

# NDOT TSMO INVESTMENT PRIORITIZATION TOOL (IPT)

By Nevada Department of Transportation

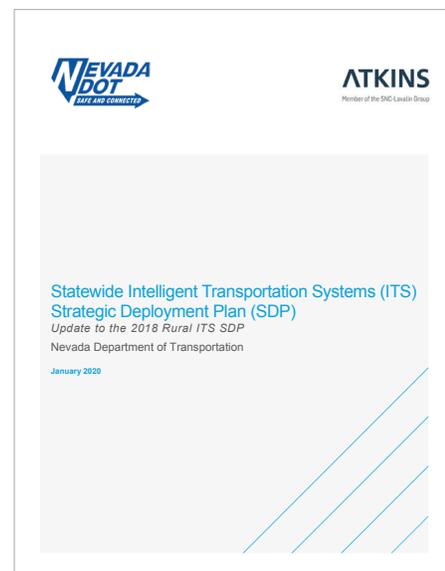
## IN THIS CASE STUDY YOU WILL LEARN:

- 1 How Nevada DOT developed the TSMO Investment Prioritization Tool (IPT) to help identify and prioritize projects based on the state's transportation priorities, and in a manner that best help achieve the established TSMO goals and objectives.
- 2 How NDOT collaborated internally so that priorities aligned with the One Nevada Transportation Plan and held workshops with the districts to educate and train them on the utilization of the tool.
- 3 How NDOT has integrated the tool into other ITS Planning efforts and device-specific Master Plans.

## BACKGROUND

The Nevada Department of Transportation (NDOT) Statewide Transportation Systems Operations and Management (TSMO) Program Plan was developed and formally adopted in 2020. As part of this program, NDOT has developed and planned for integration of TSMO business processes, procedures and tools into the DOT's day to day business. One example of the newly adopted business processes is

the TSMO Investment Prioritization Tool (IPT). The tool has been designed to help NDOT identify and prioritize projects based on the state's transportation priorities, and in a manner that best help achieve the established TSMO goals and objectives. The tool helps establish a formalized process to institutionalize TSMO goals and objectives during needs assessment and project selection for efficient resource allocation.



## TSMO PLANNING, STRATEGIES AND DEPLOYMENT

Historically, project selection within NDOT's Traffic Operations division has been accomplished through qualitative deliberations, negotiations, and making the business case



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## COMMUNICATIONS PLANNING AND EXECUTION

In developing the IPT, NDOT coordinated with the Planning division to ensure that the criteria established for the IPT and definitions are aligned with the One Nevada Transportation Plan. Other long-range plans and documents were also reviewed to ensure a unified strategic direction in development and utilization of this tool. Once the tool was established, NDOT held workshops with the districts (DI, DII and DIII) to educate and train the districts on the utilization of the tool and explained the incorporation process of the tool into everyday business. Following on from these meetings, discussions and reviews, adjustments and changes were made to incorporate comments and feedback. These coordination and collaborations played a key role in ensuring that not only the tool maximizes integration of TSMO into day-to-day business processes, but also is comprehensive enough to meet the specific needs of each district based on their available funding resources and geographical differences.

(RWIS) based on the TSMO Score for each proposed ESS installation within the state. The division is currently working with a vendor to transition the tool from an Excel-based spreadsheet to a Web-based tool to further streamline the prioritization process. NDOT's next step with this effort is to integrate TSMO performance Measures and further improve the performance driven decision-making process. Formal adoption and integration of this tool has greatly helped NDOT in TSMO Culture and Collaboration improvements at a statewide level.

## OUTCOME, LEARNINGS AND PUBLIC BENEFIT

The IPT has now been formally adopted by NDOT Traffic Operations division. The division utilizes this tool to prioritize projects listed within the Statewide ITS Strategic Deployment Plan (SDP). Every other year, the division meets with the districts to update the list of their projects within the ITS SDP and will prioritize projects and funding resources based on the TSMO Score within the IPT. The prioritized projects are then entered into the divisions 5-year plan to assign funding and an implementation date. This new process helps NDOT have a better understanding of how the deployment of new projects will serve the needs of the public, improve safety and mobility of travelers and helps provide better insight on the infrastructure gaps and needs. In addition, utilization of this tool has facilitated discussions regarding the development of additional IPT's for other NDOT divisions.

Additionally, the division has integrated the tool into other ITS Planning efforts and device-specific Master Plans. For example, the division has now developed a formal installation process for the Road Weather Information System