ODOT Category 601 – Short Range Transportation Planning

Element Number 60123 Safety Studies

Goal: To improve transportation safety through use of state or federal programs intended to correct problematic infrastructure conditions.

Objectives:

- Utilize available information resources to provide local jurisdictions with the focus and data to address locations experiencing high accident exposure.
- Assist local jurisdictions as necessary with the process of working through ODOT to implement changes to address high accident locations.

Methodology:

ODOT has undertaken a strategic initiative to reduce traffic crashes at the high crash locations through a series of low-, medium-, and high-cost improvements. TMACOG utilizes information available through ODOT and the Ohio Department of Public Safety to identify roadway safety issues and prioritize needed improvements. Using the Ohio Department of Public Safety traffic accident information data and analytical tools developed by ODOT, TMACOG encourages local jurisdictions to utilize the data to prepare location safety studies and apply for safety study funding.

Products:

1. Work with the System Performance and Monitoring Committee to continue to identify high crash locations and suggest low- to high-cost improvements, to review crash data before and after safety-related construction projects, and to develop Highway Safety Manual reports for all reviewed locations. Ongoing
2. Provide informational resources to local jurisdictions and to assist their efforts to obtain safety funding through ODOT. Ongoing
3. Provide crash diagrams and supplemental information to members at their request. Ongoing
4. Complete a comprehensive safety location report for at least two local jurisdictions. June 2022
5. Attend and provide data to regional safety committees (ODOT DSRT, Lucas & Wood Safety Coalition, Lucas & Wood Fatal review Team, Lucas County Distracted Driving Committee, OARC Safety Sub-Committee, etc) Ongoing

ODOT Category 605 – Continuing Planning – Surveillance

Element Number 60510 Data Collection and Management

Goal: To provide data and other inputs for the ongoing transportation planning process.

Objectives:

- Coordinate with local jurisdictions to acquire traffic counts throughout the TMACOG region.
- Maintain the TMACOG region's data resources (i.e. GIS, Census, and socioeconomic), acquire new data as needed, and examine trends within this data.

Methodology:

TMACOG staff will continue to maintain, update, and provide data and maps that are a necessary input to short range and long range planning. Data includes socioeconomic (Census and employment data), geographic (roadway characteristics, traffic counts, traffic crashes, aerial photography, transit, bicycle networks, and general municipality / county / state GIS layers), and networks (highway, transit, and new construction projects used in the travel demand model).

TMACOG staff will also assist jurisdictions to standardize their counting procedures and improve use of the Traffic Count Database System (TCDS) software and website program.

Products:

1. Maintain and update socioeconomic data files for the transportation study area. Ongoing
2. Maintain and update network data files including newly constructed project information. Ongoing
3. Maintain and update traffic count database. Ongoing
4. Maintain and update GIS data (roads, political boundaries, Census, etc.). Ongoing
5. Develop maps as required to assist various transportation committees and events. Ongoing
6. Maintain GIS and socioeconomic data on the TMACOG website map and data portal. Ongoing
7. Continue to work with local jurisdictions to use the Traffic Count Database System (TCDS) software to upload counts into the traffic count website. Ongoing
8. Update the database that organizes all transportation data (ODOT inventory system, network inputs, counts, TIP projects, forecasts, etc.). Ongoing
9. Support the coordination of advancing the development of traffic signal coordination in the region, holding meetings as needed. Ongoing

10. Coordinate with ODOT and regional ITS stakeholders to support improved transportation system safety and security, as well as implementation of ITS projects within the ITS Plan and regional transportation plan. Ongoing
11. Examine trends on the transportation network by comparing historical and new data (i.e. bridge condition, traffic counts). Ongoing
12. Provide traffic count data upon request by TMACOG members and non-members. Ongoing
13. Evaluate performance measures in the long range transportation plan. Ongoing

ODOT Category 615 – Continuing Planning – Procedural Development

Element Number 61520 Modeling and Forecasting

Goal: To develop forecasting tools and perform modeling for system analysis.

Objectives:

- Identify a cohesive transportation vision for the region by exploring issues and opportunities pertaining to the street system, as well as examining alternative options.
- Develop tools to aid jurisdictions in planning and maintaining the transportation system.

Methodology:

TMACOG maintains a computer model that is used to predict future traffic loading on the street system. The model requires extensive data inputs including demographic parameters, current traffic levels, and other components related to the street system. Updates and maintenance of this model is a major task as is the additional coding necessary to construct experimental network changes to test future scenarios. Refinement and improvement to the modeling capabilities at TMACOG continue in FY 2023. We will use the model for traffic projection requests as needed.

TMACOG will continue to review the pavement management planning process using pavement condition data obtained by ODOT in 2021. The pavement management plan will aid local jurisdictions with the improvement of roadway and pavement inventories.

Products:

1. Continue to update the pavement management process with 2021 ODOT pavement condition rating (PCR) data. — Ongoing
   a. Inventory roadway pavement and combine into one database.
   b. Integrate pavement systems from area communities, as available.
   c. Prepare a list and map of catch-up projects.
   d. Examine trends in the PCR data by comparing historical and new data.
2. Provide traffic projection results to members as needed. — Ongoing
3. Continue building a regional Transportation Asset Management Plan (TAMP) based on the information and data needs gathered and strategized in FY 2019 and 2020. — September 2022
4. Provide staff and support for System Performance and Monitoring Committee meetings. — Ongoing
5. Continue to refine and improve the capabilities of the traffic model, as well as perform updates to the highway network and other model input files as needed. — Ongoing
6. Coordinate with Caliper to develop an activity-based model for the Toledo area. — Ongoing