**MoDOT TIA Data Collection Plan and Checklist**

|  |
| --- |
| **Project Information** |
| **Project Name** | Click or tap here to enter text. |
| **Project STIP ID** | Click or tap here to enter text. |
| **Project Description** | Click or tap here to enter text. |
| **Project Location / Study Limits** | Click or tap here to enter text. |
| **City / County** | Click or tap here to enter text. |
| **MoDOT District** | Click or tap here to enter text. |
| **MoDOT Project Manager** | Click or tap here to enter text. |
| **Consultant Project Manager (Firm / Name)** | Click or tap here to enter text. |
| **Data Collection Sub-Consultant (Firm)** | Click or tap here to enter text. |
| **Date of Checklist Submittal** | Click or tap here to enter text. |

This data collection plan and checklist supplements EPG 905.3 Transportation Impact Analysis and is provided to coordinate data collection efforts for all MoDOT TIAs, traffic forecasts, capacity analyses, and other applicable projects. This document includes:

* **Checklist 1:** General traffic count conditions that are applicable to both turning movement counts (TMCs) and roadway segment counts.
* **Checklist 2:** Traffic count conditions that are specific to both TMC and roadway segment counts.
* **Checklist 3:** Supplemental data that is needed to inform traffic capacity analysis MOEs and is to be requested in addition to traffic volumes.
* **Table 1:** A summary of all data collection locations for the transportation project. This table summarizes the locations, timeframes, and types of all data to be collected.
* **Figure 1:** Please provide an accompanying map of all traffic count locations with this data collection plan and checklist. The ID number should match between **Table 1** and **Figure 1**. Additionally, clear symbology should be provided to distinguish the types of counts in the map.

**Checklist 1: General Traffic Count Conditions**

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Yes** | **No** | **Notes 1** |
| All overlapping pre-existing count data that has been collected within the past three years has been compiled prior to scoping and will be used to the extent possible in this Data Collection Plan. Refer to <https://www.modot.org/traffic-volume-maps> for MoDOT traffic volume maps. **2** |[ ] [ ]   |
| Data format is consistent with MoDOT needs (e.g. PetraPro, Excel) |[ ] [ ]   |
| All relevant parties (e.g., project manager, MoDOT regional engineers, local officials, and other stakeholders) have been coordinated with to confirm that all appropriate count locations are included |[ ] [ ]   |
| Collection will occur on a Tuesday, Wednesday, or Thursday |[ ] [ ]   |
| Traditional public school will be in session on collection days |[ ] [ ]   |
| Data will NOT be collected during holidays, seasonal time periods, or other special events that disrupt normal traffic conditions (refer to **Section 3.3** in the *MoDOT TIA Guidance Manual* for more information) |[ ] [ ]   |

**1** Please use “Notes” to elaborate on special circumstances for data collection.

**2** **Disclaimer:** MoDOT’s interactive AADT map shows volumes at some locations that are associated with actual count data and some data that are estimated volumes (not based on count data). If the analyst has any data concerns, then please contact the MoDOT TMS unit.

**Checklist 1 (Continued): General Traffic Count Conditions**

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Yes** | **No** | **Notes 1** |
| Collect bi-directional data (covers all travel movements) |[ ] [ ]   |
| Use a count collection duration that is appropriate relative to the project type and data needs:* **TMC counts to estimate 24-hour volumes:** Minimum 12-hour duration from 6 AM to 6 PM.
* **TMC counts to estimate peak hour traffic only:** Minimum two-hour duration counts from 7 AM to 9 AM and from 4 PM to 6 PM.
* **TMC counts for signal warrants:** Refer to [MUTCD](https://mutcd.fhwa.dot.gov/htm/2009/part4/part4c.htm) for volume duration options.
* **Segment counts to estimate AADT:** Minimum contiguous 24- to 48-hour period, or one to two weeks if daily variation throughout the week is desired.
 |[ ] [ ]   |
| Counts will include the following MoDOT TMS vehicle classifications:* Motorcycles (FHWA Class 1)
* Passenger Cars (FHWA Class 2)
* Panel Trucks (i.e., Two-Axle, Four-Tire Single Unit Vehicles) (FHWA Class 3)
* Buses (FHWA Class 4)
* Single Unit Trucks (FHWA Classes 5, 6, 7)
* Combination Semi-Trailers (FHWA Classes 8 – 13)
 |[ ] [ ]   |
| Consider project purpose (and talk with stakeholders) to determine complete data needs. For instance, ensure that items such as speed data and queuing length are included if needed to inform capacity analysis MOEs (refer to **Checklist 3** below). |[ ] [ ]   |

**1** Please use “Notes” to elaborate on special circumstances for data collection.

**Checklist 2: TMC and Roadway Segment Traffic Count Conditions**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Count Type** | **Description** | **Yes** | **No** | **Notes 1** |
| **Turning MovementCounts** | The lesser of the intersecting roads carries at least 400 vehicles per day (if not, then please specify in the notes why an intersection that does not meet this criteria is being scoped for data collection). |[ ] [ ]   |
|  | Data is collected from all approaches (includes driveways or access connections that act as an approach) |[ ] [ ]   |
|  | Collect data in intervals that are no larger than 60-minute durations (15-minute intervals preferred) |[ ] [ ]   |
|  | Pedestrians will be counted and tabulated on the approach they cross (include pedestrians within any crosswalks and/or crossing within approximately 50 feet of the intersection).  |[ ] [ ]   |
|  | Bicyclists will be counted and tabulated by movement |[ ] [ ]   |
| **Road Segments** | Collect data for a minimum contiguous 24- to 48-hour period, or one to two weeks if daily variation throughout the week is desired. |[ ] [ ]   |
|  | Collect data in intervals that are no larger than 60-minute durations (15-minute intervals preferred)  |[ ] [ ]   |

**1** Please use “Notes” to elaborate on special circumstances for data collection.

**Checklist 3: Supplemental Data**

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Yes** | **No** | **Notes 1** |
| NPMRDS / HERE Travel Time, Segment Speed, and Reliability Data |[ ] [ ]   |
| Floating Car Travel Time Runs in the Field |[ ] [ ]   |
| General Traffic Observations (Driver Behavior, Compliance, etc.) |[ ] [ ]   |
| Observations of Unique Operations (e.g., Railroad Crossing, Midblock Pedestrian Crossings, Toll Operations, Ramp Metering, etc.) |[ ] [ ]   |
| Dashcam Video of Study Area Operations |[ ] [ ]   |
| Saturation Flow Rate Measurements |[ ] [ ]   |
| Point Speed Data (from KC Scout / Gateway Guide or otherwise) |[ ] [ ]   |
| Lane Utilization Data |[ ] [ ]   |
| Queue Measurements or Estimates |[ ] [ ]   |
| Signal Phasing and Timing Plans |[ ] [ ]   |

**1** Please use “Notes” to elaborate on who is responsible; when, where, and how data will be collected; or any special circumstances for data collection.

**Checklist 3 (Continued): Supplemental Data**

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Yes** | **No** | **Notes 1** |
| Field Observation of Signal Operations |[ ] [ ]   |
| Transit Data (Service Plan, Ridership, On-Time Performance, Stop Dwell Times, etc.) |[ ] [ ]   |
| As-Built Plans or Other Geometric Information |[ ] [ ]   |
| Parking Information |[ ] [ ]   |
| Travel Demand Model Output (e.g., from MPO) |[ ] [ ]   |
| Applicable Planning Documents (e.g. LRTP, STIP, TIP) |[ ] [ ]   |
| Reports from Other Relevant Studies |[ ] [ ]   |
| Crash Data (Including Summaries, Crash Reports, Statewide Rates, etc.) |[ ] [ ]   |
| Origin and Destination Study |[ ] [ ]   |
| Other (Please Specify) |[ ] [ ]   |

**1** Please use “Notes” to elaborate on who is responsible; when, where, and how data will be collected; or any special circumstances for data collection.

Table 1: Data Collection Locations

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID 1** | **Location** | **Day(s) of Week** | **Duration / Time of Day** | **Type of Count** | **Desired Data** | **Is this New Data?** | **Notes** |
|  |  |  |  |  |  | **Yes** | **If No, then Date of Pre‑Existing Data** |  |
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|  |  | Choose an item. | Choose an item. | Choose an item. | Choose an item. |[ ]   |  |

**1** Provide ID number to match **Figure 1** map, if applicable.

Figure 1 – Traffic Count Locations

