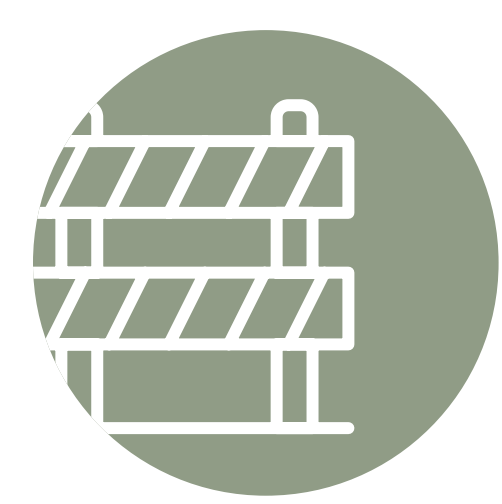


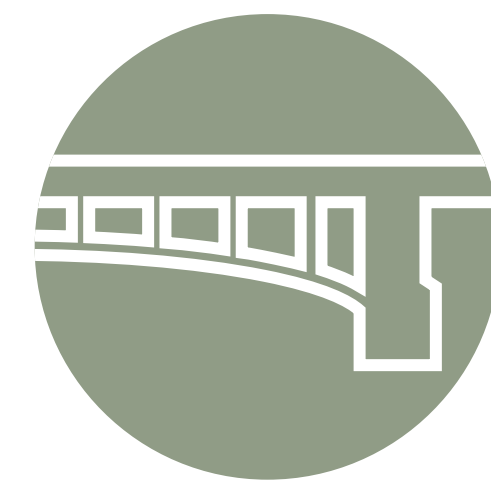
# NEW CONNECTION COSTS

## COST CONSIDERATIONS

For each extension project, several items were included to ensure that the project cost covers an “all-in” amount. The following were included in the total costs presented:



**Construction**  
of roadway  
cross section



**Bridges** over  
floodplains



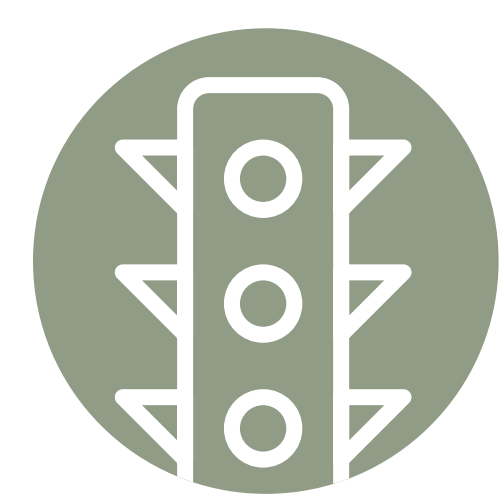
Acquisition of new **Right-of-Way**  
(most projects use some existing Right-of-Way)



Widened roads  
at intersections  
for **turn lanes**



Engineering  
**design**  
costs



**New traffic signals** at major  
intersections and new connection  
endpoints

## BENEFIT-COST ANALYSIS

To determine a value of benefit for each of these projects, a method developed by the Texas Transportation Institute was used. Delay savings were calculated for an entire year and multiplied by a value of time of \$20/hour. In addition, fuel savings were calculated from the traffic model and gas costs were assumed to be an average of \$3.00 per gallon. The annual benefit was calculated for a 20-year period to match the 2040 study year for traffic volumes, which matches the typical life cycle of a road.

**Benefit/  
Cost  
(B/C)  
ratio  
over a  
20-year  
period**

**Mulberry Extension**

3.8

**Frederick Extension**

1.8

**Post Oak Extension**

3.9

**Inner Loop (Interim Relief Route)**

1.6

**Cost** \$5M \$10M \$15M \$20M

