

**ARTICLE 32**  
**Impact Assessment**

**§ 170-32.1. Intent**

The intent of an impact assessment is to provide relevant information that is necessary to evaluate the proposal's impact upon the natural environment, traffic operations, public facility needs and the future land use of the surrounding area.

**§ 170-32.2. Applicability**

- A. An impact assessment includes a written component and a traffic analysis, as defined in Sections 32.3 and 32.4. An impact assessment shall be prepared by the applicant for any of the following projects.
- (1) Rezoning requests that represents a departure from the Township's Master Plan.
  - (2) Projects that would be expected to generate 100 directional vehicle trips, (i.e., 100 inbound or 100 outbound trips), during the peak hour of the traffic generator or the peak hour on the adjacent streets.
  - (3) A PUD.
  - (4) Special land uses in the industrial zoning district.
  - (5) A manufactured housing development.
  - (6) Sand and gravel mining operations.
- B. The requirement for an impact assessment may be appealed to the Northville Planning Commission. The appeal may be to waive the requirement or eliminate the need for submittal of some of the information. To receive a modification, the applicant shall demonstrate that the impacts will be relatively minor and/or the existing infrastructure has ample capacity available.

**§ 170-32.3. Written Impact Assessment Requirements**

- A. Name(s) and address(s) of person(s) that prepared the impact assessment. Documentation regarding wetlands, woodlands, traffic or fiscal impacts must be prepared by a person(s) with applicable experience.

- B. Except for traditional rezoning requests, a map conveying the following shall be provided.
  - (1) Land uses, building arrangement or lots, the relationship between land uses areas and the type and density of dwelling units.
  - (2) Site circulation including pedestrian/facilities, streets, drives and parking area(s).
  - (3) Open spaces, general landscaping plans, preservation of natural features and location and types of recreational facilities or amenities.
  - (4) General utility layout including stormwater management, sanitary sewer and public water.
- C. A written description of the site’s natural features such as but not limited to, topography, soils, wildlife, regulated woodlands, existing vegetation, wetlands, view sheds, lakes, streams and ponds.
- D. A description of natural drainage patterns, changes to site drainage and the method of stormwater management to be installed.
- E. A written description of how the project will comply with the site performance standards contained in Article 3, General Use and Operating Provisions and Chapter 117, Noise.
- F. A description of the proposed uses and other accessory facilities, to determine compatibility with existing and future land uses, including but not limited to lighting, views from the street and adjacent land uses and buffering to minimize impact on adjacent properties.
- G. A description of any hazardous substances expected to be used, stored or disposed of on the site. The information shall describe the type of materials, location within the site and method of containment. Documentation of compliance with federal and state requirements and a Pollution Incident Prevention Plan (PIPP) shall be submitted for any use that stores more than 25 gallons or 220 pounds of hazardous materials or wastes. Any discharge of wastewater to a storm sewer, drain, lake, stream or other surface water shall be documented and appropriate permits obtained from the Department of Environmental Quality. A detailed description of any underground storage tanks and the materials to be stored shall be documented and appropriate permits obtained from the State Police Fire Marshal Division, Hazardous Materials Section. If flammable or combustible liquids are to be stored in fixed aboveground storage containers with a capacity greater than 1,100 gallons, this shall be documented and appropriate permits obtained from the State Police Fire Marshal Division. Storage of pesticide or fertilizer in quantities greater than 55 gallons or 100 pounds shall be documented and appropriate permits obtained from the Michigan Department of Agriculture, Pesticide and Plant Pest Division. All necessary

permits shall be included within the appendix of the environmental impact assessment. Best management practices and containment of hazardous materials shall be documented.

**§ 170-32.4. Traffic Study Requirements**

- A. A rezoning traffic assessment shall be required for rezoning requests that would result in potential uses that are projected to generate more peak hour or daily trips than currently zoned uses would generate. The assessment shall compare the peak hour and daily trip generation characteristics between existing and proposed zoning. The trip generation data shall be based on the most intense uses permitted in the requested rezoning district. If the request is for conditional zoning, the trip generation shall be calculated based on planned use(s). Projected trip generation shall be based upon equations/rates outlined in the most recent version of the Institute of Transportation Engineer's (ITE) Trip Generation manual.
- B. A traffic impact study shall be required for projects that would be projected to generate 100 directional vehicle trips, (i.e., 100 inbound or 100 outbound trips), during the peak hour of the traffic generator or the peak hour on the adjacent streets. Forecasted trip generation shall be based upon equations/rates outlined in the most recent version of the Institute of Transportation Engineer's (ITE) Trip Generation manual. The ITE data may be supplemented by actual trip generation data from similar establishments in Michigan. Any supplemental data must be reviewed and approved by the Township prior to use in the study analyses.
- C. The applicant is required to contact Township staff and the traffic engineering consultant prior to preparation of a traffic impact study to discuss available data, extent of study area and inclusion of other projects or growth factors as part of the background conditions.
- D. Existing conditions including daily and peak hour traffic volumes on adjacent street(s), intersections within the vicinity that are expected to be impacted and a description of any sight distance limitations along the site's frontage shall be summarized in the study report.
- E. Existing traffic counts shall be taken on a Tuesday, Wednesday or Thursday of non-holiday weeks. Additional counts, i.e., on a Saturday for a proposed commercial development, may also be required. The following times/situations should also be avoided where possible so that the traffic count data would represent a typical day, construction detours in the area, summer days for a site near a school, etc. The firm performing the impact study must make every effort to complete traffic counts during average or higher than average volume conditions, i.e., regarding weather or seasonal variations for the area under study. Traffic data older than two years old will not be accepted. Traffic data between one and two years old may be accepted when the applicant can document that volumes have not changed more than 2%.

- F. Projected trip generation of the proposed use shall be provided for the A.M./P.M. peak hour and average daily traffic generated. The forecasts shall be based on the data and procedures outlined in the Institute for Transportation Engineers (ITE) Trip Generation manual. The applicant may use other commonly accepted sources of data or supplement the standard data with data from similar projects in Michigan. For rezoning requests when such change represents a departure from the future land use map, the study should contrast the trip generation of typical uses permitted in the requested zoning district with uses permitted in the current zoning district. The determination of typical uses shall be made by the Planning Department.
- G. All traffic impact studies will include an analysis of background conditions for the year that the project is to be completed (or in phases if applicable). Background traffic includes historic annual percentage increases and/or acknowledges the traffic impacts of other uses approved or in the review process, but not yet constructed, which may affect traffic operations for roadways and intersections near the subject site, as determined by the Township. This may include projects in adjacent communities. Improvements identified to address any poor background conditions must be the minimum required to adequately address those conditions.
- H. The projected traffic generated shall be distributed onto the existing street network to identify expected turning movement volumes at site driveways and nearby intersections and illustrated in the report. A description of the application of standard engineering procedures for determining the distribution shall also be included. The expected trip distribution shall be approved by the Township prior to continuation of the analyses. The assignment of forecasted site traffic shall be clearly illustrated in graphic form in the study report.
- I. Capacity analysis at the proposed access points using the procedures outlined in the most recent edition of the Highway Capacity Manual published by the Transportation Research Board shall be provided. Before and after capacity analyses shall also be performed at all street intersections where the expected project traffic will comprise at least 5% of the existing intersection traffic volumes and/or for roadway sections and intersections experiencing congestion or a relatively high accident rate, as determined by the Township or Wayne County Department of Public Services staff. The "after" analysis shall include a scenario with no improvements and separate analysis for various mitigation options or packages of improvements. Any proposed change to signal timing should include documentation of acceptance by Wayne County staff.
- J. Traffic crash data at analyzed intersections covering the past three (3) years shall be summarized in collision diagrams if the segment of roadway adjacent to or near the subject site has experienced crash problems.

- K. The location and design of proposed access for a driveway or new street intersection shall be provided with a map and narrative description. In addition, analysis shall include any sight distance limitations, dimensions from adjacent driveways and intersections within 250 feet and other data to demonstrate that the design and number of proposed driveways are the fewest necessary. The driveway(s) shall provide safe and efficient traffic operation and be in accordance with the standards of this chapter.
- L. The potential need for bypass lanes or deceleration tapers/lanes, including attachment of any correspondence by the Wayne County Department of Public Services.
- M. Fire Department shall approve the size and location of fire lanes and emergency vehicle access.
- N. The Township requires analysis using traffic capacity/simulation software (i.e. SYNCHRO) rather than an isolated intersection capacity analysis. Such analyses' submittals shall include electronic copies of the simulation files.