

TIS / TIA Review Checklist

Instructions: Complete all applicable items in the checklist. **Please note that not all items listed are required for TIAs.** Mark items as Completed (C), Not Applicable (N), or See Additional Notes (S). For items marked See Additional Notes, provide necessary additional information on the Additional Notes section on the last page of this checklist. Checklist items with multiple requirements shall be completed as shown. If part of the checklist item is not completed, provide reason(s) or justification in the Additional Notes section.

Checklist regulation and publication references can be found in the following documents:

- [67 Pa. Code Chapter 441 – Access to and Occupancy of Highways by Driveways and Local Roads](#)
- [Publication 10X – Design Manual Part 1X - Appendices to Design Manuals 1, 1A, 1B, and 1C](#)
- [Publication 46 – Traffic Engineering Manual](#)
- [Publication 149 – Traffic Signal Design Handbook](#)
- [Publication 282 – Highway Occupancy Permit Operations Manual](#)

Section 1 – General Requirements

C N S

- (1) Provide signature and seal of licensed PA P.E. on the front cover (Pub. 282, App. A, Introduction)
- (2) Follow TIS example format as identified in Pub. 282, App. A, Att. C or as agreed upon by the PennDOT District

- ☐ ☐ ☐ (3) Provide any additional information as required by the PennDOT District (67 Pa. Code §441.3(k))

Section 2 – Executive Summary

C N S

- ☐ ☐ ☐ (1) Provide a high level, concise summary of the following: (Pub. 282, App. A, Att. C)
- | | |
|----------------------------------|--|
| ➤ Project location and scope | ➤ Mitigation strategies and improvements |
| ➤ Proposed development | ➤ Financial responsibilities of improvements |
| ➤ Anticipated development impact | ➤ Design waivers requested (if applicable) |

Section 3 – Introduction/Project Summary

C N S

- ☐ ☐ ☐ (1) Provide a summary of the scope of the project including description of the following: (Pub. 282, App. A, Att. C)
- | | |
|------------------------------------|-------------------|
| ➤ Traffic analyses and assumptions | ➤ Site layout |
| ➤ Study area/roadway network | ➤ Project phasing |

Section 4 – Data Collection

C N S

- ☐ ☐ ☐ (1) Describe data collection efforts and methodology per Step 1 in the Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits: (**Pub. 282, App. A, Step 1**)
- Volume counts
 - Land use context
 - Sight distance and site access
 - Study area photos
 - Crash data
 - Multimodal facilities

Section 5 – Existing Study Area Conditions

C N S

- ☐ ☐ ☐ (1) Discuss the following existing conditions: (**Pub. 282, App. A, Step 2 and Att. C**)
- Surrounding land use
 - Existing traffic volumes and level of service/delay
 - Crash analysis (Provide full crash analysis as separate bound document)
 - Pedestrian/bicycle/transit activity and accommodations
 - Queue analysis (if applicable)
 - Gap analysis (if applicable)
 - Travel time studies (if applicable)
- ☐ ☐ ☐ (2) Document traffic engineering software utilized to perform capacity and crash analysis (**Pub. 282, App. A, Step 3**)

Section 6 – Design Horizon Year Traffic Conditions without Development

C N S

- ☐ ☐ ☐ (1) Discuss background traffic utilized to calculate design year traffic volumes using growth factor and planned and permitted developments (**Pub. 282, App. A, Step 3**)
- ☐ ☐ ☐ (2) Include design horizon year without development traffic volume and capacity analysis as figures (**Pub. 282, App. A, Step 8**)
- ☐ ☐ ☐ (3) Include design horizon year without development queue and turn lane analysis (if applicable) (**Pub. 282, App. A, Step 8**)
- ☐ ☐ ☐ (4) Describe and include committed transportation improvements (**Pub. 282, App. A, Att. C**)

Section 7 – Development Description

C N S

- ☐ ☐ ☐ (1) Provide brief description of proposed site access – permissible movements and distance to intersection (**Pub. 282, App. A, Step 7**)
- ☐ ☐ ☐ (2) Provide brief description of sight distance analysis (**Pub. 282, App. A, Step 1**)

- ☐ ☐ ☐ (3) Provide brief description of proposed trip information: (**Pub. 282, App. A, Steps 4 - 7**)
- Total number and peak hour trips generated (include modal reductions if applicable)
 - Internally captured trips
 - Pass-by and diverted link trips
 - Trip distribution/assignment
- ☐ ☐ ☐ (4) Provide brief description of post development study (if applicable) (**Pub. 282, App. A, Att. C**)

Section 8 – Design Horizon Year Traffic Conditions with Development

C N S

- ☐ ☐ ☐ (1) Provide brief description of strategies to manage anticipated demand (**Pub. 282, App. A, Step 10**)
- ☐ ☐ ☐ (2) Include traffic assignment diagrams with percentages and volumes indicated as figures (**Pub. 282, App. A, Step 7**)
- ☐ ☐ ☐ (3) Include design horizon year capacity analysis as tables (**Pub. 282, App. A, Step 8**)
- ☐ ☐ ☐ (4) Include left turn signal phasing analysis if required by Pub 149 (**Pub. 149, Ch. 3.1**)
- ☐ ☐ ☐ (5) Include queue analyses if required by Pub 46 (**Pub. 46, Ch. 10.2**)
- ☐ ☐ ☐ (6) Include turn lane warrants/length analysis if required by Pub 46 (**Pub. 46, Ch. 11.16**)
- ☐ ☐ ☐ (7) Include signal warrant if applicable (**Pub. 282, App. A, Step 9**)
- ☐ ☐ ☐ (8) Include weaving analysis if applicable (**Pub. 282, App. A, Att. C**)

Section 9 – Mitigation Identification and Recommendations (TIS ONLY)

C N S

- ☐ ☐ ☐ (1) Provide mitigation analysis and description of proposed mitigation (**Pub. 282, App. A, Att. C**).
- ☐ ☐ ☐ (2) Provide concept plans of full mitigation at 1:50 scale. (**Pub. 282, App. A, Step 8**).
- ☐ ☐ ☐ (4) Provide Alternative Transportation Plan (ATP) as separate document (if applicable) (**Pub. 282, App. A, Step 10**)
- ☐ ☐ ☐ (5) Provide Design (LOS) Waiver as a separate document (if applicable) (**Pub. 282, Ch. 2.6**)

Section 10 – Conclusions

C N S

- ☐ ☐ ☐ (1) Summarize study findings and recommendations (**Pub. 282, App. A, Att. C**)

Section 11 – Appendices

C N S

- ☐ ☐ ☐ (1) Include Intersection Control Evaluation (**Design Manual Part 1X, Appendix AI and Step 9**)
- ☐ ☐ ☐ (2) Include scoping meeting application and any correspondence with the Department (**Pub. 282, App. A, Att. C**)
- ☐ ☐ ☐ (3) Include Proposed Site Plan (**Pub. 282, App. A, Att. C**)
- ☐ ☐ ☐ (5) Include Turning Movement and 24-Hour Volume Counts (**Pub. 282, App. A, Att. C**)
- ☐ ☐ ☐ (6) Include existing signal plan(s) and permit plan(s) if applicable (**Pub. 282, App. A, Step 1**)
- ☐ ☐ ☐ (7) Include roadway data in form of field sketches if applicable (**Pub. 282, App. A, Att. C**)
- ☐ ☐ ☐ (8) Include background traffic growth (**Pub. 282, App. A, Step 3**)
- ☐ ☐ ☐ (9) Include trip distribution figures, supporting assumptions and calculations, and engineering justification (**Pub. 282, App. A, Step 6**)
- ☐ ☐ ☐ (10) Include volume spreadsheet indicating baseline traffic growth volumes and generated traffic (**Pub. 282, App. A, Att. C**)
- ☐ ☐ ☐ (11) Include capacity and queue analysis worksheets or analysis reports for all analysis scenarios (**Pub. 282, App. A, Att. C**)
- ☐ ☐ ☐ (12) Include pedestrian/bicycle checklist located in Design Manual Part 1X, Appendix S (**Pub. 282, App. A, Step 1**)
- ☐ ☐ ☐ (13) Include crash analysis as a separately bound document (**Pub. 282, App. A, Att. C and Step 1**)
- ☐ ☐ ☐ (14) Include gap study (**Pub. 282, App. A, Att. C**)
- ☐ ☐ ☐ (15) Include traffic signal warrant analysis (**Pub. 282, App. A, Att. C**)
- ☐ ☐ ☐ (16) Include left turn signal phasing analysis (**Pub. 282, App. A, Att. C**)
- ☐ ☐ ☐ (17) Include turn lane analysis (**Pub. 282, App. A, Att. C**)
- ☐ ☐ ☐ (18) Include approved Alternative Transportation Plan (ATP) if applicable (**Pub. 282, App. A, Att. C**)
- ☐ ☐ ☐ (19) Include Design (LOS) Waiver Request/Approval if applicable (**Pub. 282, App. A, Att. C**)
- ☐ ☐ ☐ (20) Include any additional supporting analysis data as agreed upon during the scoping application process. List the additional analyses below. (**Pub. 282, App. A, Step 10**)

Additional Notes

For any items marked See Additional notes (i.e., S), provide necessary additional information. For ease of reference, please refer to the applicable comment by its numerical number (For example, 1.2, 3.5, etc.).