



# Traffic Signal Modernization Program (TSMP) Grant Application

## 2022-23 Letter of Intent to Seek Funding

### About the TSMP Grant Application:

This Tennessee Department of Transportation (TDOT) grant opportunity is the Traffic Signal Modernization Program (TSMP), which is a program designed to help communities and their local traffic signal maintaining agencies modernize existing traffic signal equipment and operations. CMAQ eligible counties are not eligible for these TSMP grant funds and those grant applications submitted will be eliminated from consideration. The overall grant funds for this TSMP program are capped at \$500,000 from which at least five projects will be selected up to \$100,000 capped per project. Any TSMP project costs that exceeds the associated cap will be the full responsibility of the local agency. The goal is to select at least one project from each TDOT Region.

### Eligible Traffic Signal Modernization Program Items Include:

- Controllers & Conflict Monitors
- Controller Cabinet & Equipment
- Signal Heads & Flashing Beacons
- Signal Head Backplates
- Supplemental Signal Heads
- Pedestrian Signal Heads
- Pedestrian Push Buttons
- Signal Wiring and Cables
- Advance & Stop Bar Detection
- Timing Optimization Plans

### TSMP Grant Application Ranking Criteria:

The application ranking criteria includes, but is not limited to, county economic status, crash history, approximate age of traffic signal equipment, AADT, and associated project impacts regarding right-of-way, environmental, railroads, and utilities.

### Required Information (Please complete all requested fields):

Please complete all the following required fields regarding this grant application.

#### General Information

1. Name of county that the project is located in. Cumberland County
2. Name of traffic signal maintaining agency (city or county only). City of Crossville
3. Name the planning organization serving your community. Center Hill RPO

#### Site Information

4. Are there any railroad tracks within 500 feet from the project area?  YES  NO
5. What is the approximate age (in years) of the existing traffic signal equipment included in this application? 30+ years

Traffic Signal Timing Requests

6. Does this application include a traffic signal timing request?  YES  NO
7. If "NO" was answered in Question 6, then skip the rest of this section.
8. If "YES" was answered in Question 6, then are all the controller(s) in the field of the same brand?  YES  NO
9. If "YES" was answered in Question 6, then are all the controller(s) in the field of the ATC type?  YES  NO
10. If "YES" was answered in Question 6, then is there existing hardware interconnection infrastructure in the field between the corridor signalized intersections?  YES  NO
11. If "YES" was answered in Questions 6, 8, 9, and 10, then include a list of the corridor signalized intersections and the distances between the intersections. If a "NO" was answered in Questions 8, 9, or 10, then traffic signal timing requests on corridors will not be considered. In addition, please note that traffic signal timing coordination is reserved primarily for traffic signals less than 0.5 mile apart from each other.

Local Maintenance Agreement and TTSUG Involvement

12. If this grant application is awarded, will your local agency be willing to enter into a local maintenance agreement contract with TDOT to maintain the traffic signal equipment and related traffic control devices?  YES  NO
13. An estimated construction cost will be determined for the project and subject to a cap amount limit when awarded. All funds below the cap are 100% TSMP funds and no local funds will be required from the local agency. On the other hand, if a project would exceed the cap, then your local agency would be required to fund any amount exceeding the cap (e.g. Scenario: \$100,000 TSMP project cap with the construction cost bid at \$110,000. In this scenario, your local agency would be required to fund the additional \$10,000). Is your local agency willing to enter into a local maintenance agreement contract with TDOT to fund any additional construction costs above the cap amount limit?  YES  NO
14. If this grant application is awarded, will your local agency be willing to share general traffic signal information with the Tennessee Traffic Signal Users Group (TTSUG)?  YES  NO

**TSMG Grant Application Contact Information:**

Local Agency: City of Crossville

Name: Tim Begley

Title: Director of Engineering

Email: tim.begley@crossvilletn.gov

Telephone Number: 931-456-6172

### Required Grant Application Attachments:

In the box shown below, please complete a detailed description of the proposed TSMP project. In addition, please attach separately a location map of the traffic signal(s) that are included in this grant application. If possible and in addition to a location map, please include a Google Earth kmz file of the TSMP project location.

**Detailed description of proposed traffic signal equipment upgrades (please attach a separate location map):** The proposed project includes a total replacement of the existing signal located at the four-way intersection of West Avenue (Highway 70 - State Route 1 & Highway 70N - State Route 24), Elmore Road (Highway 70N - State Route 24), and Sparta Highway (Highway 70 - State Route 1). See attached location map. The proposed project consists of the total replacement of the existing signal utilizing mast arm signal poles, new signal heads, radar vehicle detection (Wavetronix), a new cabinet, a new controller (Peek ATC-1000), new electrical service and new wiring. One of the mast poles will need to have a luminaire extension for a light to replace an existing light on an existing wood strain pole. The estimated project construction cost is \$450,000.

The existing signal consist of wood signal strain poles, faded signals, signal wires, and traffic loops in the roadway. The signal was initially installed in 1979. The wood poles are from the original 1979 construction. The controller was updated in 1998 to Peek 3000 series controller. The signal heads have been retrofitted with LED lighting modules.

See attached Photographs of the existing signal.

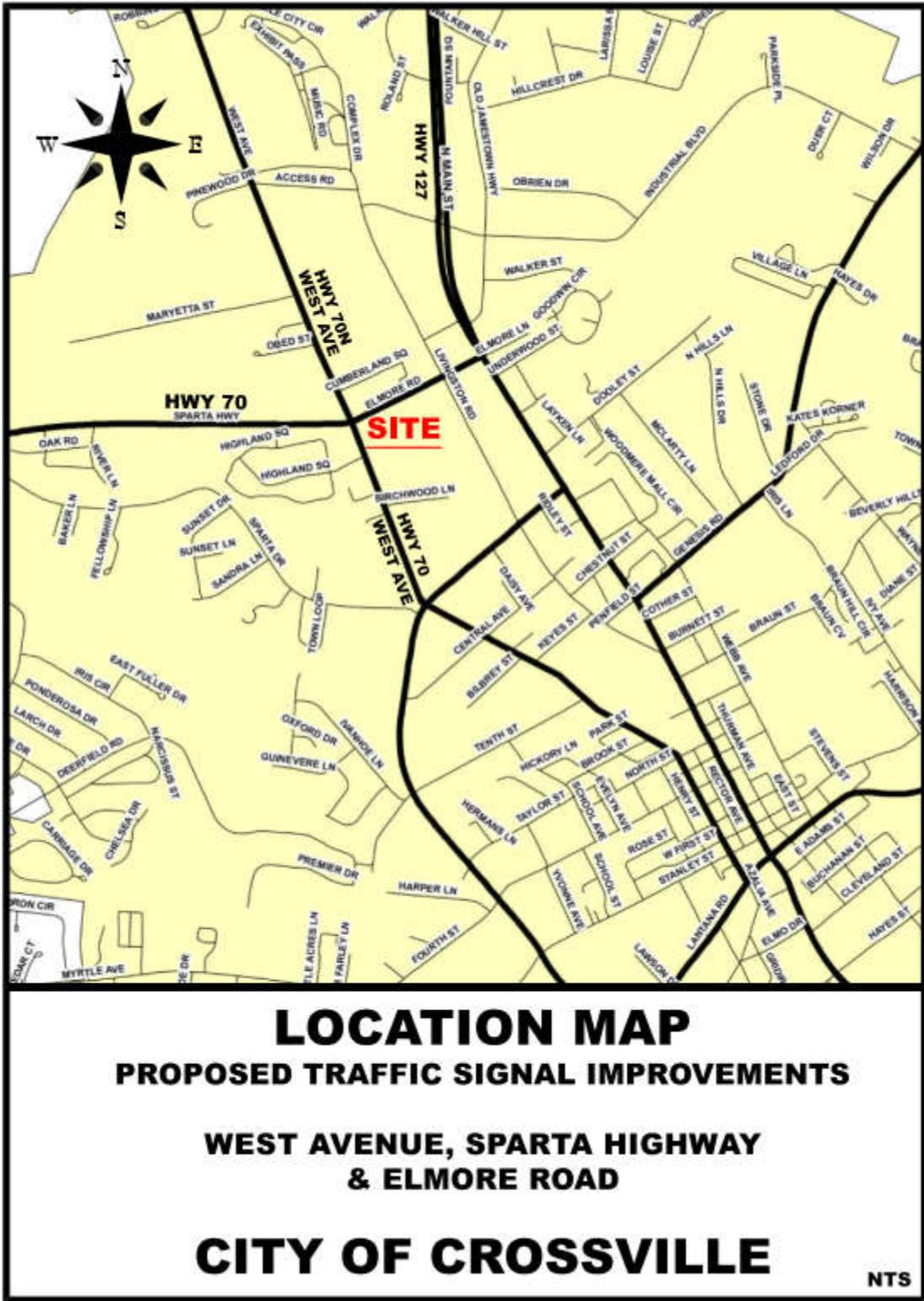
Find below a Google Earth kmz file to link to Google Earth.



### Application Deadline:

The TSMP Grant Application along with any other information related to the grant application must be completed and submitted electronically via email by **4:00pm CST on Wednesday, December 21, 2022** to [TDOT.TrafficOps@tn.gov](mailto:TDOT.TrafficOps@tn.gov) with the subject line "TSMP Grant Application". For questions regarding this TSMP grant application process, please contact Steve Bryan via email at [Steve.Bryan@tn.gov](mailto:Steve.Bryan@tn.gov).

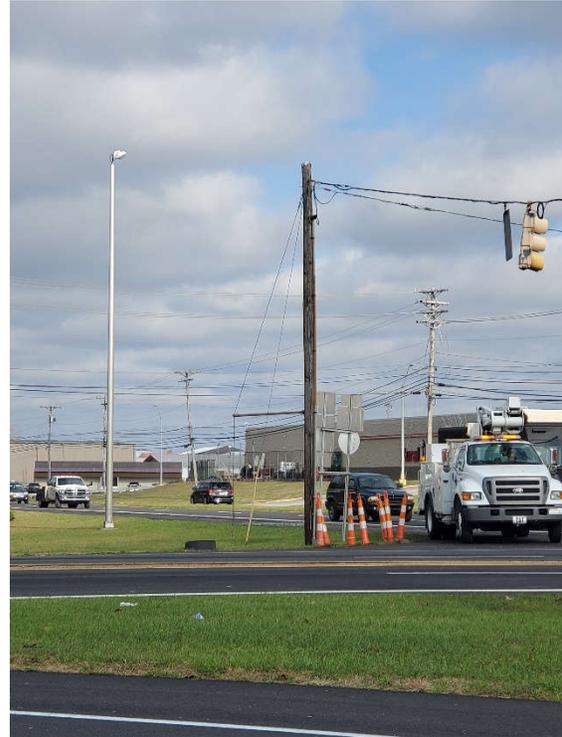
Attached Location Map



**Attached Photographs**



**Signal Lights – West Avenue North Side**



**Wood Signal Pole – Northwest Corner**



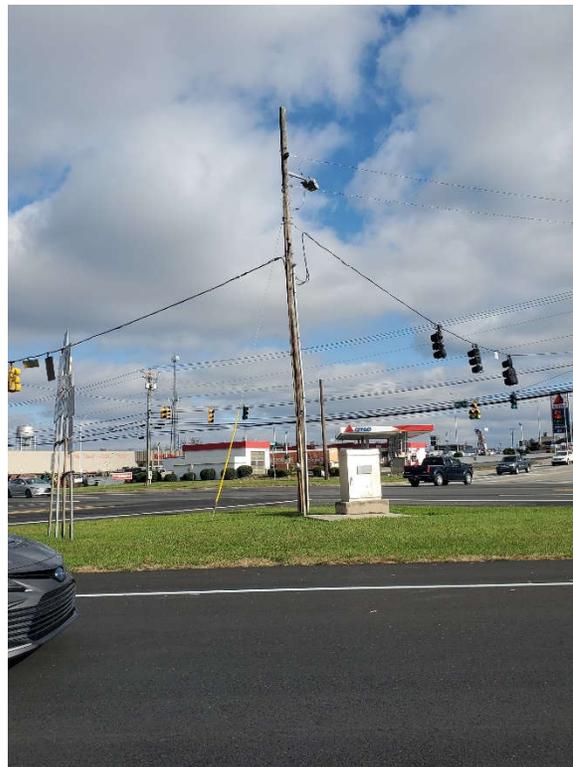
**Signal Lights - West Avenue – South side**



**Wood Signal Pole – Southeast corner**



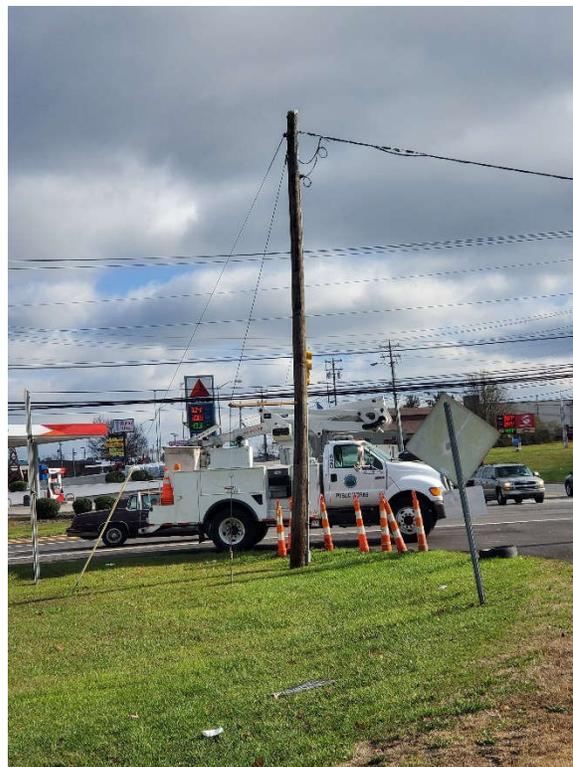
Wood Signal Pole – Southwest Corner



Wood Signal Pole – Southwest Corner



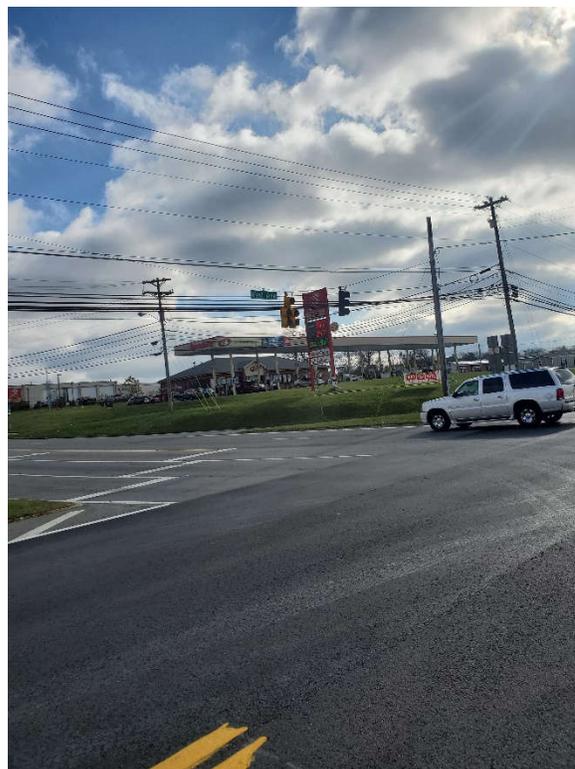
West Avenue - South Side



Wood Signal Pole – Northwest Corner



Wood Signal Pole – Northeast Corner



Elmore Road (SR24)



Wood Signal Pole – Northeast Corner



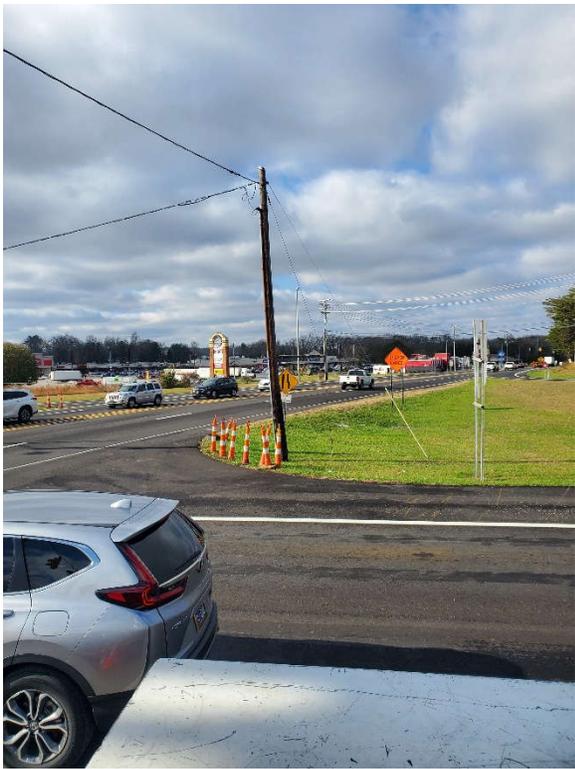
Wood Signal Pole – Northwest Corner



Wood Signal Pole – Northwest Corner



Wood Signal Pole – Northwest Corner



Wood Signal Pole – Northwest Corner



Wood Signal Pole – Northeast Corner



Wood Signal Pole - Northeast Corner



Wood Signal Pole – Southwest corner



Wood Signal Pole- Southeast corner