

City of Isle of Palms
Request for Proposals (RFP 2026-03)
“AI Controlled Traffic Signal System”

Requirement. The city is requesting proposals from firms to provide and implement an Artificial Intelligence (AI) controlled traffic signal system that: improves traffic efficiency, reduces peak-hour vehicle delay, reduces queue spillback, enhances pedestrian safety, maintains compliance with applicable traffic control standards, and provides measurable performance reporting. The selected firm will be responsible for supplying and maintaining intelligent traffic signal technologies across a designated intersection that conforms to South Carolina Department of Transportation (SCDOT) regulations as the local signal control authority as well as the Manual on Uniform Traffic Control Devices (MUTCD). If the selected firm can also perform installation of the traffic signal system the city asks that this be specified in the proposal.

Background. The city has one intersection equipped with traffic signals. During peak traffic times, and particularly in beach season, the limitations of the current traffic signal system contribute to congestion and inefficient traffic flow. This congestion is a source of frustration for residents and visitors alike and contributes to reduced response times for first responders during emergencies.

The city would like to engage a firm to help address the traffic problems described above. This request for proposals is the first step in the process.

SCOPE OF WORK AND SERVICES

Mandatory:

1. System Design & Planning: Assessment of current traffic infrastructure, problem set, and proposal of AI-integrated solution(s).
2. Hardware & Software Supply: Provision of AI-enabled traffic signal controllers, sensors, cameras, and associated software.
3. AI Capabilities: Real-time traffic optimization, predictive analytics, emergency vehicle prioritization, pedestrian safety enhancements.
4. Maintenance & Support: Ongoing, including post-project, technical support, software updates, and health monitoring system.
5. Integration: System must integrate with existing infrastructure and be SCDOT and MUTCD compliant.
6. Pedestrian Aware. The system must be cognizant of pedestrians and incorporate their movement requirements into the necessary algorithms. The system should not neglect pedestrian movement requirements, even at peak traffic.
7. Information and Training: Conduct necessary briefings to city leadership regarding system capabilities, limitation, and lifecycle requirements. Conduct any necessary hands-on training with Public Safety staff to address subjects like manual overrides.

Preferred:

1. Installation Capability: Deployment of and installation of system into existing infrastructure.

PROPOSAL CONTENTS AND SUBMITTAL INSTRUCTIONS

Consistent with Chapter 10 *Purchasing Procedures*, Section 1-10-5 *Methods of Source Selection* and Section 1-10-7 *Architect-Engineering Services*, of the city code, the city is requesting information that speaks to a firm's track record of "professional and technical qualifications" and "demonstrated competence and qualification."

By 5:00 PM on **Wednesday, April 1st, 2026**, please provide a hard copy proposal by courier or mail to:

Physical Address Instructions (Delivery by Courier, Mail Service (FEDEX, etc)):

C/o Douglas Kerr
City Administrator
City of Isle of Palms
1207 Palm Boulevard
Isle of Palms, South Carolina 29451

Mailing Instructions (US Mail):

C/o Douglas Kerr
City Administrator
City of Isle of Palms
Post Office Box 508
Isle of Palms, South Carolina 29451

The proposal should include:

- A cover letter introducing the firm
- A description of the firm's qualifications to execute the proposal as written
- Examples of similar projects including references
- Description of methodology for conducting the project
- A description of the key project personnel and their expertise
- Detailed budget and cost breakdown
- A description of proprietary issues the city should be aware of, such as data ownership, video retention, privacy factors, and cybersecurity concerns relevant to the system
- No more than 15 pages

EVALUATION PROCESS AND CRITERIA

The primary intent regarding the procurement of these services is to obtain what the City would consider to be the best package of products and services. This includes overall proposal suitability, a clear and organized proposal, price competitiveness, quality and timeliness of previous work performed.

Respondents will further be evaluated on their experience, qualifications, methodology and references. The City of Isle of Palms reserves the right to reject, in whole or in part, any proposal submitted which, in the judgment of the City, would not be in its best interest. The City also reserves the right to waive minor deficiencies or reject all proposals. Proposals will be evaluated based on the following criteria:

A. Experience and Expertise:

- Demonstrated experience in planning, designing, and implementing AI controlled traffic signal systems.
- Qualified staff with relevant expertise and certifications.

B. Methodology and Approach:

- Sound and appropriate methodology that studies and confirms the problem and then tailors a solution that meets the City's needs.
- Clear understanding of the project requirements and objectives.

C. Timeline and Deliverables:

- Realistic timeline for completing requisite studies and analysis, delivering, hardware, conducting installation (if part of the proposal), conducting training and final testing.
- Ability to meet project deadlines.

D. Cost:

- Competitive and reasonable pricing for the proposed services, including post-project costs such as maintenance, monitoring, etc.
- Value for money in terms of the quality and comprehensiveness of the deliverables.

E. References:

- Positive feedback and recommendations from previous clients.

Deadline for Submissions: The deadline for submission is 5:00 PM, Wednesday, April 1st, 2026. Proposals will be received by mail or courier (see above) in a sealed envelope. Sealed envelopes must be clearly marked "RFP 2026-03 – AI Controlled Traffic Signal System" and include one (1) hard copy.

It will be the responsibility of the proposers to verify receipt by the City. Proposals may be delivered by hand or by mail, but no proposal shall be considered which is not actually received by the City at the place, date and time appointed by the City and the City shall not be responsible for any failure, misdirection, delay or error resulting from the selection by any proposer of any means of delivery. All proposals submitted shall include a current e-mail address.

Proprietary and/or Confidential Information: Your proposal is a public document under the South Carolina Freedom of Information Act (FOIA), except as to information that may be treated as confidential as an exception to disclosure under the FOIA. If you cannot agree to this standard, please do not submit your proposal. All information that is to be treated as confidential and/or proprietary must be clearly identified, and each page containing confidential and/or proprietary information, in whole or in part, must be stamped and/or denoted as CONFIDENTIAL, in bold, in

a font of at least 12-point type, in the upper right-hand corner of the page. All information not so denoted and identified will be subject to disclosure by the City.

Proposers acknowledge and agree that the City will not be liable for any costs, expenses, losses, damages (including damages for loss of anticipated profit) or liabilities incurred by the respondent or any member of the respondent's organization as a result of, or arising out of, submitting a proposal, negotiating changes, or due to the City's acceptance or non-acceptance of the proposal or the rejection of any and all proposals.

Proposers are responsible for submission of accurate, adequate and clear descriptions of the information requests. Neither issuance of the RFP, preparation and submission of a response, nor the subsequent receipt and evaluation of any response by the City of Isle of Palms will commit the City to award a contract to any respondent even if all the requirements in the RFP have been met. Proposers must have or be able to procure an Isle of Palms Business License.