

# BOARD OF COUNTY COMMISSIONERS BRIEFING PAPER

## Main Street Extension Feasibility Study February 18, 2003 Follow up from September 17, 2003

For Information

For Discussion/Approval  
Prior to Future Hearing

For Action

### ISSUE:

Should an extension of Main Street between Meyer Drive and Pleasant Park Road in Aspen Park/Conifer be pursued to provide safer access for existing residents, access to future developments, as well as accommodate future traffic demands?

### BACKGROUND:

The extension of Main Street from Meyer Drive to Pleasant Park Road to establish a US285 frontage road has been included in the US285 Corridor Area Community Plan since its adoption in 1986. This concept was recently included in the 2002 update of the community plan. A consultant, directed by Jefferson County and CDOT staff, recently completed a feasibility study for this concept and recommended that Main Street be carried forward as shown in the attached figure. The consultant identified areas that will require further refinement prior to final design to minimize impacts to adjacent residents. The consultant also recommended that a future US285/Light Lane interchange be included in county plans. The total cost of Main Street with the interchange is approximately \$18.4 million.

The consultant also completed an addendum to the feasibility study that reviewed the traffic benefits of a standalone US285/Light Lane interchange option. The consultant's conclusion was that this interchange would serve only a large adjacent development and would not have a positive affect on future congestion at adjacent interchanges caused by other developments. The consultant recommended against this alternative as a stand-alone option based largely on that it did not meet future traffic demands and that it did not meet connectivity objectives stated in the community plan.

### DISCUSSION:

H&T staff was very concerned about high costs, low projected traffic volumes, lack of community support, significant property owner impacts, and significant environmental impacts, of Main Street and studied the issue further. Staff reviewed four distinct sections of Main Street; including Meyer Drive to Houston Street, Houston Street to Aspen Road, Aspen Road to south of Light Lane, and south of Light Lane to Pleasant Park Road. A number of short-term intersection improvements that would be required under all Main Street scenarios were also identified, see Table 1.

**Table 1, Conifer/Aspen Park Intersection Improvements**

| <b>Location</b>                            | <b>Recommended Improvement</b>                           | <b>Approximate Cost</b> |
|--|--|-------------------------|
| Main Street/Aspen Road                     | Add eastbound right-turn lane                            | \$75,000                |
| Main Street,<br>Aspen Road to Wolff Avenue | Add southbound right-turn acceleration/deceleration lane | \$200,000               |
| Conifer Road/Wolff Avenue/Barkley Road     | Construct single-lane roundabout                         | \$200,000               |
| Barkley Road/US285 southbound              | Construct single-lane roundabout                         | \$200,000               |
| Pleasant Park Road/US285                   | Construct single-lane roundabout                         | \$250,000               |
| CR73/Pleasant Park Road                    | Construct northbound right-turn lane                     | \$75,000                |
| CR73/Kitty Drive                           | Construct single lane roundabout                         | \$300,000               |
| <b>Total Cost:</b>                         |  | <b>\$1,300,000</b>      |

The first section from Meyer Drive to Houston Street is expected to carry between 1,500 and 2,000 vpd in the future. The section would provide a continuous, direct connection on the easterly side of US285 from Meyer Drive interchange to the Wolff Avenue interchange. This section would require reconstruction of a fire station, have a significant impact on a local residence and would require construction through a wetland area. This segment would also be available to help alleviate a potential safety problem at US285/Houston Street. Staff felt that while the link is not needed at this time, it should remain as a recommended link when considering future development in the area. This 2,300'-foot-long section is expected to cost approximately \$2.0 million.

Main Street from Houston Street to Aspen Road is an existing paved county roadway. Safety and operational improvements such as auxiliary turn lanes or shoulders would be considered if safety problems were identified. This 1,300-foot-long section should also be carried forward and will cost approximately \$500,000.

The section of Main Street from Aspen Road to south of Light Lane will likely be needed to alleviate future congestion at the US285/Wolff Avenue interchange intersections. Reasonable intersection improvements will be needed at these intersections under any of the improvement alternatives; however, the capacity of these improvements will likely be exceeded by future traffic demand. A Main Street connection to a future US285/Light Lane interchange, should be preserved as an alternative to major intersection improvements. Major intersection improvements might include double left-turns (resulting in multiple-lane roadways) or multiple lane roundabouts. These improvements may require reconstruction of the Wolff Avenue overpass and would have significant community impacts. This 1,200-foot-long segment of Main Street is expected to cost approximately \$1.2 million. Compared to other segments of Main Street, this segment is less costly because it is shorter and may not require retaining walls or guardrail.

South of Light Lane to Pleasant Park Road would carry the least amount of future traffic and is also the most expensive to construct. This 3,500-foot-long segment also significantly impacts property owners and in two cases would require developments to dedicate right-of-way yet would not provide access to their developments. Anticipated costs are expected to exceed \$10 million because of longer length, extensive retaining walls and guardrail. Staff has determined that the high cost and substantial impacts outweigh the traffic and community benefits in this section.

**FISCAL IMPACT:**

Short-term intersection improvements should be considered in the county's capital improvement program as outlined in Table 1 and are expected to cost approximately \$1,000,000. Construction of the US285/Light Lane interchange should be implemented by an adjacent development and is anticipated to cost approximately \$4.0 million. Construction of Main Street from Meyer Drive to Light Lane is expected to cost approximately \$3.7 million in 2003 dollars if undertaken in the future.

**RECOMMENDATIONS:**

Implement short-term intersection improvements as traffic safety and operations dictate. An interchange at US285/Light Lane should be constructed to alleviate the traffic impacts of a large, adjacent development. Main Street from Meyer Drive to south of Light Lane should be added to the Major Thoroughfare Plan, and evaluated as an alternative to reduce congestion when needed. The segment of Main Street from south of Light Lane to Pleasant Park Road should be eliminated from further consideration.

**ORIGINATOR:**

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**Figure 7.1**  
**Consultant Recommendation: Main Street Extension**

