



City of Allegan
Technical Memorandum
A city accessible to all



Why an Active and Interactive Allegan?

Very few people would disagree with the statement that North America has “engineered” activity out of daily life and social space out of its streets. In transportation and town planning, we have applied advanced sciences to move more cars and move them faster. The unfortunate results, in many cases, are streets that accommodate only cars and that actually deter people from using the most basic form of transport – feet – for their daily errands, to stay socially connected, and for their daily exercise. This is compounded by land settlement practices (e.g. strip centers, cul-de-sacs, poor school siting, and single-use zoning) that has led to auto dependency and social isolation. The result is deteriorating individual and public health – physical, social, and psychological health – in addition to escalating childhood obesity rates, increased sense of social disconnectedness, higher consumption of finite and polluting resources, higher transportation costs, and continued environmental degradation. To counter these things, we need to fix existing built environments and rethink how we plan and design new communities. The healthy choice needs to be the convenient choice; the active way needs to be an option.

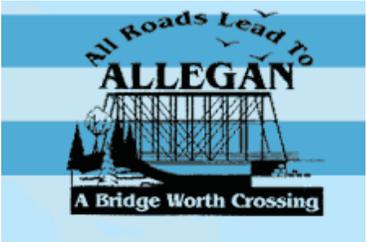
Dan Burden:

Co-founder and executive director of the Walkable and Livable Communities Institute and Walkable Communities, Dan is an internationally recognized authority on bicycle- and pedestrian-oriented facilities, active transportation, healthy communities Smart Growth and related programs. For 36 years, Dan has focused on corridor and intersection design, traffic calming, Safe Routes to School programs, campus planning, Main Street revitalization projects, and designing sustainable, livable communities.



Dan has worked in nearly 3,000 communities throughout North America, and more than 300 in Michigan, as part of his mission to help get the world back on its feet. Each town Dan has visited has helped him broaden his vision, sensitivities and commitment to help all towns of all sizes and complexities through their individual journeys from places overly comfortable and dependent on cars, to those where people come first and foremost— always.

Dan is not simply a technician and auditor, he is an advocate. In 1980, the government of Florida hired Dan to be an advocate for change. Sitting deep inside the Florida Department of Transportation, in his role as the nation’s first (combined) bicycle and pedestrian coordinator, he perfected this advocacy method in government, then took it outside to form a voice that would reach back inside government. In Dan’s advocacy role, he is quick to dispel both technical and institutional brush-offs.



ALLEGAN TODAY



Technical Memorandum

Date: October 11, 2010
To: Robert Hillard, City Manager
City of Allegan
From: Dan Burden, Walkable and Livable Communities Institute
Subject: City of Allegan Walkability; Recommendations

This technical memorandum provides an assessment of the City of Allegan's unique position to build on its current assets, which include such images as the historic commercial district, the boardwalk along the Kalamazoo River, the Griswold Auditorium or the Regent Theater. The community is fortunate to have a very intact town center, and a great stock of historic buildings. Its town center block pattern, size and scale are perfect for walking. Surrounding neighborhoods can once again be re-connected.

It is clear from the great turnout for this event, in the middle of a rain storm, on a busy Saturday, that the town has built immense social capital ... that the community has learned to work together, and is ready to begin this challenge to stitch important parts back into a vital whole.

There are challenges. To achieve its full life and vitality, the City and town center of Allegan needs to be easier to get to, and to circulate within, especially by its own residents, and to do this by foot, as well as by bike and by car. Movement of trucks and regional traffic can be worked out, but the life, character and placemaking of the town must become a high priority in future transportation decisions.

My experience overseeing many street connectivity and walkability projects allows me to see that many of Allegan's streets can be brought into balance to embrace added life and vitality, and improve the flow of traffic. But to do this, it is necessary to turn to placemaking, modern street design tools, and a new view of the purpose of streets. People focused changes are often necessary to create a competitive place for existing and new stores, bringing town center streets back to an active social, civic and retail life.

Background: On August 9, 2010 I met with over 35 citizens, retailers and other stakeholders in the City of Allegan around the theme of walkability, street design and street connectivity. In our walk, our orientation and the following training course, I brought up the subject of how challenging it is to walk between many key attractions and how disconnected the community has become through the design and operations of key roads. This includes three highway intersections of Cedar and Cutler, Cedar and Monroe, Cedar and Jenner Streets and M-89/M-40 and Sherman St. intersections.

Opportunity: Both short term and longer term corrections to these problems can be addressed. Several changes, such as getting a few critical street crossings in, can be worked out within a matter of months. Longer term, it will be important to look at outdated methods of traffic management and flow, bring down speeds in critical areas, and improve the flow, mix and choice in transportation. This will include looking at the possibility of roundabouts, and decommissioning one-way streets.



This memorandum cites specific locations, then gives state-of-the-art and recommended practices for the following:

- Crosswalk/sidewalk/curb-cut/pedestrian buffer dimensions and recommendations.
- Materials and treatments to improve pedestrian crosswalks and visibility.
- Overall street widths car/truck/bike lane/parking lane and sidewalk widths.
- Crossing islands, traffic circles, roundabouts, short medians or ellipse-shaped islands.
- Traffic calming on Pine and Monroe Streets.
- One-way streets with recommendations on how changing to two-way would improve access to the downtown, pedestrian safety, traffic flow, reduce congestion and improve air quality on the main corridors in the City. (Cutler, Trowbridge and Hubbard).
- Streetscape enhancements like trees, ground cover, park benches, boulevards, side-walk and curb bump-outs, etc. that would connect and enhance M-222, M-89 and M-40/M-89 to the downtown business district, parks and schools.
- Benefits of locating mini-circles, roundabouts, short medians, pedestrian islands, green strips and buffers that would provide pedestrian safety and access, traffic calming at the entrances to the city limits and key intersections in the downtown business district.
- Protect, preserve, restore, make slight alterations to historic districts.
- Enhance streetscaping and ground cover for traffic calming and enhance the gateways to the downtown business district.

Priority Areas:

- Pedestrian crossings at Cedar St. and Cutler St. intersection.
- Pedestrian crossings at Cedar St. and Monroe St. intersection.
- Pedestrian crossings M-89 and Jenner St. intersection.
- Sidewalk on West sidewalk of Cedar from Cutler to Monroe St.
- Sidewalk on South side of Western Ave. hill from Pine to Davis St.
- Traffic calming for Pine and Monroe Streets.
- Pedestrian crossing/traffic circle or ellipse at M-89/M-40 and Sherman Street area near the middle and high school.
- Pedestrian crossings, island, traffic circle, traffic calming on M-222 near Jaycee's Park/Village Market/M-222/Water St. and Fire Station/Walnut Street area.
- Pedestrian access/crossings, islands, boulevard traffic calming on Marshall St. in general including 5th St. and Bridge St.

Changes to Key Intersections



Allegan's main transportation issue is readily addressed by properly designing and scaling several key intersections and streets to be more people friendly. Although full engineering studies are needed, all types of traffic, including freight, can be more safely and comfortably moved by introducing modern roundabouts. These more powerful intersection tools are in use elsewhere in Michigan and many other winter states. Other changes include the use of median islands, inset parking, tree lined streets, edge stripes and bike lanes.

N. Cedar and Hubbard - a one lane roundabout will handle all current and forecast traffic. The only issue is an outside chance of one or two small retaining walls on the south/east side of the intersection on Marshall Street. A sketch design suggests this may be a "peanut" roundabout. All roundabouts will serve as important gateways to downtown Allegan.

Cedar and Western - A one lane roundabout looks possible.

Each roundabout is sized for the largest trucks that make left or right turns. If trucks only go straight through a roundabout then they are easy to accommodate. If they turn left they can be accommodated by reducing the amount of raised landscape space in the central island (see illustrations at the bottom of page 15). If trucks turn right, they are accommodated if there is not a significant right-of-way issue.

Desired roundabout results worth studying for each site

Each roundabout placement should be worked out asking these questions for long term results. Normal adjustment periods are 6 weeks to 4 months.

1. *Safety.* Roundabout will provide fewer severe (personal injury crashes) 90% reduction
2. *Capacity.* Roundabout will provide adequate or superior capacity (LOS measurements)
3. *Gateway and aesthetics.* Roundabout will provide improved aesthetics
4. *Speed control.* Roundabout will provide improved speed control in area.
5. *Noise levels.* Roundabout will result in reduced noise levels
6. *Pollution.* Roundabout will result in reduced emissions
7. *Delays.* Roundabout will reduce average motorist delays
8. *Platooning.* Roundabout can adequately handle any platooning of traffic from upstream signals, railroad crossings, etc.
9. *Public acceptance.* Roundabout has support from sufficient invested public to be accepted with moderate levels of public relations. If acceptance is lacking, how can this be improved?
10. *Traffic Types and mix.* A roundabout able to handle all appropriate traffic types will fit in this location.
11. *Physical constraints.* A roundabout can be accommodated within the frame of historic buildings, landmark trees or other physical constraints.
12. *Emergency response.* Roundabout will give adequate or superior emergency response times
13. *Transit.* Roundabout will provide appropriate support to transit
14. *Bicycling.* Roundabout will provide adequate or superior support to bicycling
15. *Walking.* Roundabout will provide adequate or superior support to walking
16. *Schools.* Roundabout will provide adequate or superior support to school related travel
17. *ADA Issues.* Roundabout designs will provide adequate or superior support to people with disabilities. Consider special populations needs, such as a school for the blind
18. *Context.* Roundabout is a good to superior fit within the historic, cultural or other environmental constraints

These drawings are accurate, but conceptual.

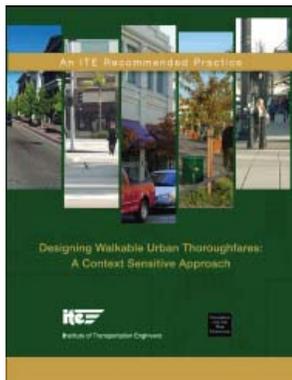
Drawings on this and the next page are conceptual. Final engineering analysis and drawings will be necessary. Meanwhile, it is important for Allegan to contract a partnership of landscape architects and engineers to honor the intent of these drawings. Care was taken in these conceptual drawings to assure that left hand and even U-turns could be made by oversize vehicles that include semi-tractor trailers. In the past, intersection designs have allowed for too much speed or capacity, and insufficient public space, walkability, bicycling and comfort.

It is important for contracted engineering companies to understand and address the more vital placemaking features of downtown, and to address alternative ways for large or oversize vehicles to make their turns without intruding or interrupting the primary purpose of the town center. Text in the adjacent column and page help express the needed rationale and approach. Many of these explanations come from the Institute of Transportation Engineers (ITE) "Designing Walkable Urban Thoroughfares" book. As Allegan crafts its more people-focused downtown streetscape there will be naysayers. Accept this fact, but know why you are making the changes that you are making, listen to and address legitimate concerns, and help the others work through their new way of accessing, driving, walking and enjoying their town center. Important excerpts from this book appear in the next three columns.

http://www.contextsensitivesolutions.org/content/reading/designing_walkable_urban_thoroughfares/



Grand and Water - By re-aligning Grand slightly to the north, a one lane roundabout will have minimal impact, especially on the two gas stations. This will create an attractive and authentic gateway into the shopping district, downtown and Allegan. Note the smaller than average center island allows oversize vehicles to make left turns in all directions. Through movements of large vehicles are easily handled. This sketch drawing assumes that the building in the upper left portion can be relocated to maximize access into and out of this property. Long term, these properties should be converted from suburban strip designs to those in keeping with the urban character of Allegan's town center.



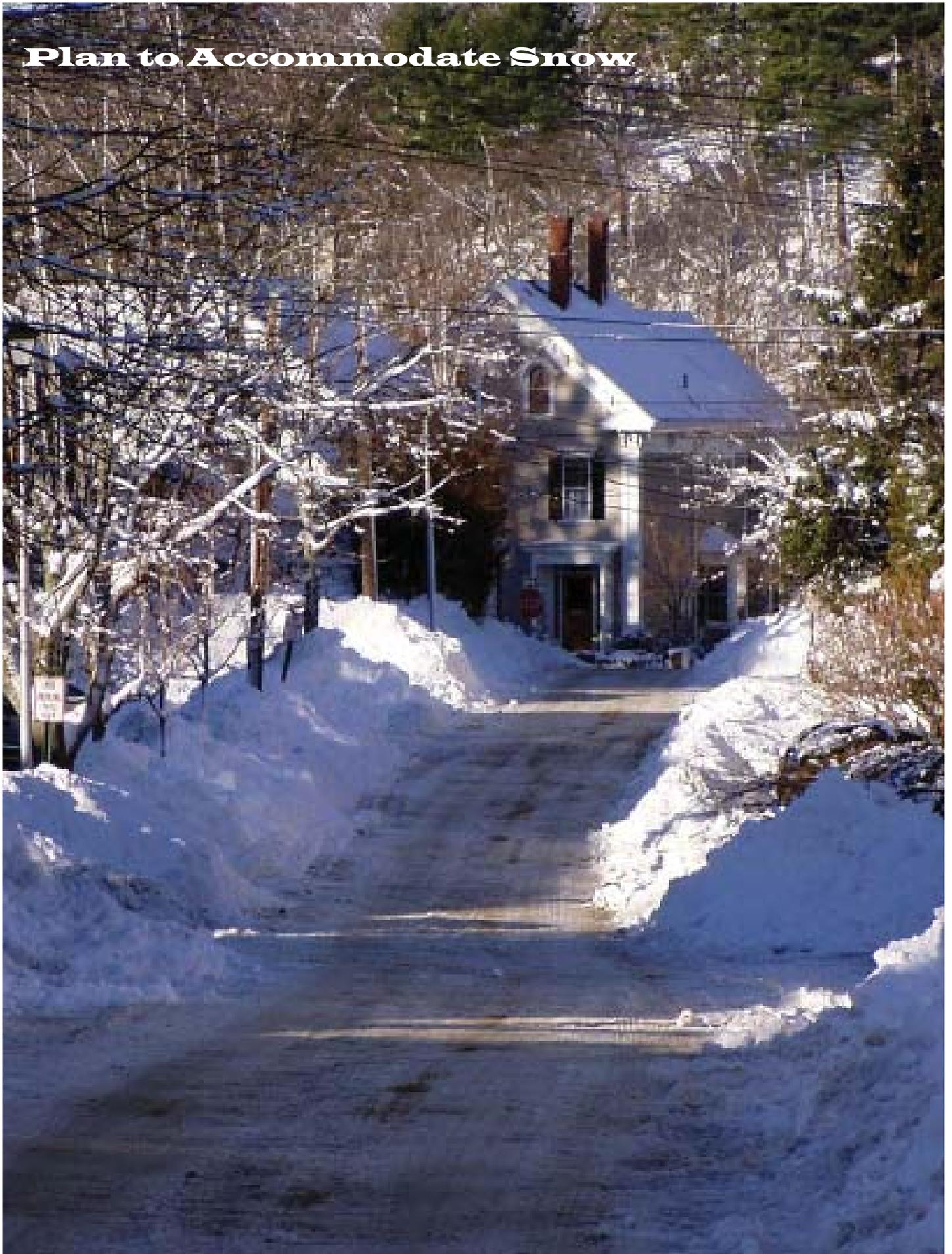
This book will help.....

Retail and social transactions have occurred along most urban thoroughfares throughout history. It is only in the 20th century that streets were designed to separate the mobility function from the access, economic and social functions of a street. This report (Designing Walkable Urban Thoroughfares...) is intended to facilitate the restoration of the complex multiple functions of urban streets. It provides guidance for the design of walkable urban thoroughfares in places that currently support the walking, livability and sustainability; especially in places where the community desires to provide a more walkable thoroughfare, and the context to support them in the future. This book is intended to promote a collaborative, multidisciplinary process that involves all stakeholders in planning and designing transportation facilities that:

- Meet the needs of users and stakeholders;
- Are compatible with their setting and preserve scenic, aesthetic, historic and environmental resources;
- Respect design objectives for safety, efficiency, multimodal mobility, capacity and maintenance; and
- Integrate community objectives and values relating to compatibility, livability, sense of place, urban design, cost and environmental impacts. (FHWA and Atlanta Regional Commission)



Plan to Accommodate Snow



Snow and Snow Removal. 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 Michigan) seeking the Michigan experience. Michigan is one of the nation's most challenging places to keep walking open and accessible year round. Tourists coming to enjoy lakes and hills 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 Michigan climate -- with a special focus on keeping trails and walkways open and accessible. This won't be easy.



When residents, and especially children, are required to turn to street walking in harsh winter conditions walkability can be expected to drop significantly. Winter brings on problems with low light and low visibility as well.

Winter cities must learn to deal with large snow loads. This requires the purchase, operation and maintenance of specialized equipment to keep walking pathways open. Snow removal for pedestrians should be maintained at the same levels and care as provided to motorists.



Residents should expect that transit and school walking trips will be given the first priority for snow removal. Meanwhile, close collaboration and cooperation between state, and town snow removal teams is needed so that snow is not simply moved from the street to the recently plowed walkway or trail openings, back to the street and back to the walkway again.

Other snow cities, such as Keene, New Hampshire and Hamburg, New York have established practices that work under their extreme snow loads. Officials should study practices in these cities, as well as other walkable extreme snow cities, such as in Denmark, Norway, Sweden and Finland.





Allegan has a good Walkshed.

In general, people find it convenient to walk for distances under a quarter-mile, or five minutes (light blue). A good town center walkshed defines the likelihood that people will walk from one place in their community to another. Inside this walkshed is the most economical and rewarding place to focus Allegan's new growth. It is often the best location for infill and brown field conversions. Inside this walkshed is the potential to bring up the highest property values and town prosperity.

The quarter mile walkshed (light blue) is not the limit. People will walk a half-mile (light yellow), or ten minutes, and under ideal urban conditions, people will walk one mile, or twenty minutes to events and popular destinations.

What do walkability, walkscore and walksheds have to do with jobs in Allegan?

Allegan's overall walkscore is 82 out of 100. What? A really cool algorithm has been developed that gives us a quick look at how walkable any place is. Employers seeking to attract and hold onto valued employees are looking for towns with high walkability scores. Under the adjusting and highly competitive economy those seeking meaningful new places for business or for new work also want a good place to live. Cities designed for people, not just cars are out competing those designed just for one way to get around.

Higher walkscores also mean higher home values. CEO's for Cities has determined that higher scores mean higher values for homes. Each point increase on this 1 to 100 scale adds \$800 to \$3,000 to the value of a home. This score assesses the walkability index for any household. Go to www.walkscore.com, then enter your home address.

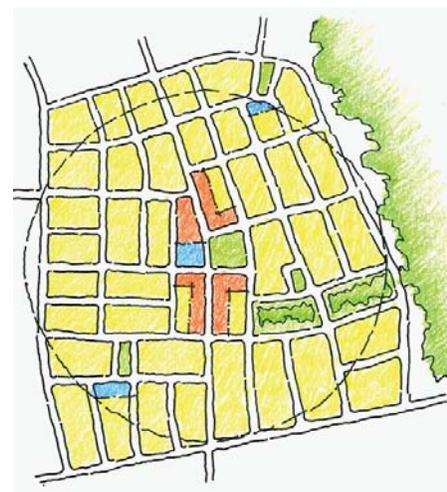
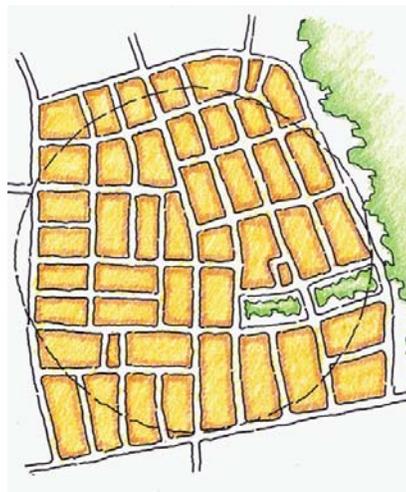
This score reflects mostly on the "bones" of connectivity, block form, distribution of important stores and services.

The score does not currently measure gaps in sidewalks, broken slabs, streets that are difficult to cross -- all of which reduce walking. But, these are serious problems in Allegan, and changes must be addressed.

As seen from the map above, Allegan is fortunate to have a well connected street system in its town core. This is enhanced with trail connections. The result, the town center is very walkable. High connectivity makes it convenient and easy to get from one place to the other, by foot, by bike and by car, without having to access principal roads.

Meanwhile, many of Allegan's primary roads are not designed for people, thus reducing active transportation, and forcing many trips into cars, even for short distances.

Walkability can be improved with modest changes. Principal roads either become an asset to their community, or dissect the town, and even neighborhoods. Bike lanes, tree lawns, medians, a few "road diets," mini-circles and a few gateway roundabouts will be of great benefit to Allegan's livability, health, longevity, vitality aging in place, and economic life.



Sidewalks

Principles: Sidewalks in a town center require high levels of design and care. It is within the protected spaces of a sidewalk where people move freely, but also spend time engaging others and spending time to enjoy the beauty of their public space. Sidewalks work best when they are fully buffered from moving traffic. The following considerations should be provided when laying out sidewalks.

- Use color, texture, street furniture and other materials to distinguish functional areas of walkways. Sidewalks have three parts (shy zone, furniture zone and the walk/talk zone). See illustration to the right.
- If driveways must interrupt, keep these to minimal widths (14 foot for one way, 26-28 for two way). Use contrasting colors and materials, and keep sidewalks fully flat across driveways.
- Sidewalk widths may need to vary, according to existing building placement, and other constraints. Try to keep town center sidewalks to 12-16 feet, when practicable, but be willing to narrow when constraints exist.

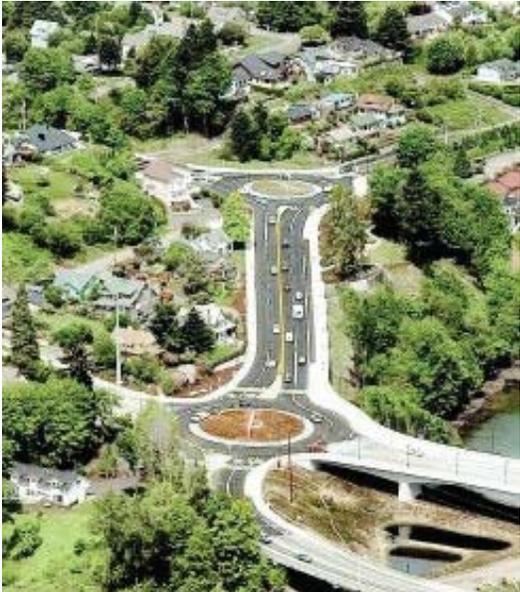




Above: Brighton, Michigan's roundabout handles 21,000 vehicles per day. Placement of roundabouts facilitates through traffic and turning movements without requiring signal control. Roundabouts are made up of a circulating roadway with an island that is often used for landscaping or other decorative features. 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).





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: Example of attractive, gateway mini-circles. Top photo, Holland, Saskatchewan. 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 Saskatchewan 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 price circles can be used elsewhere in the community.

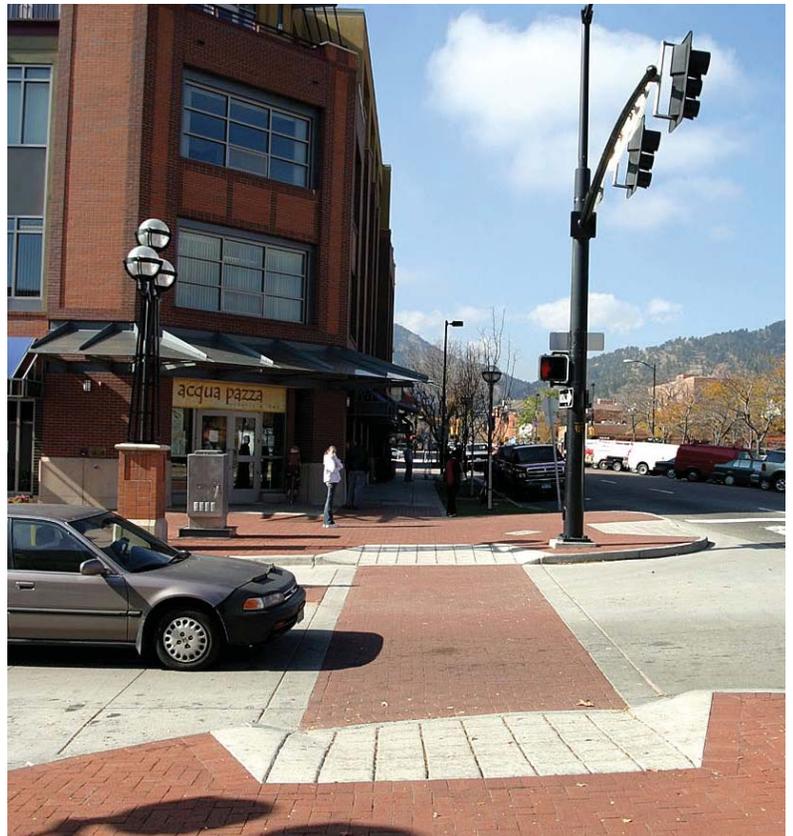
Mini-circles reduce the potential for crashes by 90%. Yield controls are used on all approaches. Seattle, Washington has placed over 1,200 mini-circles, reducing injuries 99%.





The above and below images show a broad range of how well roundabouts can be shaped to meet conventional (Grand Rapids) or unusual (Bend, Oregon) conditions. For the most part, walking is neither comfortable, nor welcoming when streets are designed only for autos. At times Allegan's speeds are too high. By significantly slowing traffic and greening the area, Allegan will stitch its civic spaces together, enhancing its newly defined park space, and providing ease of parking.

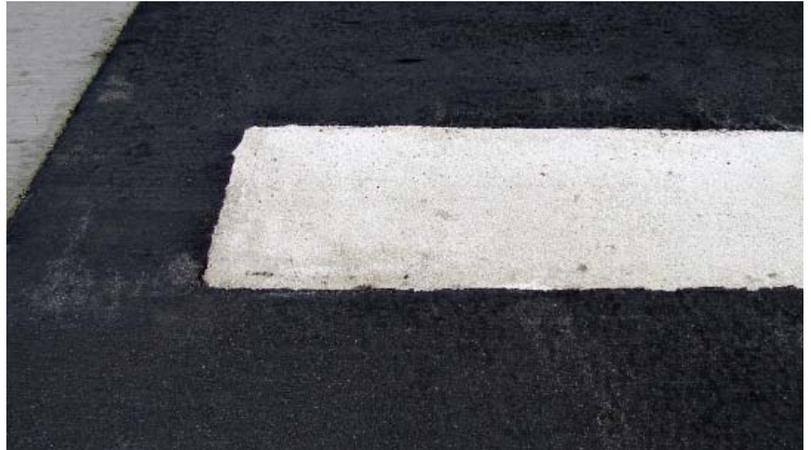




Additional tools can be used to aid pedestrians in crossing streets safely. Curb extensions reduce crossing distances. Landscaping helps channel pedestrians to ramps. Using two ramps per corner simplifies crossings. Color contrast is an aid for older pedestrians and pedestrians with visual problems.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



Shown on these two pages, the use of materials to create attractive streetscape features can add beauty, function and place to downtown Allegan. Each functional part (i.e. parking, crossings, curb extensions, lane narrowings) should be designed to add to the charm, aesthetics, character and integrity of each street. Following European examples, many street traffic operations signs can be removed, once the street “reads” correctly, that speeds are to be low, courtesies toward people high.



Crossings

Principles: Crossings should be well placed, located where there is a strong desire to cross, where sight distances are good, where speeds are low.

This Golden, Colorado crossing makes use of several important principles, the street is narrowed (to sixteen feet of asphalt, with another 2 feet of street width in each concrete valley gutter). Growth of ground cover (keep trimmed to 20-28 inches) and tall vertical trees, in time, will complete this crossing. This road was once 40 feet wide. Today parents feel comfortable having their children make crossings along a popular park and trail.

Use high emphasis markings. A new approach is being used (noted in the center photos) with paving ground down about 1/3rd of an inch. A hot ceramic mix is poured in, then reflective glass beads are settled on top. This anti-slip design is expected to wear well and outlast the life of the road surface. If desired, crossings can also be raised. This raised table has a 1:16 gradient change.



Tools used to slow traffic and help people cross streets.

If space exists where some crossings will be warranted, then a median island can be added. This is a former 4-lane road, in Olympia, Washington. With medians, pedestrians are only exposed to one direction of moving traffic at a time. Medians should have both ground cover and trees to make them more noticeable to motorists from greater distances. Use of these features slows speed, then draws attention to the crossing.



Parking and Placemaking

Principles: The retail life of a town center is supported best by having sufficient on-street parking. Parking areas should also be attractive, adding to the sense of place of a community center. Many towns fail to use their streets wisely, often leaving them stark and uninviting. These towns induce speeding by having too much space for vehicular flow, and not enough for street car storage.

On-street parking adds value through convenience and by only taking one third as much land as off street parking. On-street parking belongs on center city streets, serving as a buffer between moving cars and pedestrians. Performed well, on street parking is a vital means of creating a wall of separation between vehicular flow and the social life along the edges.

On-street parking is also a natural traffic calming tool. When used in conjunction with curb extensions (bump outs) and tree wells, parking is said to be inset, narrowing streets, making pedestrian crossings easier, more comfortable and safe. Used with curb extensions, angled parking reduces pedestrian exposure in both time and distance, and makes pedestrians visible to motorists, and motorists visible to pedestrians.

In time, to achieve compact town center form, where more people can live and help activate the town center, it will be necessary to move away from over done levels of off-street parking. Once a full and vibrant retail life is achieved in a town center, each parking space becomes worth \$200,000 per year. Thus, attention to using town center streets to maximize convenient parking, is urgent and paramount to town revitalization.

Specific recommendations:

- If front-in angled parking is used (highly recommended) the entire curb to curb dimension can be 54-58 feet. When front-in angled parking is used, lane widths can be much narrower, since back out “discovery time” is not needed. Also, the back end of vehicles have more overhang, so less space is used.
- Parking bay depths should be 15 feet. An added two foot of space is picked up when valley gutters are used (highly recommended). See valley gutter in photos on page 4.
- Keep travel lanes to a combined width of 20-22 feet.



Parking in town centers. *Efforts should be made to reduce or eliminate off-street parking. Go with maximum requirements rather than minimum requirements. Avoid all suburban style parking. Added on street parking helps slow traffic speeds, creates an important buffer for walking, adds to the social life of the street and frees up land for development.*



Modern streetscaping creates a town identity and character. The area surrounding Allegan's civic heart must be captivating and rewarding. Today many roadways on the edges of downtown are stark. This is worsened by a lack of defining edges, and lack of functional and other visual definitions. Images on these pages show how well areas can be transformed into places of authentic beauty and added function, while providing (easy pedestrian street crossings, low speed, improved access to commercial and civic buildings, well defined open space, and added parking). Note: Photos on this page are front-in angled parking found in Livermore, California. For many reasons (available space is one) back-in parking is preferred. Back-in parking has many advantages, and is shown and more completely described on pages 5 and 12-14.



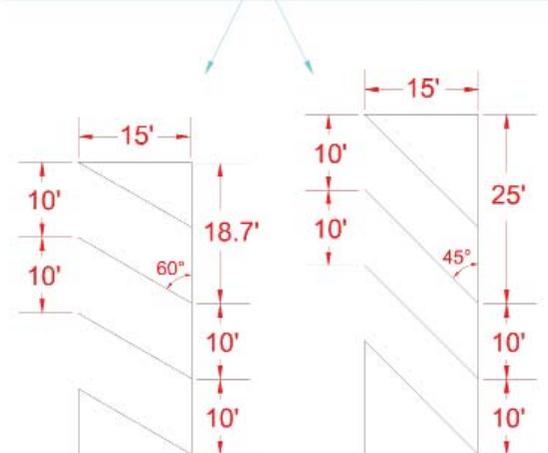
A center line is not used, unless a specific warrant can be found based on sight lines or another significant factor. This tight driving space helps keep speeds low, which reduces the chance of vehicle crashes.

- More parking should be placed on center town streets, freeing up other land for development, and helping hold down speeds.
- An added two foot of space is picked up when valley gutters are used with parking bays (highly recommended). See valley gutter in photos on page 4.
- Today there is insufficient physical width for sidewalks, especially on corners. Many corners in the downtown provide ideal locations for outdoor cafes.
- Modify town codes to promote urban design in all portions of the downtown, and reduce the impact of strip (suburban) style development.
- Take actions to incentivize infill investments in the town center, and remove current incentives to develop new strips, or to add on to current strips.
- Through a public and a private set of strategies, provide quality edges on all downtown parking lots.
- Over time tax those things that you wish to see decline (such as abandoned or undesirable properties and open parking lots), and give tax incentives for those things that are desired to build the community.
- Create a much stronger theme and use Allegan's authentic history and culture.



With front-in angled parking many communities max out their parking gain by using 60 degrees. With back-in angled parking the “yield” is reduced some when a 45 degree angle is used. Either angle is possible, but with back-in 45 degrees is more common, since it is easier to park

45 degree Back In angle Parking (BIAP) will always be 6.3 feet longer than 60 degree BIAP

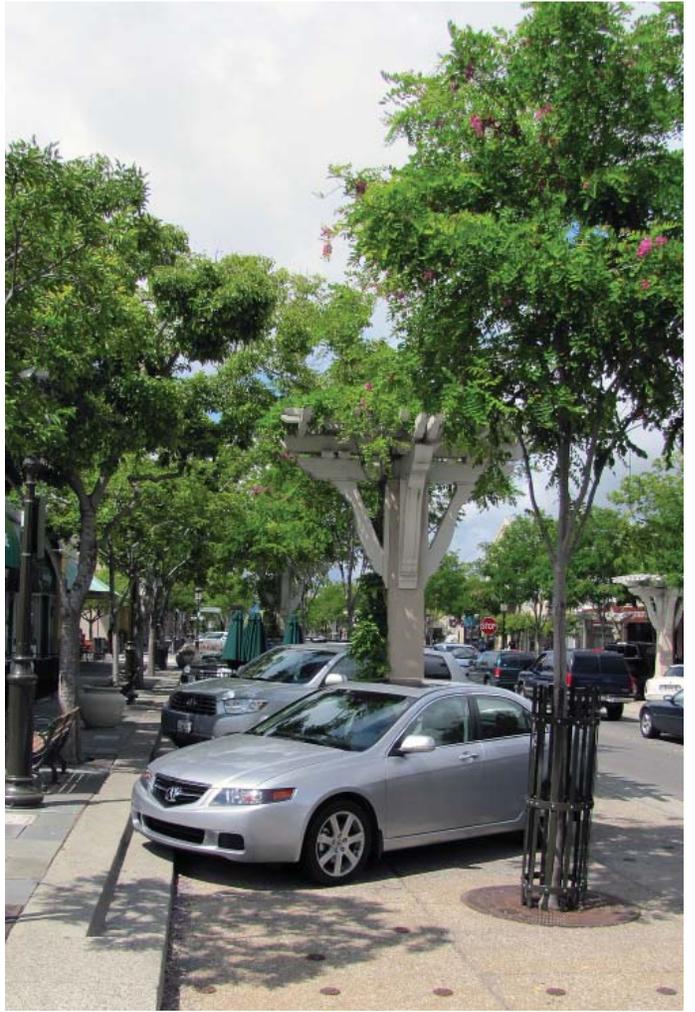




Left side. Keep sidewalks wide and comfortable. Back-in parking allows cars to overhang more than front angle parking, so set all fixtures (lamps, hydrants, signs, trees) 24-30 inches from the edge of curb. Note in the upper left the use of a different texture to depict the furniture zone. Right side. Note use of a valley gutter to add more parking space.

It is generally recommended that parking bays be no more than fifteen feet deep (perpendicular measurement). With a 2-foot wide valley gutter, bringing the full depth to 17 feet, all conventional and many oversize vehicles fit in this space. Omit center lane lines when using on street parking. This allows motorists to go around a car in the process of parking, when there is no opposing traffic. Removal of center lane lines has been shown to reduce traffic speeds and crashes.







There are multiple benefits to back-in angled parking. Back-in is the safest way to park a vehicle. Back-in increases the “yield” of how much on street parking can be used (from 30 to 110 percent). Back-in on-street parking maximizes use of adjacent land, since off-street parking takes up three times as much space as on-street. Back in parking is easier than parallel parking, it places the trunk where it is safe to access, it takes up less road space (adjacent lanes can be 11 feet wide).



The following document is a model of what we 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

Project Recommendations

When designing a new development, we recommend 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.

Tool 7. A checklist for identifying activities with which to proceed

This checklist identifies some criteria that can be used to set priorities among and select activities and interventions with which to proceed. Not all criteria apply to every activity; you also may have additional ones to apply.

Rank the activities from 1 (lowest) to 4 (highest).

Will achieve the goals and objectives of the plan	1	2	3	4
Will address the needs of targeted audiences and groups	1	2	3	4
Will help to reduce inequity	1	2	3	4
Recognizes and supports diversity	1	2	3	4
Can produce the desired results in the desired time frame	1	2	3	4
Will be supported by stakeholders and the leadership group	1	2	3	4
Will be supported by residents of the community or city	1	2	3	4
Will be supported by partners in a variety of sectors	1	2	3	4
Will be supported by external funding agents	1	2	3	4
Has a clear lead agency or department	1	2	3	4
Takes full advantage of existing resources and initiatives	1	2	3	4
Can be implemented with available financial resources	1	2	3	4
Can be implemented with available staff and voluntary resources	1	2	3	4
Will not conflict with or duplicate other initiatives	1	2	3	4
Can be realistically implemented within the time frame	1	2	3	4
Can be evaluated	1	2	3	4
Is sustainable over the long term	1	2	3	4
Will attract mass-media support	1	2	3	4

Source: adapted from *Community physical activity planning: a resource manual* (16).

Publications authored by Dan Burden and others

ITE's Traffic Safety Toolbox (bicycling)

Dan developed the chapter in the ITE Traffic Safety Toolbox ("The Yellow Book") that addresses steps that can be taken to enhance designs inclusive of the safety needs of bicyclists. (Available through ITE, written circa 1994).

12 Steps Toward Walkable Communities

One of Dan's earliest works, written while at the Florida Department of Transportation. This publication combines each of the ingredients leading toward walkability in a simple, graphic format. Provides both text and graphic support for the reader to better grasp the concepts and approaches needed to achieve walkability. Available through the Florida Department of Transportation and electronically through:

www.walkable.org/resources, written in April 1995. <http://www.walkable.org/assets/downloads/12STEPS.pdf>

Street Design Guidelines for Healthy Neighborhoods

Dan assembled a team of five experts and, charrette style, they produced one of the earliest definitive guides to the design of streets for all users of the street. This guide has come to be used widely throughout North America as the starting point and a check point for new street design. (Available through the Local Government Commission Bookstore, www.lgc.org/bookstore, written in 1996).

Oregon Main Street Guide

Under a contract to the Oregon Department of Transportation, Dan facilitated a team of 50 engineers, planners and Main Street stakeholders to create the Oregon Main Street Guide. (Available through the Oregon Department of Transportation, written in 1998).

Citizens Guide to Traffic Calming (Streets and Sidewalks, People and Cars) Dan Burden and Paul Zykofsky teamed together to develop a hands-on guide to traffic calming North America's streets. Written for the lay person, many towns, cities and states use this as their guide to communicating a better way to design streets. (Available through the Local Government Commission Bookstore (www.lgc.org/bookstore), written in 2000).

Emergency Responders Guide to Traffic Calming and Healthy Streets

Dan Burden and Paul Zykofsky teamed together to develop a publication that specifically addresses the needs of Emergency Responders as they explore ways to collaborate with their communities on the design and layout of streets systems that work for everyone's needs. (Available through the Local Government Commission Bookstore (www.lgc.org/bookstore), written in 2000).

How Can I Find and Help Build a Walkable Community?

Written by Dan Burden to help the average new home buyer, retiree, or person looking to settle into a new job or locating (or building) a Walkable and Livable Community. This nine-page article is well illustrated with photos of the most walkable communities. At the end of the article is a listing, state

by state, of example walkable communities. This is only available in electronic form through: www.walkable.org/resources written in 1996. <http://www.walkable.org/assets/downloads/How%20Can%20I%20Find%20and%20Help%20Build%20a%20Walkable%20Community.pdf>

22 Benefits of Urban Street Trees

A current publication that overcomes many of the tired myths of urban street trees, pointing out the safety, aesthetic, monetary, environmental, walkability, sustainability principles and practices of urban street trees.

This is only available in electronic form through www.walkable.org/resources, written in 2008.

<http://www.walkable.org/assets/downloads/22%20Benefits%20of%20Urban%20Street%20Trees>.

22 Reasons for Paved Shoulders (and Bike Lanes)

Written by Michael Ronkin, but popularized through the Walkable Communities web site for the past fifteen years. A current publication that explains that most of the benefits of both paved shoulders and bike lanes are a value to all street users, especially motorists, but an important side benefit to bicyclists, pedestrians, deliveries and much more. This is only available in electronic form through www.walkable.org/resources, written in 2008.

Road Diets

In March, 1999 Dan Burden and Peter Lagerwey co-authored the definitive article on Road Diets, coining and introducing the term to the world. This concept to take away lanes to build healthier streets has now become a common tool in the traffic engineering world. Road Diets decrease crashes 20-70%, help bring down traffic speeds 2-7 mph (top end speeds even more), and otherwise build more walkable, livable, bicycle and transit friendly corridors. This is only available in electronic form through www.walkable.org/resources, written in 2008. <http://www.walkable.org/assets/downloads/roaddiets.pdf>

Healthy Development Checklist

Developed by Dan Burden for Weld County, Colorado. This useful checklist provides a self-evaluation, or guide, to the developer, planner, planning commissioner, or elected official on some of the more common and important parts of a healthy development. The list can be used for infill development, or green field development. Well illustrated with color graphics and photos. This is only available in electronic form through www.walkable.org/resources, written in 2008 http://www.walkable.org/assets/downloads/healthy_development_checklist.pdf

Articles and Publications About Dan

He Takes Back the Streets for Walking, TIME Magazine, 2001 TIME Magazine, in 2001 declared Dan as one of the six most important civic innovators in a special series they ran. Check out the article to learn why. <http://www.time.com/time/magazine/article/0,9171,1000144,00.html>

Walk This Way, Men's Health Best Life Magazine, By Will Rizzo, My Cause 2009

One of the best overall graphic pieces on how to lay out a main street, written for advocates who wish to help reinvent their downtown. <http://www.walkable.org/assets/downloads/BL0509MyCause.pdf>

A Bumblebee for Walking, Great Lakes Bulletin, 2009 Written by Keith Schneider for the Great Lakes Bulletin News Service, January, 2005. Article is an interview with Dan and it features the way Dan is going about changing towns to look at traffic and town centers in new ways. <http://www.mlui.org/transportation/fullarticle.asp?fileid=16781>

Crimes of the Heart, NEWSWEEK Magazine, 2010 The importance of an active life is brought out by the authors as they tell the story of Dan Buettner (author of Blue Zones) who took on the task to define how to better design a community for human health. Dan Burden is quoted for his work to oversee re-design of the built environment for Albert Lea, Minnesota. In the article Dan Burden is quoted as saying, "Require that sidewalks and bike lanes be part of every federally funded road project. The government already spends 1 percent of transportation dollars on such projects. It should increase the level to 2 to 3 percent. When sidewalks are built in neighborhoods and downtowns, people start walking. "The big win for city government is that anything built to a walkable scale leases out for three to five times more money, with more tax revenue on less infrastructure," says Dan Burden, executive director of the Walkable and Livable Communities Institute. He recommends a "road diet" in which towns eliminate a lane or two of downtown traffic and substitute sidewalks. "When roads slim down, so do people," he says" <http://www.newsweek.com/id/233006>

New ICMA Publication on Rural Smart Growth

26 July 2010

Download free report that examines challenges facing rural communities and focuses on smart growth strategies.

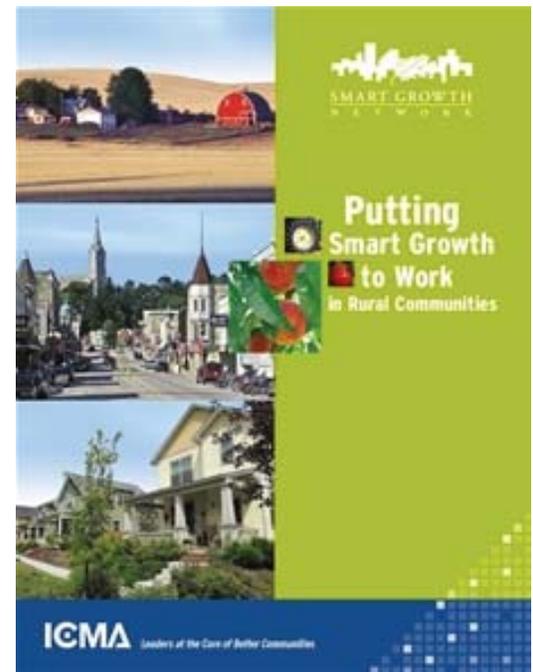
ICMA has recently released a new publication on policies and practices to guide smart growth in rural communities. “Putting Smart Growth to Work in Rural Communities,” examines challenges facing rural communities and focuses on smart growth strategies that can help guide new growth in rural areas, while protecting natural and working lands and preserving the rural character of existing communities.

In the United States, about 75 percent of the land area is rural, and 17 percent of the population, or about 49 million people, live in rural communities. Today, many rural communities are facing changes and challenges. Some are losing population and seeing fewer family farms and farmers. Others are becoming bedroom communities and losing land to rapid growth on metropolitan edges. Many struggle with limited accessibility, which can prevent critical goods and services from reaching these communities and make access to jobs difficult, as well as with limited planning capacity, which can make planning for change a challenge and lead to haphazard development patterns.

Strategies and supporting tools and policies are centered around three goals: 1) supporting the rural landscape by creating an economic climate that enhances the viability of working lands and conserves natural lands; 2) helping existing places to thrive by taking care of assets and investments such as downtowns, Main Streets, existing infrastructure, and places that the community values; and 3) creating great new places by building vibrant, enduring neighborhoods and communities that people, especially young people, don't want to leave.

The report uses case studies from local governments, states, and nonprofit groups from across the country to highlight how the strategies, tools, and policies have successfully implemented smart growth strategies to support rural lands, revitalize existing communities, and create great new places for new and long-time residents, as well as visitors. Case studies include building the agritourism industry in Vermont; investing in preserving rural towns and landscapes in Kentucky; and protecting rural character through compact growth in Sioux Falls, South Dakota, among others.

The full report is available at www.icma.org/ruralsmartgrowth.



New Designs for Growth represents a collaboration of efforts promoting planning and development best practices that accommodate growth and maintain quality of life in Northwest Lower Saskatchewan

www.newdesignsforgrowth.org/

The above link will take you to New Designs for Growth Development Guidebook. I helped with this publication for the small rural communities in NW Lower Saskatchewan. It's a pretty good resource document.

Resources

1000 Friends of Oregon: www.friends.org
Better Environmentally Sound Transportation:
www.best.bc.ca

CivicInfo: www.civicinfo.bc.ca
Federation of Canadian Municipalities: www.fcm.ca
International Downtown Association:
www.ida-downtown.org

James Taylor Chair in Landscapes and Livable Environments
UBC: www.sustainable-communities.agsci.ubc.ca/about.html
New Rural Economy:
www.landcentre.ca/lcframeweb.cfm?ID=5382

New Schools Better Neighbourhoods: www.nsbm.org
Pedestrian and Bicycle Information Centre:
www.walkinginfo.org

Project for Public Spaces: www.pps.org
Smart Growth BC:
www.smartgrowth.bc.ca

Smart Growth America: www.smartgrowthamerica.org

Smart Growth Network: www.smartgrowth.org

Sustainable Communities Network: www.sustainable.org

The Land Centre: www.landcentre.ca

US Green Building Council: www.usgbc.org

Victoria Transport Policy Institute: www.vtpi.org

Walkable Communities Inc.: www.walkable.org

West Coast Environmental Law: www.wcel.org

