



March 24, 2009

Mr. Tim Young, AICP
Director of Community Development
City of Locust Grove
P.O. Box 900
Locust Grove, Georgia 30248

Subject: Proposed I-75 at Bill Gardner Parkway Interchange Modification Report

Dear Mr. Young:

The Office of Planning is in receipt of your August 18, 2008 Feasibility Review requesting an Interchange Modification Report (IMR) for a modification to the interchange of I-75 at Bill Gardner Parkway in Henry County. To expedite the initiation of the IMR, your August 18th Feasibility Review will serve as the Memorandum of Understanding between the City of Locust Grove and the Department. As outlined in your Feasibility Review, the City will be responsible for 100% of the cost of the IMR. The Department will hire the consultant and serve as the project manager.

Based on this understanding we will request that our consultant provide a work scope, budget and schedule for completing the requested IMR. Once the City has had an opportunity to review the budget, work scope and schedule, we will request a check from the City to cover the full amount of the budget cost before we are able to enter into a contract with the consultant. Based on previous IMRs, the expected cost is between \$150,000 and \$200,000.

If you have any questions or comments, please contact Reuben Woods at 404-631-1806 or via e-mail at rwoods@dot.ga.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Angela T. Alexander", is written over the typed name.

Angela T. Alexander

Acting Director of Planning and Transportation Data

ATA: rw

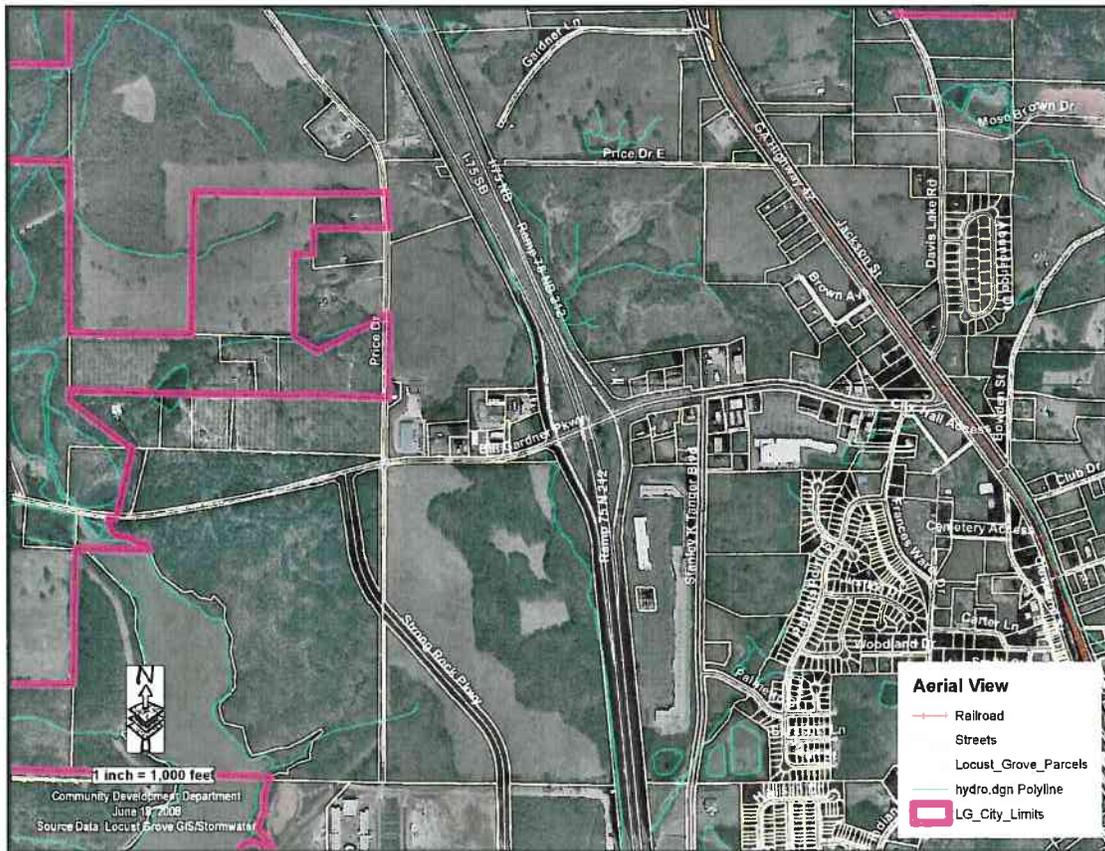
Copy: Thomas Howell, District Three Engineer

Feasibility Review for I-75 Interchange Modification Report
Exit 212 (Bill Gardner Parkway)
Henry County, Georgia
City of Locust Grove

IMR Sponsor: City of Locust Grove
Address: P.O. Box 900
3644 Highway 42
Locust Grove, GA 30248

Contact: Tim Young, AICP
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The City of Locust Grove seeks to Sponsor a study for modifications to the Bill Gardner Interchange at I-75 (Exit 212) as part of its SPLOST III commitments approved by voters in November 2007. As part of its Interchange Policy the Georgia Department of Transportation (GDOT) requires the Sponsor to produce a Feasibility Review for an Interchange Modification Report (IMR). The following documentation outlines the GDOT requirements in terms of justification to begin the IMR for this interchange.

3140 -1 Interchange Policy

A. 1. Review and Written Analysis of the Spacing Requirements.

Throughout the 1990s and into the current decade, Henry County Georgia has been one of the fastest-growing counties in the nation. Correspondingly, the City of Locust Grove has grown dramatically since 2000. The city currently lies outside the Atlanta Urbanized Area as an urban cluster and is located in southern Henry County along the I-75 corridor. The interchange area does not fall within that urban cluster boundary; however, the fact that the population in the city has increased by over 93% since 2000, with even greater growth in the area outside the incorporated area leads one to assume that this area is reminiscent more of a suburban characteristic. As such, the required suburban minimum spacing is two (2) miles with an average spacing of four (4) miles.

Since this request is for a Feasibility Review only and requesting modification of an existing interchange, it is anticipated there will be no change to the existing interchange spacing along I-75. Immediate interchanges to the North of this interchange consists of: SR 155, Exit 216 located approximately 4.5 miles north of Exit 212 (Bill Gardner Parkway) and Exit 218, SR 20/81, located approximately 6.2 miles north. Immediate interchanges to the south of Exit 212 consist of Exit 205, SR 16, located approximately 6.6 miles south and Exit 201, SR 36 an additional 4.21 miles south (total 10.81 miles south of Interchange. Thus, minimum spacing is 4.5 miles (Exit 212 to 216) while average spacing is 4.25 miles (Exit 201 to 218 divided by four). Under Section II-A, the criteria for this IMR would be in excess of the suburban spacing requirements (1. b.).

A. 2. Written Statement Defining Consideration of the Modification As Needed

- a. The Bill Gardner Interchange at I-75 is in need of modification due to multiple reasons. First, the interchange is currently experiencing considerable peak hour delays due to the tremendous growth beginning in the late 1990s and exploding in this decade. The addition of large residential and mixed-use development to the west side of I-75 is adding to the traditional commuting flow experienced in the City early in the decade. Congestion at the nearby Tanger Boulevard intersection with Bill Gardner Parkway extends queues over 570 feet towards the Northbound I-75 off ramps. A recent traffic model prepared for a proposed Wal-Mart, prepared in accordance to City requirements, demonstrated queue lengths extending underneath the overpass. The model also demonstrated that the level of service (LOS) (defined by the

Highway Capacity Manual in terms of the amount of control delay, including initial deceleration delay, queue move up time, stopped delay and final acceleration delay) at the I-75 northbound and southbound ramps worsen with the increase of development and traffic volumes in the area. For example, during peak periods, the operation of the ramps has degraded to LOS D with long delays and increased queue lengths. The southbound off-ramp queue length is nearly 600 feet while the northbound off-ramp queue length is over 400 feet during the peak periods. The intersections adjacent to the I-75 ramps do not operate at an acceptable LOS and result in higher delays and longer queues that extend to the I-75 ramps and negatively affect the LOS. The deficiencies of the intersections at the I-75 ramps will continue to grow as the volumes increase at the current growth rate. As travel demand increases with new development in the area, the congestion situation will only continue to worsen. The existing interchange is clearly becoming inadequate, and the nearest interchanges for alternatives are Exit 216 (SR 155), which is already severely deficient in the peak operating hours due to the massive expansion of residential and industrial development in the McDonough-Central Henry area, and Exit 205 (SR 16), which was recently improved and upgraded, but too far south of the primary direction of travel to serve most residents and businesses.

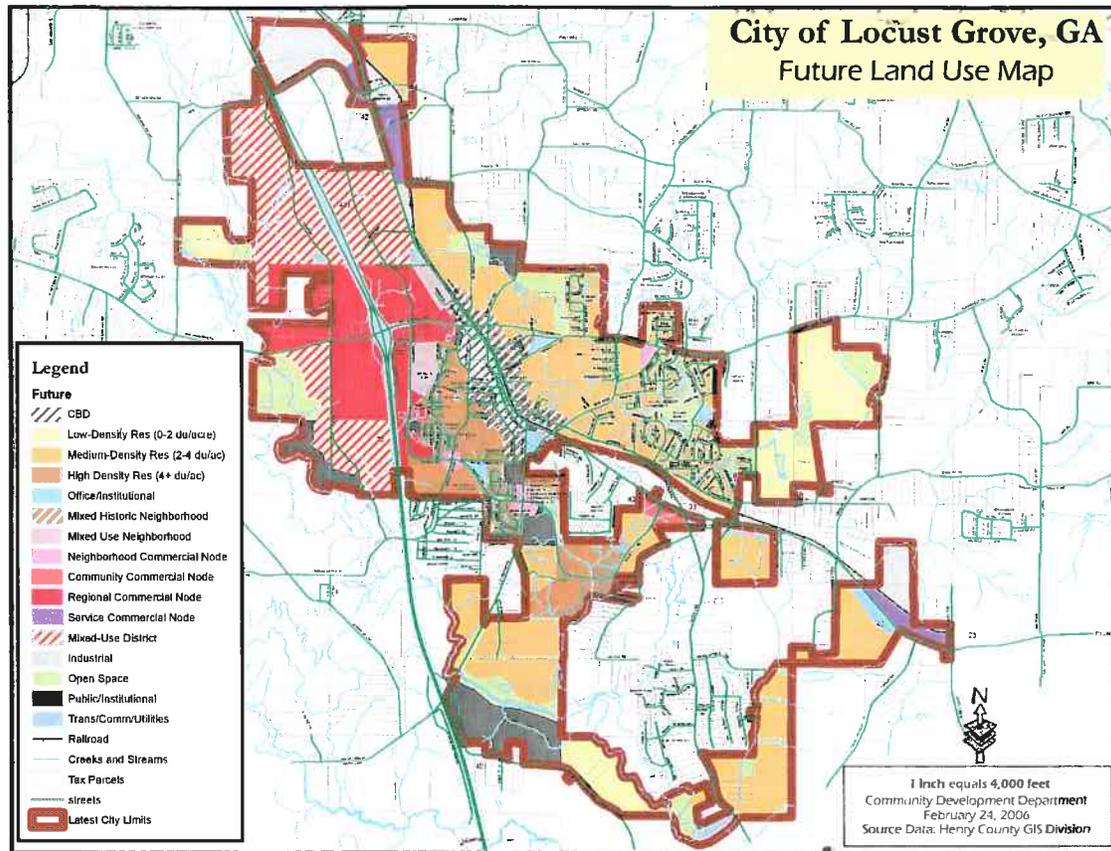
Georgia Department of Transportation Project STP-0000-00(562) proposes to widen Hampton-Locust Grove Road\Bill Gardner Parkway from SR 155 to the southbound ramps of the I-75 interchange. A four lane section is proposed from SR 155 to Lester Mill Road and a six lane section is proposed from Lester Mill Road to the I-75 ramps. The existing Bill Gardner Parkway lane configuration beneath I-75 is inadequate to convey the proposed laneage for this project. An analysis of the interchange and development of proposed alternates is necessary to coordinate the proposed layout of the six lane section. The concept phase for project STP-0000-00(562) cannot be completed until the analysis of the interchange has been completed.

Pending development in the South Henry area is the primary factor that has spurred the City of Locust Grove to spearhead the effort of the need for an Interchange Modification. Outside the city limits are the Eagles Brooke (1,800 residential units), Heron Bay (2,800 residential units at the Henry/Spalding border), and new Watermark (1,100 residential units east of the city on Peeksville Road) developments which will increase the overall population at build-out to over 16,000. Within the city limits, there are over 5,800 residential units approved or rezoned for development, bringing another 15,000 residents primarily served by this interchange. At the Bill Gardner interchange, the city has zoned or is in the process of zoning review for over 1.2 million square feet of retail space, over 600,000 square feet of office space, a 120,000 square foot hospital, and a private school that will serve over 3,600 students. This is in addition to the existing 300,000 square feet of retail space and additional 200,000 square feet under construction as part of the new Wal-Mart Supercenter. Since many of these projects were subject to traffic

impact analyses for GRTA, the projected traffic from this indicates between 40,000 – 50,000 vehicles per day under I-75 on Bill Gardner, along with the need for additional turning lanes on the SB and NB ramps to the expressway.

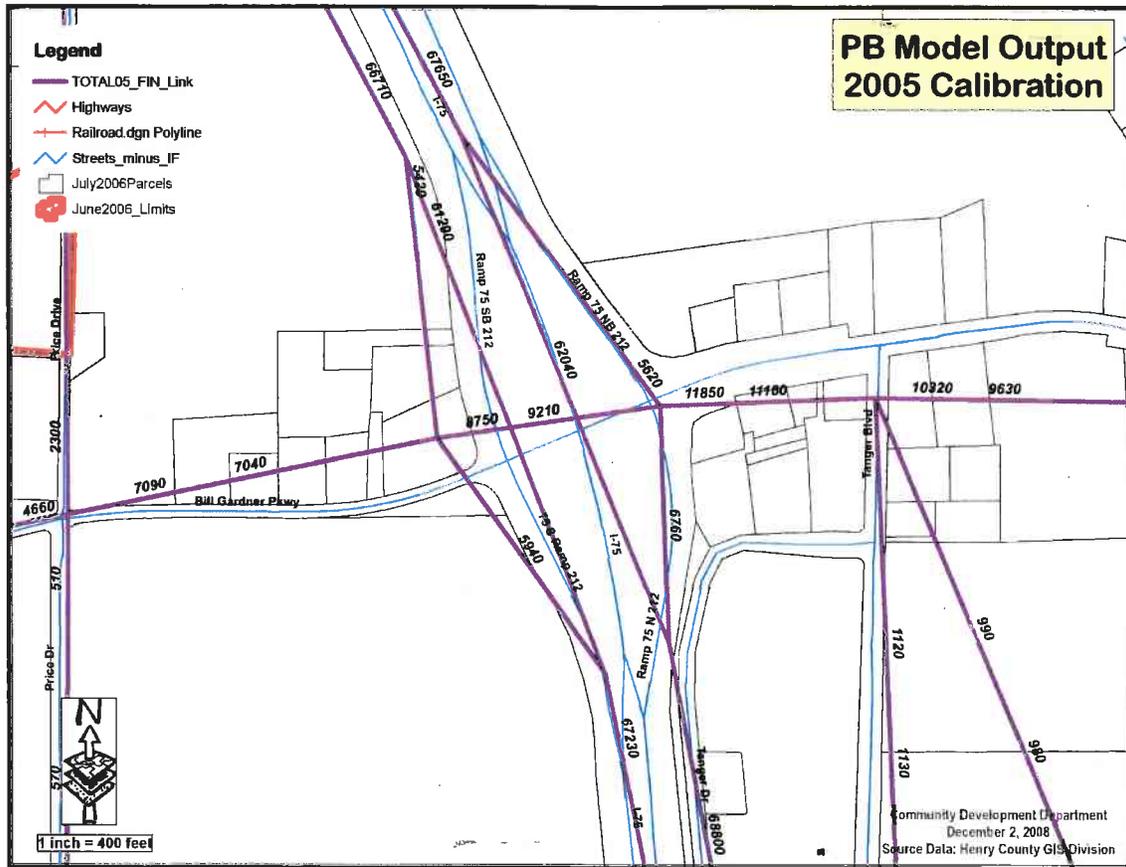
As part of the spearhead effort by the City of Locust Grove, a special portion of the Transportation Element of the SPLOST III was dedicated for an Interchange Modification Report (IMR) at a projected cost of \$250,000. Voters overwhelmingly approved the SPLOST referendum in November 2007.

- b. The area near to the interchange is adjacent to an existing perennial stream; however, portions of it has been channeled as either part of the original construction of the interstate or as part of the subsequent widening or improvements during the 1980s to 2000. Locust Grove has water and sanitary sewer lines within the vicinity of the interchange, although much of the sanitary sewer lies parallel with the expressway. Additional utilities such as electricity (Georgia Power) and natural gas traverse the existing interchange. There are no schools in the immediate vicinity of the interchange, although the Strong Rock Christian School complex is under development within 1.5 miles of the Bill Gardner Parkway interchange. Existing roads within the interchange area are Bill Gardner Parkway, the mainline facility crossing under I-75, Tanger Boulevard, approximately 700 feet east of the NB off ramp, and Price Road/Strong Rock Parkway approximately 1,200 feet west. Certain sections of these roadways come within a few hundred feet of the interstate either north or south, but are generally well away from the I-75 ROW. Gardner Lane, north of the NB I-75 on-ramp, is an unimproved road. All future roads are to be a minimum of 1,000 feet from the existing freeway interchange, including a new street proposed as J. Bandy Parkway to connect Strong Rock Parkway to Bill Gardner. For Section 106 considerations, there are two historic structures within a reasonable proximity, including the old Gardner homestead near the NB 75 on-ramp, and the Price homestead west of I-75 between Price Road and the freeway.
- c. In terms of Future Land Use, the City of Locust Grove initiated an Interim Future Land Use Map revision that was approved and accepted by ARC and DCA in March of 2006. The map is shown below.



The area shown in red around the I-75/Bill Gardner Interchange is depicted as a Regional Commercial Center, where it is expected that the most intensive commercial land uses would be located. The striped areas north and south of that commercial center is known as a Mixed Use District area, which is primarily for commercial, residential, and industrial uses at fairly high intensity, but more horizontally mixed. The remaining land uses are primarily residential in nature and step down in intensity of use the greater the distance from the interstate corridor. This is primarily due to the increased availability of sanitary sewer in this corridor via the Indian Creek Wastewater Plant (Locust Grove), completed in late 2005.

Within the next 5 years, there are three major retail/service developments scheduled to break ground within the immediate interchange area. First is a Wal-Mart #5709, a 176,000 square foot supercenter located in the northeast quadrant of I-75 and Bill Gardner Parkway, to be served by a new road extending from Tanger Boulevard north and then east to Highway 42. Other spin-off development is anticipated in this quadrant, including new medical offices (22,000 square feet), retail, and restaurant. To the southwest quadrant of the interchange, the Strong Rock DRI (#999) development has completed the elementary school building of approximately 140,000 square feet. This is currently at an enrollment of



Model Runs 1: 2030 and 2005 for Exit 212

The paired figures indicate 2030 directional traffic volumes, showing nearly 50,000 vehicles immediately to the east of I-75 on Bill Gardner and nearly 30,000 vehicles to the west of I-75. Therefore, the interchange is expected to have a demand well in excess of 60,000 vehicles per day. Further, with information from the DRI Traffic Studies, there is documented evidence that additional turning lanes are needed to the degree that the existing width underneath I-75 cannot accommodate the required lanes for Bill Gardner Parkway. In fact, Section 2 of Attachment C of the GRTA Notice of Decision for Strong Rock (DRI #999) notes the need for lengthening the I-75 flyover bridge to accommodate the additional turning lanes. The parallel roadways appear to be within respectable design limits, although there may need to be additional improvements to them over time for operations, etc. Further, the DRI and NOD for Locust Grove Retail (DRI #1610) detail more of the need for widening Bill Gardner underneath I-75 and the need for interchange reconstruction, with over 33,000 more trips to be added in that vicinity.

The data for Exit 216 are shown on the following page.

As with Bill Gardner Parkway, this interchange is similar in terms of existing travel volumes, with more traffic coming or heading to the easterly direction than to the west. By 2030, this favored direction remains, and with volumes more severe than with Bill Gardner Parkway (nearly 60,000 vehicles per day east of interchange, with approximately 30,000 on the western side). Furthermore, this Exit is the proposed terminus of the HOV lane system on I-75 as currently included in the Regional ARC Plan. Thus, the even more extreme traffic volumes and the distance precludes this exit as any viable alternative for no modification of Exit 212.