

Material/Installation Cost Breakdown

The following table shows the cost breakdown for material and installation of one pole and light fixture. The City of Denton uses a standard pole for the majority of its streetlights. These poles can be placed along the segments of US 380 that have a curb. Based on TxDOT requirements, segments of the corridor without a curb must use a breakaway pole (if hit, the pole breaks so as not to cause serious injury to people in the car). These breakaway poles cost more than the City's standard poles.

LED Standard Pole (curbed areas) Total = \$7477.5 <ul style="list-style-type: none">• Standard Pole: \$900• Light Fixture: \$270• Other Misc. Mat.: \$275• Installation: \$3540• Contingency: \$2492.5	LED Non-Standard Pole (non-curbed areas) Total = \$10,477.5 <ul style="list-style-type: none">• Non-Standard Pole: \$1280• Light Fixture: \$270• Other Misc. Mat.: \$395• Installation: \$5040• Contingency: \$3492.5
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*Contingency: Design, ROW/Acquisition, etc.

Electricity/Maintenance Cost Breakdown

The following is the cost breakdown for maintenance and electricity supply per pole per month. The maintenance cost is based on the data provided from City of Ft. Worth's pilot LED program. The electricity cost is based on the assumption that each light pole is using electricity 12 hours per day.

LED Lights: Electricity/Maintenance Costs	
Maintenance	\$16.67/pole/month*
Electricity	\$2.15/pole/month**
Total	\$18.82/pole/month

*Data provided from Fort Worth

**Electricity Rate Used: 3.92 cents/kwh

Cost to Install LED Lighting on US HW 380

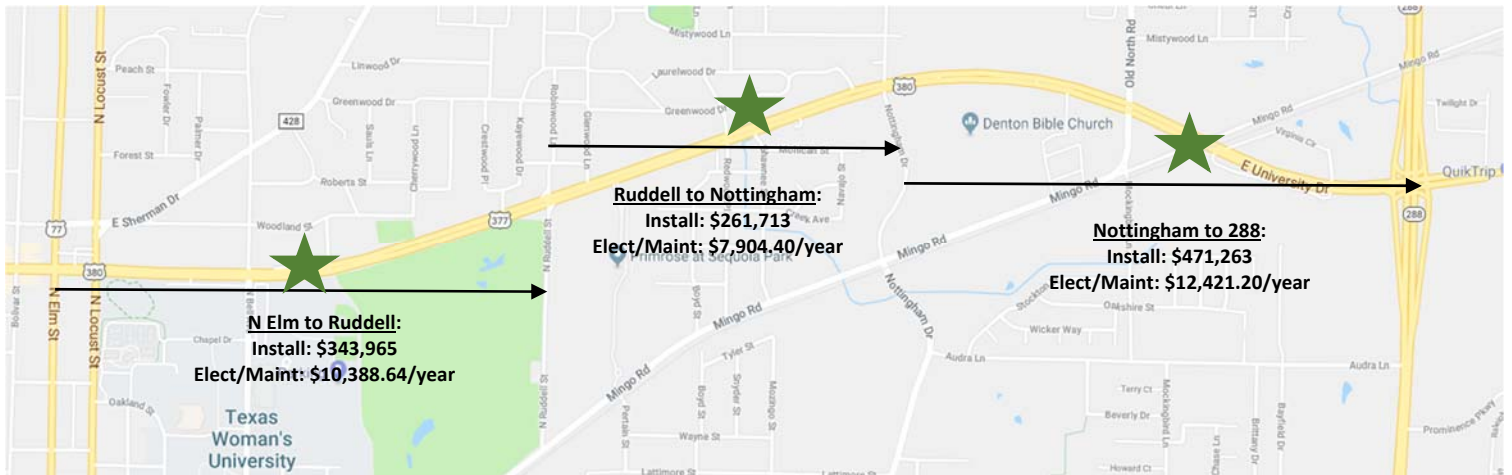
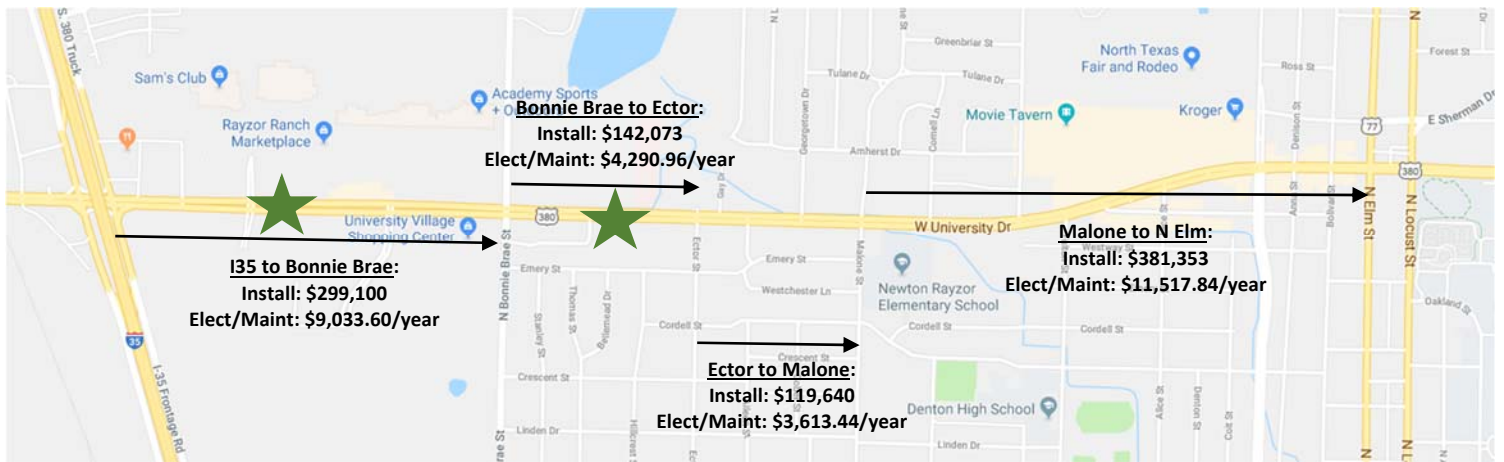
(200 ft. spacing; Lights on Both Sides of Road)

The following analysis shows US HW 380 divided into 14 segments from city limit to city limit and the associated cost to add LED lights to each segment. The purpose of breaking the corridor into segments is to show how much it costs to light up US Highway 380 in small sections in order to help identify the City's priority areas.

Segment Map from I35 to Loop 288:



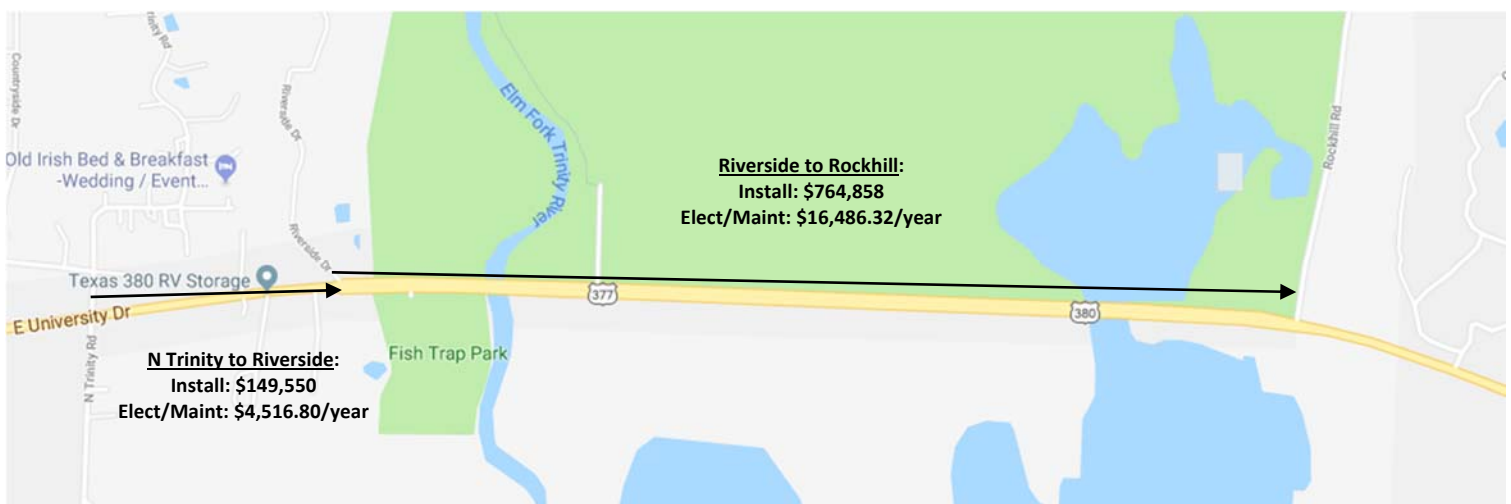
= Staff Recommended Priority Areas



-Total Cost to install lights between I35 and Loop 288 = \$2,019,107; Elect/Maint = \$59,170.08/year

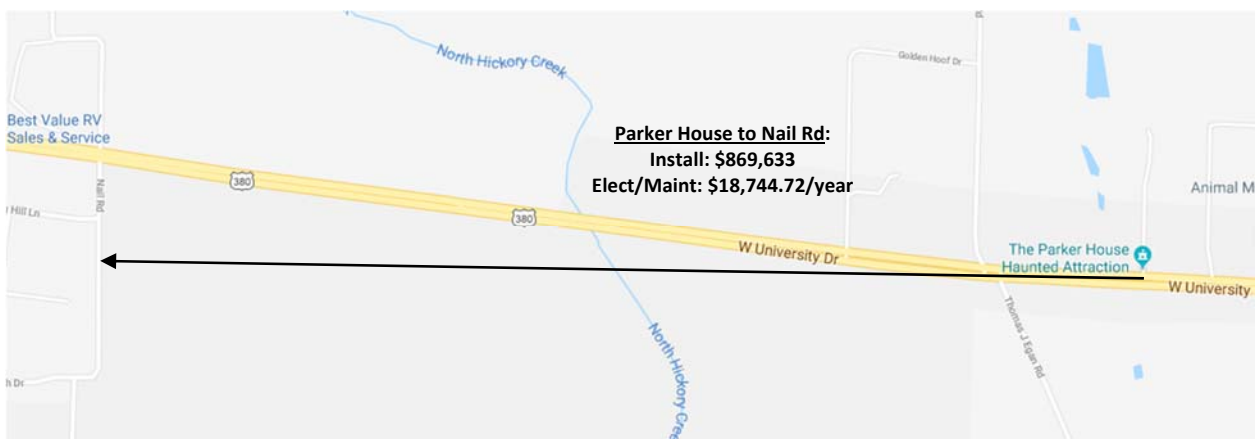
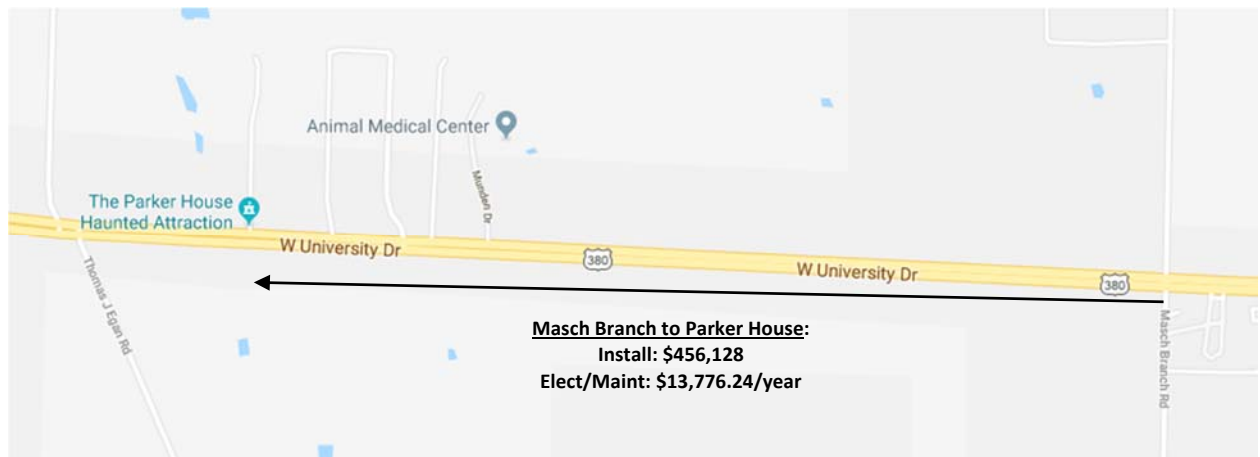
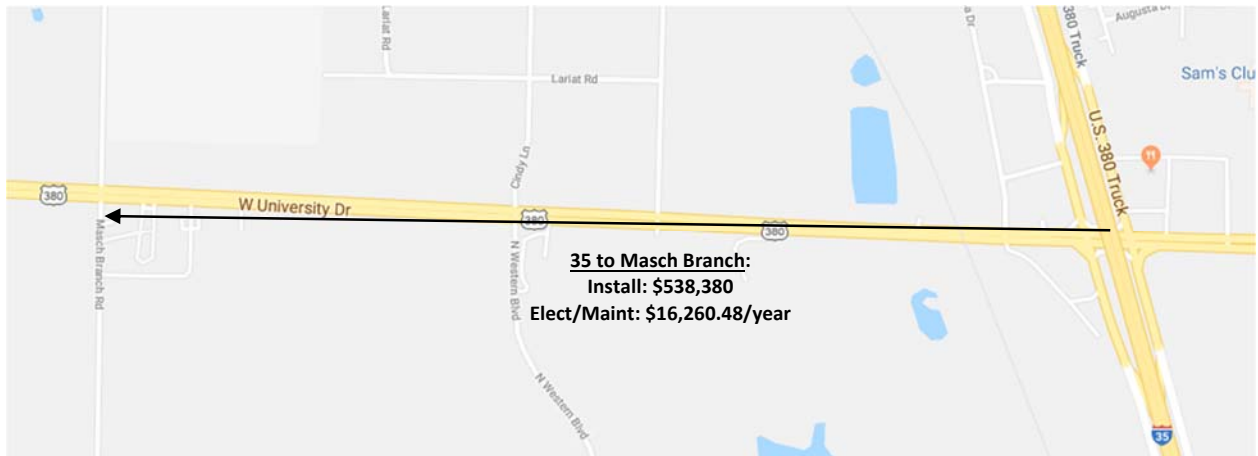
Within the urbanized section from I-35 to Loop 288 above, there are 5 segments that are of highest priority for the addition of street lights due to their location. The first segment is from I-35 to Bonnie Brae because this is where the Razor Ranch shopping center is located. This area has a very high volume of traffic flow and very little lighting. The second segment is from Bonnie Brae to Ector. This area is also largely commercial with a high volume of traffic flow and currently has no lighting. The third segment is from North Elm to Ruddell St. This section of US 380 is located directly in front of Texas Women's University, has a large volume of pedestrian activity and traffic flow, and does not have street lights currently. The fourth section, from Ruddell to Nottingham, runs through a residential area. The fifth segment, from Nottingham to 288, is a mixture of residential and commercial areas and has very few lights. The remaining 2 sections of the I-35 to Loop 288 segment, Ector to Malone and Malone to N Elm, currently have some streetlights throughout but will need an evaluation to ensure they are adequate.

Segment Map from Loop 288 to Eastern City Limit (Rockhill Rd.):



-Total Cost to install lights between Loop 288 and Eastern City Limit = \$1,751,889; Elect/Maint = \$46,297.20/year

Segment Map from I35 to Western City Limit (Nail Road):



-Total Cost to install lights between I35 and Western City Limit = \$1,864,141; Elect/Maint = \$48,781.44 /year