



Cochise County Community Development

Highway and Floodplain Division

Public Programs...Personal Service
www.cochise.az.gov

TRANSPORTATION ANALYSIS ATTACHMENT

This information will help you determine what type of traffic report or other agency requirements you may need for your proposed project. These requirements can be found in the County's Zoning Code and Road Design Standards. It is recommended that you complete your traffic analysis in advance of finalizing your design plans.

Requirements developed through these studies will inform you about infrastructure improvements that you will need to include in your permit application and on your site plans. Traffic reports may also be required to document that infrastructure improvements are not warranted for the project site location when traffic impacts for the full-build out of the project are taken into account. The purpose of these reports is to provide you with a neutral analysis of traffic impacts and recommendations for mitigation as well as assure the County that your project is designed for safe access for your employees, customers and the traveling public.

APPLICANT NAME _____

TAX PARCEL NUMBER _____

Project Access Impacts

1. Are you creating new access from the state highway system? YES _____ NO _____

If YES, it is your responsibility to obtain approval from the Arizona Department of Transportation. They will require, at a minimum, a Right-of-Way/Encroachment Permit. They may require additional traffic information and may also require an approved Traffic Impact Analysis Report (TIA), depending on the scope of your project and your commercial business location.

Your final site and building plans must include the access and off-site improvements as approved by ADOT.

2. Are you creating new access from the county maintained system? YES _____ NO _____

If YES, it is your responsibility to obtain approval from the Cochise County Highway Department. They will require, at a minimum, a Right-of-Way/Encroachment Permit. They may also require a Traffic Control Plan, Construction Bonds, additional traffic information or Traffic Reports.

Your final site and building plans must include the access and off-site improvements as approved by the County Highway Dept.

Project Construction or Operational Impacts

3. Will the construction or operational phase of your project require the use of large equipment, semi-trucks, concrete trucks, and/or oversized or overweight loads? YES _____ NO _____
4. Will the operation phase of your project be **less than** 150 vehicles per day with **no more than** 25 vehicles in any one hour span of time? YES _____ NO _____

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If YES to **both** questions, please complete and submit a Project Construction & Operational Impact Report. A Project Construction & Operational Impact Report may be completed by the property owner, project foreman or project engineer. It is not required that these reports be stamped by an engineer. If you answered NO to either question, proceed to the next section (Project Infrastructure Impacts).

Project Construction & Operational Impact Report

A Project Construction & Operational Impact Report should address, at a minimum, the following information:

- A. State if the potential impact will be solely during the construction phase, the operational phase or both.
- B. Describe the potential impact for the construction and/or operational phases of your project. Include estimated number of trucks per day and size of trucks. *Note that size of trucks should include length, height and weight. Identify if any construction loads might be oversized loads and/or overweight loads.*
- C. Estimate the potential duration of construction and tentative construction schedule, by phase, for your project. Alternatively, how frequently heavier trucks are expected for your proposed use.
- D. Identify the access roads that will be used for construction or oversized vehicles to reach your site; include roadway condition, weight limits on roads or bridges, ownership and maintenance responsibility for each roadway. Photographs are helpful to include.
- E. Describe the proposed mitigation for the construction/operational phases of your project. Specifically identify any measures that might need to be taken to navigate any portions of the roadway that might require trucks to use more than one lane, use the shoulder area, make larger turns than can be made within the existing roadway marked lanes. Mitigation may be pilot cars, temporary traffic signs, improved detour routes etc.
- F. Identify the dust control measures you plan to use to keep dust from blowing onto adjacent properties off of the construction routes during your construction project.
- G. Identify the measures you plan to take to prevent tracking of dirt, gravel, mud and/or vegetation onto the access roadways from your construction site.
- H. Describe your Traffic Control plan and any needed mitigation measures you plan to implement.

Project Infrastructure Impacts

5. Do you expect more than 350 vehicles/trucks to come to your site in one business day?
YES _____ NO _____
6. Do you expect more than 50 vehicles/trucks to be turning into or out of your site in any one single hour of your business day? YES _____ NO _____
7. Are there any other parcels, immediately adjacent to these project sites, that are owned by the same owner or company? YES _____ NO _____

If you answered NO to **all** three of these questions, please complete and submit a Traffic Impact Statement for your project. A Traffic Impact Statement is typically completed by either a Civil or Traffic Engineer. This report should be certified and stamped by the certifying engineer.

If you answered YES to **any** of these three questions, please complete and submit a Traffic Impact Analysis Report. A Traffic Impact Analysis is typically completed by a Traffic Engineer. This report should be certified and stamped by the certifying engineer.

Traffic Impact Statements

A Traffic Impact Statement should address, at a minimum, the following information:

- A. A brief description of the proposed commercial venture including location, number of acres and type of land use. Include a study area map.
- B. Identify the condition, ownership and maintenance responsibility for the existing roadway network serving your site. Photographs and a map are helpful to include.
- C. Identify the current average daily traffic and peak hour traffic volumes on the roadway network that you plan to take access from for your site. This data is available at: <http://seago.ms2soft.com/tcds/tsearch.asp?loc=Seago&mod=>
- D. Calculate, consistent with the most current version of the Traffic Engineer's *Trip Generation Manual*, the average estimated traffic to be generated by your proposed use and estimated peak hour traffic. Identify if the traffic generation by your project anticipates seasonal variations. Justify variances if your analysis or expectations are different from the typical averages for your type of business.
- E. Describe full build-out traffic circulation patterns on your site, including distribution of traffic and delivery truck loading zone access, both in and out of the site. Ensure adequate turning radii for freight deliveries. Provide appropriate illustrations/diagrams.
- F. Describe internal circulation features that are planned to move people throughout the site; in particular pedestrian movement, but also include, as appropriate, multi-modal aspects, such as bicycle and/or equestrian facilities, bus stops and traffic management elements.
- G. Calculate the clear zones (sight distance triangles) for each access driveway to the site.
- H. Describe potential impact, duration and proposed mitigation for construction phases of the development. (See Project Construction & Operational Impact Report items)
- I. Provide a summary of findings with recommendations for mitigation, by phase, for your proposal.

Traffic Impact Analysis (TIA) Reports

A Traffic Impact Analysis Report should be prepared for all commercial developments that have the potential to generate more than 700 daily vehicle trips; primary access is from a State Highway or County federally functionally classified roadway; developer owns/has control over adjacent lands not part of this permit request. This analysis should address, at a minimum, the following information:

- A. A description of the full development, including adjacent lands held by the same developer/owner and surrounding area land uses. Identify conceptual plans for adjacent lands held by the same developer/owner. Include study area and site plan maps.
- B. Identify the condition, ownership and maintenance responsibility for the existing roadway network serving the proposed commercial development. Photographs and a map are helpful to include.
- C. Identify the current average daily traffic, peak hour traffic volumes, and level of service on the roadway network serving the site.
- D. Calculate, consistent with the most current version of the Traffic Engineer's *Trip Generation Manual*, the average estimated traffic to be generated by your proposed use. Justify variances if your analysis or expectations are different from the typical averages for your type of business.
- E. Identify estimated traffic and Level of Service on the primary access roadways after full build-out.
- F. Provide estimates of peak hour traffic and, if appropriate for the type of development, peak seasonal traffic generation and/or estimates of peak hour traffic generation by phase of development. Include directional distribution of site traffic and a queuing analysis for peak hour travel for the primary access points to the site.
- G. Describe anticipated traffic patterns on-site and for any state highway, signalized intersection and major unsignalized street intersections within one-half mile of the proposed development.
- H. Describe future traffic circulation needs for both the proposed development and potential future development in the immediate area; specifically include potential impacts generated by adjacent lands held by the same developer/owner.

- I. Describe full build-out traffic circulation patterns on your site, including distribution of traffic and delivery truck loading zone access, both in and out of the site. Ensure adequate turning radii for freight deliveries. Provide appropriate illustrations/diagrams.
- J. Describe internal circulation features that are needed to move people throughout the site; include multi-modal aspects, such as pedestrian, bicycle and/or equestrian facilities, bus stops and traffic management elements.
- K. Analyze the known accident data for the federally functionally classified roadways and intersections within a quarter mile of the site. Include, when appropriate, collision diagrams and document existing and potential future collision rates. Describe how emergency access for the proposed development is being addressed.
- L. Calculate the clear zones (sight distance triangles) for each access driveway to the site.
- M. Describe potential impact, duration and proposed mitigation for construction phases of the development. (See Project Construction & Operational Impact Report items)
- N. Provide a summary of findings with recommendations for mitigation, by phase, for your proposal.
- O. If deemed, necessary, the County Engineer may require conformance with the Arizona Department of Transportation *Traffic Impact Analysis Manual*.

Specific assumption and data sources used in the Traffic Impact Analysis should be documented in your report. Analysis and proposed mitigation should be consistent with AASHTO Highway Safety Manual, MUTCD, TRB Highway Capacity Manual and the Cochise County's Road Design & Construction Standards and Specification for Public Improvements.

If you are taking access from the State Highway system, you are strongly advised to obtain concurrence from ADOT's Traffic Engineer on the number and assignment of trips generated by your development and what specific analysis requirements, level of detail and mitigation that ADOT will require. Meeting the County's TIA requirements may or may not be sufficient to obtain an approved ADOT TIA, depending on the scope of your project. Meeting the County's transportation mitigation requirements may or may not be sufficient to meet the State's mitigation requirements.

QUESTIONS? Contact the County Transportation Planner at (520) 432-9300 for clarifications of these requirements. The Cochise County Roadway Design and Construction Standards are available on-line at: <https://www.cochise.az.gov/highway-and-floodplain/highway-division>