

CHAPTER VII: Transportation

ROADWAY FUNCTIONAL CLASSIFICATION

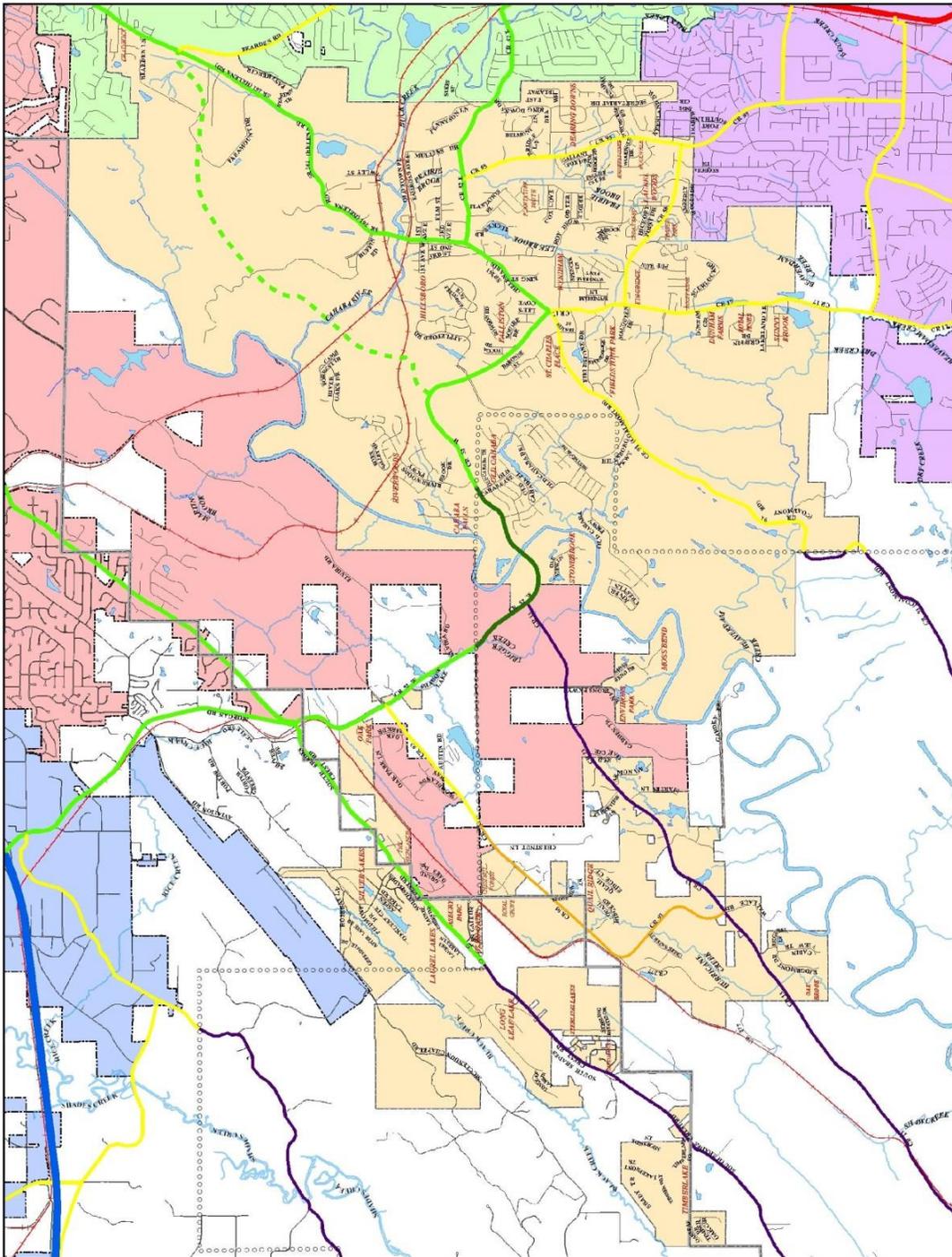
According to the character of traffic service that they are intended to provide and the degree of land access that they allow, roadways are arranged into classes known as the process of roadway functional classification. All roadways are sorted within three main functional classifications: arterial, collector, and local roads which provide a balanced relationship between mobility and land access. Mobility is the ability to efficiently travel along the roadway, while land access is the ease of being able to connect to a particular tract of land. Arterials afford the top level of service at the maximum speed for the longest continuous distance with little or no access control. Collectors provide a medium level of service at a lesser speed for shorter distances by gathering traffic from local roads and linking them with arterials. Local roads consist of all other roads and primarily offer a high degree of access to land with little or no mobility.

Roadway functional classification is linked directly with the roadway design speeds and roadway cross sections such as lane width, shoulder width, and other design characteristics. In addition, functional classification is different for urban and rural areas due to the land use intensity of those areas. Thus as land use changes occur due to growth, the functional classification of roadways must also change including its design parameters. Failure to maintain adequate roadway functional classifications leads to inefficient traffic service such as congestion. As the federally designated transportation planning agency for the transportation planning area, it is the Birmingham Metropolitan Planning Organization's (MPO) responsibility to assist the Alabama Department of Transportation (ALDOT) with the identification and maintenance of the roadway functional classification within the Jefferson County and Shelby County planning area. This classification is also used in the allocation of federal roadway funds.

Arterials are further broken down into seven subclasses based on its urban setting: urban interstate, rural interstate, freeway, urban principal arterial, rural principal arterial, urban minor arterial, and rural minor arterial; and collectors are further broken down into three subclasses based on its urban setting: collector, rural major collector, and rural minor collector. Urban setting is based on the urbanized areas as set by the Census Bureau following Census 2000. Unfortunately, the Helena city limits do not entirely lie within an urbanized area, but most likely will following the release of Census 2010. Helena does not have any type of interstate, freeway, or principal arterial within its city limits.

Helena has three roadways classified as urban minor arterials. State Route 261 is classified as an urban minor arterial. Within the urban area, County Roads 52 and 2 in both counties are classified as urban minor arterials, and the portion of County Road 52 in Shelby County that lies outside of the urban area is classified as a rural minor arterial. The Helena Bypass is classified as a proposed urban minor arterial. County Roads 17, 58, 91, and 95 are classified as collectors. County Road 93 is classified as a collector within the urban area, but is classified as a rural minor collector outside the urban area. Outside the urban area, County Roads 2 and 13 are classified as rural major collectors.

**PAGE INTENTIONALLY
LEFT BLANK**



**ROADWAY
FUNCTIONAL
CLASSIFICATION**

LEGEND

- Urban Interstate
- Urban Principal Arterial
- Urban Minor Arterial
- Urban Minor Arterial (Proposed)
- Collector
- Rural Major Collector
- Rural Minor Collector
- Birmingham Urbanized Area
- Wetland

NORTH

1 Inch = 3,500 Feet



Old Town Helena



County Road 58

TRAFFIC VOLUME

Traffic volume on state routes and federal highways is monitored with annual average daily traffic counts (AADT) by the Alabama Department of Transportation (ALDOT). State Route 261 is the only roadway within Helena for which ALDOT keeps AADT data. Prior to 2012 there were only two traffic count locations in Helena; a south location near Roy Drive (SR261S) and a norther location near the Helena Quarry (SR261N). The southern location near Roy Drive was used to monitor traffic volume on the stretch of State Route 261 between the intersection of State Route 261/Highway 52 East and the 261/91/52W crossroads. The northern location near the Helena Quarry (between Cunningham Drive and Bearden Trail) was used to collect data between the intersection of State Route 261/Highway 52 East and the intersection of State Route 261/County Road 105 (Bearden Road).

In 2012 the ALDOT began recording data for three (3) additional locations along State Route 261 in Helena. These locations include an Old Town Helena location at Amphitheater Park, and two locations further north of the original northernmost location – one between Bearden Trail of Bearden Road (CR105), shown on the Table as SR 261(A) and the other between Bearden Road and Chadwick Drive shown on the Table as SR 261(B). As a result of these new locations a new Traffic Count Table has been added to show only Helena counts and the second table shows the counts of impacting locations in Pelham and Hoover.

AADT counts kept over the past ten years for locations along State Route 261 and roadways that Helena commuters use such as US Highway 31 and Interstate 65 are shown in the following table. Starting in 2007, the economic downturn has contributed to the considerable decrease in traffic volumes on all routes used by Helena residents. State Route 261 took a significant loss of traffic volume of over 2,000 AADT on all three traffic counters between 2006 and 2009, although the 2009 counts were higher than the 2008 counts on all three.

YEAR	SR 261 S	SR 261 Old Town	SR 261 N	SR 261(A)	SR 261(B)
2005	12,490		12,530		
2006	12,630		12,670		
2007	11,440		11,480		
2008	10,230		10,260		
2009	10,330		10,360		
2010	10,860		10,900		
2011	10,750		11,480		
2012	15,640	12,170	11,680	12,480	14,710
2013	14,890	11,570	11,100	10,910	14,500
2014	15,210	11,660	11,190	11,000	14,620

Source: State of Alabama Department of Transportation

Table 22						
ALDOT TRAFFIC COUNTS						
AREAS OF HELENA IMPACT IN PELHAM & HOOVER						
YEAR	SR 261 Pelham	US 31 Pelham	US 31 Hoover	I-65 S Pelham	I-65 N Pelham	I-65 Hoover
2005	20,700	35,590	36,750	80,850	89,490	111,660
2006	20,880	35,840	37,130	82,140	90,530	112,220
2007	19,350	35,530	38,120	83,040	91,530	113,450
2008	17,300	33,990	34,090	81,050	89,320	109,030
2009	17,470	34,570	34,670	81,940	90,300	110,230
2010	18,370	34,760	35,450	83,250	91,750	111,990
2011	11,070	34,410	35,100	82,000	90,830	110,870
2012	12,280	35,100	35,980	83,270	90,530	110,510
2013	18,200	31,350	31,430	83,600	95,820	113,630
2014	18,580	34,910	31,680	84,690	97,810	112,650

Source: State of Alabama Department of Transportation

In 2005, traffic counts were collected in the Helena area by various entities on County roads. Although no recent comparisons can be drawn from such numbers since annual monitoring has not been maintained on these roads, counts on most of these roads did exist from collections in 1999 as shown in the previous comprehensive plan. The table shows that before the economic downturn traffic volume was significantly growing all along Highway 52 from the county line all the way to the Pelham city limits as well as along the commercial portion of County Road 17 south of State Route 261.

Table 23					
TRAFFIC COUNTS – COUNTY ROADS IN HELENA					
ROUTE	1999	2005	ROUTE	1999	2005
CR 52 East of CR 95	10,200	13,100	CR 91 South of SR 261	NA	2,600
CR 52 West of CR 95	NA	10,000	CR 17 South of SR 261	14,000	17,100
CR 52 North of SR 261	11,100	17,000	CR 17 South of CR 58	10,000	10,300
CR 52 East of CR 13	11,500	14,700	CR 58 West of CR 95	7,600	9,100
CR 52 North of CR 13	9,500	13,300	CR 95 North of CR 58	7,900	8,400
CR 52 North of CR 93	10,400	14,500	CR 95 South of CR 58	13,000	10,900
CR 13 South of CR 52	2,000	2,400			

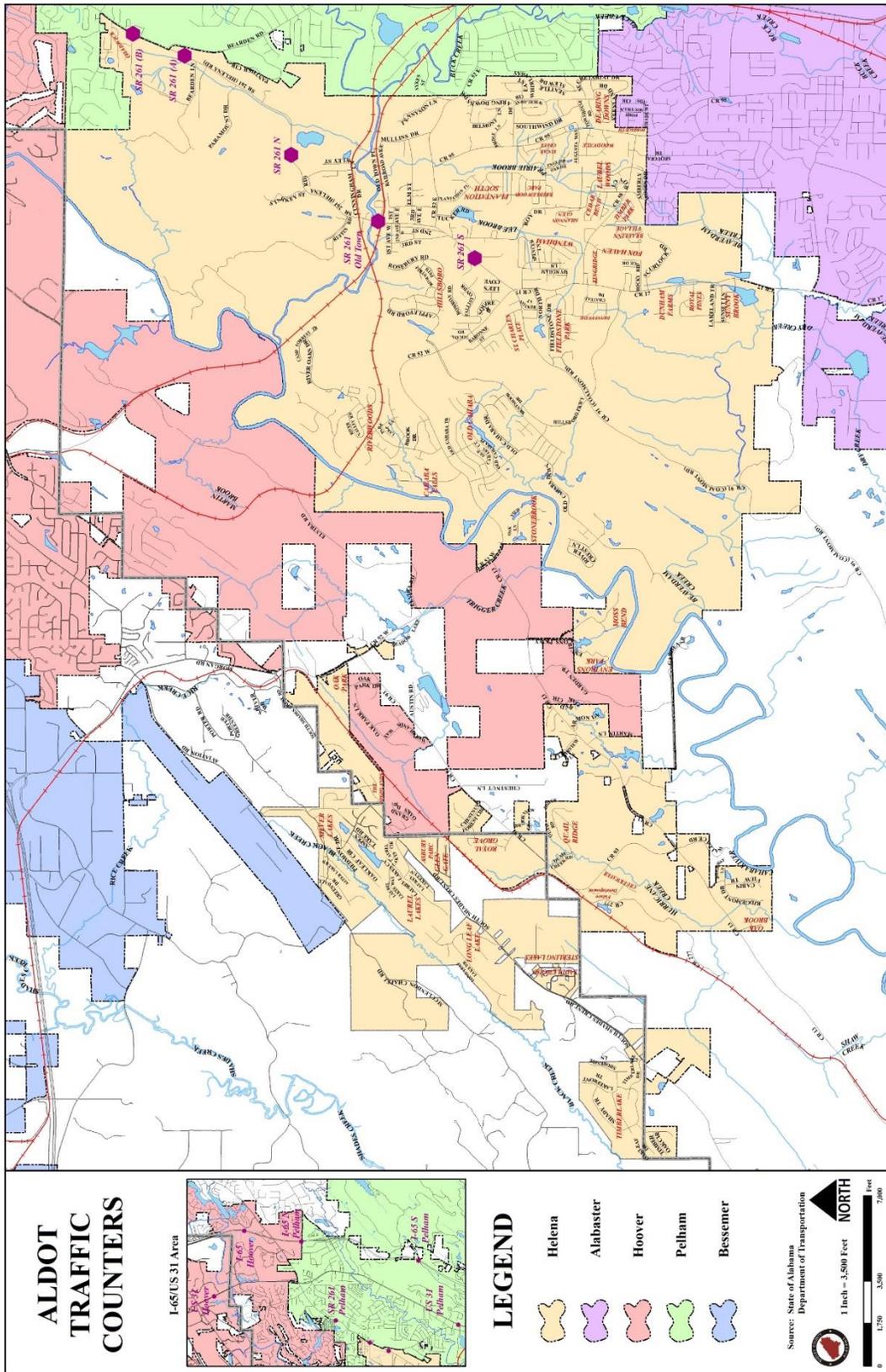
Source: Regional Planning Commission of Greater Birmingham
NOTE: County has not maintained traffic counts since 2005

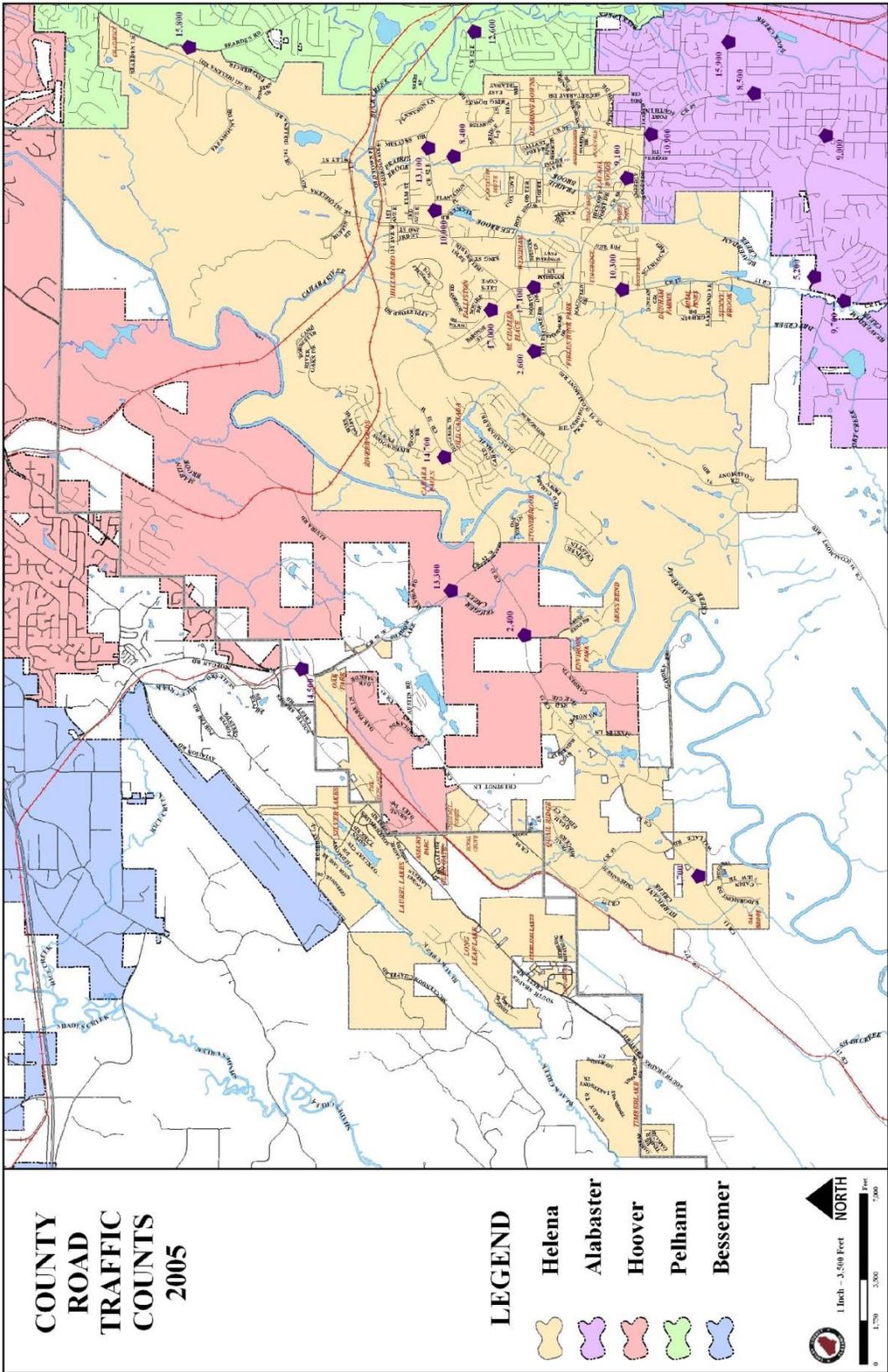


Old Town Helena



Helena Business District @ Intersection: Hwy 261 and County Roads 52, 91, & 17





PLANNED TRANSPORTATION PROJECTS

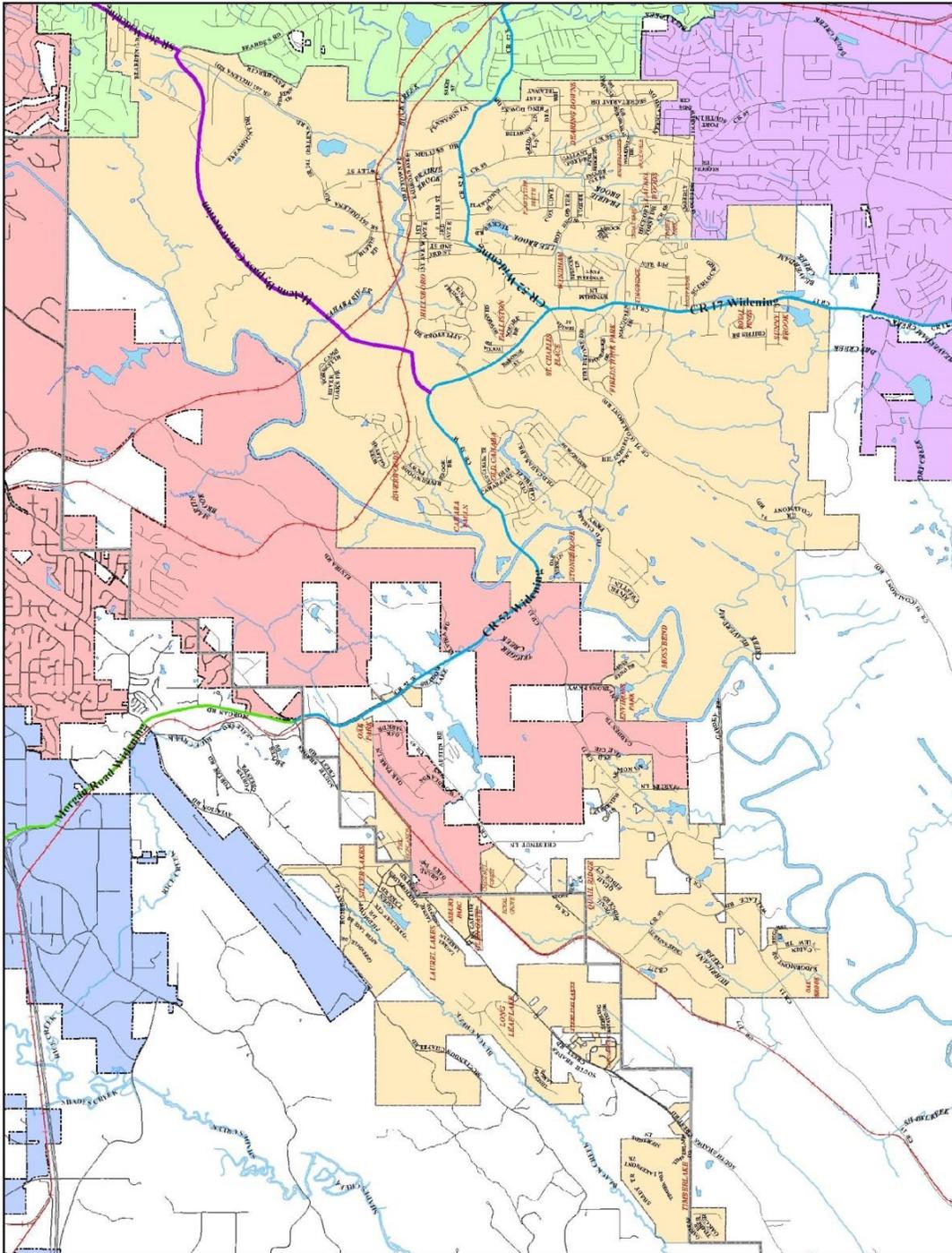
In January 2015, the 2040 Birmingham Regional Transportation Plan (RTP) was adopted by the MPO. The RTP, a collection of planned transportation projects to be implemented over time, was developed to provide a foundation for regional transportation planning in the Jefferson County and Shelby County area by coordinating fiscally sound initiatives and investments to better the movement of people and goods over the next 25 years. Since most major transportation projects are beyond the fiscal means of state and local governments, said governments or sponsors seek federal funding of projects whereby the sponsors will only have to provide a twenty percent match. However in order to receive federal funding, the sponsors' projects must be part of the fiscally constrained RTP. Such projects are proposed to be pursued for development within expected funding constraints. The following table shows fiscally constrained roadway projects that would have an impact on Helena residents in relation to reduced traffic congestion.

Table 24 Fiscally Constrained Roadway Capacity Projects				
Project #	Sponsor	Project Name	Year	Project Cost
78	ALDOT	Helena Bypass (CR 52 to SR 261)	2022	\$26,000,000
141	ALDOT	SR 261 (CR 105 to US 31)	2020	\$28,000,000
365	Shelby County	Morgan Road/CR 52 (CR 13 to SR 261)	2025	\$8,500,000
1192	Shelby County	Morgan Road/CR 52 (CR 13 to South Shades Crest)	2028	\$9,200,000
1190	ALDOT	I-65 Shelby County (CR 52 to US 31)	2021	\$54,000,000
109	Jefferson County	Morgan Road/CR 52 (CR 2 to I-459)	2016	\$12,500,000

Source: Regional Planning Commission of Greater Birmingham



Area of Proposed Helena ByPass off State Route 261



**MPO
ROADWAY
CAPACITY
PROJECTS
FISCALLY
CONSTRAINED**

LEGEND

- Project Sponsor
- ALDOT
- Jefferson County
- Shelby County
- Helena
- Alabaster
- Hoover
- Pelham
- Bessemer

1 Inch = 3,000 Feet

NORTH

0 1,500 3,000 Feet

In addition, the MPO adopted the FY 2016-2019 Transportation Improvement Program (TIP) in September 2015. The TIP is a list of projects, with funding assigned, to be implemented over the next four years. Several projects are included that lie within the city limits, and various projects are included that are situated outside of the city limits that would have an impact on Helena residents. Below is a table showing the TIP projects in the Helena area.

Table 25 TIP PROJECTS				
Project #	Sponsor	Project Name	Year	Project Cost
109	Jefferson County	Morgan Road/CR 52 (CR 2 to I-459) (Intersection Improvements)	2016	\$12,729,782
83	ALDOT	Valleydale Road (US 31 to Riverchase Pkwy) (Additional Lanes)	2016	\$7,000,000
257	Helena	Helena Buck Creek/Tacoa/Ruffin Trail System	2016	\$2,700,000
78	ALDOT	Helena Bypass (Preliminary Engineering)	2010	\$562,432

Source: Regional Planning Commission of Greater Birmingham



South Shades Crest Road @ Morgan Road

The table below indicates project names, sponsors, and scopes of Visionary Roadway Capacity Projects in Helena and the surrounding area. Visionary projects are those projects where funding levels prevent such from being placed in the fiscally constrained RTP now. As funding levels improve, such projects may be moved to the fiscally constrained RTP. Helena commuters and those desiring to travel to Helena would benefit from the widening projects and the Valleydale Road Interchange project. However, the one project listed that would be most advantageous to traffic movement in and out of Helena would be the proposed interchange on I-459 as it would provide an additional access point for Helena on I-459 besides the Morgan Road interchange. Hoover has proposed the Ross Bridge Parkway extension as the primary route from said proposed interchange into Shelby County to connect with Highway 52 West to a point west of the Cahaba River.

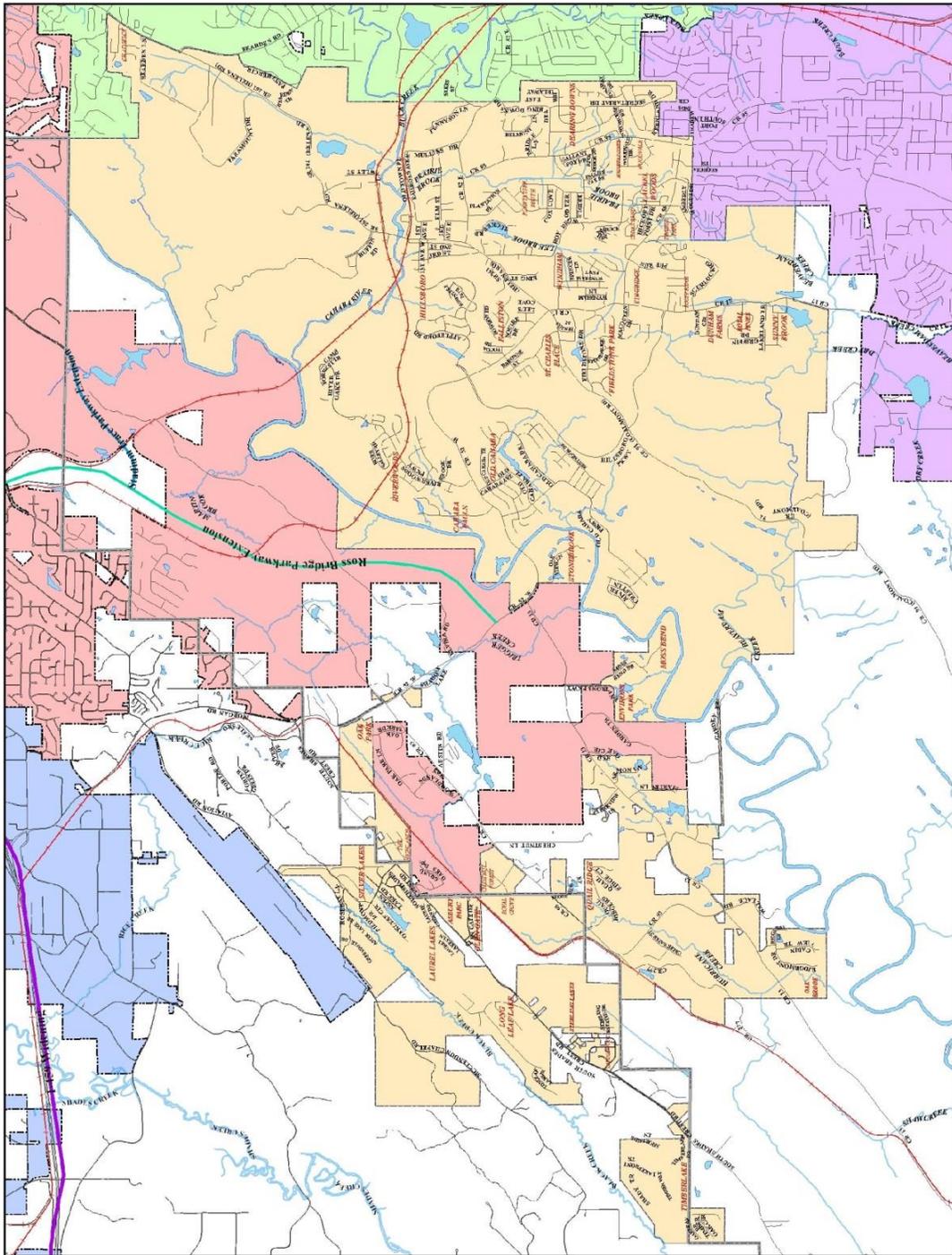
**Table 26
VISIONARY ROADWAY CAPACITY PROJECTS**

Project #	Sponsor	Project Name
168	Hoover	US 31 Widening (I-65 to Riverchase Parkway)
386	ALDOT	US 31 Widening (Riverchase Parkway to SR 119)
388	ALDOT	I-459 Widening (I-20/59 to CR 2)
405	Hoover	Stadium Trace Parkway (End to Ross Bridge Parkway Extension)
424	Shelby County	CR 17 from SR 261/CR 52 to CR 12
429	Shelby County	CR 52 from SR 261 to Johnson Street
629	ALDOT/Hoover	South Shades Crest Road I-459 Interchange
630	Hoover	Ross Bridge Parkway Extension (SR 150 to CR 52)

Source: Regional Planning Commission of Greater Birmingham



Highway 52 West @ County Road 93



**MPO
ROADWAY
CAPACITY
PROJECTS
VISIONARY**

LEGEND

- Sponsor**
-  Aldot
 -  Hoover
 -  Shelby County
 -  Helena
 -  Alabaster
 -  Hoover
 -  Pelham
 -  Bessemer

 **NORTH**

1 Inch = 3,500 Feet

0 1,750 3,500 7,000 Feet



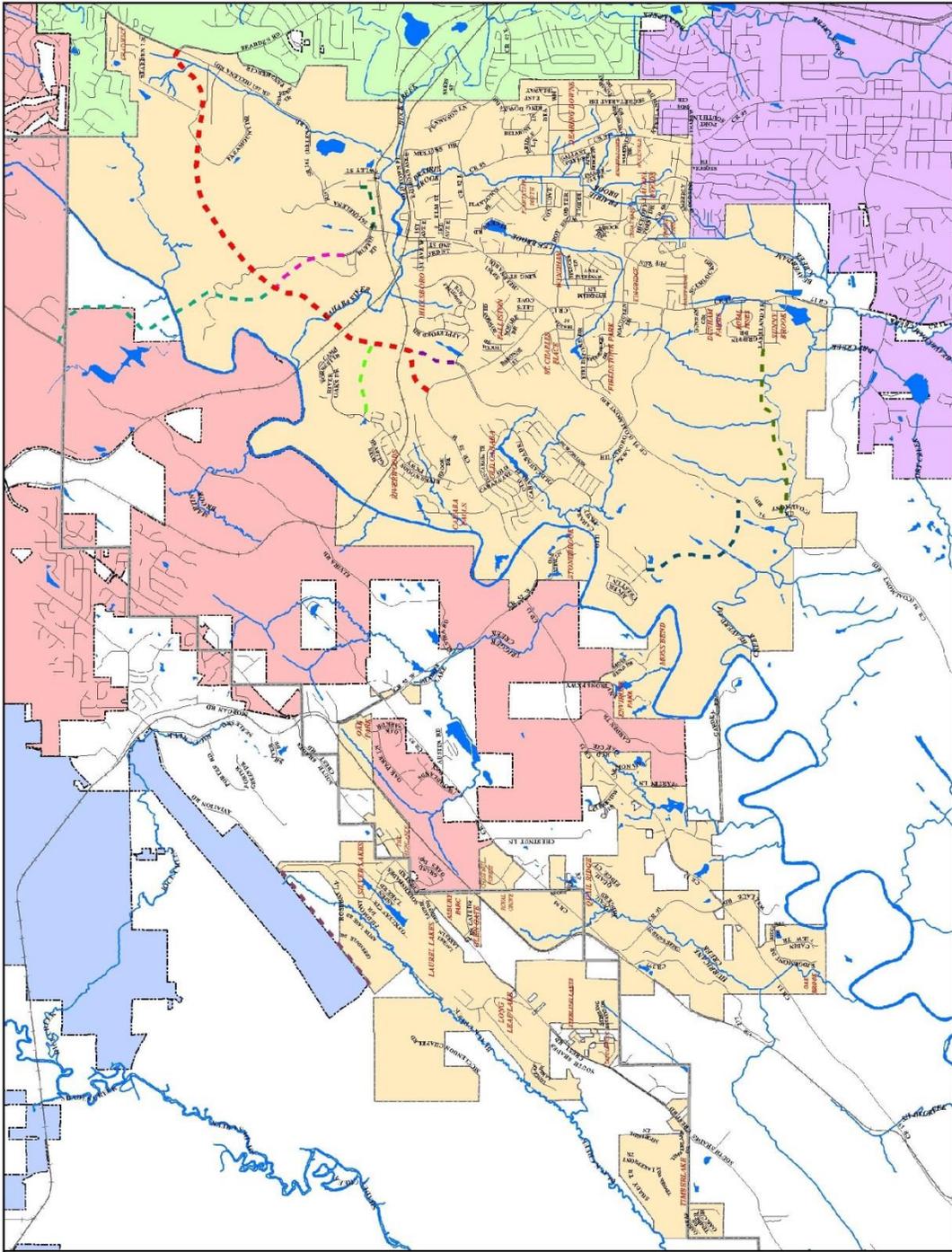
PROPOSED ROADWAYS

In addition to transportation projects that have been slated for completion at some future time (see the MPO's LRTP), there are routes that need to either be added to such LRTP or completed by developers to further the efficient and uncongested flow of traffic both within and through the City limits of Helena. Other than the proposed Helena Bypass, no new roadway is planned to alleviate the traffic problems and bottlenecks on Helena's limited roadways and intersections. Traffic is not only generated from residents of Helena but also from residents of municipalities south of the city such as Alabaster and Montevallo. New roadways need to be constructed to circumvent the congested intersections and lessen congestion on major roadways that access Helena. Although the Helena Bypass would minimize congestion through Old Town, traffic generated by current residential developments and future residential developments would dump even more vehicles on an already congested State Route 261 through Pelham.

Therefore, a roadway will need to be built off the Helena Bypass heading in a northerly direction crossing the Cahaba River to either connect with Flemming Parkway, the proposed Stadium Trace Parkway Extension, or the proposed Ross Bridge Parkway Extension. Two of these potential connections would put traffic on Interstate 459 via the proposed South Shades Crest Road intersection. The Flemming Parkway Extension would not replace the proposed Ross Bridge Parkway Extension but create an additional and better option for the overwhelming majority of the current and future residents of Helena, who happen to reside or will reside on the east side of the Cahaba River. A built-out Hillsboro dictates this option to occur. Without this option, a new bottleneck, besides the one that would continue on State Route 261 in Pelham, will be created on Highway 52 West crossing the river to get to the Ross Bridge Parkway Extension. In addition, the Ruffin Road Extension would be construction from its current terminus to the Flemming Parkway Extension at its intersection with the Helena Bypass. Due to the costs involved with completing these projects, Helena should move to place these projects or at least the Flemming Parkway Extension on the LRTP, and get support from its municipal neighbors who will benefit.

Desiring to circumvent traffic around congested intersections, the proposed routes of the Beaverdam Creek Parkway, the Old Cahaba Connector, and the Riverwoods Connector are needed. The initial two routes would be located near the southern boundaries of Hillsboro South and would move traffic laterally from the southern areas of Old Cahaba and Hillsboro South to County Road 17 avoiding forcing traffic through the congested intersection within the Crossroads. Between the two railroads, the Riverwoods Connector would provide a connection to the bypass from existing and future developments in that area, alleviating some of the pressure off Highway 52 West.

The Liberty Heights Connector was discussed in the previous plan as better access to State Route 261 than traveling through the quarry area, and the McClendon Chapel Connector would provide access from Silver Lakes to city lands on McClendon Chapel Road as well as access to the backside of other subdivisions.



PROPOSED ROADWAYS

LEGEND

- Planned Routes**
 - Helena Bypass
 - Hillboro Parkway Extension
- Proposed Routes**
 - Flanning Parkway Extension
 - Rutin Road Extension
 - Riverwoods Connector
 - Beaverdam Creek Parkway
 - Old Catalina Connector
 - Liberty Heights Connector
 - McClendon Chapel Connector
- Helena
- Alabaster
- Hoover
- Pellham
- Bessemer

1 Inch = 3,500 Feet

NORTH

0 1,750 3,500 7,000 Feet

RAILROAD CROSSINGS

Three railroads cut across the City limits of Helena. Two CSX Transportation lines cross through at Old Town, and a Norfolk Southern line travels along the extreme west edge of the city limits. The CSX lines cause traffic headaches as the railroad crossings on State Route 261 are at grade as well as the one on Cunningham Drive. Only driveways are crossed by the Norfolk Southern line. Traffic congestion caused by moving trains is a negative but safety is another concern as the northern State Route 261 crossing only has flashing warning lights unlike the southern State Route 261 crossing which not only has flashing warning lights but gates as well. A stop sign exists at the Cunningham Drive railroad crossing. Following a trend of a couple of Shelby County residential developers, the Riverwoods developer built a bridge over the CSX line connecting its various phases.



State Route 261 Railroad Crossing (Lights Only)



State Route 261 Railroad Crossing (Gates/Lights)

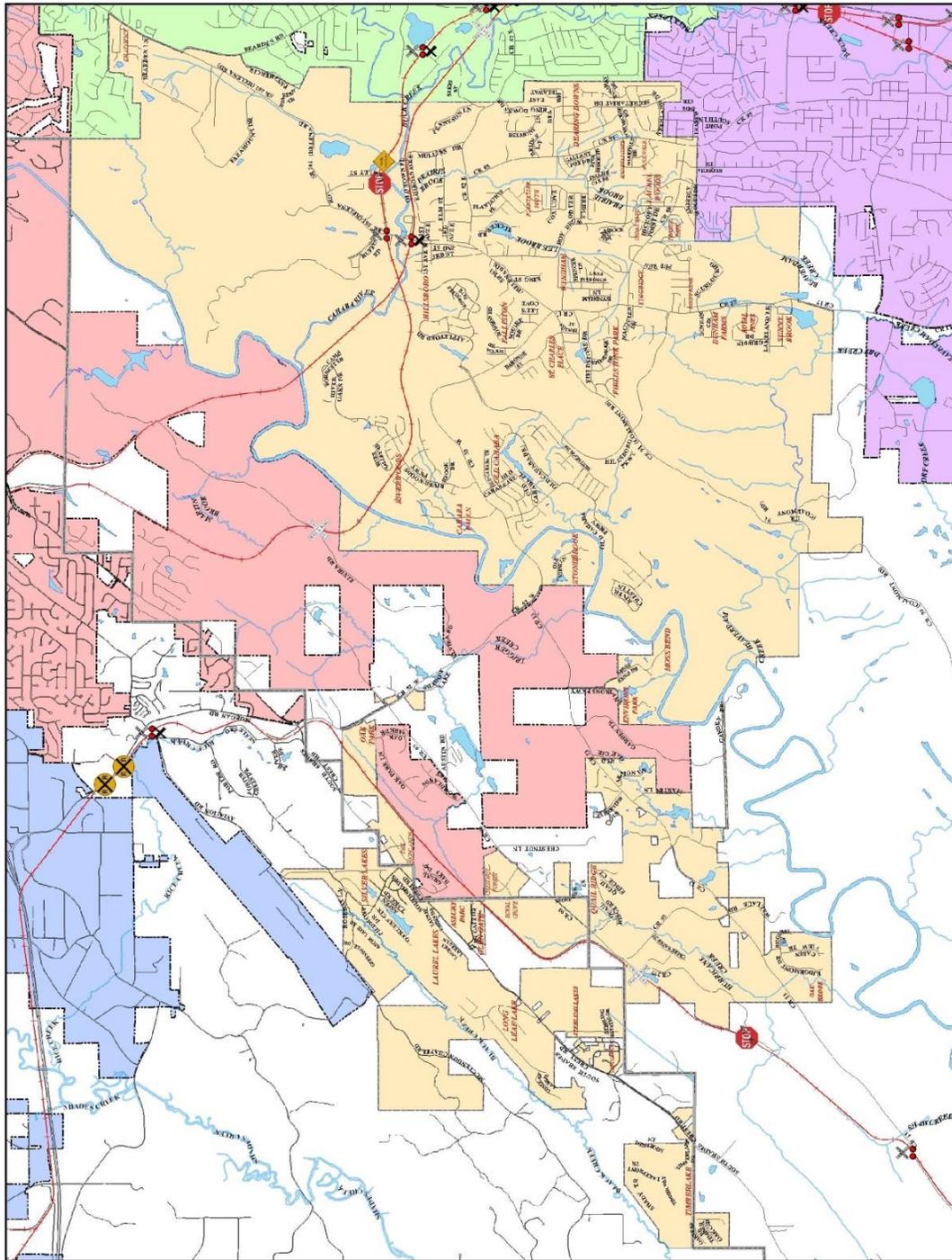


Cunningham Drive Railroad Crossing



Riverwoods Subdivision Railroad Overpass

Gates needs to be added to the southern State Route 261 crossing for safety reasons. Once the Liberty Heights neighborhood is redeveloped and a new road is added on the north side of the tracks connecting State Route 261 at Ruffin Road, the Cunningham Drive crossing could be removed as it would no longer be needed. A pedestrian tunnel or bridge could be constructed at that time to connect Liberty Heights to the proposed Buck Creek Park. Planned developments should be required to have bridges crossing railroad tracks and at grade crossings should be denied.



AT GRADE RAILROAD CROSSINGS

LEGEND

Warning Device



None



Crossbuck



Stop Sign



Flashing Lights



Flashing Lights with Gates



Gated / Closed



Helem



Akabaster



Iboover



Pelham



Bessemer



1 Inch = 3,500 Feet

NORTH

0 1,750 3,500 7,000 Feet

***PAGE INTENTIONALLY
LEFT BLANK***

Final Draft