

Where Georgia comes together.

Perry Planning Commission - Agenda Special Called Meeting Workshop Thursday, November 15, 2018 5:30pm

CALL TO ORDER

ROLL

INVOCATION

NEW BUSINESS

1). Discussion of street design standards

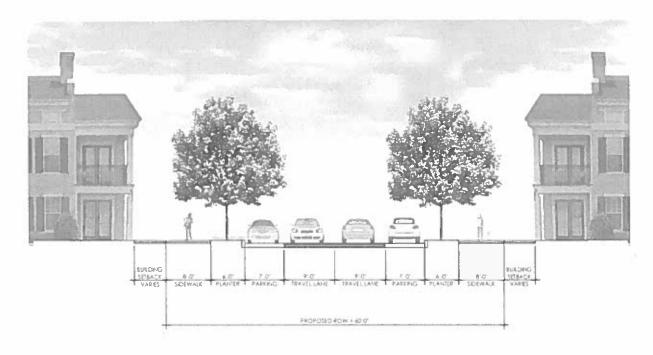
OTHER BUSINESS

ADJOURN

	v	Max Length (ft)	none		None found	600 or serving more than 19 lots	600 to 800 depending on topography	2,000	1,200	попе	900
Standards	Residential Cul-de-sac	R-O-W Diameter (ft)	120 100 prior to adoption of LMO		110	100	100	100 urban 120 rural; 100 with curb & gutter	100 Cul-de-sac max length 1,200 ft	82 minor 100 major	106 local
Residential Street and Cul-De-Sac Design Standards		Diameter (ft)	96 80 prior to adoption of LMO	Cul-de-sacs not allowed except by variance	80 to back of curb	80	80 to back of curb	80 urban and rural	80 to inside of curb	64 back of curb minor 80 back of curb major	84 back of curb local Not allowed on collector
idential Street and		R-O-W Width (ft)	50 for dead end 60 for minor 40 for minor res in conservation s/d	50 local 60 collector	50 for up to 400 lots 60 for over 400 lots	50 for local 60 for collector	50 for local st 60 for res s/d w/ lots greater than 20,000	50 urban 60 rural; 50 with curb & gutter	50 local 60 collector	44 minor 50 major	50 local 60 collector
Comparison of Res	Residential Street	With Curb (ft)	27	Local includes parking one side 8' Collector includes parking both sides	24 28	24 local 28 collector	28	27 urban and rural	24 local 34 collector	22 minor 24 major	28 local 32 collector
		Pavement Width (ft)	23	26 local 32 collector	20 for up to 400 lots 24 for over 400 lots	20 for local 24 for collector Collector is street with over 100 average peak hour trips	24	23 urban 27 rural; 23 with curb & gutter Rural is s/d with 40,000 sf lots	20 local 30 collector (includes 8' of bike lanes) No clear definition of collector	Not indicated w/out curbing Minor serves up to 50 lots; Major over 50	24 local 28 collector Collector serves 100 or more lots; local less than 100
	Č	Č	Perry Standard Regs	Perry Form Based Code	Canton	Carrollton	Douglasville	Duluth	Dunwoody	East Point	Gainesville

		Residential Street			Residential Cul-de-sac	
Şî Ö	Pavement Width (ft)	With Curb (ft)	R-O-W Width (ft)	Diameter (ft)	R-O-W Diameter (ft)	Max Length (ft)
Hinesville	22 no parking 42 parking both sides	26 no parking 46 parking both sides	60 minor 60 collector	80 minor Not allowed on collector	100	009
Lawrenceville	18	22	44 less than 50 lots 50 more than 50 lots	80 back of curb	100; 120 if center landscaping	009
Newnan	24	29	50 local 60 minor collector	None for local 100	100 local 120 collector	200
Peachtree City	22 residential 24 neighborhood collector	+ Curb and gutter but no detail found	50 residential 60 neighborhood collector	80 w/out island 100 w/ island, 20' min pavement	100	none
Peachtree Corners	23 urban 24 rural; 23 with curb & gutter Rural is s/d with 40,000 sf lots	27 urban and rural	50 urban 60 rural; 50 with curb & gutter	80 urban and rural	100 urban 120 rural; 100 with curb & gutter	2,000
Rome	23 urban residential 28 collector Collector serves 200 or more lots	27 urban residential 32 collector	50 urban residential	80 edge of pavement	100	1600
Stockbridge	22	26	90	80 back of curb	110	800
Woodstock	Minor res 24 Minor collector 28		Minor res 50 Minor collector 60	74 back of curb	100	

G. Collector Street Residential



Width	
Right-of-way Width	60 feet
Face of curb to face of curb width	32 feet
Streetscape	The second secon
Sidewalk	8 feet
Planter	6 feet
Planter Tree Spacing (max.)	40 feet on-center
Planter Type	Landscaped
Travelway	
Parallel Parking	7 feet
Travel Lane	9 feet

D. Local Street Residential



Width	
Right-of-way Width	50 feet
Face of curb to face of curb width	26 feet
Streetscape	
Sidewalk	6 feet
Planter	6 feet
Planter Tree Spacing (max.)	40 feet on-center
Planter Type	Landscaped
Travelway	
Parallel Parking	8 feet
Travel Lane	9 feet

For Best Printing Results, Use Print Button at Bottom of Article

How Wide Should a Neighborhood Street Be? – Part 1

<u>by Steve McCutchan</u>

The Street Width Debate

Is suburban America ready to reduce local street widths, drive slower, and reduce neighborhood accessibility?



New urbanism and traditional neighborhood design has started a neighborhood

street width debate. For decades, suburban development with its long, curvilinear streets and cul-de-sacs led to wider neighborhood streets that flowed cars like rivers through single family home communities.

Negative consequences evolved from wider suburban streets, the worst being ever increasing vehicle speeds -- triggering attempts like speed bumps to slow cars down.

Determined to resurrect safer, pedestrian friendly narrow streets of traditional neighborhoods, new urbanists have pressed cities and towns to narrow street widths to both reduce vehicle speeds and create "friendlier" streets.

Many communities are now debating decreasing neighborhood street width. Planning commissioners need to understand the positive and negative aspects of each side of the debate. How narrow is too narrow -- and how wide is too wide?

Today and tomorrow, we'll look at some of the issues in neighborhood street widths, including information from recent research that has addressed the subject of safety.

The discussion of street width often centers around two issues – accessibility and safety.

Accessibility is a measure of how efficiently you can drive through a neighborhood.

Safety is whether traffic and vehicle speed poses a risk to pedestrians.

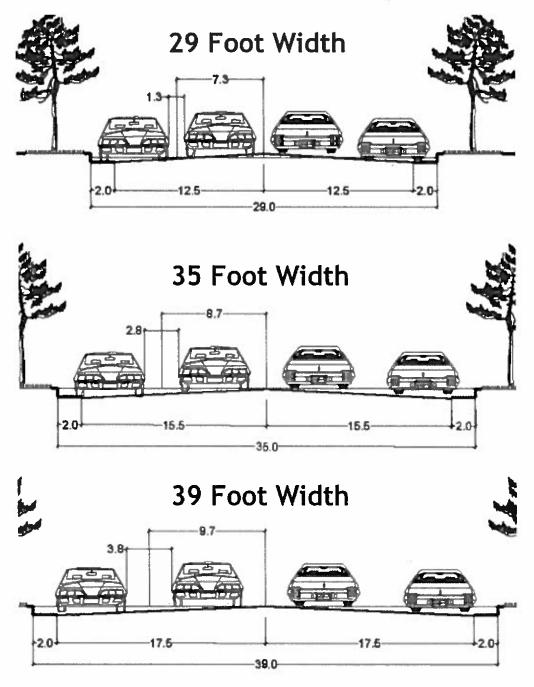
In discussions of neighborhood street width, each of these issues is typically addressed. Surprisingly, accessibility is often given more consideration than safety.

Is there a minimum neighborhood street width? An online search of standard minimum street widths provides information that illustrates a wide range of municipal ordinances regulating street width and design. There is little consensus on a minimum street width.

Some standards do stand out as reasonable minimums. For emergency access, 20 feet is commonly accepted as a minimum width for two way traffic. In addition, eight feet is necessary for on street parking. Therefore, 28 feet is a widely accepted minimum curb face to curb face neighborhood street width.

If 28 feet is a minimum, what is a workable minimum street width that balances accessibility and safety? The illustration below shows three commonly used neighborhood street standards, 29, 35, and 39 feet curb face to curb face. Generally right-of-way widths (which would include sidewalks and the green space between the sidewalk and the curb) for these would be 50, 55, and 60 feet, respectively.

The illustration also shows the distance between vehicles for the three typical street widths. The average width of a vehicle is six feet.



The spacing for a car on the 29 foot street is 7.3 feet, or a distance of about 1.3 feet, or 15.5 inches between vehicles, not a comfortable driving distance between vehicles.

The 35 foot street proportional spacing is 8.7 feet, a distance of 2.8 feet or 33.6 inches between vehicles.

The 39 foot street width spacing is 9.7 feet leaving 3.8 feet or 45.6 inches between vehicles.

While the 29 foot street vehicle spacing requires opposing drivers to slow down and give the right-of-way, the 35 and 39 foot street vehicle spacing do not -- even when passing parked vehicles on both sides of the street. Unfortunately, wider streets designed for driver convenience usually encourage speeds that are not safe in residential neighborhoods.

In the street debate, significant importance is given to the daily trip in and out of neighborhoods. Many drivers see the accessibility of driving unconstrained through their neighborhood as being very important. This (along with concerns about access of fire fighting equipment) has driven the movement in the past toward wider neighborhood streets. In contrast, within a narrow street neighborhood, drivers must slow or stop to allow opposing traffic to pass because of vehicles parked on the street.

<u>Tomorrow in Part Two</u> – Street Width & Safety. We will examine studies that measure the relationship between street width, increased speeds, and the impact of speed on the severity of pedestrian injuries from traffic accidents.



Steve McCutchan works as a land planning and urban design consultant

for Blu Line Designs, a Salt Lake City, Utah land planning, urban design, and landscape architecture firm and specializes in preparing master planned communities, planned developments, site plans, and subdivisions for the Mountain West's land development and home building industries.

In addition to his more than 37 years of professional experience, Steve has worked to broaden his career by lecturing, teaching and writing on land planning, urban design and land development. He has lectured and taught at universities in California and Utah and contributed to professional journals throughout the United States. Steve is the recipient of an American Planning Association's National Award for Outstanding Planning for comprehensive planning and several chapter awards for urban design.

In upcoming columns, Steve will be taking a closer look at a range of land use and development issues, such as creating sustainable neighborhoods centered around schools; the future of suburban shopping malls; and the extent to which residential development pays for itself.

Share

Print

Tags: Public Health & Safety, Streets & Roads

css.php

For Best Printing Results, Use Print Button at Bottom of Article

How Wide Should a Neighborhood Street Be? – Part 2

by Steve McCutchan

-- continued from Part 1

Street Width & Safety



The safety issue takes different paths to achieve that same objective, safer street for

pedestrians. New urbanists focus on narrow streets as the most effective way to slow traffic, combining that with increased access points to a neighborhood, allowing for traffic to be more evenly distributed. Others advocate traffic calming devices, particularly as solutions in established neighborhoods with already built wide streets.

New urbanists have been on the forefront of advocating narrower neighborhood streets that: (1) slow traffic to 10 and 15 miles per hour; (2) respect and protect the pedestrian; and (3) promote streets as neighborhood activity areas.



The move toward narrower streets, as proposed in most all new

urbanist developments, has met with resistance, chiefly from fire and emergency safety officials in communities where established standards of wide streets have been in place for many years. Both sides -- the fire / emergency safety establishment and the new urbanists upstarts -- have armed themselves with empirical data proving they are right.

To assist you in deciding where you stand, let's look at some of the data and issues in the debate to help you decide what is best for your neighborhoods and community.

Originally published in 1977, and updated in 2002 and 2006, Swift & Associates (Swift) – a Boulder, Colorado town planning, civil and traffic engineering firm – published a report –"Residential Street Typology and Injury Accident Frequency" — that examined data from 20,000 injury accidents in suburban Longmont, Colorado. The objective of the

Longmont study was to create a method of empirically analyzing whether neighborhood street width affects injury accident frequency.

Within the study, Swift focused on a range of street and neighborhood characteristics. The characteristics included street curves, street widths, tree density, parking density, sight distance, and similar items. The resulting accident numbers were placed in a multiple regression analysis and compared.

The conclusions of the Swift study found substantial differences between injury accident frequency on narrow and wide streets. If we use Swift's findings and compare them to the three different street widths we discussed yesterday, you get some striking results -- an average of

- 0.07 accidents per mile per year (a/m/y) for the 29 foot wide street;
- 0.16 a/m/y for the 35 foot wide street; and
- 0.27 a/m/y for the 39 foot wide street.

The increase in accidents per mile per year between our three streets is quite substantial: 128% between the 29 and 35 foot wide; 68% between 35 and 39 foot wide; and a whopping 286% between 29 feet and 39 feet.

The Swift study demonstrates that a strong relationship exists between street width and an increase in the number of injury accidents. Narrow streets are safer than wide streets.

But one thing the Swift study did not look at was the relationship between street width and increased vehicle speed. In 1997, James Daisa and John Peers, both professional engineers, published a study titled "Narrow Residential Streets: Do They Really Slow Down Speeds?" based upon a study done in San Francisco. The conclusions of their study were that wider residential streets experience higher speeds, and that presence of on-street parking significantly affects vehicle speeds in residential neighborhoods. This is no surprise because we see the cause and effect of wider streets and speed every day.



The final piece of the puzzle is the relative survivability of pedestrian / vehicle

injury accidents and speed.

The FHWA notes 1 that a pedestrian has a:

- -- 95 percent chance of surviving being struck by a vehicle traveling 20 mph;
- -- 55 percent chance at 30 mph; and a
- -- 15 percent chance at 40 mph.

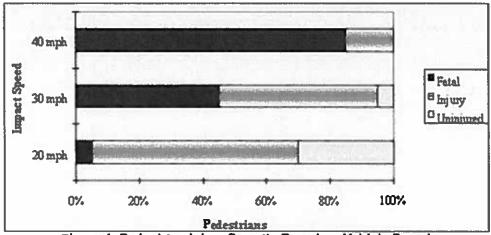


Figure 4: Pedestrian Injury Severity Based on Vehicle Speed.

Combining the findings of the street width and the vehicle speed studies we can deduce that narrower streets reduce accidents and lessen severe injuries. Wider streets increase accidents and encourage drivers to speed resulting in more severe injury accidents.

The question remains regarding street width and adequate passage for fire emergency vehicles. ² To determine the adequacy of emergency access, these items should be taken into consideration.

- 1. Is there sufficient street width to provide an average passage width of 20 feet even when parking is permitted on both sides of the street? (An average passage width is where 20 feet is available for more than half of a street's length).
- 2. Is there enough connectivity in the neighborhood where responders have multiple choices of access to an emergency? Many suburban neighborhoods have long stretches of streets with minimal connectivity. In contrast, new urbanist developments stress multiple points of connectivity to disperse average daily trips.

Summing Up:

There's more to our neighborhood streets than just providing the fastest access possible for residents. It's more important for us to be aware of empirical data on the relationship between street width, vehicle speed, and safety. At the same time, we need to balance legitimate concerns by fire departments against the fact that wider streets have been shown to result in significantly higher injury accident rates.



Steve McCutchan works as a land planning and urban design consultant

for Blu Line Designs, a Salt Lake City, Utah land planning, urban design, and landscape architecture firm and specializes in preparing master planned communities, planned developments, site plans, and subdivisions for the Mountain West's land development and home building industries.

In addition to his more than 37 years of professional experience, Steve has worked to broaden his career by lecturing, teaching and writing on land planning, urban design and land development. He has lectured and taught at universities in California and Utah and contributed to professional journals throughout the United States. Steve is the recipient of an American Planning Association's National Award for Outstanding Planning for comprehensive planning and several chapter awards for urban design.

In upcoming columns, Steve will be taking a closer look at a range of land use and development issues, such as creating sustainable neighborhoods centered around schools; the future of suburban shopping malls; and the extent to which residential development pays for itself.

Notes:

- 1. <u>Pedestrian Facilities User Guide Providing Safety & Mobility</u> (FHWA, 2002), Pedestrian Crash Factors, p. 13. See also <u>Impact Speed and a Pedestrian's Risk of Severe Injury or Death</u> (AAA Foundation for Traffic Safety, 2011); the AAA study also compares risk of injury or death by age group).
- 2. Editor's Note: for some good observations on street width and fire equipment access, see Dan Burden, "Street Design Guidelines for Healthy Neighborhoods" (from TRB Circular E-C019: Urban Street Symposium; 1999). Burden notes that after a team of engineers, planners, architects, and others measured and analyzed residential streets in a number of communities: "although we found that 26-foot-wide roadways are most desirable, we measured numerous 24-foot and even 22-foot wide roadways, which had parking on both sides of the street and allowed delivery, sanitation and fire trucks to pass through unobstructed."

Share

Print

Tags: Public Health & Safety, Streets & Roads

css.php