COLORADO
Department of Transportation

CDOT Smart Work Zone Decision Tool

This workbook is a decision tool for Smart Work Zone selection on CDOT construction projects.

CDOT promotes the use of SWZ devices on construction projects to address safety and mobility concerns. Projects with sufficient scope and budget may use any of the 9 SWZ Subsystems described here to address specific traffic concerns throughout the project limits. This decision tool produces impact scores for each SWZ subsystem which can help for prioritization and budgeting purposes.

Guidance is also provided for including SWZ devices in temporary traffic control plans.

How to Use this Tool

Step 1. Project Information

Fill out the project details in the highlighted boxes below. This information will be used in the final report.

Project Number:	
PM Name and Email:	
County / Highway:	
Date Completed:	
Completed By:	

Go to Step 2. SWZ Scope

Answer the questions in the flowchart and mark the recommendation in the highlighted blue box. This step will help you determine whether SWZ devices or subsystems would be beneficial to your project.

If no SWZ technology is recommended, the decision tool is completed.

If standalone or connected SWZ devices are recommended, skip to Step 5.

If SWZ subsystems are recommended, proceed to Step 3.

Go to Step 3. SWZ Subsystems

Read through the project characteristics and select the box in each row that applies. Select the box even if the characteristic only applies to a portion of the project.

Go to Step 4. System Summary

Review the summary score for each subsystem. Review the recommended devices and configuration for each subsystem with a summary score > 33. Mark which subsystems will be included in the highlighted green box.

Go to Step 5. Device Evaluation

Read through the project's Temporary Traffic Control (TTC) Plans to note all devices used for work zone traffic control. Consult with project stakeholders to determine if any SWZ devices are desired. Complete the evaluation by selecting each box that applies. Then, review the recommendations.

Go to Step 6. Report

The first page is a summary that has been formatted for easy viewing and printing. The summary quickly shows a) what SWZ subsystems are most beneficial, if any, b) what types of SWZ devices should be included, and c) which Specification should be used. The additional pages are a copy of notes from this tool.

Go to Step 7. SWZ Pay Items

This page provides all item numbers for SWZ devices and setup or mobilization pay items. Use these pay items when using connected devices or a SWZ System.

Go to Step 8. SWZ Costs

This page provides cost estimates for SWZ devices and system deployment. These costs are based on historic CDOT SWZ projects and are likely to evolve as more technology is deployed across the state.