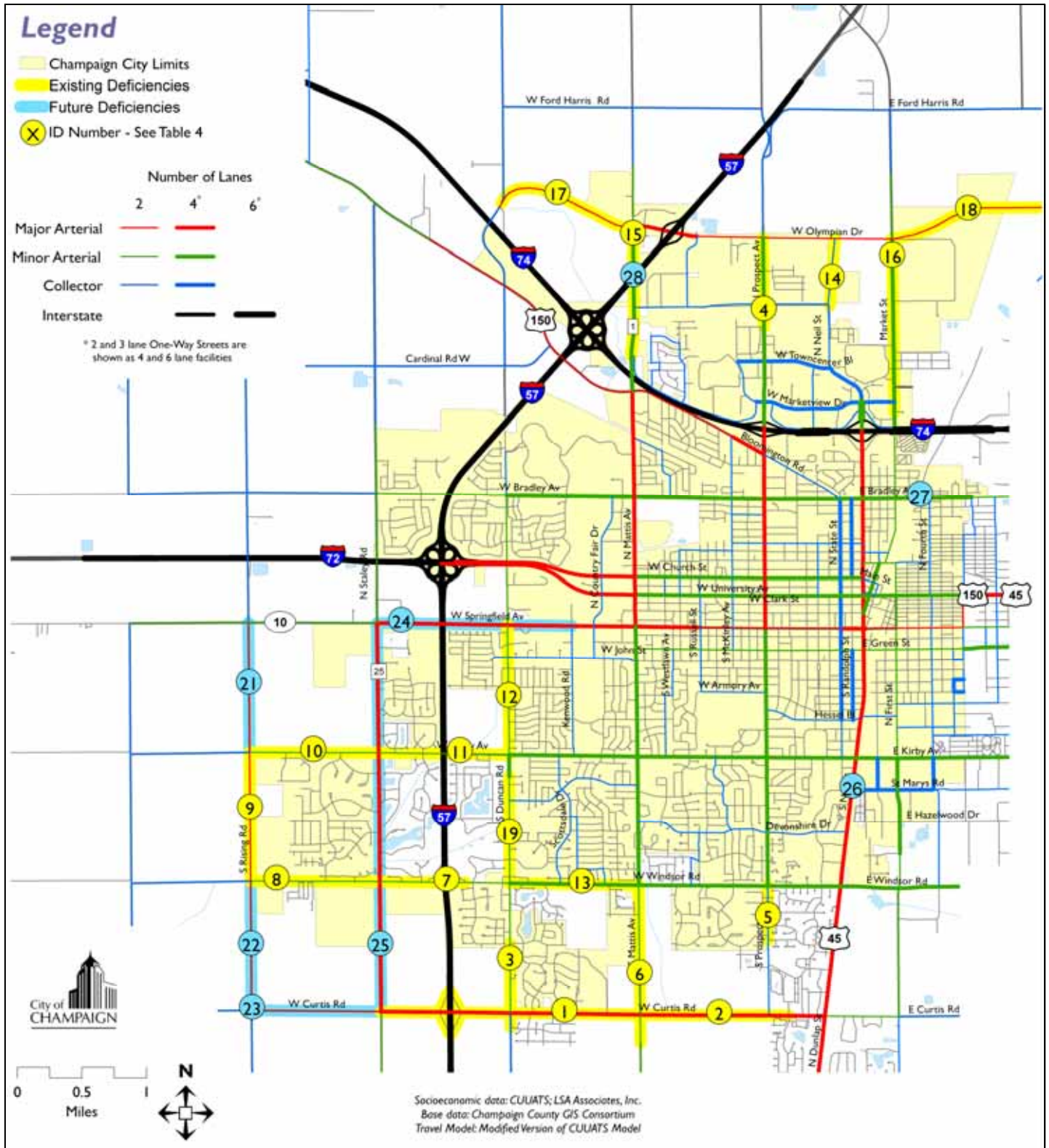
#### **Existing Deficiencies Funding Options**

There are three general options available for local transportation funding for existing deficiencies, as depicted in Table 6. Each option has revenue generation benefits and each has drawbacks. As an example, based on preliminary estimates, it would take a 0.30 percent sales tax over 10 years to fund the current transportation deficiencies. If this sales tax were imposed, the City of Champaign may be at a disadvantage when compared to other City's sales that do not have the higher sales tax.

A local Champaign County Motor Fuel Tax might be an option where all residents in the County would pay equally, and the revenues collected would go back to the point of origin or be distributed on a per person basis. The revenue from this tax might not be adequate to address all of the existing transportation needs.

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## FIGURE 22: 2030 ARTERIAL ROADWAY NEEDS



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## TABLE 5: 2030 ARTERIAL ROAD IMPROVEMENT DEFICITS

ID	Street Name	West / North Limit	East / South Limit	Necessary Improvements	Est. Total Project Cost	City of Champaign Cost	Un-Funded Amount (\$M)
1	Curtis Rd.	Duncan	Wynstone	Widen to 4 Lanes plus Center Turn Lane	7.48	2.97	
2	Curtis Rd.	Wynstone	Wesley	Widen to 4 Lanes	15.40	2.74	
3	Duncan Rd.	Meadows West	Curtis	Improve to suburban/urban standards	2.20	2.20	
4	Prospect Ave.	Olympian	Interstate	Widen to 4 Lanes	2.20	1.70	
5	Prospect Ave.	Windsor	Savoy Limit	Improve to suburban/urban standards	1.00	1.00	
6	Mattis Ave.	Windsor	Curtis	Improve to suburban/urban standards	2.50	2.50	2.50
7	Windsor Rd.	Staley	I-57	Improve to suburban/urban standards	1.25	1.25	1.25
8	Windsor Rd.	Rising	Staley	Improve to suburban/urban standards	2.50	2.50	2.50
9	Rising Rd.	Kirby	Windsor	Improve to suburban/urban standards	2.50	2.50	2.50
10	Kirby Ave.	Rising	Staley	Improve to suburban/urban standards	2.50	2.50	2.50
11	Kirby Ave.	Staley	Duncan	Improve to suburban/urban standards	2.50	2.50	2.50
12	Duncan Rd.	Springfield	Kirby	Improve to suburban/urban standards	2.50	2.50	2.50
13	Windsor Rd.	Duncan	Mattis	Widen to 4 Lanes	4.80	4.80	4.80
14	Neil St.	Olympian	Interstate	Improve to suburban/urban standards	1.25	1.25	1.25
15	Mattis Ave.	Olympian	Anthony	Widen to 4 Lanes	4.50	4.50	4.50
16	Market St.	Olympian	Marketview	Widen to 4 Lanes	5.60	5.60	5.60
17	Olympian Dr.	Duncan Rd.	Mattis	New 2 Lane Arterial	8.90	8.90	6.40
18	Olympian Dr.	Apollo	Lincoln	Improve to suburban/urban standards, bridge over CN RR.	15.50	1.70	1.70
19	Duncan Rd.	Windsor	Watterson	Improve to suburban/urban standards	2.00	2.00	2.00
<b>Total Costs (Existing Deficiencies)</b>					<b>87.08</b>	<b>55.61</b>	<b>42.50</b>
21	Rising Rd.	Kirby Ave.	Springfield Ave	Improve to major arterial (shoulders, ditches)	1.25	1.25	1.25
22	Rising Rd.	Windsor Rd.	Curtis Rd.	Improve to major arterial (shoulders, ditches)	1.25	1.25	1.25
23	Curtis Rd.	Rising Rd.	Staley Rd.	Improve to major arterial (shoulders, ditches)	1.25	1.25	1.25
24	Springfield Ave	Staley Rd.	Kenwood Rd.	Widen from 2 to 4 lanes	6.75	6.75	6.75
25	Staley Rd	Springfield Ave	Curtis Rd.	Widen from 2 to 4 lanes	13.50	13.50	13.50
26	Bradeley Ave.	Railroad Overpass		Improve Overpass	2.50	2.50	2.50
27	St. Marys	Railroad Underpass		Improve Overpass	2.50	2.50	2.50
28	Mattis Ave.	Freeway Overpass		Rebuild/Widen Overpass	5.00	5.00	5.00
<b>Total Costs (Future Deficiencies)</b>					<b>34.00</b>	<b>34.00</b>	<b>34.00</b>
<b>Total Costs</b>					<b>121.08</b>	<b>89.61</b>	<b>76.50</b>

### Funding Future Arterial Improvements

Transportation improvement funding for future needs can similarly use the funding methods above, however most jurisdictions have found that it is difficult to have existing residents to fund transportation improvements for future development. Therefore, some form of new development fair share funding, based on a nexus of development impacts is more appropriate.

As indicated in Table 7, there are two general approaches for funding new transportation improvements, some form of a transportation impact fee or district funding.

Key to implementing any transportation impact fee is that there exist a nexus between new development impact and the improvements needed to accommodate this growth. A jurisdiction cannot charge new development to pay for existing deficiencies. A nexus based on a comprehensive transportation planning effort, such as the Champaign Moving Forward, which correlates the future need compared to future development.

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**TABLE 6: OPTIONS AVAILABLE FOR LOCAL TRANSPORTATION FUNDING**

	Funding Method	Who Pays	Advantages & Disadvantages
Existing Needs	Property Tax	Property Owners (may be passed on to renters/ tenants)	The property tax increase for transportation capital improvements, operations and maintenance would be imposed on the basis of assessed real estate values. There is a weak connection between assessed values and the need for transportation. Visitors do not pay property taxes in a direct way.
	Sales Tax	Consumers, including both Residents and Visitors	Sales tax can produce a significant and predictable revenue stream. This tax is also imposed on visitors and travelers who purchase retail goods and stay in local lodging. If implemented only in the City of Champaign, retail sales might shift to competitor locations outside the City limits.
	Motor Fuel Tax	All Motor Vehicle Drivers	Motor Vehicle Fuel Tax would be applicable for projects that correct existing deficiencies and for the City share of projects partially funded by new development. This tax might also be appropriate to finance improvements that facilitate a shift to alternative modes. Users of gasoline and special fuels ultimately pay this. Residents, visitors and businesses would all pay the tax. The tax would particularly impact businesses in the delivery business. If implemented only in the City of Champaign, users might travel outside the city to purchase motor vehicle fuel.

Source: FHWA 2006

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**TABLE 7: APPROACHES FOR FUNDING NEW TRANSPORTATION IMPROVEMENTS**

	Funding Method	Who Pays	Advantages & Disadvantages
Future Needs	Development Excise Tax (Transportation Impact Fees)	Developers and New Home Purchases	Development Excise Tax or transportation impact fee are tools appropriate for improvements that are attributable to new growth. This tool may be particularly appropriate for missing segments of arterials or collectors. This is a cost savings tool from the municipal perspective since it transfers financing burden to new development.
	Special Improvement District (SID)	Local Businesses and Property Owners	Special improvement districts are typically used for financing smaller transportation projects which benefit a defined area. Special improvement districts may acquire, construct and install streets, parking facilities and drainage improvements. Payment is from properties included within the special improvement district. These districts may impose property taxes, fees, or charges. Taxes and fees are structured to generate sufficient revenues to pay for district programs and facilities.

Source: FHWA 2006

A common approach to addressing future development funding of impacts is through a transportation impact fee where each new development pays for a fair share of the total future transportation needs. This could be on a per unit basis, such as dwelling unit or square foot for non-residential, or on a per trip basis.

As indicated, the total additional costs for improvements required to mitigate future development traffic is \$34 million. Based on the trip generation estimate from the regional travel model, forecast growth within the City of Champaign will generate approximately 211,000 daily trips. This would equate to approximately \$161 per trip. Given that the typical single-family generates 10 trips per day; the transportation impact fee would be \$1,600 per dwelling unit.

### RECOMMENDED CHANGES TO CODES AND STANDARDS

#### New Development Pedestrian Impact Analysis

Require all proposed developments to conduct a transit, pedestrian, bicycle, and impact analysis that addresses directness, continuity, street crossings, visual interest and amenities, and security.



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### **Pedestrian Assessment for New Streets**

The City of Champaign and Illinois Department of Transportation (IDOT) should provide transit, bicycle, and pedestrian improvements per the City's complete streets standards and to conduct a pedestrian I-57 overpass and bicycle crossing assessment for all proposed major roadway widenings that add additional through and/or additional turn lanes to determine the impact of the proposed roadway improvement on pedestrian and bicycle mobility and transit access, and identify mitigation to offset pedestrian impact.

IDOT overpasses of I-57 and I-74 are in particular need of pedestrian and bicycle crossings. These expressways already create a barrier for pedestrians and bicycles, but not being able to cross this barrier at intersecting arterials is very problematic in achieving a balanced multi-modal transportation system.

### **Pedestrian Connectivity Requirements**

The City should update the City's codes and standards to improve pedestrian and bicycle connectivity for new developments. These pedestrian connectivity recommendations include:

- Provide pedestrian and bicycle connections between subdivisions.
- Provide direct and non-circuitous pedestrian and bicycle connections between residential developments and destinations including, but not limited to transit, schools, parks, retail, employment and public uses.
- Commercial office and retail projects shall provide an onsite system of pedestrian walkways and bike routes that provide direct pedestrian and bicycle access from the front door to perimeter streets, adjacent developments and existing or planned transit stops.

### **Site Design Standards**

The City should update the City's codes and standards to require new developments to provide pedestrian connections and mobility within the development and to destinations outside the development.

### **Pedestrian Standard Variance**

Because retrofitting existing arterials and neighborhood streets to complete street standards is often impractical and not affordable, flexibility to current design standards should be considered, provided the intent of the Complete Streets objectives are met. An example might be construction of sidewalks without curb and gutters.