Pedestrian Crosswalks

Community Input

GNA considered crosswalks as a top priority during the Study's Research Phase. For pedestrians and cyclists, the ability to safely cross University and Austin Avenues is critical. Based on written survey responses, crossing both University and Austin Avenues are a significant challenge for pedestrians and cyclists.

Here are summarized comments received by GNA during the online survey. You can access all specific comments made by survey participants in Section 7b (Attachments – Online Community Survey). The summarized comments are grouped by various sections of roadway.

Corridor Survey – University Ave between Hutto Road & Main Street (83 responses)

SUMMARY OF COMMENTS:

This stretch of University Avenue is widely seen as difficult and dangerous to cross. Traffic is traveling faster than the speed limit, and in clusters that include large trucks. Lights are not synchronized to give gaps in traffic. In general, drivers are not expecting pedestrians or bikes - several people mention this - and it's especially true when drivers make turns, which are often fast.

With so much fast traffic, there's a sense of dodging traffic - it's a wide road, and as noted, "4 lanes is a long way to cross." This is especially dangerous with children. There's no good place to cross except at Maple. Even there, cars and trucks sometimes run the light - traffic should be slowed before the light, and again at College. At the Main Street crossing drivers are distracted, not expecting pedestrians, especially as they turn.

Some people will walk to the crossings at Maple or Main, but as Question 9 below shows, the majority seems to cross where their feeder street is, the whole length of this route. Jaywalking seems the only way to cross for many. Some people mention aggressive drivers.

Slowing traffic down is the predominant theme throughout this survey. One comment calls for stop signs, not lights, at Hutto Road and College Street to kill the "thru-traffic" feel of University in this stretch.

Corridor Survey – University Ave between Austin Avenue & Scenic Drive (63 responses)

SUMMARY OF COMMENTS:

While the previous section of University felt to respondents like a wide, fast and open road to charge across, this section feels more narrow, more congested, with much more distraction for drivers, and very problematic to cross - and equally fast. Even in this congestion, drivers are racing to beat lights and speeding to beat the next one - they are not looking for pedestrians and even at crossings, pedestrians are regarded as a hindrance.

There are no lights or signs to slow traffic or warn them of pedestrians, and it is difficult for pedestrians to gauge how much traffic is approaching or how fast. With a lot of commerce on either side of the street, cars turning into or out of a side road are the greatest threat: drivers are turning onto University and speeding up to match traffic or turning off University against lethal oncoming traffic - in both cases not expecting or seeing pedestrians and with no leeway to slow or stop anyway. Crosswalks painted on the side streets are largely invisible to drivers and, as noted, offer no safety to walkers from turning vehicles.

The roadway traverses a residential area, and people cross in the AutoZone/Dollar General area, which is very dangerous. The only safe places to cross are at the two lights, which are quite a distance apart. The Austin Avenue crossing is busy, drivers have many distractions and are not looking for pedestrians or welcoming them - drivers have honked at pedestrians.

The Scenic Drive crossing is a wide road requiring both directions of fast-moving traffic to stop. Scenic Drive through-traffic has a short light to clear the intersection, and drivers don't like to wait for pedestrians. Bikers don't feel safe riding with through traffic across University; they have to walk bikes on the pedestrian crossing. The light for the crossing is a long wait. On the north side, the crosswalk button is hard to get to, on a narrow slope of sidewalk - difficult with kids, stroller, bike, etc.

Corridor Survey – Austin Avenue between 6th Street and 2nd Street (67 responses)

SUMMARY OF COMMENTS:

The hill topography of this section of Austin Avenue poses a great problem: cars are fast on a wide open, 4-lane road, and there is poor visibility for drivers seeing pedestrians and for pedestrians anticipating traffic surges.

Along Austin Avenue there is no buffer between the sidewalk and the roadway. Traffic is too fast. There aren't many breaks in the traffic flow. Traffic needs to be "SLOWED DOWN" - there's really no need for speed, but speed is what there is.

The painted crosswalk at the Monument is especially dangerous - neither drivers nor pedestrians are clear as to who has the right of way; and visibility is deceptive - this is called "terrifying" to cross with children. Traffic leaving downtown is accelerating on what seems like a clear driving stretch with no more pedestrians crossing (leaving downtown behind) and racing to meet lights in the distance. At the same time, traffic coming up the hill is moving fast and not aware of pedestrians trying to cross the roadway.

As stated frequently, many drivers seem to feel that pedestrians don't have the right of way, and even in the crosswalk, drivers won't stop for pedestrians. [NOTE: Absent a culture of automatic deference to pedestrians, extra warnings and signage are needed everywhere anyway - but especially where topography and visibility conspire against the pedestrian.]

Corridor Survey – Austin Ave between University Ave & 9th Street (53 responses)

SUMMARY OF COMMENTS:

Traffic is moving a shorter distance between lights on this stretch, but still fast. Visibility is poor because of parked cars. Turning cars are a hazard. Drivers are distracted and anxious, looking at shops, looking for parking, making decisions. As commented everywhere, there's nothing to slow traffic down or to alert them to pedestrians - it needs signage and calming. Even at the traffic lights with pedestrian lights, people have almost been hit by drivers not stopping.

Again, the culture of not yielding to pedestrians is a significant problem. Even the crosswalk with flashing lights at 10th is a problem: pedestrians report traffic only stops half the time; crucially, drivers don't know how to respond when pedestrians are waiting to cross - no one knows the state law, and this MUST be spelled out with signage.

The only safe places to cross are at the lights of University or 8th Street.

Corridor Survey – Austin Avenue between University Ave & W 18th Street (38 responses)

SUMMARY OF COMMENTS:

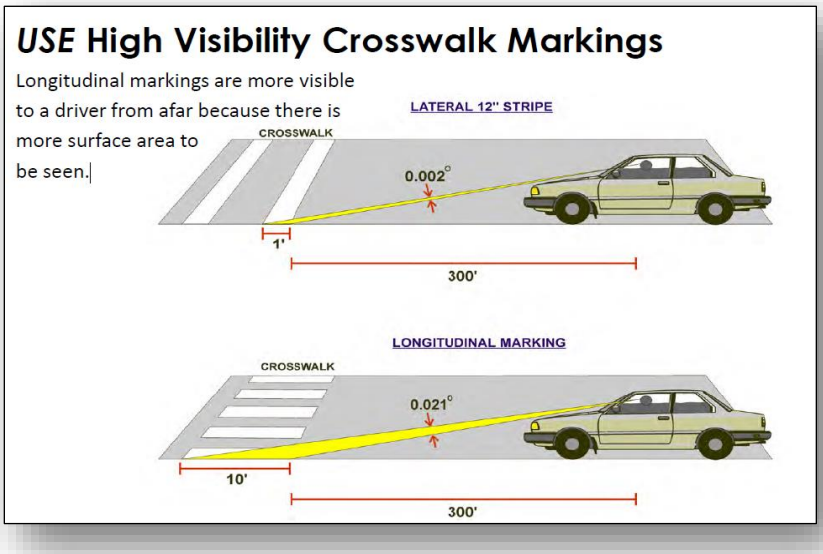
This is a fast stretch of road: wide, open and daunting to cross. Cars heading south from University especially accelerate rapidly and break the speed limit. One resident runs across the road, while others simply change their patterns to avoid having to cross it.

This is a "RESIDENTIAL" neighborhood and families should be able to cross the road without danger. There is nothing to slow cars down or to warn them of pedestrians. Drivers aren't expecting pedestrians to cross the street in this area.

Crossing at 18th Street is very dangerous, turning vehicles especially are careless. Fast traffic can appear suddenly. The only place to cross is the flashing light crosswalk at 16th Street - however, cars often don't stop for pedestrians even there. There are no warning signs about "STATE LAW". [Again, we see the probability that unless we slow and warn drivers, inadequate crosswalks are an invitation for pedestrians to be hit by cars.]

Research

In the past few years, the City of Georgetown has made several design improvements to 2 crosswalks on University Ave. GNA research found that a key design factor for pedestrian crosswalks is the level of visibility of the crosswalk to the oncoming drivers.



GNA research identified five effective crosswalk design concepts to have merit.

Raised Pedestrian Crosswalk is a combination of speed tables that can be used at midblock or intersections and in controlled or uncontrolled locations. Raised pedestrian crosswalks serve as traffic calming measures by extending the sidewalk across the road and bringing motor vehicles to the pedestrian level. Raised crosswalks also improve accessibility by allowing a pedestrian to cross at nearly a constant grade without the need for a curb ramp and makes the pedestrian more visible to approaching motorists.

They have a trapezoid-shaped cross-section to slow motorists at the pedestrian crossing where the slowing will be most effective. Speed tables outfitted with crosswalk markings are used on local streets, but the design needs to consider emergency vehicles.

Studies have shown that there is a 69-91% improvement in driver yielding and the reduction of vehicle speeds to 20-30 mph at these crosswalks.

Colored crosswalks have become a popular way to use colors, textures, and patterns to enliven city streets as engaging and safe places for people. They can be designed to reflect the special character of a neighborhood, mark the gateway to a district, or otherwise create local identity and pride.

They offer a playful, cost-efficient and low-maintenance tool to highlight marked pedestrian crossings. In addition to being fun, they raise awareness of pedestrian safety.

The City of Asheville transformed several blocks on Coxe Avenue into a colorful temporary road improvement that was part of their multimodal collaboration project called "Tactical Urbanism".

Asheville's "Tactical Urbanism" is a term used to describe a collection of low-cost, temporary changes to streets and sometimes neighborhoods, intended to test what might work best when considering permanent enhancements.

"*This is a chance to try before you buy a street design*," said Asheville Assistant Transportation Director Jessica Morriss. "*The installation can be adjusted during this testing period to find out what works best. Then we can incorporate what works into the ultimate street design*."

Using planters, paint, and street "armadillos," the designs incorporate more places for pedestrians and bicyclists, places to walk your dog or stroll with the family. The Avenue is a wide street, like Georgetown's Austin Avenue, allowing plenty of room for cars in addition to its creative pedestrian improvements. Asheville's approach was to make the Coxe Avenue corridor more accessible to multiple modes of transportation.

Colored crosswalks are a high visibility crosswalk design that is easier for drivers to recognize an upcoming crosswalk and have been shown to improve yielding behavior or drivers and to reduce crashes by 48%.

In-Pavement Warning Light Systems are enhanced LED lights embedded in streets alongside pedestrian crosswalks to warn drivers that a pedestrian is present, and that the driver should stop to allow the pedestrian to cross.

When a pedestrian approaches the crosswalk, the system is activated, and the LED lights begin to flash improving pedestrian safety. These lights are programmed to flash for a period of time that is sufficient for an average pedestrian to cross. While not bright enough to impair drivers' vision, the LED warning lights can reportedly be seen from up to 164 feet away.

Two methods exist for activation of the lights: 1) push a button like a pedestrian signal at an intersection, or 2) walk between two bollards which use break beam technology. If technology is installed to detect a pedestrian in the crosswalk, then the flashing time can be extended to allow for slower pedestrians to traverse the crosswalk.

In-Pavement Warning Light Systems have on-going maintenance costs and initial capital costs are higher than other pedestrian crosswalk warning devices.

Rectangular Rapid Flashing Beacons (RRFB) are active warning devices used to alert motorists of crossing pedestrians at uncontrolled crossings. They remain dark until activated by pedestrians, at which point they emit 2 bright, rapidly flashing yellow lights. This is the approach that the City has used on 2 recent crosswalks on Austin Avenue.

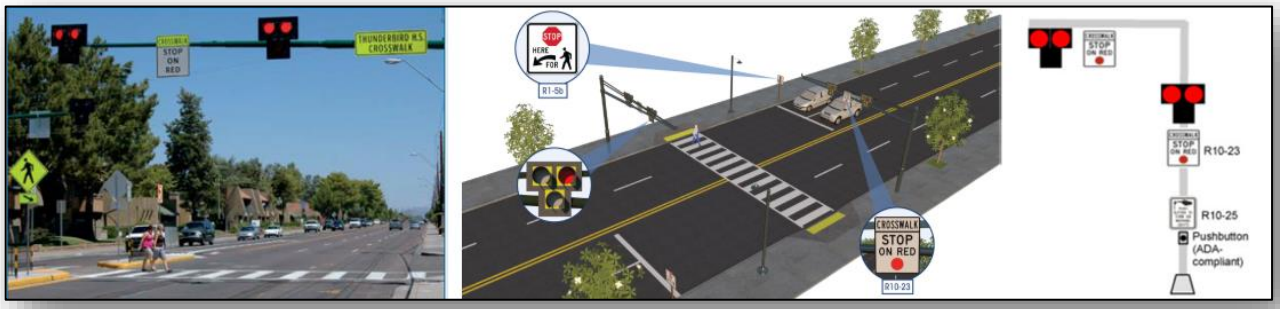
RRFBs are a lower cost alternative to traffic signals and hybrid signals that are shown to increase driver yielding behavior at crosswalks significantly when supplementing standard pedestrian crossing signs and markings. Since the pulsing LED lights are located on the side of the street, drivers looking ahead as they drive on wider streets might not see the LED lights, especially on a bright, sunny day.

Recent studies verify, RRFBs rank as the most effective and cost-efficient crosswalk device on the market today. Tests prove the RRFB can heighten driver yield rates by up to 96% and reduce pedestrian crashes by 47%.

Pedestrian Hybrid Beacons (PHB) are pedestrian activated devices located on the roadside or on mast arms over pedestrian crossings used to stop road traffic and allow pedestrians to cross safely. The beacons allow protected pedestrian crossings, stopping road traffic only as needed.

The beacon "head" consists of two red lenses above a single yellow lens. The beacon head is "dark" until the pedestrian wishes to cross the street.

A pedestrian pushes a button that activates the beacon. After displaying brief flashing and steady yellow intervals (during which cars must stop) the device displays a steady red indication to drivers and a "WALK" indication to pedestrians, allowing them to cross the street while traffic is stopped.



After the pedestrian crosses the street, the "WALK" indication changes to a flashing orange hand to notify pedestrians the walk phase has ended and not to enter the crossing. The hybrid beacon displays alternating flashing red lights to drivers while pedestrians finish their crossings before once again going dark at the conclusion of the cycle.

Crosswalk Recommendations

GNA Recommendation #2.1.

GNA recommends that the City add enhancements to the existing crosswalks on Austin Avenue at 10th Street and 16th Street. The City installed Rectangular Rapid Flashing Beacons (RRFB) to these crosswalks that add significant visibility to the crosswalks. GNA believes that by adding additional, low-cost enhancements to these crosswalks, pedestrian safety could be significantly increased.

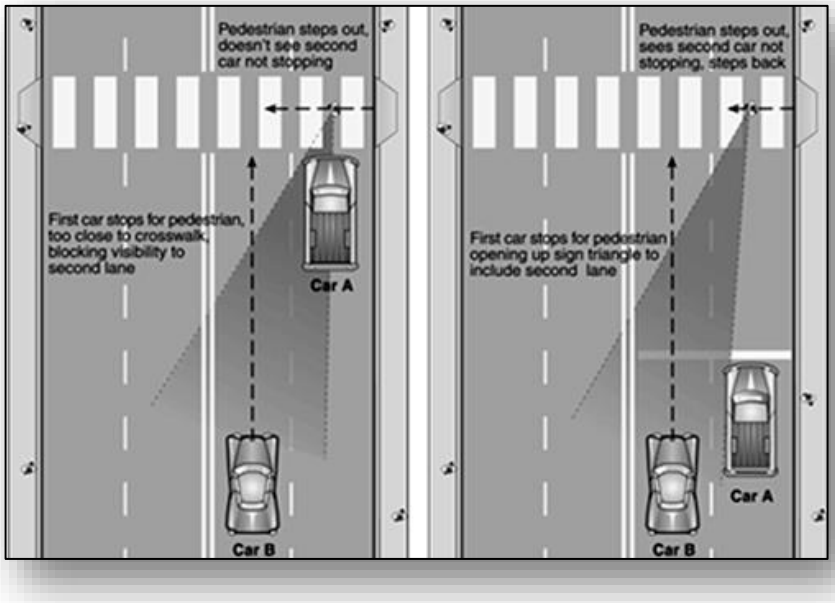
1. At the 10th Street crosswalk, the City used a border of "pavers" to differentiate the crosswalk area from the rest of the street. Though the use of pavers is aesthetically very attractive, they do not effectively highlight the pedestrian crosswalk from the rest of the street, making it more difficult for on-coming traffic to see the actual crosswalk. GNA recommends that the City enhance the crosswalks by adding painted transverse side stripes similar to the ones used in standard crosswalks.

2. At the 16th Street crosswalk, the City used painted transverse side stripes to differentiate the crosswalk area from the rest of the street. Though the use of side stripes does define the crosswalk, they are not the most effective way to highlight the pedestrian crosswalk from the rest of the street to on-coming traffic. GNA recommends that the City enhance the crosswalk by adding painted "continental" pattern stripes to increase crosswalk visibility.

GNA feels these low-cost enhancements will help better distinguish the existing crosswalks from the street and increase pedestrian safety.

Further increasing pedestrian safety, GNA recommends that the City add advanced stop lines placed 20 to 50 feet prior to each crosswalk. This low-cost enhancement would be an effective solution for making both vehicles stop and see pedestrians using the crosswalk.

It is not uncommon for a motorist to stop for someone in a crosswalk, only for the vehicle following them to not see the pedestrian and veer around, driving through the crosswalk.



Advanced stop lines have been shown to reduce pedestrian-vehicle conflict up to 90 percent.

GNA Recommendation #2.2.

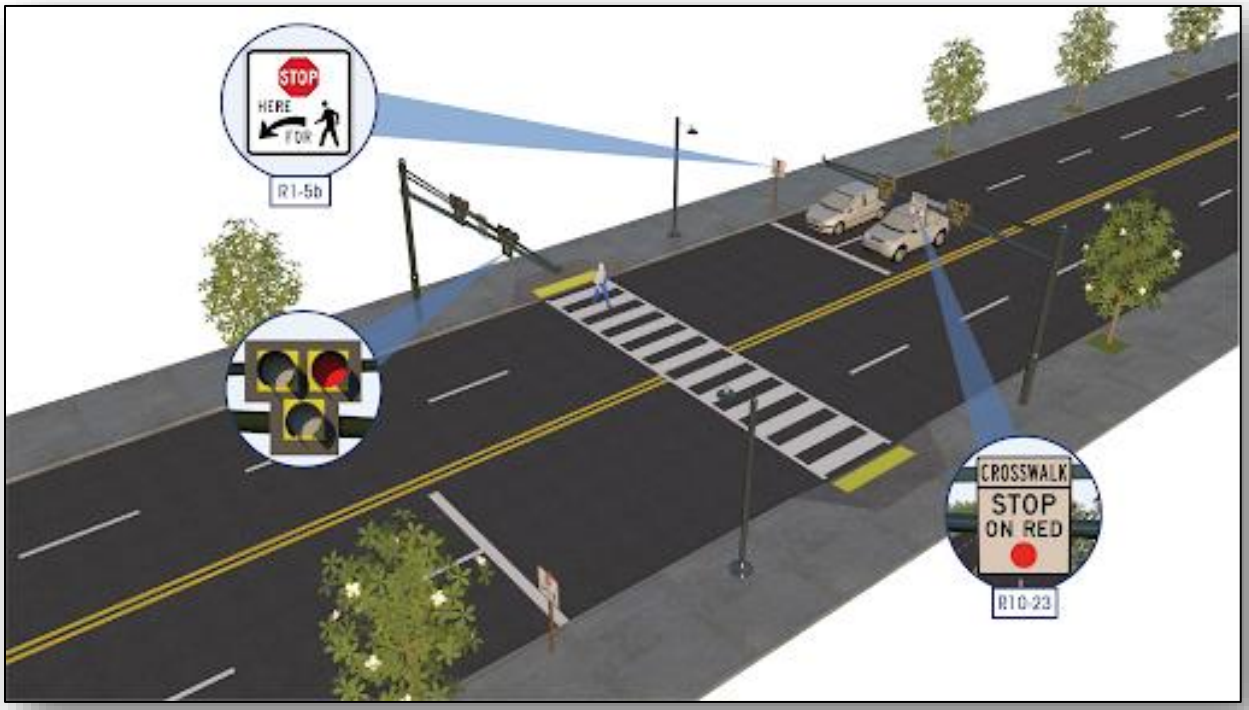
GNA recommends that on future crosswalks, the City use the more traditional continental pattern of crosswalk striping, which more effectively highlights the crosswalk in the street, increase visibility to on-coming traffic and increase pedestrian safety at a lower cost than the use of pavers.

An alternative to the use of the continental pattern for crosswalks would be the use of "colored" crosswalks. GNA feels that the use of "colored" crosswalks especially in the downtown area would visibly highlight the crosswalks on the streets and add to the City's "art" theme in the downtown area.

This low-cost enhancement would not only increase the visibility of the crosswalks, but also differentiate Georgetown from other local communities and increase art awareness. The City could incorporate the painted crosswalks into its annual artist competition.

GNA Recommendation #2.3.

GNA recommends the City consider using Pedestrian Hybrid Beacons (PHB) instead of Rectangular Rapid Flashing Beacons (RRFB) on crosswalks located on busy streets like University and Austin Avenues. Though more expensive, the PHB beacons allow more protected pedestrian crossings by stopping road traffic only as needed. In addition to PHB beacons, GNA also recommends the City use continental striping or "colored" patterns for all future crosswalks.

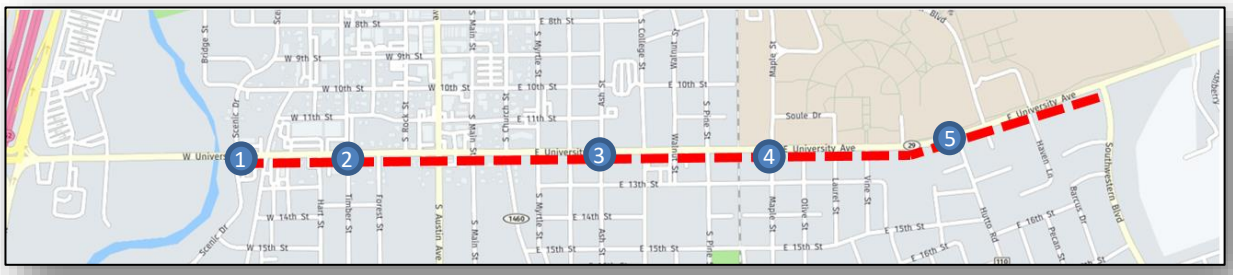


GNA Recommendation #2.4.

Based on the GNA interviews and the results from the Community Survey, **GNA recommends** that the City consider adding enhancements or new pedestrian crosswalks at the following locations:

Recommended new or enhanced **University Avenue Crosswalks**

1. University Avenue at Scenic Drive: New continental striping or "colored" patterns on existing crosswalks to increase driver visibility of crosswalks as described in Recommendation #2.2 above.
2. University Avenue at MLK/Timber Street: PHB crosswalk per Recommendation #3 above.
3. University Avenue at Ash Street: PHB crosswalk per Recommendation #2.3 above.
4. University Avenue at Maple Street: New continental striping or "colored" patterns on existing crosswalks to increase driver visibility of crosswalks as described in Recommendation #2.2 above.
5. University Avenue at Hutto Road: RRFB crosswalk per Recommendation #2.1.



Recommended new **Austin Avenue Crosswalk**

1. Austin Avenue at mid-block between 5th and 6th Streets: PHB crosswalk per Recommendation #2.3 above.