

Walkability Report

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Arcadia, Florida and DeSoto County



Where the past meets the present and the future is only a few healthy steps away

Background

This report is intended to assist Arcadia and DeSoto County in protecting, preserving and restoring life, culture, buildings and lifestyles. In one sense, walkability not only determines whether people will continue to have walking as a restorative measure for health, but as a process and blueprint to help assure sustainable land form and urban/rural prosperity. Although the walkability audit is only one step to assure a healthy future, it is an essential tool to help build a collaborative, collective community vision. Another major step is creating a “smart transportation” future by connecting land development practices, transportation planning and economic development.

Smart Transportation is an approach to planning and design of roadways that links transportation investments to local contexts. These include financial, community, land use, transportation and environmental contexts. A sound project arises out of a process that is sensitive to the needs of both land-use and transportation, includes input from local stakeholders, reasonably mitigates impacts on the environment, and includes a budget that is scaled to the size of the problem.

Land development in Florida has greatly outpaced population growth, resulting in the loss of agricultural and rural lands (sprawl) and the decline of cities and towns with existing infrastructure. Such changes are particularly noted in small, precious legacy lands. At the same time, many communities throughout Florida lack adequate work force or affordable housing. This forces many in the working and service classes to drive long distances at increasingly great costs, to be transported at high cost, or live in inadequate housing. DeSoto County can capitalize on these problems by building needed infrastructure and complete towns where travel times and distances are shortened for many, where new housing product types fit into the community, where equity and equality are realized through design.

Land use, transportation and health agencies can work together collaboratively to overcome the problems associated with conventional sprawl and strip patterns, to build communities that become prosperous as they focus on building the kind of places where people want to bring and settle in many small, new, innovative businesses. DeSoto County is well located to allow a future agreeable and attractive to many. This might include having good jobs and higher education for many young children who today move away for work and social opportunities.

Research reveals that Florida and DeSoto County are at high risk for obesity, sedentary lifestyles and patterns of neighborhood development. This has led to isolation of people and high dependency on cars. In the aging society we live in (Florida is the bell-weather state for aging), this will become increasingly problematic. In fact, the obesity epidemic that is plaguing our nation has already manifested at an alarming rate in DeSoto County. Shockingly, DeSoto ranks 2nd in the state, with 77% of adult residents considered overweight and obese, according to the DeSoto County Health Department. Sadly, the youth of DeSoto County are not exempt from this harsh reality.

The DeSoto County Health Department recently conducted a root cause analysis of this public health crisis and determined several correlations between the built environment (city design & infrastructure) and health. The lack of complete streets and safe routes to school, which encompasses sidewalks, bike paths, crosswalks, traffic calming measures and proper road signage, has led to increased vehicular traffic in neighborhoods and school drop-offs. Ultimately, this has deterred active transportation among adults and school-aged adolescences. The declining numbers in children walking and riding their bikes to and from school, coupled with the increased engagement in sedentary activities (TV, video games, computers & texting) directly reflects the extreme rise in childhood obesity.

Disease Rates in DeSoto County	DeSoto	FL
Adult Overweight & Obesity Rate	76.9%	62.1%
Adult Diabetes Prevalence	12.5%	8.5%
Adults who engage in no leisure-time physical activity	38%	26.4%
Obesity & Overweight Rates in School-Aged Children		
DeSoto Middle School Students	17.6%	11.3%
DeSoto High School Students	17.5%	11.2%

It is the DeSoto County Health Department’s mission to promote, protect, maintain and improve the health and safety of its citizens and visitors through promotion of public health and the control and eradication of preventable diseases. Today, the DeSoto County Health Department’s Walkable Communities Project is striving to bridge the gap between the emerging research base on community design and healthy living with the everyday realities of local government planning. Facilitating the integration of health into the policy framework of comprehensive planning will be integral in reversing the built environment’s negative impact on public health. A more prosperous and healthier future in Arcadia and DeSoto County will depend on building strong community partnerships that represent a holistic vision for smart growth and redevelopment.

The Walkable Communities Project is spearheaded by the DeSoto County Health Department, in association with the Florida Department of Health’s Office of Performance Improvement and the Multi-State Learning Collaborative. The *Multi-State Learning Collaborative: Lead States in Public Health Quality Improvement* is managed by the National Network of Public Health Institutes with support from the Robert Wood Johnson Foundation.

About Dan Burden

Dan Burden, co-founder of Walkable Communities, Inc. and a senior urban designer and principal of Glattig Jackson Kercher Anglin, Inc., is an internationally recognized authority on bicycle-and pedestrian-oriented facilities and programs, street corridor and intersection design, traffic calming, Safe Routes to School, campus planning and designing sustainable communities. He has worked in nearly 2,500 communities throughout the world as part of his mission to help get the world back on its feet. More information: www.glatting.com or www.walkable.org. Follow Dan on Twitter (@DanBurden).



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Arcadia and DeSoto County's First Step Toward a More Healthy and Prosperous Future

Arcadia and DeSoto County's inland Florida location provides culture, charm, history, pride and dignity. As the County sets a vision and plans for designing a more compact land form which works for its people, it will become a healthier, better-connected, more prosperous place. Successful and prosperous towns are scaled to the human foot. This right-size, right-scale concept allows people to focus on town centers that are affordable for the community and for people.

This movement is evidenced by the enthusiasm and conviction with which residents and key leaders in Arcadia and DeSoto County came together to focus on a walkability audit, recent changes to downtown and the ongoing work to invest in a main street redevelopment program.

Downtown Arcadia and the surrounding historic neighborhoods were selected for the drive through and walking audits -- to provide insights on how these places and the greater region can benefit by a renewed focus on its people and their health.

The walkability assessment got underway on May 31st and June 1st, 2009 - with a walkability audit. More than 40 residents, regional health officials, county leaders and community advocates walked the streets with walkability expert Dan Burden, a principal and senior urban designer with Glatting Jackson Kercher Anglin, Inc., and co-founder

of Walkable Communities, Inc.

The walkability audits revealed how the historic neighborhoods and main street environment had good original "bones" (i.e. an urban form of well connected streets, proper orientation of buildings, parks, schools) but were in need of improvements and adjustments to make them truly walkable communities, a place where walking isn't just a form of exercise, but also a means of transportation.

This written report summarizes findings and recommendations from the event, as well as Arcadia's plans for main street improvements, and other research performed after the event. It focuses primarily on the physical environment of DeSoto County and provides ideas about how to adjust transportation elements and land uses to improve recreation, open space, commerce, parking, retail sales and the County's overall connectivity and health. In fact, the report helps explain how combining land-use planning and transportation as a single community-building tool can help communities thrive and, in fact, will be the mark of successful, sustainable communities in the future.

Framework for this report. Since January 2008, much has happened to the American and world economies. These are deep-seated problems and solutions will not come quickly. But almost all analysts are reaching similar conclusions:

Walkability -- *The measure of the overall walking and living conditions in an area, defined as "the extent to which the built environment is friendly to the presence of people walking, living, shopping, visiting, enjoying or spending time in an area."*

Factors improving walkability include: mix of land uses, high levels of street connectivity, high residential density (as residential units per acre), plenty of places to go near the majority of homes. Walkability also requires street-level details that include "transparency," or a high percentage of occupied buildings with transparent windows and doors at the street level, as well as orientation and proximity of homes and buildings to watch over the street, and buffer pedestrians from moving cars.

Walkability is enhanced with quality placemaking, including well-laid-out public streets, squares, plazas and small parks. Walkable streets create a human scale and a sense of enclosure to the street, helping to keep vehicle speeds low. Walkways must be buffered, not immediately adjacent to moving traffic. Use of planter strips, on-street parking or bike lanes achieve this while helping create "enclosure."

Walkability also is improved with enjoyable walkways of sufficient width to be comfortable for two or more people to walk side by side; and wider if volumes of pedestrians are moderate or high. Walkability also calls for ease and frequency of convenient street crossings for pedestrians. Low vehicle speeds and volumes allow this to happen naturally, but at higher speeds, formalized crossings are necessary.

Walkability is improved aesthetically as an area takes on its own charm and sense of place (imageability) and is further enhanced when walkway environments are rich and complex, with many things to see and experience.

Measure -- Counting the number of people walking, lingering and enjoying a space is a good way to quickly determine how walkable a block, corridor or neighborhood is. The diversity of people, and the presence of children, seniors and people with disabilities, denotes the quality, completeness and wholesomeness of a walkable and livable space.

WALKABILITY & WALKING

the non-sustainable sprawl patterns and principles to which we have built, and the unhealthy lifestyles they have fostered, are nearing their ends. Rather, building or reviving sustainable, connected, healthy and happy centers will provide a future that is logical, “green,” and prosperous.

Much of this report provides validation that a small, dedicated group of DeSoto County citizens and leaders are alert to these problems and are willing to help its people get back on track. Indeed, DeSoto County’s historic town-making pattern and its recent new investments in its downtown are an indication that a growing number of people are willing to come together to set a course for a prosperous and healthy future. Seen from a “15,000-foot-high lens,” DeSoto County has not yet suffered badly from sprawl, and looks mighty fine. On the ground, though, several missteps and missed opportunities are noted. The fixes for many of these missed opportunities are affordable, such as completing sidewalks, linking trails and neighborhoods, improving public space, putting some roads into a more urban form and building compelling gateways, bike lanes and roundabouts.

This report outlines numerous “low-hanging fruit” projects that will help provide immediate inspiration, stimulus and lift during the County’s makeover. Many other opportunities are mid-priced and can be funded locally, while a few are longer-range initiatives, such as the remake of SR 17 and SR 70. Meanwhile, there are hints that broader based future transportation and community development monies may help kick-start local economies - and this may come sooner rather than later.

Positioning and timing DeSoto County’s vision and people will be critical to securing any state or federal funding. The walkability audit validated many things County leaders already know. DeSoto County and Arcadia have an abundance of “places” and a historic form that makes the communities a good place to live and invest. The presence of well located, quality downtowns, with good streets, roads, trails and great neighborhoods make for a good start for the future. With only a modest number of added investments, it is possible to bring Arcadia and DeSoto County back to a more sound and solid economic, social, physical and psychological life.

Placemaking, Sustainability, Complete Streets

Placemaking -- Placemaking is the transforming of a street, sidewalk, plaza, square, paseo, open lot, waterfront or other space to be attractive, rewarding and a community source of distinction and pride. Good places make good experiences possible and have consequences in our lives. Being in places involves social encounters, immersion in the sights, sounds, sun, wind and atmosphere of a locale, and encourages curiosity about the traces of thought, imagination and investment that have guided their construction and use over time. Why is place-making important now? It is largely due to economics, ecological sustainability and a desire by people to be more socially connected.

Sustainability - Sustainability is meeting today’s needs without borrowing from the needs and opportunities of future generations. Recalibrations are taking place on where and how jobs are created. Vast changes in local and national economics are already occurring based on a growing desire to be more conscious and considerate of what and how much is consumed. Indeed, all urban design is changing as new non-carbon sources for energy and reduced consumption of energy separates out struggling towns from the most sustainable and thriving towns.

Sustainable Transportation -- Sustainable transportation is about meeting present transportation needs without compromising the ability of future generations to meet their needs. The practice of sustainable transportation developed in reaction to the mistakes of transportation policy, practice and performance throughout much of the world during the past half-century. Urban transportation systems based on the car have proved unsustainable, consuming excessive energy, affecting the health of populations and delivering a declining level of service despite increasing investments. Many of these negative impacts fall disproportionately on those social groups who are least likely to own and drive cars. The sustainable transportation movement is gaining force and is helping to shift the emphasis in public spending and actions away from building and supply, to management and demand.

Complete Streets -- Street designs need to shift toward all streets being walkable, bicycle and transit friendly. This “completion” goes hand-in-hand with more balanced, affordable street designs, placemaking and active transportation. People walking or riding bicycles are improving their physical, emotional and social health, through active transportation.

Despite significant changes in America's economic life, a meltdown in pensions, home values, vast uncertainties about global warming, and changes in the auto industry, DeSoto County is sitting in a good position -- there is an abundance of things people seek in its infrastructure.

This change in focus toward walkability and placemaking creates potential to attract new jobs while enriching the lives of those living here. Employees and retired people are increasingly considering lifestyle and place as much as they consider salary and other benefits. Employers looking to locate in a city consider these same attributes. And today, the high recreational value and affordability of DeSoto County looks inviting to many.

What went wrong and how will we correct it? Roads were built for higher speed to allow easier access to escape towns. These streets were commonly stripped of parking and trees. Zoning codes were altered to favor or force

parking lots to the front of buildings. Auto-centric designs even crept into downtowns.

Taxation rules and other measures rewarded property owners for not putting land into its best use. Now these rules are changing. Towns of the future that thrive will reinstall on-street parking, plant trees and in other ways significantly "green up," enclose and provide enclosure and a human scale to village streets.

How will this take place? Using town making and placemaking principles, empty parking lots will either be replaced with mixed use buildings, or otherwise made into attractive gathering places. Parking lots will no longer be a visual blight. And everywhere in a central town, more parking will be put back on the street, helping calm traffic speeds and creating an important buffer and edge. This edge will separate moving traffic from pedestrian and retail life.



All buildings in time should be transformed to urban placements. The downtown business plan should support a returning town center population, allowing many people already living in the historic area to walk or bicycle to nearby destinations. Below, a recent investment on D Street in Ft. Pierce, Florida, helps anchor an important corner, slowing traffic and creating a strong, compelling sense of arrival and place. This building also provides a new police precinct station and a community gathering place.



New buildings, or adapted buildings, can provide important added presence of people in the downtown (see suburban vs. urban form on page 10).

Many sidewalks have fallen into ruin. While investments in streets are behind the times, support systems for walking are at or below 20% of investments needed to support this mode of travel. Arcadia and DeSoto County each need to make an ongoing investment in walkability infrastructure. Below, a recently reconstructed sidewalk in Cambridge, Massachusetts, makes use of color to highlight walking areas, create a buffer to moving traffic, and otherwise support walking.



After years of taking a different route, designers and elected leaders have learned that towns designed for people and jobs are packed with people and place, and that towns designed for cars are packed with cars and space. Towns that thrive are designed for large numbers of people and jobs. These towns accommodate or tolerate cars; not the other way around.

DeSoto County has the right “bones.” What will work best in the future is largely what worked best in the past. When people walked, biked and used transit more, when land uses were calibrated to a human scale -- smaller, mixed and closer together -- there was a high degree of social mixing and social equity. Infrastructure was affordable and sustainable. DeSoto County is well positioned to take advantage of its historic grid, and excellent street connectivity. Sustainability practices place more trips closer to home, calling for greatly improved aesthetics for streets, reduced speeds, and improved tools for keeping traffic in motion. Meanwhile, there is a missed opportunity.

As the downtown strives to draw in a growing clientele, and as infill investments are made in the central downtown area, both SR 70 and SR 17 will require new streetscapes, lower speeds, more parking, buildings and identity as place.

Macro-Level Current Conditions. Arcadia and DeSoto County already have the base needed for success. Due largely to its preserved buildings, mixed town development, well located neighborhoods and historic block form, Arcadia has a link to a promising future, prosperity and health.

Towns over the years with “good bones” heal from job losses and recessions more quickly than those that lack these qualities. By focusing on some immediate fixes to insert missing pieces (town makeover) and then addressing long term commitment to creating place, DeSoto County will weather these storms just fine.



Aerial maps of town centers, such as Arcadia (above), reveal compact, well laid out systems of streets, good block form and easy access to most destinations. In general, 80 percent of people find it convenient to walk for distances under a quarter-mile, or five minutes. Under favorable urban conditions, people will walk a half-mile, or ten minutes, and in even better urban conditions, one mile, or twenty minutes. Many Arcadia residents live within an easy walk of the town center and major attractions.

Walkability can be improved with some modest changes. Principal roads can either become an asset, or further divide community. Bike lanes, tree lawns, medians, a few “road diets,” mini-circles and a few gateway roundabouts will be of great benefit to area towns’ livability, health, longevity, vitality and economic life. www.walkscore.com helps us assess the walkability index for any household. It can also be generalized for a town.



For Arcadia as a whole, the walkability index is 78 out of 100 (Very Walkable) (see www.walkscore.com); This score reflects mostly on the “bones” of connectivity, block form, distribution of important stores and services. The score does not currently measure gaps in sidewalks, broken links and other effects that reduce walking. Localized for each of these effects, the scores of various portions of Arcadia are lower or much lower. Type in a specific street address for actual score. Each of these scores can be improved significantly. These scores do not take into consideration such factors as street width such as those imposed by the five laning of SR 70 or SR 17, with miles of ugly strip form shopping (urban form promotes walking) and high levels of discomfort due to speeding.

Walkability in DeSoto County. Walkability is achieved by paying close attention to details. Extra design must be built in to accommodate a variety of people (residents and tourists to Florida) that seek the “real” Florida experience. Inland Florida has not been well promoted in the past. Tourists coming to enjoy the Peace River and other area attractions can be attracted to a variety of shopping, eating and other entertainment experiences. But the atmosphere must reflect and respond to the Florida climate.



Park Avenue, and the many side streets found in Winter Park, Florida, have come together to create a smorgasbord of shopping, dining and recreational experiences.



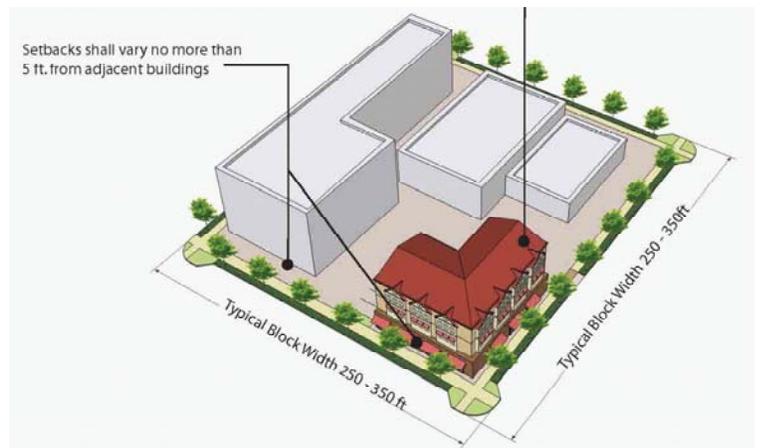
Streets must maximize their support of parking, host a number of shade trees and other shade producing features. This can be expanded to include the use of alleyways that become portals to main street.



Above: Curb extensions are needed in places, but they must help establish attractive edges and gateway entries. Below: Bicycling and walking need to be friendly and an easy choice for people of all ages.



Walkability calls for attractive buildings, built to the corner to provide a sense of place, not pushed back.



Why is walkability important?

As recently as 15 years ago, many people throughout the country didn't understand the importance of building walkability and place. Downtowns lost vibrancy. Land uses became more and more separated from one another. Most new homes were built to suburban scale, sidewalks and crossings were omitted, and it became physically challenging to conduct errands without using a car. Car use by the average American driver grew from 5 miles per day in 1945 to 27 miles per day in 2007. In the last twenty years, traffic volume has grown five times faster than our population. Such auto growth and dependency is not affordable, sustainable, healthy or smart. Isolation and loneliness of people, as well as reduced levels of volunteerism, resulted from these impacts in most towns and cities. Although this is a national phenomenon, Florida has been especially hard hit, since much of our growth occurred in post auto years. Yet, DeSoto County has been hit by this phenomenon less than others, largely due to the very slow growth rate of the region, and this has reduced sprawl effects. Herein, lies the potential and promise to evolve sound, solid, sought-after community through designs that work well and well into the future.

But a pass through image of Arcadia is harsh. Towns that offer no "there" on their primary corridors allow people to continue their search until they get to a town or place of greater overall value, character, personality, charm and attraction. People coming in on SR 17 or SR 70, and especially on W. Magnolia and E. Hickory, pass through ugly strips, and backs of sun bleached, edgeless parking lots. These areas of suburban form and lack of investments at the center discourage people from coming in to see the beauty of the main street (Oak Street). Once these areas are properly visioned and built, prosperity can take root.

Once place and walkability are established, many people feel the warmth and attraction and will spend more time vacationing or visiting. Others may talk it up among friends, and yet others may bring new businesses. Much of future town economies will be based on building walkability, activity, social engagement and place into their future.

Our economy is over a barrel, literally and figuratively. Americans are being hammered at every turn. Falling home values, rising gas prices, and Wall Street bailouts with fallout on Main Street. Hanging over it all is a sense that we have come to the end of the road with our over-dependence on oil. - *Build for America*



Public streets form and frame so much of our public realm that by emphasizing speed of cars, we destroy character and our sense of community. By doing this, we devalue homes nearby, increasing crashes, forcing even more people into cars and car-dominated lives. Both SR 70 and SR 17 currently dishonor Arcadia. A vision for these two corridors is a great starting point.

Below: A single multi-story investment along SR 70 or SR 17 (especially W. Magnolia) could frame and enliven the street, create visual appeal and begin the process of drawing many new residents to the downtown and historic district. If the investment were on SR 17, it could buffer the sound of traffic, making the Oak Park Plaza a more enjoyable part of the town center.





Parks, plazas and open spaces are ideally positioned within 600 to 700 feet of every house. The vision map for downtown San Luis Obispo, California, illustrates how carefully this must be thought through. Parks do not need to be large, but they must be well spaced and watched over by adjacent buildings. By keeping block perimeters between 1,200 to 1,600 feet, people have many choices of ways to walk to destinations. Below photo: Like Arcadia, ten years ago, downtown Sanford, Florida, was a sleepy, unnoticed spot in the road. The remake of its principal street has brought a significant increase in life, investments and overall prosperity to the downtown and the town as a whole.

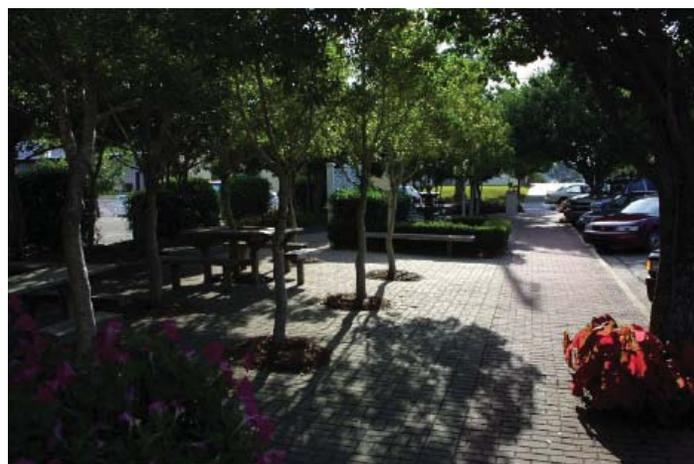


DeSoto County towns have ample opportunities to study other southern cities, like Winter Park and Stanford. (Right panel). Bottom two photos: Fairhope, Alabama, is another award winning small town that has demonstrated the importance of building trails and attractive town center streets.

These towns provide parks and other open space features, designs and concepts that create attractions for youth and adults, such as protected outdoor eating areas and parks that can be channeled into attractions for shopping and play.

Great Southeastern cities, such as Winter Park (right) or Fairhope, Alabama, (bottom photos) have featured their main streets to make them attractive, compelling and interesting places that people want to return to time after time. People are drawn long distances toward beauty.

Careful design, such as use of a series of well designed trails, sidewalks, the planting of many trees, and inviting neighborhood parks will allow Arcadia and other DeSoto County communities to become walkable and bicycle-friendly all seasons of the year.



During the two-hour walkability audit of downtown Arcadia, participants identified ways to convert alleys, parking lots, undeveloped downtown land, main street, and side streets into more green and attractive places. They better learned the importance of looking at its main street buildings, especially the upper stories, back into productive use in order to “activate” the street and downtown. Unless people live on main street, people will not feel safe and comfortable all hours of the day. Residents learned that Florida SR 70 and SR 17 can be remarked in the short term, and rebuilt long term to honor and make the downtown and historic district more prosperous.



WALKABILITY AUDITS

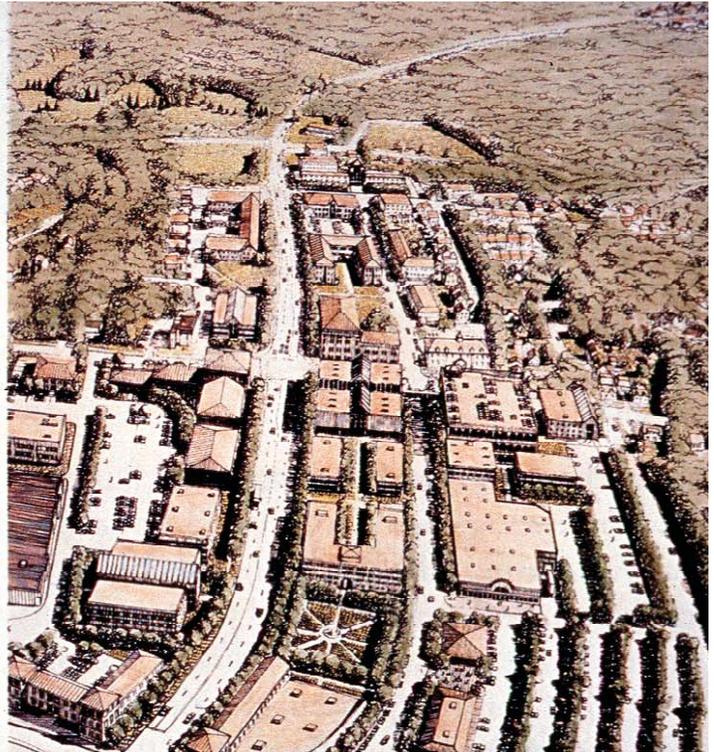
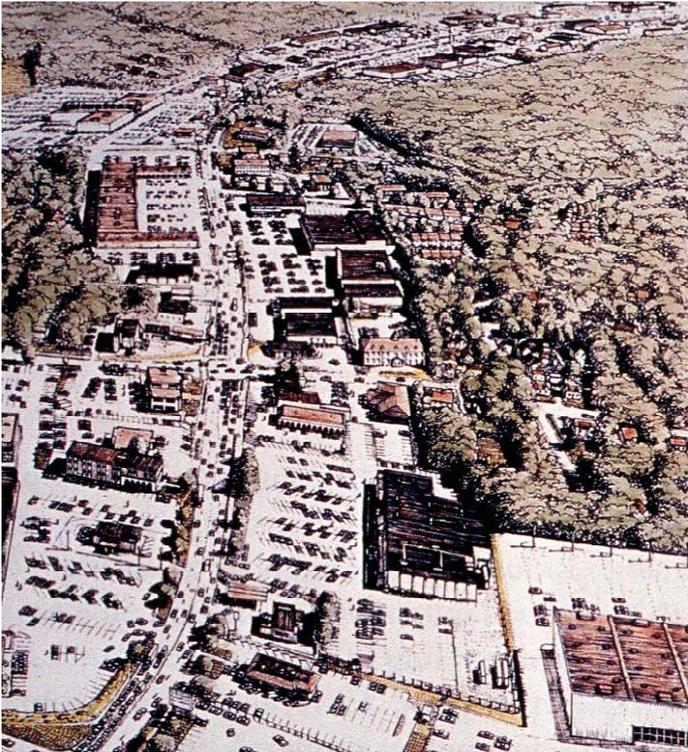
Walkability audits, also called *walkability workshops* or *walking classrooms*, are powerful planning and teaching tools that help turn blocks, streets, corridors, downtowns, waterfronts and neighborhoods into walkable and livable places. During a walking audit, stakeholders trek the road to simple discoveries about the place, together. A walking audit allows all people to see conditions and opportunities through a new set of lenses and they often teach participants how to see.

Dan Burden pioneered the idea of taking human-scale, hands-on planning to the streets through walkability audits. In the early 1980's, Dan learned that engineers designing streets and intersections often had never walked the corridors they were designing. Once he took them to the field, the corridors that would impact the health and well being of the neighborhood, the downtown, the people, the businesses and especially motorists took on new and improved qualities and completeness.

When Dan first started taking engineers and planners to the streets, he was surprised when some of them refused to cross intersections during walks because they felt they were “too dangerous”. One engineer even said, “I will drive across and meet you on the other corner.”

Today, walking audits are recognized by many in planning, engineering, architecture and landscape architecture as a best practice to help diverse groups of people learn from one another. It helps level the playing field and bring down the “shields” between neighborhood advocates and technical staff. Issues are better understood and addressed while being “walked out.” In fact, by the end of a walk, many have learned they have much more in common than they thought. They often have new and more focused issues to talk through once they get back to meeting rooms. Presentations, discussions and ideas are tightened to reflect reality, based on what was actually observed.

People taking part in walking audits claim they will never take walks or study projects the same way. Some graduate students in urban design have claimed that they learned more in a two-hour walking audit than in an entire semester of urban design classes.



Photos above and below depict auto-centric, unwalkable environments. Streets above are dominated by parking lots and lack connectivity into surrounding neighborhoods. The retail center below ignores the needs of pedestrians and instead caters to vehicles. In these examples, land use and development weren't coordinated to encourage multi-modal access or to make the community truly accessible to everyone. Our most vulnerable citizens, seniors, children and poor people, are most impacted through strip designs.

Above and below photos depict traditional town forms with high levels of walkability. DeSoto County features many scenes similar to the one below, but the town has slipped from time to time into an all too stark, auto-dependent form. Arcadia's comprehensive plan sets a course to become more walkable, social, inspirational and physically attractive. The courage to take on and deliver the comprehensive plan principles through outstanding leadership is underway.





Many Arcadia and DeSoto County roads are nearing the end of their” structural life” and will be rebuilt. Today, roadways need to serve a more holistic and complete mission: To create attractive “addresses,” provide a social environment and sustainable transportation, while continuing to move traffic safely and at reasonable speeds. Stakeholders should look at alternatives that work for everyone.

A portion of Oak Street through Arcadia’s downtown today. Lack of investment in green infrastructure, especially on corners, gives an overall stark appearance to the street. A variety of trees should be considered for a vertical wall, as well as attractive ground cover, hanging baskets and other ways to enliven the street.



Above and right panels: Downtown Arcadia can use a substantial investment in placemaking. This calls for a master plan that encompasses Magnolia, Oak and Hickory, as well as all connecting north/south streets, all parking lots and other surface areas. A significant investment in landscape materials and street furniture can pay handsome returns over time, both in retail sales inside area stores, and in overall increases in lodging, food and related tourist trade. Arcadia and much of DeSoto County are leaving behind their agricultural and industrial income streams and must replace those with a growing interest in tourism and small business investments. Due to its importance of being the most recognizable town, it is essential for DeSoto County’s economic health to help influence placemaking investments.





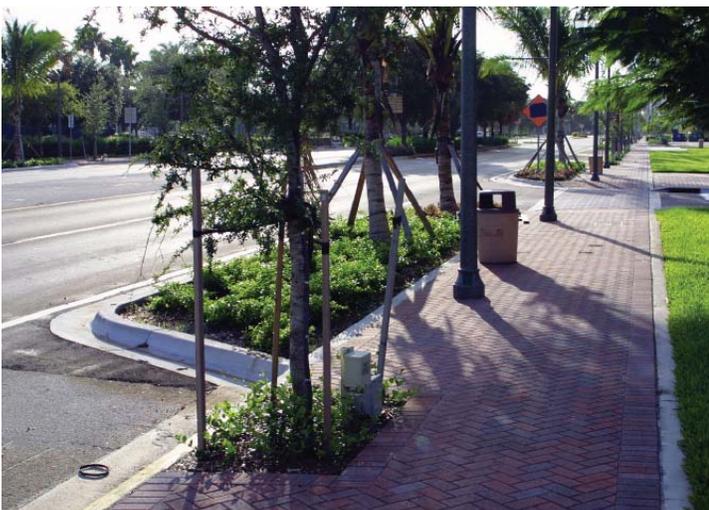
CURB EXTENSIONS



Curb Extensions, like the large photo shown above in Fairhope, Alabama, will help transform Arcadia to a more attractive, natural, functional and prosperous town and county center. Curb extensions are designed to capture all space not used by autos. In Arcadia, the spaces where curb extensions will be applied are already painted out in yellow as no parking zones. By adding curb extensions, Arcadia will turn these vital spaces into civic and retail uses.



Left panel: All work performed in transforming the town and county center should be performed in a way that least disrupts local businesses. Winter Park, and Sanford, Florida, replaced sewers, water lines and other infrastructure as part of its reconstruction. Streets were worked on at night, then covered during the day to maximize retail success.



Arcadia's building-to-building right-of-way is too tight to plant trees in sidewalk areas. Use of in-street tree wells can allow the street to be "greened" and often without removal of parking. Tree wells can either be installed to allow water to flow naturally in existing channels, or, if a complete reconstruction is needed, to insert drainage in a pattern that supports these green innovations. Tree wells are used on many local streets, but can also be used, along with curb extensions on roads like SR 70 and SR 17. A number of state roads now use tree wells routinely in urban areas. Use of tree wells and curb extensions, in combination, help bring speeds to more appropriate urban levels.

Changes and Transitions

DeSoto County has the opportunity to make a number of easy, short term, affordable changes to improve its active transportation, walkability, alternative transportation and livability. For instance, signal timing, signing and pavement markings can all be adjusted to better accommodate a wider diversity of street users. The absence of strong, compelling edges, as well as the absence of a vertical wall of green through the planting of hearty trees on a number of key streets, creates added desire to travel through what is a bleak area.

Bike racks and indoor bike storage (protection from rain and sun) are easy to develop. Seating is cheap. Trees can be planted soon in a nursery then brought to streets like SR 17 and SR 70 when plans can be completed. In many cases, bike lanes can be added, especially along SR 70 by applying paint. Our recommendations start with low priced, low hanging fruit. Although not all recommendations will be taken, it is important to emphasize that the principles in the adopted comprehensive plan call for a number of measures to make the town more livable, walkable and friendly for all.

The recommendations provided are an assortment. Perhaps out of 100 opportunities, only 10 or 20 will be adopted. It is important to emphasize that DeSoto County won't be the first to carry out many of these recommendations. But be assured, treatments proposed here have been built hundreds of times. Recommendations are a combination of many tools pointed out on the walk, and during the closing session. Others are by the author, Dan Burden.



Roundabouts allow roads to be better scaled (2-3 lanes versus 4-5 lanes), create an attractive terminating vista, allow for on street parking, and significant new “greening” and commercial retail success. A recent project built in the San Diego (Bird Rock) area took 5 lanes to 2, moves 23,000 cars and trucks per day, getting people to their destinations in less time than with signals, and with a 90% improvement in safety. In order to design and gain stakeholder backing for a street remake, it will be necessary to conduct a public charrette. A similar project in Hamburg, New York, altered three key streets and provided the same level of achievements.



Example of a former 4-lane road, placed on a road diet with on-street parking, bike lanes, one travel lane in each direction and a raised median. This style of roadway design (boulevard) is 30-50% safer than SR 17 or SR 70 today. An engineering analysis and public charrette would be applied to confirm the ability for converting DeSoto County roadways to a higher urban form and performance. With the aid of roundabouts, it is possible to move 30% more traffic at lower speeds, with reduced noise and delay than with existing roads move today. Although parking is not needed today, with new urban forms placed over time, on-street parking may be a serious consideration.

(Kirkland, Washington, 17,000 ADT)

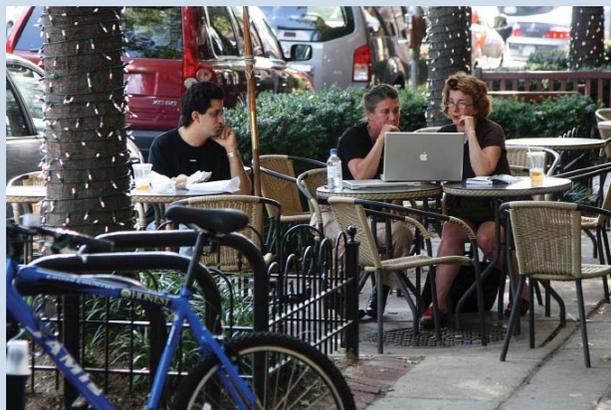
Arcadia and DeSoto County's Low Hanging Fruit

- Change rules for downtown occupation of top level floors to not only permit, but to maximize resettlement of residents. Building owners should not be punished by limiting their use of buildings in ways that keep them from having maintenance funds. Downtown Arcadia needs all the people it can get to live in and around main street addresses.
- Create a “revolving” interest free bank loan to encourage downtown retail to upgrade their facades.
- Upgrade alleys, making them some of the most attractive and functional spaces in the downtown.
- Use significant “green” cover for major portions of all downtown ground surfaces, including all principal streets, side streets and parking lots.
- Use curb extensions extensively in the downtown area, making these areas especially appealing.
- Transform SR 70 and SR 17 into urban streets. This includes strong vertical walls of green, new urban buildings, and other features that characterize the town as a destination, not a pass through place.
- Share spaces, services and utilities such as dumpsters to minimize clutter and ugly features in all alleys and parking areas.
- Provide attractive, functional bike racks.
- Bike storage can also include indoor parking.
- Locate bike parking where there are many “eyes” on parking. Cost range (\$500-\$5,000 per station).
- Provide additional attractive seating throughout the town center.
- Place attractive litter cans with each sitting area.
- Identify sidewalk gaps throughout Arcadia and DeSoto County and prioritize their construction.
- Sidewalks are needed to support children walking to school, in and around all senior centers, and as approaches to all retail centers.
- Highest priority sidewalks should include filling gaps along principal roadways (arterials and collectors) and especially SR 70 and SR 17.
- On most principal streets, motorists only require two ten or eleven foot lanes, with an occasional third lane near key intersections.
- Oversized roads are a problem in a few locations in DeSoto County.
- Identify and build rails-to trails, and provide other trails to create a county-wide trails system. Some short sections of trails can be built by volunteers, with staff design and oversight.
- Interior town roads have speeds much higher than are friendly for walking, bicycling and safety. Use bike lanes and other visual techniques, as well as actual narrowings of through lanes to bring speeds back toward urban levels. In general, speeds should not be above 25 mph in the immediate downtown, and 30 mph in the historic district.
- Mini-circles can be installed on some historic district side streets parallel to principal roads. Mini-circles are attractive, move traffic quietly, with 90% greater efficiency and safety and save energy. Motorists stay in motion. Mini-circles also act as gateways and transitions into neighborhoods and town centers.
- Look for early opportunities to complete other missing street connections.
- Have “main street” retailers assess their building facades. Improve window displays, make changes in lighting, facades and otherwise find inviting ways to welcome people back to downtown.
- Create a contest to reward those making the most significant contributions to the formation of a town character through their buildings, landscaping and displays.
- Bring in a “town architect” (on contract, if necessary) to help define and establish a “town character” and to further help individual retailers and building owners develop a plan for each store front. For a cost of \$5,000-25,000 per store, it is possible to see a significant improvement in downtown retail trade.
- Study all signals in DeSoto County for added pedestrian support. Include “pedestrian lead intervals” and countdown signals, where warranted.
- Evaluate (audit) all crosswalks in town. Repaint and increase visibility of crosswalks. Start this process in the downtown and near schools. Poorly marked crossings may be part of the problem identified on principal streets where “yielding” behavior by motorists is poor. Current use of yellow as a crosswalk color are out of synch with the MUTCD. Markings have low visibility.
- Encourage downtown retailers to work together to better manage parking. Eliminate staff and owners from parking on main street.
- Conduct local audits to map out “security,” “warmth” and “aesthetics” on main street. (Glattig Jackson can supply tools for these audits)

Arcadia and DeSoto County's Low Hanging Fruit

(continued)

- Place new wayfinding signs that help people who live, shop or visit the area find ease in navigation. This is an immediate action step that can be aided by local industrial schools or others that can manufacturer signs. Wayfinding signs also establish the character and charm of the town.
- Expand local farmer's markets, advertise them more widely and consider combining an artist's market, with music and other festival events. Note that at least one event a month should be a regional large scale event, attracting people to bike or drive up to two hours to get to such an event.
- Develop community gardens with one garden for each 1,000 residents. Start a new garden each month until you hit your goal. Each garden should fill a niche and create a buzz.
- Start a bike club, offer free bike repairs, a clinic, and otherwise incentivize biking as a lifestyle.
- Set a policy and help businesses with more than 10 employees find a way to get at least 40% of workers to no longer drive to work on a regular basis. This can include many incentives, and there are many programs that can be found as working examples.
- Create a DeSoto County Bicycle and Pedestrian Master Plan. Funds are often available through state levels. A good plan can be started and completed in 3-12 months.
- Launch a "walking school bus" program in all elementary schools. Kits are available from national organizations.
- Measure the way children currently get to school.
- Establish a base line (on a warm, dry day) so that you have a measure to compare with a year later.
- Apply for Safe Routes To School (SRTS) grant monies to conduct studies to improve walking and bicycling to and from all elementary, middle and high school properties.
- If not already designated, identify each of DeSoto County's neighborhoods (with boundaries) then prepare the first Neighborhood Master Plan.
- Start a cops-on-bikes program, giving each resident more visible police surveillance and more direct engagement/involvement.
- Start a bicycle rescue team, where trained EMS staff have basic equipment on bikes and can maneuver through crowds at festivals, fairs and other events more quickly. This program can add visual recognition to active transportation as a resource.
- Start an "active transportation" work day. Incentivize and reward all public servants, employees, elected leaders, everyone to park their car for a full day and to use feet and wheels to commute and conduct errands. This process will teach everyone what is missing and help the press focus in on how easy it is to emphasize healthy transportation.
- Implement a "Healthy Development Checklist" provided in the Appendix.



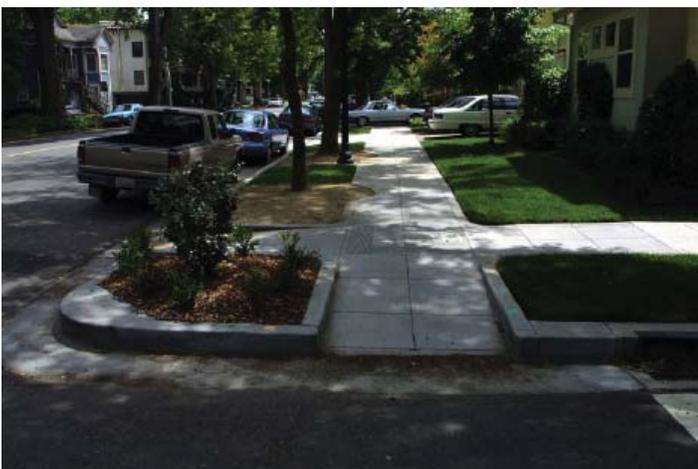
A number of other opportunities can be applied with little funding. DeSoto County should provide a number of tools leading to reduced speeds on major streets.

- Major streets with moderate to high volumes of traffic should be transformed into “Complete Streets.” Bike lanes, bike trails, sidewalks, streetscaping, curb extensions, mid-block crossings and other tools are applied.
- Traffic calming and traffic management techniques should be used. On-street parking can be striped, curb extensions, tree wells and medians can be added. Such improvements not only bring down speeds, they improve town centers and connect streets by reducing noise and perceived danger.
- Most principal streets should have lanes narrower than today, especially when combined with bike lanes. Bike lanes add a buffer to parking and sidewalks. There are 22 benefits when bike lanes (or paved shoulders) are added (see Appendix).
- Sidewalk construction and maintenance should be greatly improved, especially within 1/4 to 1/2 mile of town centers and schools.
- ADA ramps (Universal Design) need attention in many locations.



Above and below: Example of a two lane road with a median, inset parking, one ten foot wide lane in each direction and bike lanes. A roadway based on these concepts can move up to 20,000 ADT (if used with roundabouts at key intersections). If roundabouts are not used, more lanes are added at intersections for storage and turns at key intersections -- not the entire section.

(Photo: Issaquah Highlands, Issaquah, Washington)





Above: Example of attractive, gateway mini-circles. Top photo, Holland, Michigan. Bottom Photo, Orlando, Florida. Both mini-circles manage traffic quietly, maximize on street parking by bringing speeds down, and offer attractive corners in the commercial districts they occupy. A mini-circle or two on key streets on gateway approaches to town, in downtowns and other locations will add charm, beauty and movement.

By helping rescale a roadway, roundabouts help set the stage for more successful retail trade and social life. The roundabout below transformed an ugly strip street in Golden, Colorado, into a much better proportioned street. Four roundabouts were built; all signals were removed. One surprising result: retail trade in the corridor outperformed all other streets in the state of Colorado during the last recession.

Mini-circles are low cost and attractive traffic management tools that can be easily designed and installed. Although costs can be as low as \$15-25k, much more attractive circles are recommended for a number of historic roads where speeds are too high. A cost range of \$75-125k would be appropriate for central locations, while modest priced circles can be used elsewhere in the community.

Mini-circles reduce the potential for crashes by 90%. Yield controls are used on all approaches. Seattle, Washington, has placed over 1,000 mini-circles.



Appendix A

Codes to Create Traditional, Walkable Communities

Most land-use codes were written at a time when U.S. cities had an abundance of available land, water, clean air and other resources. Governments assumed continued availability of these resources, as well as financing, which led communities to construct poorly connected and outwardly expanding light density urban development, supporting street networks and other inefficient infrastructure. As a result, land uses were separated – sometimes by miles – and urban areas were allowed to decay.

Today, we have a better understanding of the limitations of our available resources. Roads, bridges, sewers and water lines that are now failing need to be replaced or refurbished. Costs of building roads, bridges or anything has gone up 2-8 times from what it would have cost had we stayed current with maintenance needs.

As we make “brick and mortar” changes to the physical infrastructure, we also should update the policy infrastructure, including land-use codes, to foster more livable, walkable communities.

Existing codes promote poor connectivity, which leads to higher dependence on cars – and even greater strain on infrastructure. Facing high gas and energy costs, residents are ready for change. But it will require more than Band-Aid solutions. Metaphorically speaking, we’re talking surgery and radical changes to get our towns back to good health.

Moving Toward Change: Mixing Uses and Connecting Streets.

Walkable and livable communities can’t develop without transit, dense development, a mix of land uses and strong street connectivity. Most existing codes do not tolerate – let alone encourage – such forward-thinking development. Instead, codes have generated misplaced development, forcing residents into their cars and leaving their neighborhoods to access basic services.

Progressive officials and developers, planning board members, architects, the health community and others have seen the need to embrace a better system, one that promotes sustainability, eco-friendly practices, walkability, and transit-friendly designs. Unfortunately, their efforts have been slowed by outdated codes and regulations.

A number of cities throughout Florida and the country have



even drafted visionary plans. However, too often these plans are relegated to back shelves as leaders and planners grapple with code-related challenges. The question is: how can we shape codes to encourage better development?

The first step is to develop a process that is inclusive, comprehensive, integrated, transparent and clear. Many people need to take part, including many individuals and groups that have been staying home hoping someone else would take charge. Even more significant, there are groups that favor existing power systems that they comprehend and sometimes control. Great towns require everyone to be on board with needed changes. Otherwise those skilled at “gripping” will effectively oppose and put down changes they did not initiate.

1. Fully engage all stakeholders to develop a vision. Enlist both the general public and the development community in the process of creating new code that supports smart, complete, and predictable standards for development. Include stakeholders with differing opinions to help create a vision that is holistic, practical and collaborative. Broad support will provide the necessary political shield for leaders to write, adopt and enforce new codes that promote sustainability, green design, active living and livable communities.

2. Understand that many factors affect the built environment. New proposals should address all of the factors that can influence design standards, not just the obvious ones. For example, tenant expectations shouldn’t be an afterthought.

3. Create a master plan that clearly communicates the development expectations. Standards that are clear, concise, and predictable are more likely to be accepted and successful. Standards must be highly graphical and easy to understand for both builders and regulators. Programs should be reviewed and evaluated yearly, and amended as appropriate.

A municipality does not need to change its entire book of codes overnight. In fact, it’s probably smarter to make such changes incrementally. For example, when Miami-Dade County created its Parks and Open Space Master Plan, the vision stated, “To facilitate the creation of great streets, Miami-Dade County must move beyond vehicular performance-based street design and instead design streets that are defined by their role in the community. While streets should have a minimum level of accessibility to all modes of transportation, not all streets require the same details.”

Additionally, developers will be able to work within these new guidelines to meet the public’s demands – including greater affordability, diversity, home “scaling” to boost



The built landscape ranges widely in its safety, security and friendliness to pedestrians. The illustrations above demonstrate the importance of having all of the parts in place to support walking. Sidewalks and crosswalks create a safe environment. Adding trees and landscaping creates a friendly environment. Presence of forward facing homes sitting near the street creates security.

Such lofty goals require a comprehensive vision that supports updating codes. Having adopted a parks and open-space plan that is seamless across community borders, Miami-Dade is positioned to revise codes and regulations that will appeal to developers by allowing them to strengthen land uses and create broader, more marketable types of homes.

Below: Homes must sit close enough to the street to watch over it (urban vs. suburban style). The back of the same homes must also have good window and back porch coverage of parking areas, providing security to internal uses.



energy efficiency, enhanced security, and increased property values.

DeSoto County must take the time during this latest market lull to “right the ship.” While reviewing the County’s land-development regulations, and building its Comprehensive Plan, County leaders recognize the need for downtowns and infill projects in the right location to draw people near and far to well made, lovable, memorable places that they want to return to.

As they do this, they will be creating walkable streets, balancing automobiles with pedestrians and alternative modes of transportation, and melding land-use decisions with transportation goals. In time, they will adopt new form-based codes with district design standards, block developments, typical streetscapes, and a vision plan to focus future development. When the market recovers, DeSoto County will be prepared to receive development as part of a community vision resulting in a more sustainable, vibrant and livable city.

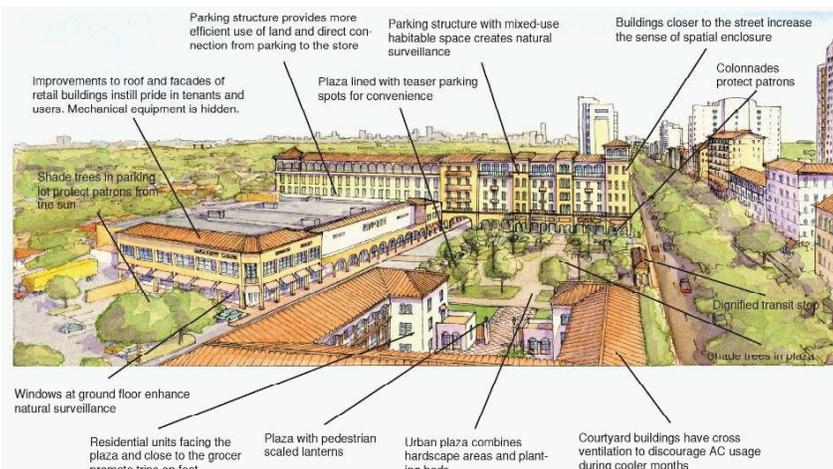
It is admirable that so many communities throughout

Florida want to promote walkable, livable communities. The next step is for governments, residents, developers and planners to work together to make this reality. It’s time to throw out archaic codes and create new rules that foster smarter growth.

Lane widths:

“The underlying engineering hypothesis of lane width and roadway widenings is that road infrastructure improvements will reduce both fatalities and injuries. However, it is not found that this hypothesis (of lane widenings) can be supported. Results actually tend to suggest the counter intuitive hypothesis that these type of road “safety improvements” actually lead to statistically significant, though small, increases in total fatalities and injuries, all else being equal.”

... Robert B. Noland, TRB 2001





Bradenton Beach, Florida, once exposed pedestrians to high speeds at this crossing. On average, one pedestrian was killed each year. Walking for exercise, pleasure or transportation was suppressed. Following the construction of the roundabout, all crashes disappeared, and a new stage was set for mixed use development. After fourteen years of operation, there have been no reported crashes of any type. New economic life has set a mood of prosperity to the entire shopping district. Today, there is an abundance of pedestrian life.

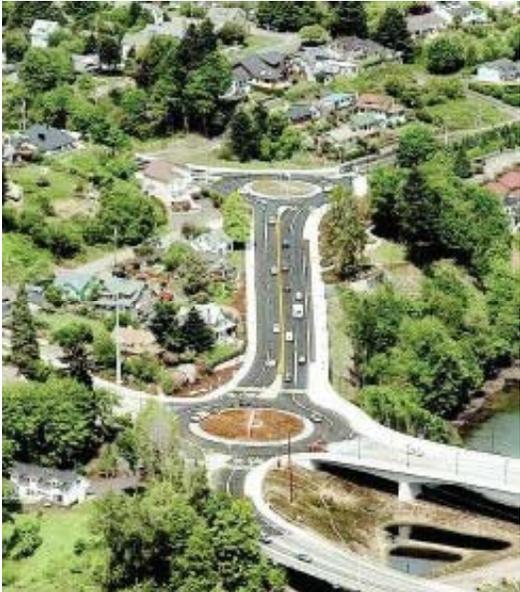




Above: Brighton, Michigan's roundabout handles 21,000 vehicles per day. Placement of roundabouts facilitates through traffic and turning movements without requiring signal control. Roundabouts are made up of a circulating roadway with an island that is often used for landscaping or other decorative features. The circulating roadway is typically wider than the approach roadways and features an additional 'apron' against the edges of the island; both of these features allow for operating contingencies, especially with trucks, emergency response vehicles, and other large vehicles.

Roundabouts have been demonstrated to increase intersection volume by up to 30 percent. As the only requirement for yielding the right-of-way is to traffic already in the circulating roadway, vehicles can continue moving through intersections carrying a light volume, requiring no queue at the approach roadways and potentially allowing all intersecting streets to use the intersection at once. Due to their low speed (15-20 mph in and out on each leg), roundabouts also drop every personal injury crashes by 80-90%. Roundabouts reduce delay to all types of movement, which reduces idling engines, air pollution, noise and lost time.

Roundabouts provide safer and more comfortable pedestrian crossings. Splitter islands serve as a pedestrian refuge. Allowing one car length between the crossing and circulating lane(s) optimizes roundabout efficiency for vehicles. Roundabouts reduce conflicts in multiple ways: when crossing, pedestrians face only one potential conflict (traffic either entering or exiting the roundabout, divided by the splitter island), and not the six conflicts per crossing leg in full-crossing intersections. In properly designed roundabouts, all conflicts are at low speeds for both entering and exiting traffic (15-22 mph). Roundabouts also create the least delay to pedestrians wishing to cross a street. Instead of waiting for up to two minutes to cross (common with a signal), the pedestrian reaching a roundabout rarely has more than a 2-8 second delay for each leg that they cross. Most bicyclists circulate with traffic (since it is now going their speed).





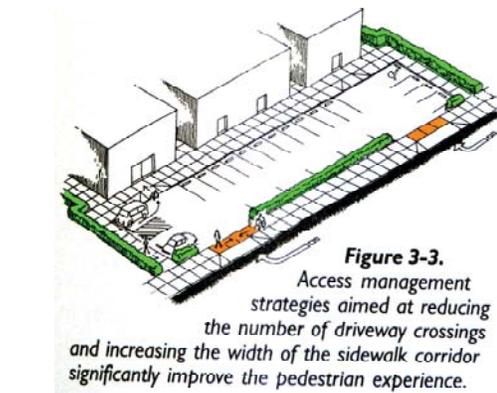
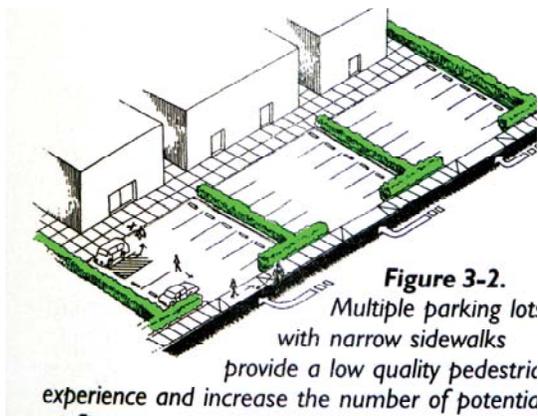
Before



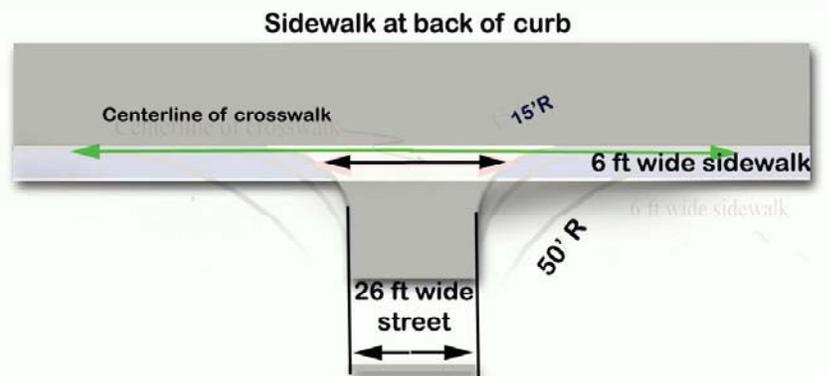
After

Physical form to support walking is found everywhere in a street environment. Top left, a 30 foot wide street creates high speeds and dangerous crossings. Top right, the same road narrowed to two 10 foot lanes, plus a bike lane and curb extensions, produces lower speeds and safer crossings.

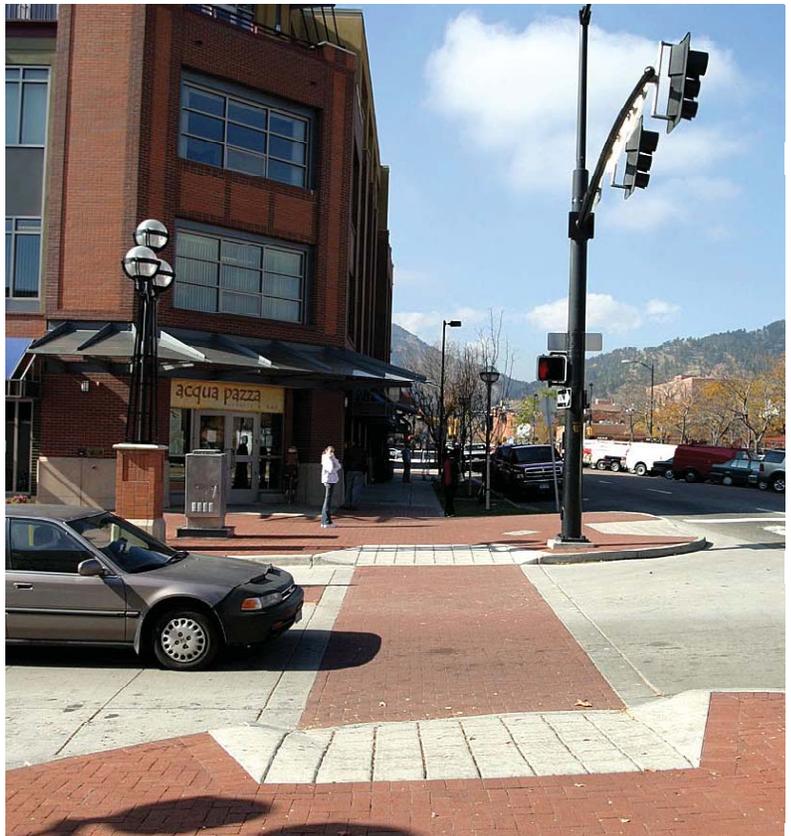
Center photos: Left: a wide (55 feet) high speed driveway entry and very wide crossing for pedestrians. Right: a 14 foot driveway crossing. Lower panels illustrate the importance of combining parking lots, and of keeping corner turning radii compact to minimize exposure and speed to pedestrians.



Effect of Corner Turning Radii on Pedestrian Crossing Distances



Radius	Crossing Distance	Increased Crossing	Percent Increase
15'	37'	+11'	42%
25'	50'	+24'	92%
50'	89'	+63'	203%



Additional tools can be used to aid pedestrians in crossing streets safely. Curb extensions reduce crossing distances. Landscaping helps channel pedestrians to ramps. Using two ramps per corner simplifies crossings. Color contrast is an aid for older pedestrians and pedestrians with visual problems. Count down timers are now recommended as a soft replacement for all urban area signalized crossings.



Before 78 foot crossing for pedestrians



After 14 foot crossings for pedestrians

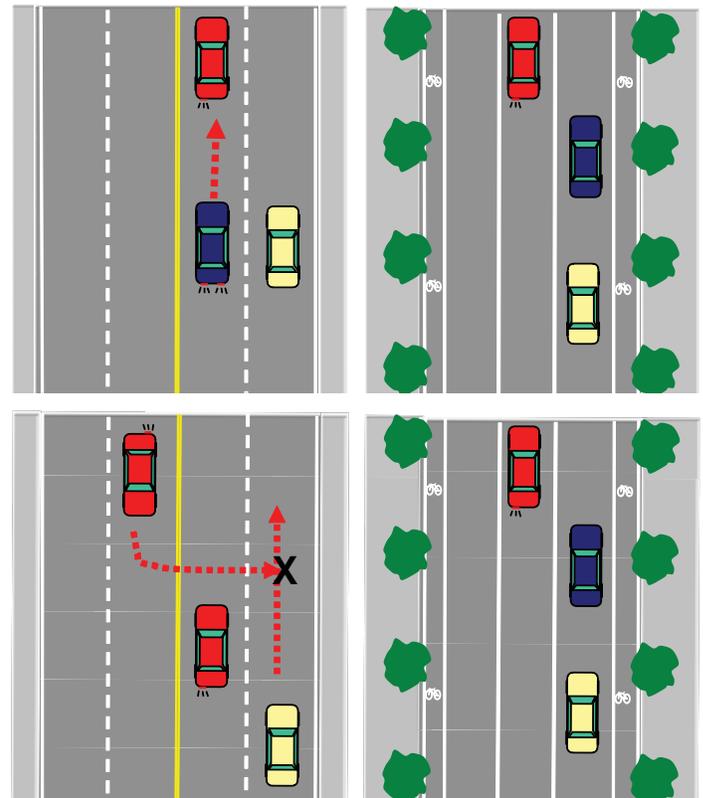
Road Diets. Any time a roadway is widened to more lanes than needed, safety and operational problems are created. In many cases, it becomes necessary to add costly signals. The consequence is that pedestrians have greater difficulty getting across widened streets, motorists are exposed to additional crashes and crash types, speeding increases and turns become more difficult.

The panel of images on the top are of a road diet from five lanes to two lanes. The roadway is LaJolla Boulevard in San Diego, California. Commercial businesses were suffering and speeding was common. Following the lane reductions, signals could be taken out. The 23,000 vehicles per day move slower, but without stopping, they get home sooner and much more safely. Just as important, today there are many hundreds of pedestrians and bicyclists coming to the commercial center. Business has improved and new stores and shops are joining the street.

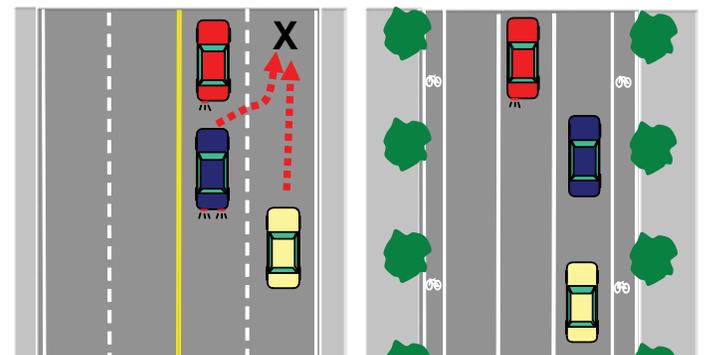
The most common road diet is the popular 4-3 (plus bike lane) conversion. Seattle, Washington, has now performed 23 road diets. In all cases, the same traffic is served. Crashes are reduced from 20 to 60%. On average, the success of retailers improves from 20 to 30%. Shop owners report people now feel more comfortable getting into and out of parking spaces and appreciate the quieter, more pleasant environment.

Below: Data from Seattle, Washington road diets.

Roadway Location	Date Change	ADT Before	ADT After	Collision Reduction
Greenwood Ave N N 80th St to N 50th	Apr-95	11872	12427	24 to 10 58%
N 45th Street Wallingford Area	Dec-72	19421	20274	45 to 23 49%
8th Ave NW Ballard Area	Jan-94	10549	11858	18 to 7 61%
Martin Luther King Jr W North of I 90	Jan-94	12336	13161	15 to 6 60%
Dexter Ave N Queen Ann Area	Jun-91	13606	14949	19 to 16 59%
24th Ave NW NW 85th to NW 65th	Oct-95	9727	9754	14 to 10 28%



Safety. Four lane sections do not provide motorists safe places to make either right or left hand turns. Driveway and side street entries are dangerous. By taking away two through lanes, then adding back a third lane (turn lane) and bike lanes, motorists are able to get out of harm's way. Turning cars are stored in left turn lanes and drivers know that the vehicle they see ahead is the only vehicle. With four lanes, a multiple threat crash is created where the near car screens the hidden car.



REASONS FOR BIKE LANES AND HIGHWAY SHOULDERS

Prepared by Michael Ronkin, Former Bicycle and Pedestrian Program Manager & Members of the Preliminary Design Unit, Oregon Department of Transportation.

Before the 1971 Oregon “Bike Bill” was passed, and the terms “shoulder bikeways” or “bike lanes” were commonly used, the Oregon Highway Division advocated (1) building paved shoulders when constructing roads and (2) adding paved shoulders to existing roads. These were often referred to as “safety shoulders.” There are good reasons for this term.

The following reasons are what AASHTO (American Association of State Highway Transportation Officials) has to say about the benefits of shoulders in three important areas: safety, capacity/operations and maintenance. Most of these benefits apply to both shoulders on rural highways and to marked, on-street bike lanes on urban roadways. See below for other benefits specific to urban areas.

Safety - Highways with paved shoulders have lower accident rates, since paved shoulders:

1. Provide space to make evasive maneuvers;
2. Accommodate driver error;
3. Add a recovery area to regain control of a vehicle, as well as lateral clearance to roadside objects such as guardrails, signs and poles (highways require a “clear zone,” and paved shoulders give the best recoverable surface);
4. Provide space for disabled vehicles to stop or drive slowly;
5. Provide increased sight distance for through vehicles and for vehicles entering the roadway (rural: in cut sections or brushy areas; urban: in areas with many sight obstructions);
6. Contribute to driving ease and reduced driver strain;
7. Reduce passing conflicts between motor vehicles and bicyclists and pedestrians;
8. Make the crossing pedestrian more visible to motorists;
9. Provide for storm water discharge farther from the travel lanes, reducing hydroplaning, splash and spray to following vehicles, pedestrians and bicyclists; and
10. Provide safety to motorists when getting into and out of parking spaces.

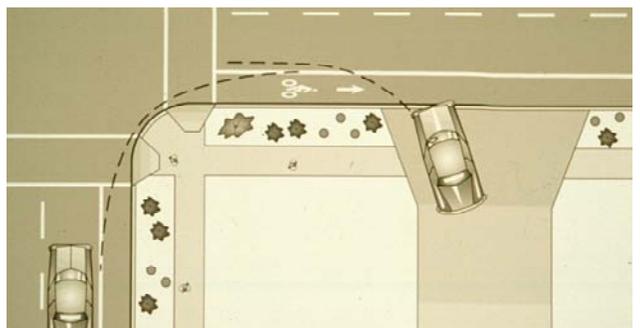


Capacity and Operations - Highways with paved shoulders can carry more traffic, as paved shoulders:

1. Provide more intersection and safe stopping sight distance;
2. Allow for easier exiting from travel lanes to side streets and roads (also a safety benefit);
3. Provide greater effective turning radius for trucks;
4. Provide space for off-tracking of truck's rear wheels in curved sections;
5. Provide space for disabled vehicles;
6. Provide space for cars to pull over when responders need to get by;
7. Provide space for mail delivery;
8. Provide space for bus stops; and
9. Provide space for bicyclists to ride at their own pace.

Maintenance - Highways with paved shoulders are easier to maintain, as paved shoulders:

1. Provide structural support to the pavement;
2. Discharge water farther from the travel lanes, reducing the undermining of the base and subgrade;
3. Provide space for maintenance operations and snow storage;
4. Provide space for portable maintenance signs;
5. Facilitate painting of fog lines.



The following document is a model of what DeSoto County could require of all new development in order to assess the walkability and bikeability of proposed projects.

Project: _____ Date: _____

Location of Project: _____

A Walkable & Bicycle Friendly Checklist for DeSoto County

Project Recommendations

When designing a new development, DeSoto County recommends that planners, architects, landscape architects, engineers and developers check proposed development projects carefully for their potential walkability and bikeability. Small details make a big difference and can lead to a healthier lifestyle.

Please check off items as you go through the list. Submit this list, along with your design plans.

INITIAL ANALYSIS

Imagine a virtual walk of the project from various surrounding locations and from within the project. Imagine that you are walking to the project from the nearest bus stop, the nearest residential area, etc.

Imagine a virtual bike ride to the project from various surrounding locations.

Plot the potential walking and biking routes from the various surrounding locations.

Identify potential barriers to walking and biking for the project and how they might be removed.

Visit the location of the potential project and walk and bike in the vicinity of the project.

CONNECTIVITY – How well does the project connect to the surrounding community for walkers and bikers?

Are direct, short and clearly adjacent routes to entrances provided?

Does the building or project provide convenient access from neighboring uses?

If feasible, is access provided on all sides?

Does the project provide short cuts for bicyclists and walkers to adjacent uses?

Does the project give priority to access to walkers and bicyclists? Does the project encourage you to walk or bike?

Does the project connect to nearby walking/biking lanes or trails?

ENTRANCES

Are entrances to the building(s) directly adjacent to the street?

Are entrances convenient to transit?

Is the building's primary entrance and address well marked so that walkers and bicyclists can readily locate the building and how to access it?

Are the setbacks beneficial or detrimental to walkers? Note: Setbacks may be visually attractive but can discourage walking by adding greater distance to entrances, unless treated appropriately.

A Walkable & Bicycle Friendly Checklist for DeSoto County (Continued)

BICYCLE PARKING

Does the project provide safe, secure short and long term parking for bicyclists in a conspicuous location?

Is the bicycle parking conveniently located near the primary entrance of the business (within 100 ft)?

Are the bike racks readily visible and a city approved design?

Note: City approved designs are either an upside down “u” or a “hitch”.

SIDEWALKS

Are sidewalks sufficiently wide to accommodate the potential number of walkers? Note: 6’ minimum clear width without obstructions for commercial uses.

Are hard curbs provided?

Is shade provided on the sidewalk through canopy trees, awnings or building design?

Is there supplemental evening lighting?

Are there buffers between walkers and traffic?

Is there sufficient width for a bus stop and bus shelter provided, as may be necessary?

INDOORS

Are wide central stairs provided or easily located to encourage walking rather than the use of elevator(s)?

Are showers and lockers provided for office and commercial uses?

Can bicyclists bring their bikes indoors or place them in a secure indoor environment?

CROSSINGS

Are safe, direct crossings provided for walkers? – This could include “bulbouts” at corners, median refuge islands, midblock crossings, signals for pedestrians, etc.

BARRIERS

Are utility poles, traffic mast arms, and equipment boxes located outside the sidewalk area? Note: preferably in the planter strip between the sidewalk and the street, without obstructing line of sight for pedestrian and drivers.

Is there a plan for removal of existing barriers in the sidewalks?

Is there a plan for removal of existing barriers in the bike lanes?

Thank you for completing this project checklist! Please submit with your plans.

HEALTHY DEVELOPMENT CHECKLIST

Please provide written responses to each applicable question. For those questions which are not applicable, please indicate so on the form (N/A). Attach additional sheets if more space is necessary to respond fully to the questions. Submit completed form with your project/development application.

PROJECT NAME: _____

ADDRESS/LOCATION: _____

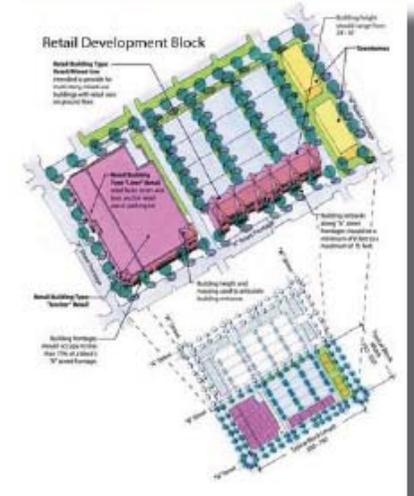
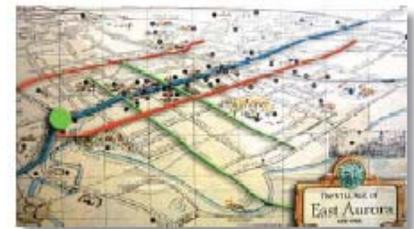
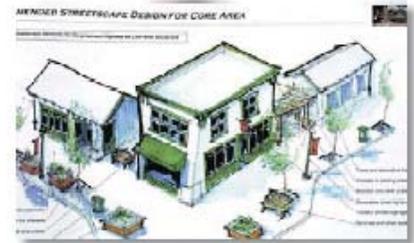
CASE #: _____

TYPE OF PROJECT: Residential Mixed Commercial Office Civic

LAND USE

YES NO

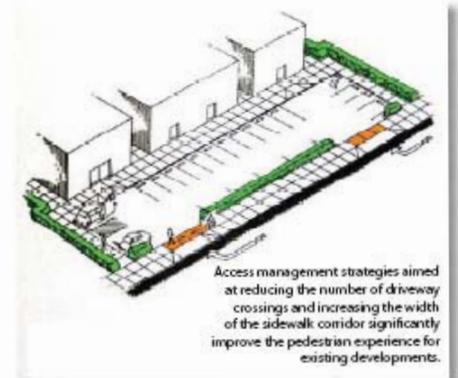
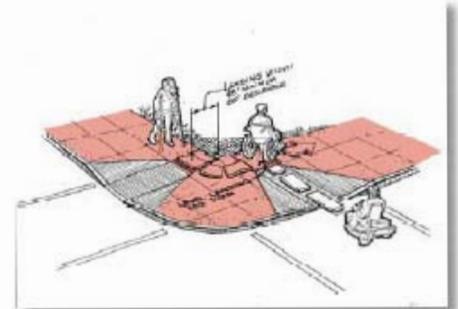
- Does the project/development promote interaction between neighbors?
If YES please list: _____
- Is the physical design of the project harmonious with the overall neighborhood?
- Is this development adjacent to existing development and connecting to the development with pedestrian links and roadway connections?
- Is there an adequate mix of land uses that provide a variety of housing choices?
- Do these mixes provide for a great diversity in incomes, and especially provide for affordability?
- Are there locations for non residential land uses that are integrated with the residential?
- Is the land use configured around a walkable block size (¼ mile perimeter)?
- Is there a range of density permitted in the neighborhood?
- Are fronts of homes properly placed and have windows watching over schools, parks, streets, trails and other public places?
- Is the architecture of buildings attractive and supportive of life on the street, park, school?
- Are there provisions eliminating garages from "mooning" the street (i.e. required garage setbacks, lot frontage percentage)?
- Are public buildings, parks and other common destinations properly placed to maximize the number of people that can walk to them?
- Can the majority of people walk safely and comfortably in ten minutes (2500 feet), and without crossing dangerous intersections to an elementary school?
- Can the majority of people walk safely and comfortably in twenty minutes (5000 feet), and without crossing dangerous intersections to a high school?
- Is there too much emphasis on providing large amounts of off-street parking (relates to affordability, density)?



TRANSPORTATION, STREETSCAPING, & STREET DESIGN

YES NO

- Does the project/development achieve a connectivity index of 1.4? The index is calculated by dividing the number of street links (street sections between intersections, including cul-de-sacs) by the number of street nodes (intersections and cul-de-sacs). A grid street network would yield an index of 2.0.
- Does the project/development provide mobility options for those who cannot drive?
- Does the project/development have a well connected sidewalk system that lead to local destinations?
If YES what is the proposed width of the sidewalks (5.0 foot minimum recommended)? _____
- Are sidewalks detached from the curb allowing planter strips to take up driveway elevation changes?
- Do all corners have ADA accessible ramps (2 ramps per corner preferred)?
- Do planter strips offer canopy street trees (each 15-30 feet recommended)?
- If median tree plantings are preferred, are plantings adequate for canopy development (each 15-30 feet recommended)?
- Are there adequate provisions made for proper care and maintenance of canopy trees?
- Do building practices eliminate privacy fences (above 4.0 feet) toward the public side of properties?
- Are there specifications that public facing fencing be attractive and transparent above 4.0 feet?
- Do curbs, swales, curb extensions, or other designs keep cars parked in correct locations (no rollover curbs)?
- Does the project/development have, or connect to, a trail system for walking or biking?
- Does the project/development contain elements that enhance the feeling of neighborhood security and safety?
- Are local street lights provided?
- Are houses oriented toward the street to provide "eyes on the street?"
- Are buildings built to properly address the street? (i.e. front doors)
- Is parking to the interior or back side of buildings?
- Can a child walk safely, comfortably, and feel watched enroute to school?
- Are there sidewalks/pathways along the route to the school(s)?
What is the walking distance to the area's schools? _____
- Is the visibility at intersections good? Can drivers see short children, physically handicapped?
- Does the route contain known dangerous intersections?
If YES please list _____
- Are there crossing guards at these intersections?
- Will the project/development contain a significant elderly population?
- Can the elderly walk to important destinations (i.e. banks, post office community centers, and library)? What is the walking distance to these destinations? _____



TRANSPORTATION, STREETSCAPING, & STREET DESIGN CONTINUED

- | YES | NO | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Are there sidewalks/pathways along the routes to these destinations? |
| <input type="checkbox"/> | <input type="checkbox"/> | Is the overall speed at or below 25 mph for all local streets? |
| <input type="checkbox"/> | <input type="checkbox"/> | Is the overall speed at or below 30 mph for all collector streets? |
| <input type="checkbox"/> | <input type="checkbox"/> | Does the project contain design elements to calm traffic such as curb extensions, mini-circles, parking chicanes, roundabouts, medians, raised street crossings, or similar features?
If YES please list _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | Does the project/development present unsafe conditions or deter access and free mobility for the physically handicapped? |
| <input type="checkbox"/> | <input type="checkbox"/> | For projects/development on arterial streets, does the plan include pedestrian crossing signals and/or mid-block crossing islands? |
| <input type="checkbox"/> | <input type="checkbox"/> | Is public transportation available?
If YES, where and how close is the nearest bus/train stop? _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | Does the nearest bus/train stop have a shelter? |
| <input type="checkbox"/> | <input type="checkbox"/> | Does the nearest the bus/train stop have a bench and litter can? |
| <input type="checkbox"/> | <input type="checkbox"/> | Do curb extensions or other treatments prevent motorists from parking too close to corners? |
| <input type="checkbox"/> | <input type="checkbox"/> | If narrow streets are used, do streets provide a physical space (20 feet wide) every 200 feet for emergency response operations? |
| <input type="checkbox"/> | <input type="checkbox"/> | If alleys are used, is there high transparency (surveillance) in the alley? |
| <input type="checkbox"/> | <input type="checkbox"/> | If paseos (connectors or links) are used, is there high transparency (surveillance) to the paseo? |
| <input type="checkbox"/> | <input type="checkbox"/> | Do schools, parks, and other public destinations have adequate well located and secure bike parking? |



PARKS & OPEN SPACE

- | YES | NO | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Can the majority of people walk safely and comfortably in five minutes (1500 feet) to a public gathering place, park, plaza, or community center? |
| <input type="checkbox"/> | <input type="checkbox"/> | Are there an adequate number of parks provided within walking distance (1/8 - 1/4 mile) from every residence? |
| <input type="checkbox"/> | <input type="checkbox"/> | Are there sidewalks/pathways, ADA ramps along the route to the above services? |
| <input type="checkbox"/> | <input type="checkbox"/> | What is the walking distance to the area's amenities? _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | Is the size of parks and open space adequate for the amount of potential residents? |
| <input type="checkbox"/> | <input type="checkbox"/> | Are there a number of buildings/houses that watch over parks, trails, and open space? |
| <input type="checkbox"/> | <input type="checkbox"/> | Are these parks well used? If not yet built, are there a number of things to discover and do in these parks? |
| <input type="checkbox"/> | <input type="checkbox"/> | Do parks have appropriate on-street parking, or is there too much off-street parking? |





walkable
COMMUNITIES



GLATTIG
JACKSON
KERCHER
ANGLIN