

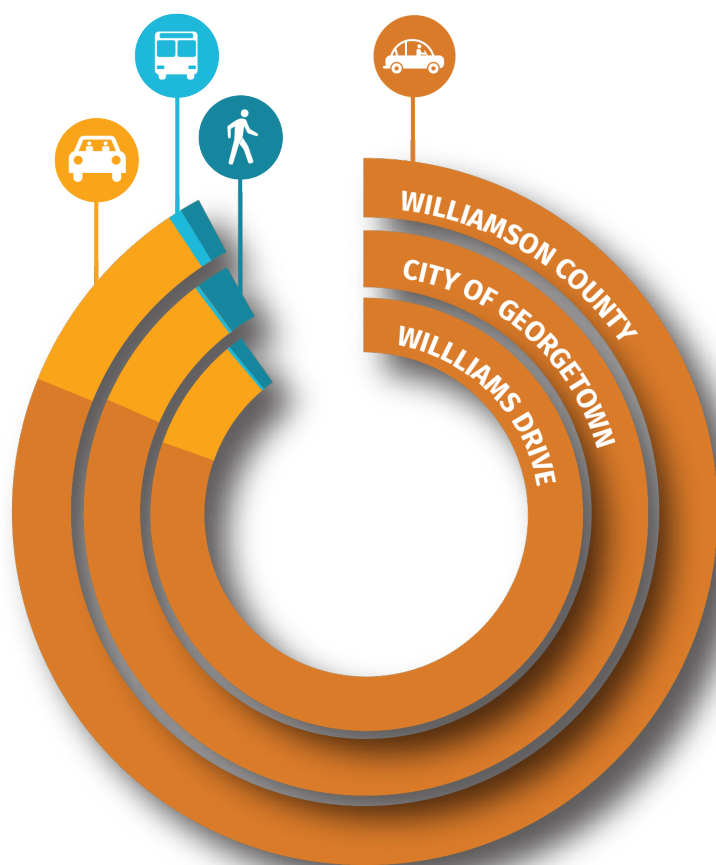
Mode Choice

The City of Georgetown and surrounding Williamson County exhibit a dominating preference for (and dependence on) driving as the primary mode of transportation. With the exception of Downtown,

Georgetown has developed in a way that living (and traveling) without a car is impractical. Like many other cities in the United States, Georgetown was built with separated land uses, low

densities, and a disconnected street network. As a result, most residents drive to work and use their cars on a daily basis, and Williams Drive is no exception.

Mode Split in Context



Approximately 80% of residents along the corridor drive alone to work.

Around 8% of residents carpool.

Very few residents along Williams Drive choose alternative modes of transportation:

Less than 1% of residents use transit.

Around 2% of residents travel on foot.

The percentage of residents along the corridor that bike to work is negligible.

Nearly 10% of residents take a cab or work from home.

**Note: The population taken into account for the Williams Drive area extends beyond the boundaries of the study area, as there are many residents living outside those boundaries that use Williams Drive on a daily basis.*

Source: American Community Survey 2010 - 2014, Means of Transportation to Work

CAR ORIENTED ENVIRONMENT



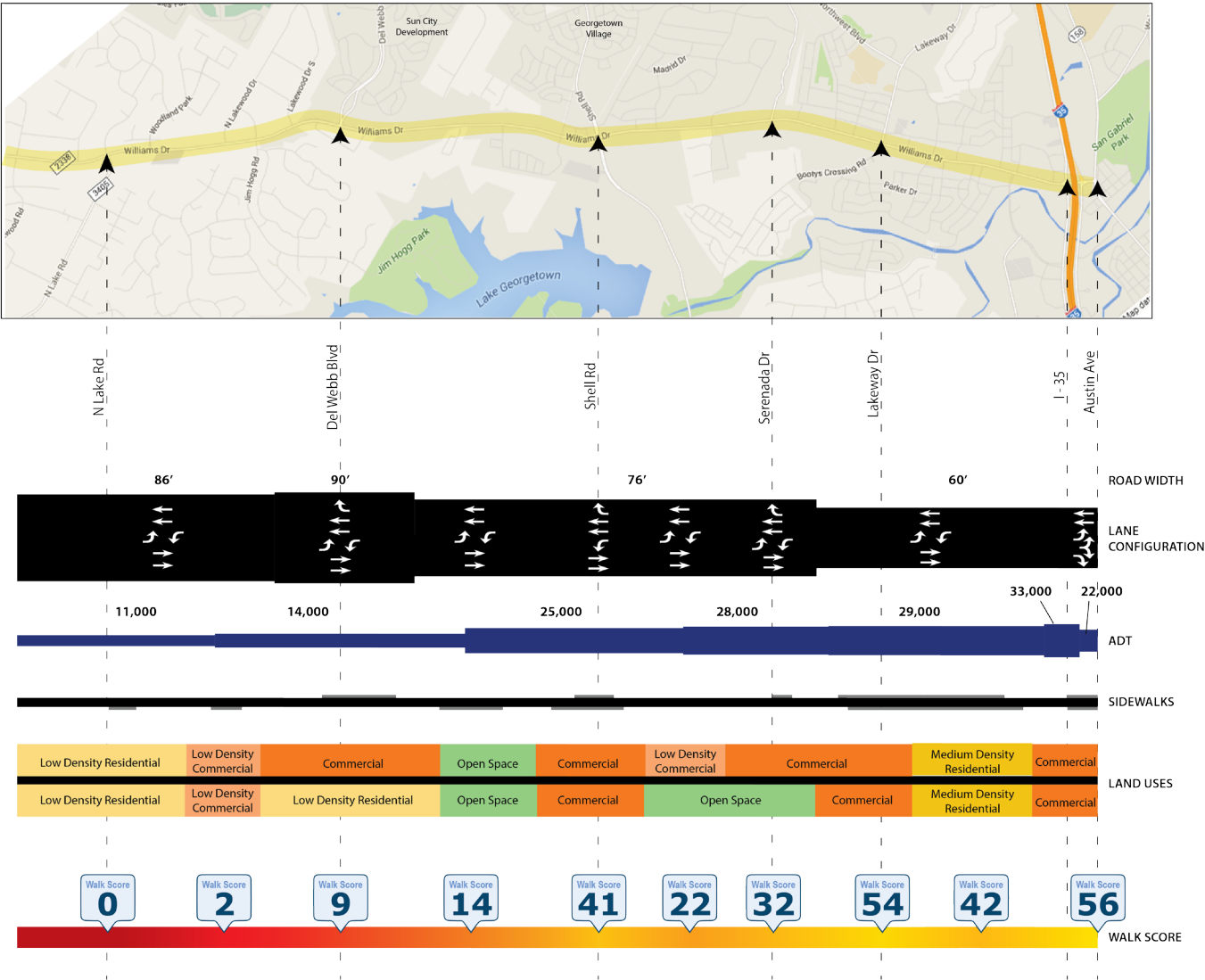
The car oriented development of Williams Drive has limited both the ability and desire for residents to walk or bike as a mode of transportation. Many sections of Williams Drive are either missing sidewalks or have poor sidewalk conditions. Where quality sidewalks exist, there is limited connectivity from those facilities to others along Williams Drive or within adjacent neighborhoods and retail centers. In addition to a lack of sidewalk connectivity, there is a general lack of street connectivity that also negatively impacts walkability.

Greater street connectivity provides more route options and creates a sense of shorter travel distances for pedestrians. Bicycle facilities do not exist along Williams Drive, and are limited to a recreational trail south of the corridor with no connection to Williams Drive. Vehicular speeds on Williams Drive currently do not support a bicycle-friendly environment.

While the City of Georgetown does not yet have a traditional transit system, there is currently a demand-response transit

service in place. This service is provided by the Capital Area Rural Transportation System (CARTS), and operates anywhere within the City limits. It is a point to point service that is utilized along Williams Drive, and is primarily used for travel between housing developments, retail centers, and medical centers along the corridor. The City, however, recently adopted a fixed-network bus system that will provide service to the eastern-most portion of the Williams Drive study area.

Figure 3 Williams Drive Conditions



STREET NETWORK AND TRAVEL OPTIONS

“Because of the poor connectivity of these collectors, the city is facing increasing congestion problems in certain areas. Improving connectivity of the roadway network should be a priority.”

In the 2030 Comprehensive Plan, it is noted that most traffic in Georgetown utilizes the major arterials, while the collector roads that are meant to provide alternatives and distribute

traffic lack the connectivity to effectively do so. Looking at a map of the streets in Georgetown, as shown in Figure 4, it would appear that the city has a fairly extensive network.

Figure 4 Map of Existing Street Network



However, when the dead-end, cul-de-sac, and other disconnected streets are removed from the map, as shown in Figure 5, it becomes apparent how few travel options exist. This

is particularly true for longer distance travel, and illustrates the demand that is placed on corridors such as Williams Drive. A limited roadway network can contribute to congestion and

limits the possible routes for emergency vehicles, which can lead to longer response times.

Figure 5 Map of Effective Street Network



THE CORRIDOR

Williams Drive is primarily a four-lane street with a continuous two-way center left-turn lane. As one of few major street connections to I-35 and into Downtown, Williams Drive serves as a primary route for motorists traveling both into and out of the City. Few alternatives exist for residents along Williams Drive to access I-35 and Downtown.

Williams Drive has the highest daily traffic volumes of any major corridor in the greater Georgetown area, making it significant in the overall street network.




Annual Average Daily Traffic (AADT) counts collected by TxDOT in 2013 are shown on the map in Figure 6. These counts illustrate the regional dependence on Williams Drive and its significance in the overall street network. As shown, Williams Drive has the highest daily traffic volumes of any major corridor in Georgetown and surrounding areas, aside from I-35.

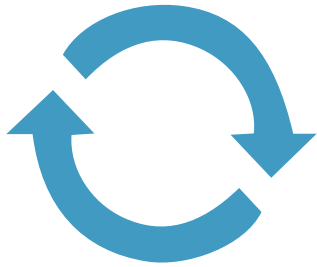
It is also worth noting that the volumes along I-35 are much lower on the north side of Williams Drive than they are to the south. This

may be due to the fact that there are many more people traveling southward toward Austin than there are traveling north toward Temple or Waco. If residents along Williams Drive had an alternative route or connection in the southbound direction, this could potentially alleviate some of the demand at I-35 and Williams Drive.

This map illustrates the proposed extension of the Green Line in the Lake Georgetown area. The extension is shown as a highlighted orange and green line, starting from the existing line at the intersection of W University Ave and S Wood St and running northeast to the intersection of S Austin Ave and S Leander Rd. The map includes major roads like FM 3405, FM 971, and I-35, as well as landmarks like Lake Georgetown. A scale bar (0-2 miles) and a north arrow are in the bottom left.

30,000+
cars per day travel on Williams Drive
through the Center Study Area

-  Annual Average Daily Traffic Count Location
-  Corridor Study Area
-  Center Study Area



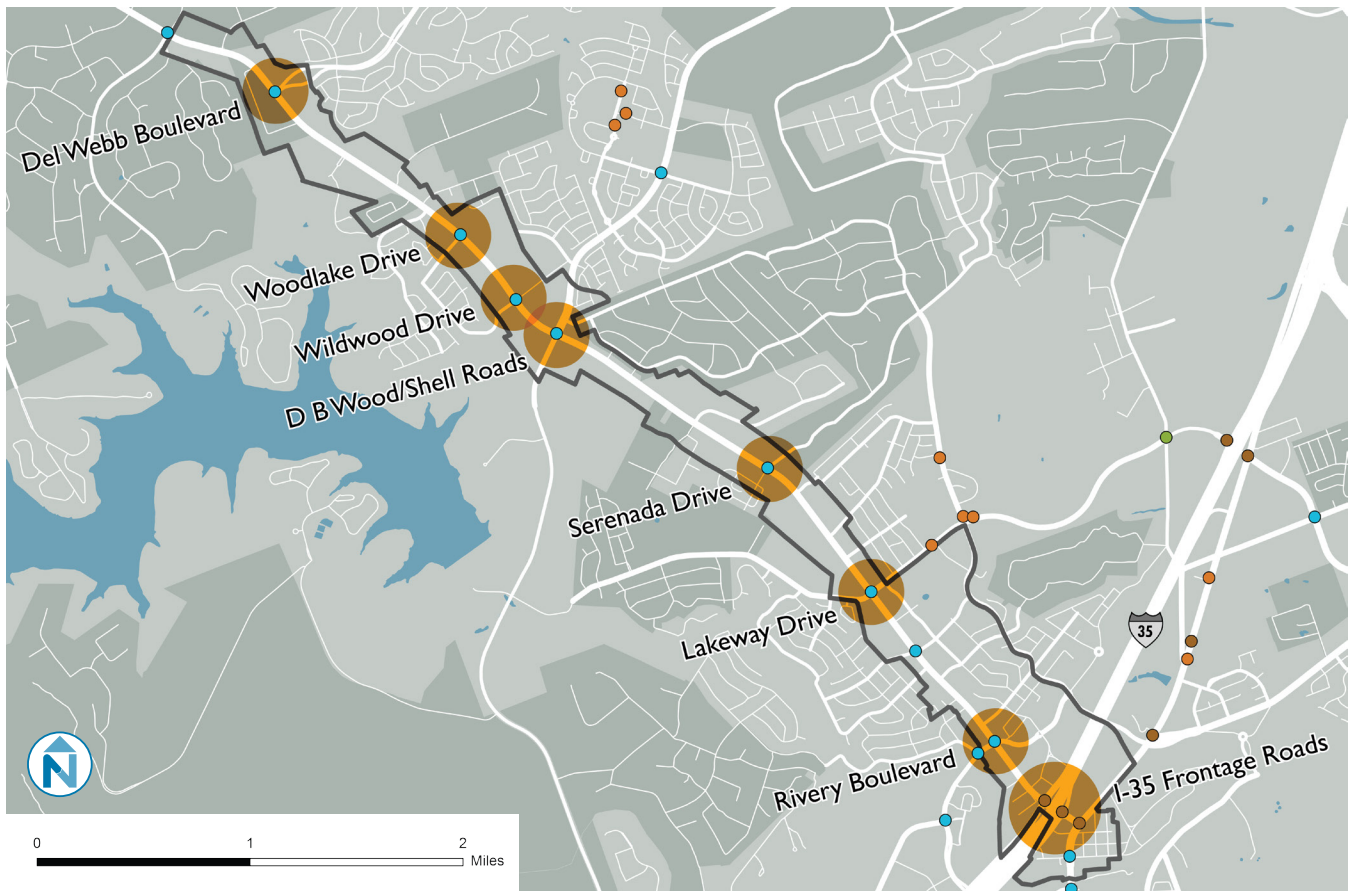
Circulation and Key Intersections

The traffic signal system along the corridor is split into two sections – east of Shell Road and west of Shell Road. West of Shell Road to Jim Hogg Road the City controls five (5) signalized intersections which are within a coordinated system through a fiber connection. This system was last coordinated in 2012. East of Shell Road to the I-35 interchange and Austin Avenue, the traffic signal system is uncoordinated and comprises eight (8) signalized intersections including the I-35 northbound and southbound frontage road signals. The I-35 signals are controlled by Texas Department of Transportation under a single timing plan and individual cabinet. The remaining signals are City controlled and are run on an actuated timing plan without coordination. This is due in part to the spacing between intersections (1.2 miles between Serenada Drive and Shell Road) and the combination of old and new equipment.

The key intersections highlighted in Figure 7 have experienced volumes ranging from 2,100 to 3,500 vehicles during the busiest hour of the day. The more significant volumes occur near I-35, and at the intersection of Williams Drive with D B Wood and Shell Roads. As these nodes represent important convergence points in the regional transportation network, they see an elevated turning movement count during peak hours relative to total traffic (38-53%).

Looking closer at turning movements in the context of improved multimodal safety for the corridor, a number of underutilized right turn movements have been identified. Potential removal of the lanes summarized in Figure 8 can have a number of positive impacts for pedestrians along Williams Drive including shorter crossing distances and reduced vehicle speeds.

Figure 7 Williams Drive Corridor - Key Intersections and Traffic Signals



Traffic Signals






- | | | | |
|---|----------------------------------|---|------------------|
|  | School Signal |  | Key Intersection |
|  | City of Georgetown Signal | | |
|  | Future City of Georgetown Signal | | |
|  | TxDOT Signal | | |

Figure 8 Underutilized Right Turn Lanes

Facility/Location	AM/PM Peak Hour Volumes
Channelized Right Turn from Williams Drive WB to I-35 NB Frontage	32/73
Channelized Right Turn from I-35 SB Frontage to Williams Drive	83/97
Right Turn Only Lane from Williams Drive WB to Serenada Drive	53/61
Right Turn Only Lane from D B Wood Road NB to Williams Drive	72/87
Right Turn Only Lane from Del Webb Boulevard SB to Williams Drive	59/42

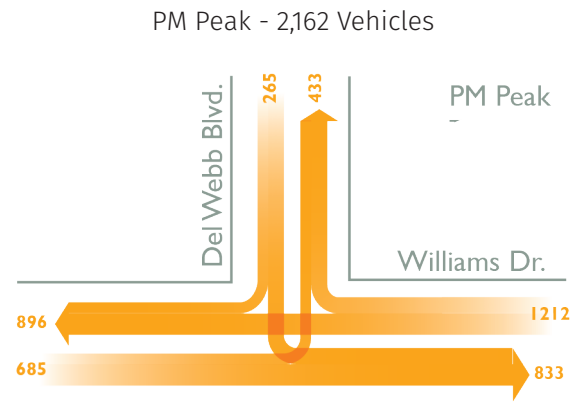
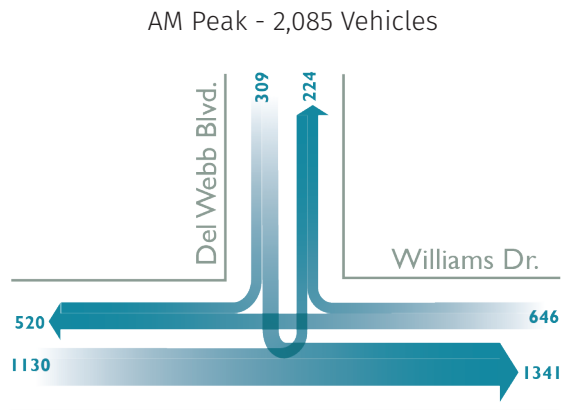
A more general corridor improvement could be realized by altering the center bi-directional turn lane, especially west of Serenada Drive. The presence of a median would help to manage speed and create pedestrian refuge islands while continuing to allow for pocket left turn lanes at strategic points such as Serenada Drive and Del Webb Boulevard.

Further study of activity and turning movements of the identified key intersections revealed segments of Williams Drive that diffuse or contribute to traffic via side streets and driveways during peak hours. This detailed look into the key intersections along Williams Drive is illustrated in Figure 9. While the data for each intersection are not from the same point in time, the information can be used to

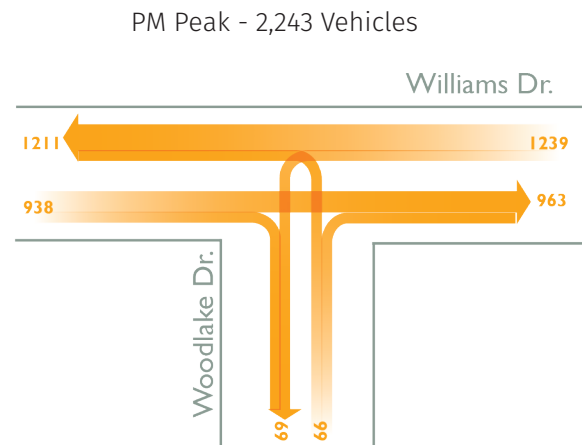
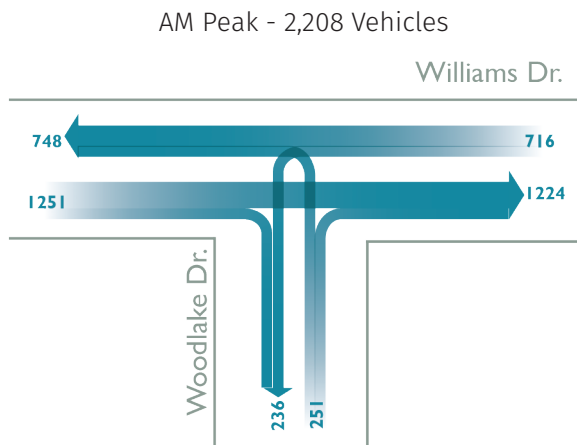
extrapolate activity occurring along the corridor between intersections. For instance, the segment of Williams Drive between the intersections with Rivery Boulevard and Lakeway Drive indicate that there is a significant number of vehicles exiting Williams Drive between the two intersections. The same situation exists between the intersections of Williams Drive with Serenada Drive and Shell Road.

Figure 9 Turning Movement Counts for Key Williams Drive Intersections

Del Webb Boulevard (2015)

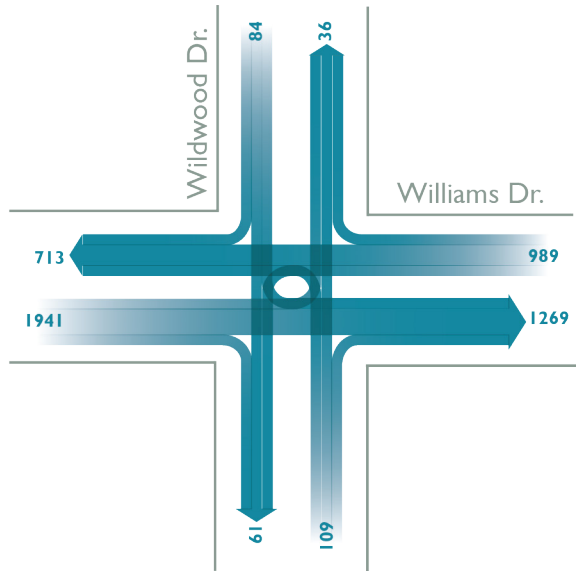


Woodlake Drive (2014)



Wildwood Drive (2014)

AM Peak - 2,079 Vehicles

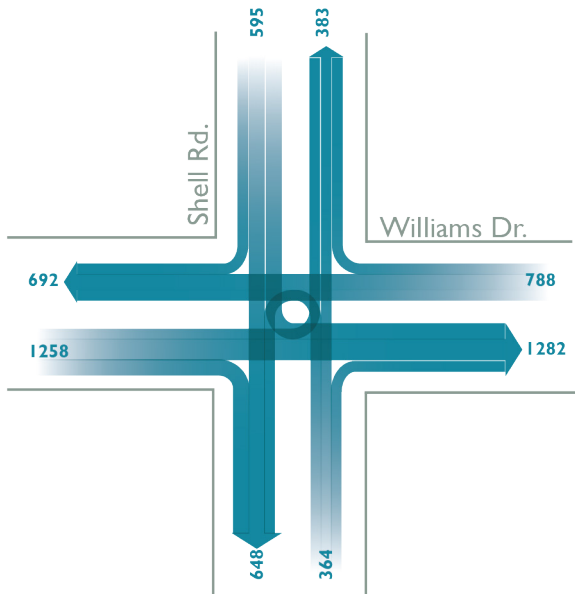


PM Peak - 2,361 Vehicles

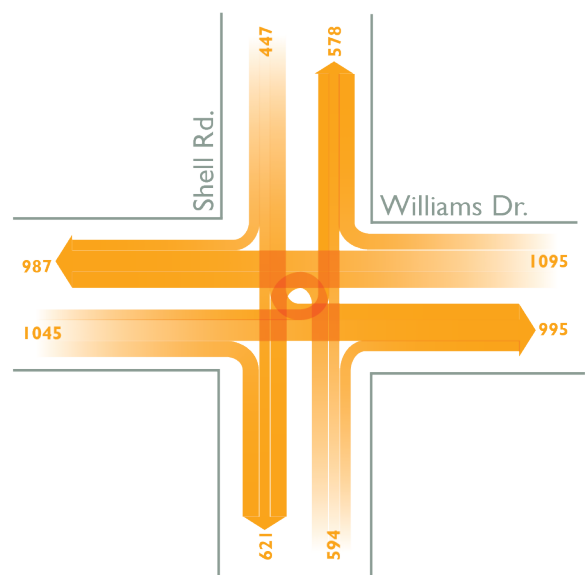


DB Woods/ Shell Road (2014)

AM Peak - 3,005 Vehicles

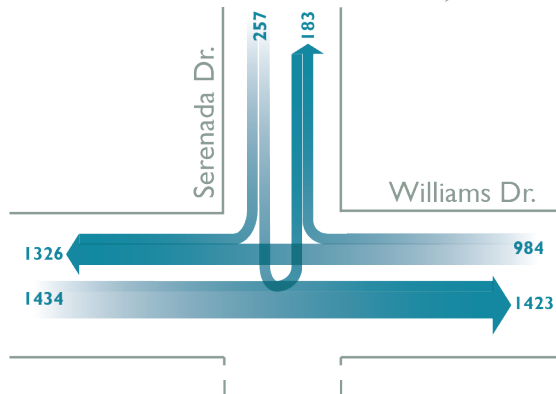


PM Peak - 3,181 Vehicles

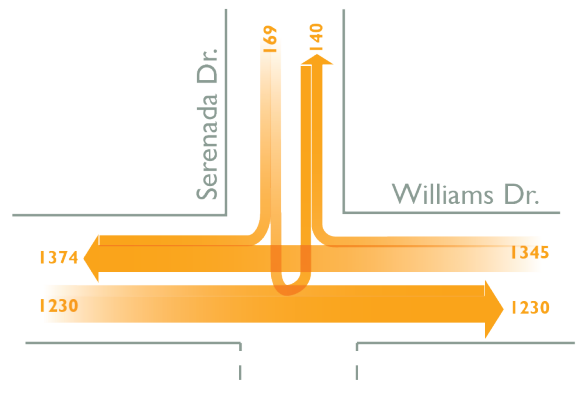


Serenada Drive (2016)

AM Peak - 2,675 Vehicles

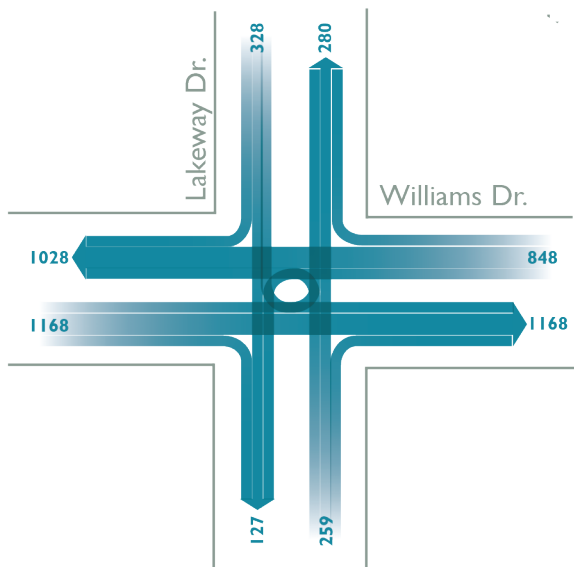


PM Peak - 2,744 Vehicles

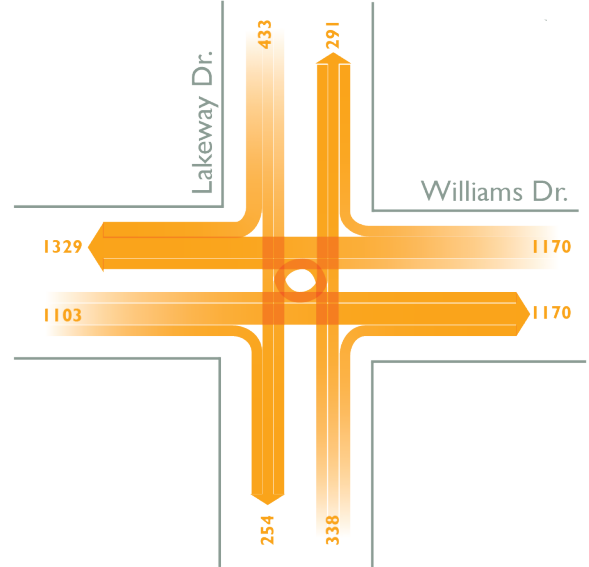


Lakeway Drive (2016)

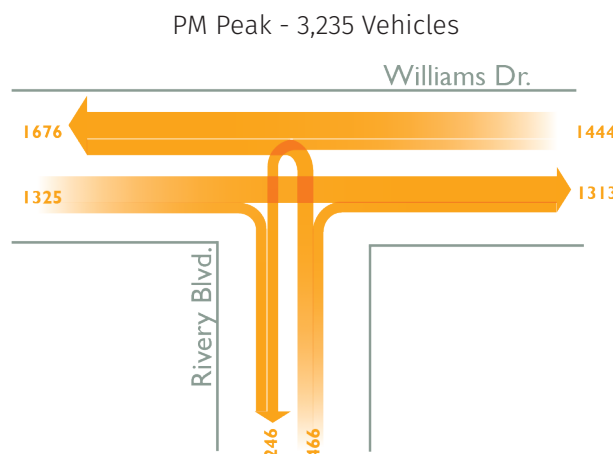
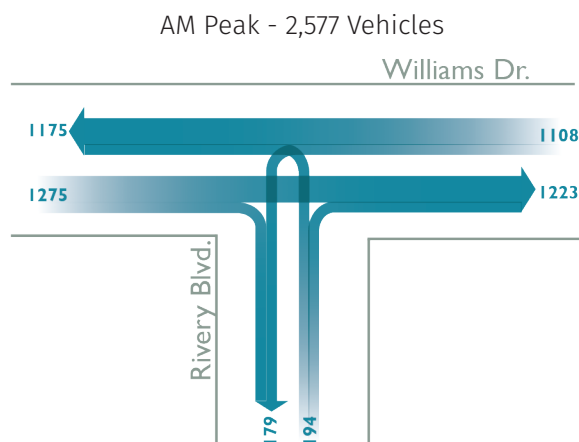
AM Peak - 2,603 Vehicles



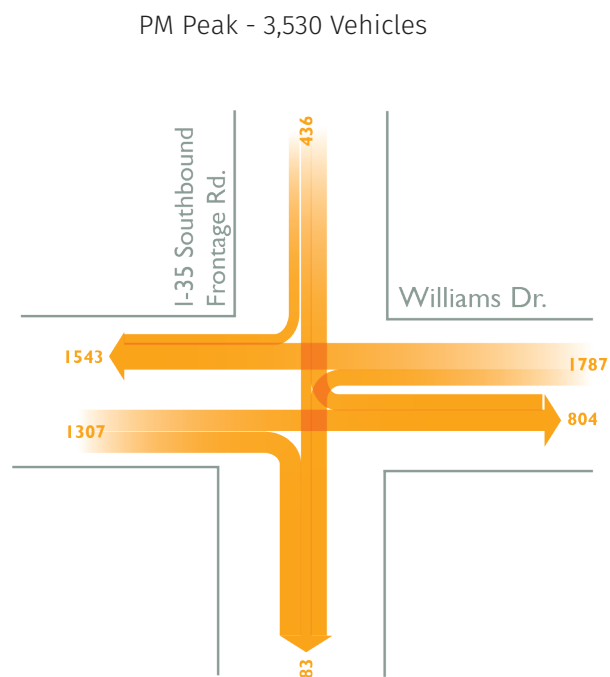
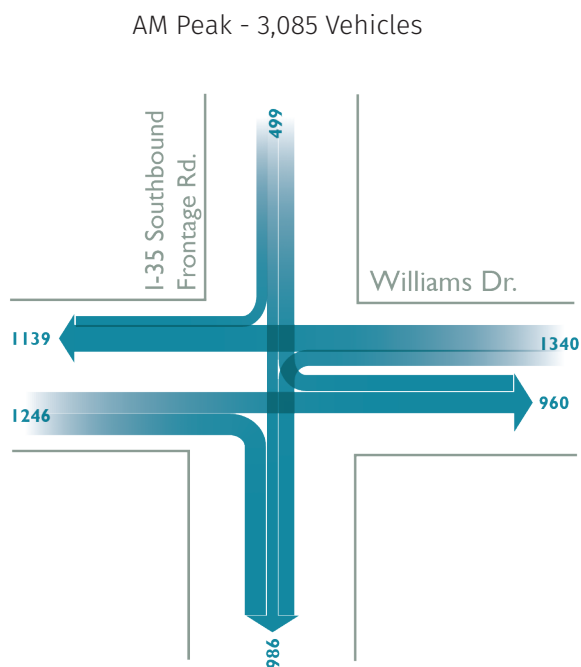
PM Peak - 3,044 Vehicles



Rivory Boulevard (2013)

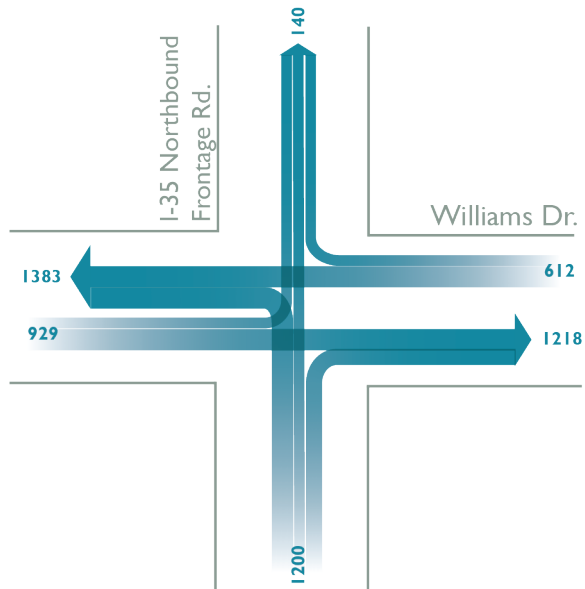


I-35 Southbound Frontage Road (2013)

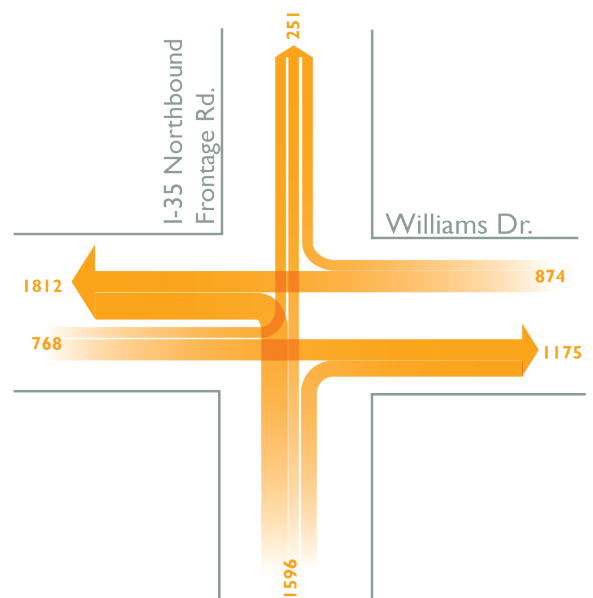


I-35 Northbound Frontage Road (2013)

AM Peak - 2,741 Vehicles



PM Peak - 3,238 Vehicles



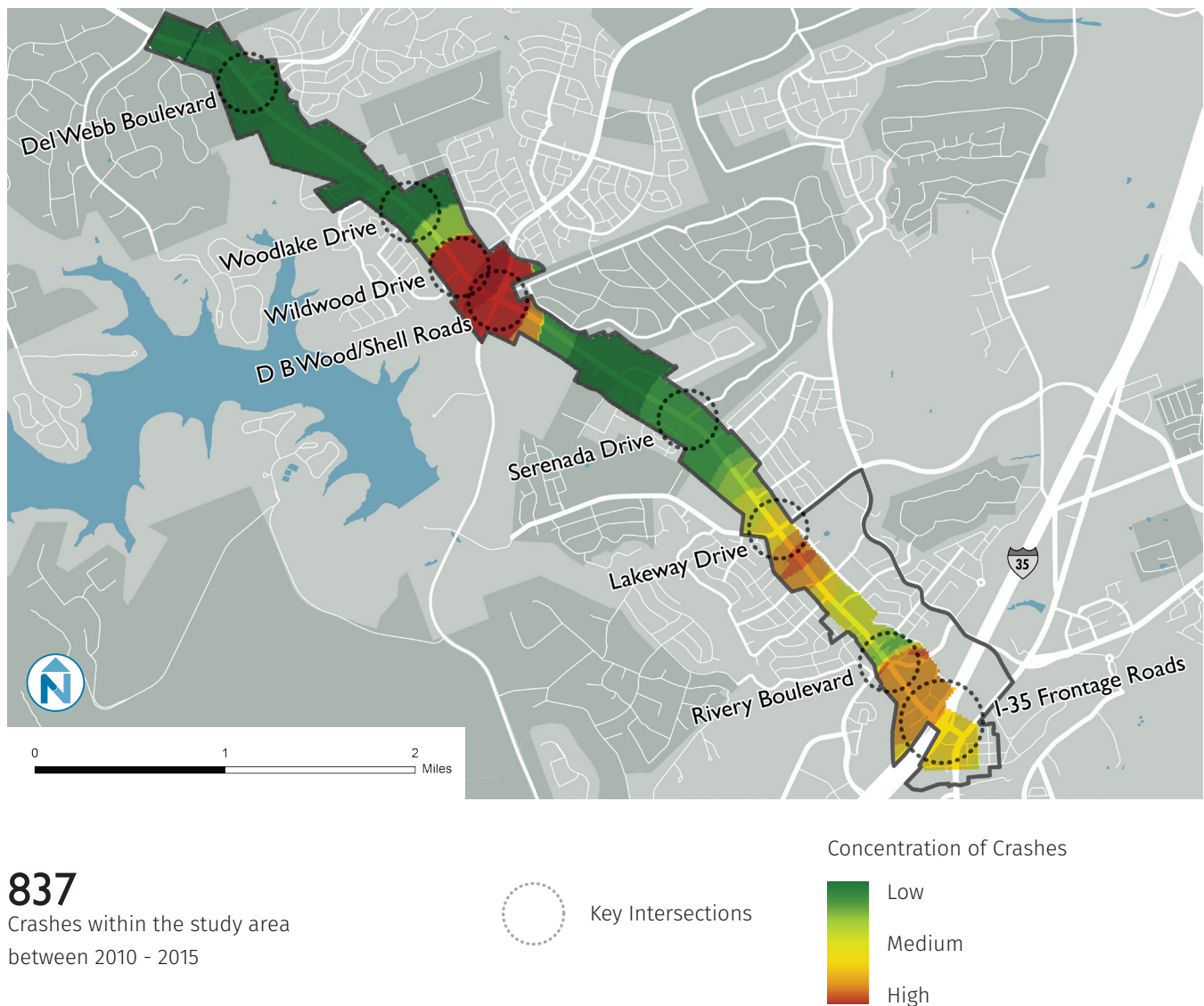
Roadway Safety

The highest concentration of motor vehicle crashes along the Williams Drive corridor occurs in or near the proximate intersections at D B Wood/Shell Roads and Wildwood Drive, as illustrated in Figure 10. While corridor volume is not at

its highest on this stretch of road, roadway width is large (76 feet) and turning movements are very high compared to the rest of the corridor. Other areas with elevated crash concentrations include the segment between Rivery

Boulevard and Lakeway Drive, which was previously identified as a transition area with a high number of turning movements during peak periods and the highest daily traffic volumes.

Figure 10 Williams Drive Motor Vehicle Collision Concentration





Walking

In 2014, the City adopted the Sidewalk Master Plan. This Master Plan included a citywide assessment of existing sidewalk facilities and the prioritization of future sidewalk improvement projects. Along Williams Drive the assessment identified 6.7 miles of missing sidewalk, 0.4 miles of sidewalk as having limited failure, and 0.07 miles of sidewalk as completely failing. Limited failure indicates that the sidewalk is functional; however, there are spots where the sidewalk is failing. Sidewalk failures include excessive slope, faulting, distortion, or sunken areas. Completely failing indicates the sidewalk cannot be used by wheelchairs and is difficult for all pedestrians.

Most of the Williams Drive corridor has major gaps in sidewalk facilities, resulting in a lack of overall pedestrian connectivity. Functioning sidewalk facilities on Williams Drive are generally present at major shopping centers,

such as the centers located at the intersection of Williams Drive and DB Wood Road. These sidewalk facilities are located directly in front of and along the edge of the shopping center, but end at or just beyond the property line. Gaps in the sidewalk network also exist along side streets that connect Williams Drive to adjacent residential communities. As shown in Figure 11, there are a number of schools within or near the study area that are surrounded by streets with poor quality or non-existent sidewalks.

The map in Figure 11 also identifies locations where there have been recorded pedestrian-involved crashes. Most of these crashes appear to have occurred within or near shopping center parking lots, indicating a potential issue with the design of these land uses and the lack of safe pedestrian accommodations surrounding them.

Figure 11 Existing Pedestrian Facilities and Crash Locations



7

Pedestrian-involved crashes within the study area between 2010 - 2015

(2 located at the corner of DB Wood Road and Williams Drive)



Pedestrian-Involved Crash Location



City Facility



School

Sidewalk Conditions

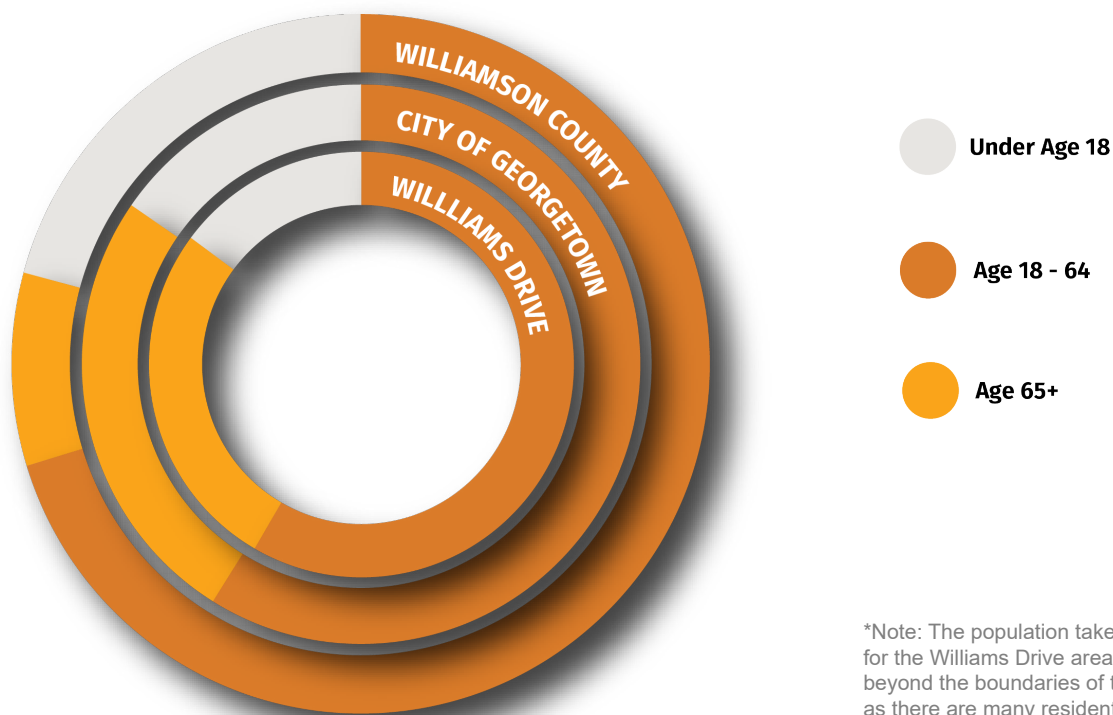
- Excellent
- Good
- Passable
- Limited Failure
- Failing
- No Sidewalk

The chart below illustrates the breakdown of age groups along Williams Drive in comparison to that within both the City and the County. The population taken into account for the Williams Drive area extends beyond the boundaries of the study area, as there are many

residents living outside those boundaries that use Williams Drive on a daily basis. Both Georgetown and Williams Drive have a much higher percentage of seniors than the County, each sitting at around 27% compared to only 9% in the County. The County, on the

other hand, has a much higher percentage of 18 – 64 year olds at approximately 70% of the total population. School-age children, or children under the age of 18, make up about 15% of the population in both Georgetown and along Williams Drive.

Age Breakdown by Area



**Note: The population taken into account for the Williams Drive area extends beyond the boundaries of the study area, as there are many residents living outside those boundaries that use Williams Drive on a daily basis.*