Scope Statement

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| Project Name | Smart Traffic Vendor project | Date | August 31st, 2022 |
| Project Manager | Buschor, Curtis | | |

| Project Objectives |
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The primary goal of the project is to publish a white paper that compares the accuracy and performance of AI-based traffic monitoring devices built by different vendors in the market.

| Project Description and How it Meets the Objectives |
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The three main evaluation approaches used in the analysis of different vendor systems are technology evaluation, performance evaluation (including vendor performance claims), and economic benefit analysis. Other factors considered when evaluating a vendor's product include changes in the road safety index, the emissions index, and the efficiency with which traffic congestion is treated, among others. These various approaches, in conjunction with the Bill of Materials (BOM), Mean Time Difference Failures (MTDF), Multiple Objects Tracking Precision (MOTP), and Multiple Objects Tracking Accuracy (MOTA), will be used to assess the accuracy and efficiency of various vendors' traffic monitoring devices.

| Project Benefits |
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A comparison of various market solutions provides us a clear overview of the present state of development of AI-based smart traffic systems, as well as insights on how to improve current systems in order to build a solution for challenges human’s encounter. This, in turn, will assist the state Department of Transportation (DOT) in understanding the present vendors and assisting them with the installation of Smart Traffic systems in the state which will alleviate traffic congestions.

| Project Requirements |
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Buying hardware from vendors for study purpose. Inquiring with the vendor about existing data and requesting the data if available. Dissecting the system's software and hardware components. Confirm the sort of data being collected, who is collecting it, and the privacy complexities associated. On-campus testing of the devices as a real-time test case scenario.

| Project Deliverables |
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The project's deliverables include the publication of a white paper comparing the various smart traffic devices on the market.

| Project Does Not Include |
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The project does not include any changes to the devices' software or hardware. It also excludes the testing and development of AI-based algorithms.

| Success / Acceptance Criteria |
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The variables defining the project's success are intended to test the equipment, effectively evaluating their efficiency and performance, and publishing a white paper based on the results.

| Estimated Project Schedule | |
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| Milestones | Estimated Date of Completion |
| 1. Project Start | 5 August 2022 |
| 2. Scope Statement | 2 September 2022 |
| 3. Research on Florida’s DOT’s policies | 10 September 2022 |
| 4. Updates on the procurement of equipment from vendors | 20 September 2022 |
| 5. Literature review & vendor platform purchase | 30 September 2022 |
| 6. Creating a set-up for evaluation | 10 October 2022 |
| 7. Evaluating different vendor technologies strength and weakness | 30 October 2022 |
| 8. Conduct preparation studies for future real-world performance evaluation | 25 November 2022 |
| 9. Scientific White Paper drafting | 1 December 2022 |
| 10. White Paper Review | 20 December 2022 |
| 11. Deliver Final report / Presentation | 30 December 2022 |
| Total Estimated Length of Project | 147 Days (21 weeks) |

| Project Constraints |
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Vendors are not replying after repeated emails, hinting that the equipment would take longer to obtain. A high number of vendors to products acquired ratio (as of now). Few vendors sell their devices directly to distributors, increasing the capital required to purchase a device.

| Project Assumptions |
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The notion that the products are ready for full-time implementation on the streets. When it comes to privacy and security, the hardware and software are reliable. The devices will not cause any issues for drivers on the road. The devices would provide an efficient method of regulating traffic congestion.

| Decision | | | | |
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|  |  | Approved with modifications |  | Deferred |
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| *Required Modifications* | | | | |
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| *Additional Comments* | | | | |
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Approver’s Printed Name Date

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