

TRAFFIC ENGINEERING PROJECTS

| | TITLE | PURPOSE | TOTAL CAPITAL | REVISED | COMMENTS |
|---|--|--|---------------|--------------|---|
| 1 | Ref # 98 City Wide Guardrail Replacement | <p>This project targets sub-standard guardrail installations that have incurred damage and must be totally replaced.</p> <p>This description needs to read: "This capital request item targets substandard legacy barriers that no longer meet current standards (i.e. guardrail on 12.5' spacings - current standard is a 6'-3" spacing) and substandard guardrail installations that have deteriorated wood posts to a point where they are ineffective and would not be able to perform as designed or intended." Current unit pricing for typical guardrail pay items:</p> <ul style="list-style-type: none"> - Linear foot of W-beam single guardrail: \$21.50 - Linear foot of Guardrail removal: \$3.50 - Guardrail Extruder Terminal (GET): \$3,150 per each - Guardrail anchor unit, Type 'B': \$500 per each <p>Given the above costs, a 200 foot section of rail with a GET, a Type 'B', and 150 foot of W-beam in between the anchor units would cost \$6,875.</p> | \$ 2,000,000 | \$ 2,000,000 | No change |
| 2 | Ref # 99 City Wide Traffic Signalization and Synchronization | This project will expand the citywide traffic signal synchronization system. | \$ 4,000,000 | \$ 2,000,000 | Reduced by \$2 million |
| 3 | Ref # 101 Citywide Median and Curb Return Improvements | To remove, repair and replace medians and curb returns as needed throughout the City. This is required to repair damage caused by vehicles while bringing medians into ADA compliance. The funding for this item is to restore damaged median curb noses and radius returns that incur damage from snow plows during ice and snow removal and from heavy trucks that off-track over | \$ 2,500,000 | \$ 1,000,000 | Reduced by \$1.5 million |
| 4 | Ref # 102 Roadway, Pedestrian, and Decorative Lighting Replacement | Replace aging highway lighting infrastructure requiring extensive maintenance and to upgrade to more efficient lighting. | \$ 4,000,000 | \$ 2,000,000 | Reduced by \$2 million |
| 5 | Ref # 103 Matching Funds for ODOT Traffic Projects | 20% City match for funding of ODOT traffic signal, school zone, impact attenuator and railroad crossing projects to supplement the 80% of Federal and State funding. The purpose of this item is to have on hand, City of Tulsa funds to match state and federal funding sources, when a project is originated with funding typically through the Oklahoma Department of Transportation whereby state or federal sources supply 70 to 90 percent of the project cost and they remaining must be committed by the City. If monies are NOT | \$ 4,000,000 | \$ 1,500,000 | Reduced by \$2.5 million |
| 6 | Ref # 105 Pavement Marking & Delineation | <p>Install durable pavement markings on arterial streets citywide and delineate raised concrete island noses.</p> <p>Funds in this category would fund annual school crosswalk re-marking, arterial intersections, downtown streets and crosswalks, and other locations as determined with durable markings. Sign inventory is a federal mandate specified in the Manual on Uniform Traffic Control Devices Handbook in Section 2A.08.</p> <p>Extruded panel sign installation and replacement is for overhead sign locations and new locations where it is determined an extruded panel sign is required.</p> | \$ 5,000,000 | \$ 7,500,000 | Combined projects 6, 8, and 19 for a total of \$7.5 million |
| 7 | Ref # 108 Traffic Calming | Purpose of project is to slow vehicles on residential streets in areas that have support of the neighborhood and where an engineering study shows this to be a viable option. Criteria for installation is set forth in the City's Neighborhood Traffic Calming Guideline. | \$ 3,200,000 | \$ 2,000,000 | Reduced by \$1.2 million |

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| 8 | Ref # 109 Traffic Sign Inventory | To inventory all street signs and assess their condition and location citywide. Project inventory database would be maintained going forward to track status of street signs. | \$ 1,000,000 | \$ - | Combined with 6 |
| 9 | Ref # 110 Traffic Signal Head Upgrades | Upgrade traffic signals citywide with LED signal heads. This project will replace existing LED heads that are beyond their manufactured life and beginning to fail. | \$ 800,000 | \$ 800,000 | No change |
| 10 | Ref # 111 Traffic Signal Installation and Modification | Installation of new traffic signals at required locations citywide as traffic demands dictate. Modify existing traffic signals to accommodate changing needs and to replace obsolete or non-maintainable equipment. | \$ 1,600,000 | \$ 1,600,000 | No change |
| 11 | Ref # 112 Traffic Signal Pole Replacements | Upgrade signal systems. Existing poles, signal heads and controllers are in poor condition. Recommend combining with 10 (Ref # 111). Will replace old galvanized traffic signal poles, conduit, pull boxes and wire. | \$ 2,000,000 | \$ 2,000,000 | No change |
| 12 | Ref # 113 Upgrade School Flashing Beacon System | To upgrade school flashing beacons citywide to modern design standards. Existing system uses an obsolete pager system that has become a maintenance problem. In some instances schools zones have not activated at the correct times causing a safety problem. This project will upgrade to a modern system, which will improve public safety. | \$ 1,600,000 | \$ 1,600,000 | No change |
| 13 | Ref # 114 71st St. S. and Riverside Dr. - Eastbound Right Turn Lane | To add a right turn lane on eastbound 71st St. S. to go to southbound Riverside Dr. This project would help alleviate heavy congestion and reduce accidents at this location. | \$ 500,000 | \$ 500,000 | No change |
| 14 | Ref # 115 71st St. S. and U.S. 169 Lane Modifications | To modify median on eastbound 71st St. to allow traffic to continue eastbound, rather than being forced to make a left onto US-169. Study to determine viable alternates to help reduce congestion and increase traffic safety. Engineering plans to be developed pending study results. | \$ 1,000,000 | \$ 200,000 | Changed to Traffic Eng's estimate |
| 15 | Ref # 116 Riverside Drive and Boulder Avenue - Traffic Signal and Median Modifications | To modify the existing intersection of Boulder (23rd St. S. eastbound off ramp), reconfigure the existing median and install traffic signals to enable traffic to go either northbound or southbound on Riverside Drive. | \$ 1,500,000 | \$ - | Defer |
| 16 | Ref # 117 E. Seminole Street - Widening and Improvements west of Harvard | This project would provide for widening and a bus turnaround for Seminole Street to better facilitate traffic movement into and out of Clinton Elementary School grounds. | \$ 500,000 | \$ 500,000 | No change |
| 17 | Ref # 118 19th St. S. Extension - Midland Valley Trail to Boston Place | To extend 19th Street South to enable parents of children at Lee Elementary to make a circular route to pick up and drop off children. This eliminates the congestion that occurs on Cincinnati Ave. by the school during those times, which creates an unsafe condition with decreased visibility of school children behind parked cars. | \$ 2,000,000 | \$ - | Defer |
| 18 | Ref # 119 Creek Turnpike Trail Pedestrian Bridge over Memorial Drive | The pedestrian bridge will serve to move bicycle and pedestrian traffic across Memorial Drive just south of the Creek Turnpike. | \$ 1,750,000 | \$ 200,000 | Reduced to \$200,000 modify scope to study for Memorial/Creek and 71st/169 |

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| 19 | Ref # 120 Citywide Extruded Panel Sign New Installation and Replacement | | \$ 3,500,000 | | Combined with 6 |
| 20 | Ref # 121 GPS Emergency Vehicle Preemption System | To provide traffic signal preemption capability to emergency vehicles that utilizes Geographical Positioning System (GPS) to determine the vehicle's location at all times. This project will help TFD in achieving their target response times. It provides more reliability than the existing system with added features such as knowing the next street a fire truck will turn down. This project will add approximately 30 intersections to the system (e.g. 71st, Memorial to Garnett). <i>(140 Now)</i> | \$ 400,000 | \$ 400,000 | No change |
| | | | <u>\$ 42,850,000</u> | <u>\$ 25,800,000</u> | |