



South Barrett RelieverPhase 4 Feasibility Study June 2020



Executive Summary of Study Findings

Arcadis is very aware of the Town Center Community Improvement District's (TCCID) ultimate goal of improving infrastructure that will promote quality growth and development making the district an attractive option to developers and retailers looking for a place to call home. TCCID strives to help foster this growth by investing in multi-modal transportation networks, providing commuter, cultural and recreational options. This investment over many years has allowed TCCID to be considered one of Cobb County's premier regional activity centers.

To support existing needs and anticipated future growth, Arcadis was selected to conduct a study to determine the feasibility of an extension of the South Barrett Reliever (SBR), beginning at the proposed Phase 3 roundabout just east of I-75 and continuing east across I-575 with a terminus to be determined. Known as South Barrett Reliever Phase 4, this new link would provide the final segment for a bypass route of Barrett Parkway for complete connectivity east and west through the district, from Cobb Parkway to east of I-575. This scope of work covers the traffic analysis, risk analysis and planning level cost estimates required for the TCCID and other stakeholders to evaluate the validity of this potential investment and prioritize it against other capital projects. The study area for this project includes Barrett Parkway from Cobb Parkway to Canton Road and Barrett Lakes Boulevard from Cobb Parkway to Barrett Parkway. The study area is shown in Figure 1.

Alternatives Analyzed

Previous planning studies concluded that the eastern terminus of the Reliever should tie to the southern end of Chastain Meadows Parkway, thereby providing a true loop around Barrett Parkway's most congested areas. Based on initial screening data, the Phase 4 team determined that other alternatives should be explored due to environmental constraints, recent developments, and topography.

Three alternatives were identified as being potentially feasible to meet the need of the project. These alternatives have been evaluated for their traffic relief or impact, cost, constructability, and general benefit:



Figure 1: Study Area



Alternative 1

Cross I-575 then run northward along the green space between the Barrett Creek and Colonial Grand at Barrett Creek neighborhoods, terminating at Barrett Parkway & Chastain Meadows Parkway.



Alternative 2

Cross I-575 and continue eastward to tie into Bells Ferry Road at the existing entrance to "Skip" Wells Park.



Alternative 3

Similar to Alternative 1 but running northward parallel to I-575 along excess Interstate right of way then turning eastward to terminate at Barrett Parkway & Chastain Meadows Parkway.

High-level cost estimates were developed for each of the three alternatives and compared against their travel benefit/utilization and anticipated environmental and real estate impact.







Study Recommendations

All of the alternatives studied indicated an overall traffic benefit of 4-7 percent to the broader roadway network by reducing travel times and congestion to points east and west of I-75 and I-575 on Barrett Parkway. Each alternative requires that additional intersection improvements be implemented along Barrett Parkway to service the additional traffic volumes that would be attracted to the South Barrett Reliever.

Alternative 1, the preferred alternative in previous studies, was found to have unacceptable and costly impacts to the US Army Corps Regulatory Floodway that is the green space along which this alternative was proposed to follow. Anticipated cost for this alternative is \$71 M**. Alternative 2 appears to be a straightforward option, however more of the outlying roadway network would need to be modified to serve traffic, including some widening of Bells Ferry Road. The eastern terminus of this alternative also falls outside of the TCCID boundary. Anticipated cost for this alternative is \$51 M**. Alternative 3 has identical traffic operations, intersection tie-in and benefit as Alternative 1. but without the large floodway impacts. This alternative presents the greatest overall commercial real estate impacts and would require the partial or complete displacement of several businesses. This alternative would also require the State of Georgia to allow for the shared use of I-575

Figure 2: South Barrett Reliever Phase 4 Alternatives

right of way, which may not be feasible. Anticipated cost for this alternative is \$50 M**.

Given these factors, the feasibility study team recommends that Alternative 2 is the most feasible of the options studied. The alignment is straightforward and does not have unacceptable environmental or commercial impacts. The new roadway will create more crossing traffic wherever it ties into Barrett Parkway. Therefore, from a traffic operations perspective, the tie into Bells Ferry Road is preferred as it would move additional traffic volumes to the new Reliever route farther away from I-575. This in turn reduces tertiary impacts to the intersections in the immediate vicinity of I-575 at Barrett Parkway.

There are other repercussions to implementing this alternative that would require further, more in-depth study. This would include additional analysis of the needed improvements along Bells Ferry Road, obtaining public by-in, and studying the broader reaching social, economic and traffic implications. TCCID's upcoming Bells Ferry Road Corridor Study could provide some valuable insight into some of the larger characteristics of this area. At this time, we recommend that a definitive determination of the "best" alternative should not be decided upon until more information can be compiled as to the impact/effects to Bells Ferry Road and its surrounding neighborhoods.

^{**}Note: Cost estimates are in 2020 dollars and include preliminary engineering, utilities, right of way, and construction.