Wisconsin Department of Transportation

Functional Classification Update Process Lean Summary Report



Project Summary

The Bureau of Planning and Economic Development (BPED) worked collaboratively with the Federal Highway Administration (FHWA), the Division Transportation System Development (DTSD) Regions, the Bureau of State Highway Programs (BSHP), Metropolitan Planning Organizations (MPOs), and other local stakeholders to capture specific customer needs and areas of improvement for the functional classification (FC) update process.

This project was chartered by Division of Transportation Investment Management (DTIM), BPED to examine causes for process delay in FC updates.

The goal of this project was to streamline the process and improve common understanding of the functional classification process.

Improvements

- Defined roles and expectations
- Standardized and documented process
- Implemented two policies on approval and review of updates

MAPSS Core Goal Area

- Service
- Accountability

Statewide Goal Area

- Culture of government
- Employee work environment

Issue

The Bureau of Planning and Economic Development facilitates functional classification (FC) updates in coordination with DTSD regions, local stakeholders and FHWA. This update process was prone to delays because of multiple iterations among all parties. Additionally, insufficient knowledge of the process and staff turnover added to the time required to complete an update. While the process was the main focus, Code of Federal Regulation (CFR) compliance also became a part of the project.

Lean Six Sigma Process

BPED's Statewide Planning Unit and improvement team used the following Lean Six Sigma tools:

- SIPOC (Supplier, Input, Process, Output and Customer) diagram to understand the main components of the FC process
- Stakeholder outreach to understand voice of the customers (VOC)
- Flowcharts and value stream maps to identify redundant processes and improvement areas

Results

The project team, which included process owners and external stakeholders, developed and implemented two policies: one establishes a 60-day time period for each iteration of review and a bi-weekly check-in on the status of FC reviews, and the other allows for the delegation of FC approval authority to a qualified person, pursuant to CFR requirements.

Next, the team worked with FHWA to expedite their approvals of FC submittals and set deadlines for their response, resulting in a bi-monthly cycle for approvals of FC changes. Additionally, FHWA confirmed minor revisions to FC criteria and the criteria update process. Average Daily Traffic (ADT) was eliminated as a mandatory criterion for initial classification of a roadway. Other valid criteria, such as land use, can be used in lieu of ADT. The benefit is a reduced need for special traffic counts to determine ADT on previously unclassified roads, which has the potential for significant savings.

This project was determined to be a "non-traditional" Lean Six Sigma project because of the lengthy timeframe—over five years—to complete all FC updates statewide, largely due to the time for local review of proposed FC changes. Moreover, reaching out to external stakeholders (local governments and MPOs) who perform key steps in the process did not lead to valid and reliable measurements of lag time in communication and in determining other reasons for delay.

Next Steps

The Statewide Planning Unit will continue to monitor and track the progress of the update process using newly developed metrics. With these metrics and a stable process, it is anticipated that beneficial information can be captured to substantiate future changes to the process and FC criteria. A work group for system planning—comprising DTSD region and DTIM staff—has been proposed to discuss potential changes to system-related processes and policies within WisDOT and to provide recommendations to management when necessary.