



***What is an Intersection Traffic Count?***

An Intersection Traffic Count is completed to collect a real-time count of vehicles, pedestrians and/or bicycles through an intersection for each movement during defined time periods.

***What is Intersection Delay?***

Intersection Delay is additional travel time experienced by a driver at an intersection beyond that required to travel at the posted speed.

***What is Level-of-Service?***

Level-of-Service (commonly referred to as LOS) is used to define driver delay at an intersection through assignment of a letter grade on an A to F scale. LOS A represents the best operating conditions from the driver’s perspective, and LOS F the worst. LOS D or better is considered acceptable by PennDOT for roadways surrounding the site.

<b>Highway Capacity Manual Level-of-Service Criteria</b>		
<b>Level-of-Service (LOS)</b>	<b>Intersection Delay (Seconds per Vehicle)</b>	
	<b>Signalized</b>	<b>Unsignalized</b>
<b>A</b>	≤ 10	≤ 10
<b>B</b>	> 10 – 20	> 10 – 15
<b>C</b>	> 20 – 35	> 15 – 25
<b>D</b>	> 35 – 55	> 25 – 35
<b>E</b>	> 55 – 80	> 35 – 50
<b>F</b>	> 80	> 50

***What is a Transportation Impact Study?***

A Transportation Impact Study (commonly referred to as a TIS) is a report prepared by a licensed Traffic Engineer that provides information on the traffic volumes and traffic operations expected from a proposed development. As part of the land development approval process, the TIS must be reviewed and approved by PennDOT and the Township.

***What is Trip Generation?***

Trip Generation predicts the number of vehicles expected to enter and exit a new development. The Institute of Transportation Engineers (commonly referred to as ITE) provide industry standard trip generation data that Traffic Engineers use to predict trip generation based on the types and sizes of uses within the new development. The trip generation calculations must be reviewed and approved by PennDOT and the Township within the Transportation Impact Study.



***What is the difference between vehicles and trips?***

When describing trip generation, two units of measure can be referenced: (1) number of vehicles generated and (2) number of trips generated. When describing trip generation, one vehicle both enters the site and exits the site during the specified time period. When describing trip generation, one trip enters the site and one trip exits the site, and therefore, one vehicle equals two trips.

***What are PennDOT's Roadway Improvement Requirements for a new development?***

As part of the land development approval process, PennDOT requires the applicant to maintain the same level of service (which is a description of the traffic operations) at each study intersection with the development as compared to without the development. If necessary, the applicant is required to construct roadway improvements to satisfy this requirement.

***Existing traffic is already bad in this area, so how will the development impact it?***

With the additional traffic from the new development, the applicant must demonstrate and complete roadway improvements to maintain at least the same general traffic operations as compared to without the development in order to satisfy PennDOT requirements. There are significant roadway improvements under consideration with this development which will satisfy this requirement, and in many cases these roadway improvements will result in traffic operations that are better than existing conditions, exceeding PennDOT requirements. All improvements must be reviewed and approved by PennDOT and the Township to verify compliance with this standard.



## What about the TRAFFIC?

We know the community has a lot of questions about the traffic associated with the development of the property, so let's talk about the facts.

### *How much traffic exists along Sproul Road today?*

Based on data collected by PennDOT, Sproul Road carries approximately 33,000 vehicles per day (total in both directions of travel) in front of the subject property.

### *How much additional traffic will be added with development of the property?*

The proposed Preservation Plan is a mixed-use development providing a variety of uses within a well-connected, walkable environment. A mixed-use development like this is best located along a major roadway to allow patrons to visit the site as part of their typical commuting patterns, thus lessening the increase in traffic. Certainly, additional traffic will be experienced on nearby roadways, primarily Sproul Road, as part of the development of this site. The new traffic that is generated by this development is expected to come from the nearby surrounding community within an approximate five-mile radius. With the proposed uses, people in this community can travel to this site, rather than traveling outside of the immediate area to get to similar amenities.

Under the Current Zoning of the property, institutional uses such as a community center, schools, hospital and medical office space, as well as residential uses are permitted. The residential uses will bring more residents and traffic to the area. The institutional uses will bring more traffic to the area from a larger area as compared to the Preservation Plan since these uses would be expected to serve more than the immediate community. New traffic to be generated by development based on the Current Zoning could generate about the same amount of daily traffic as the Preservation Plan, and more traffic during the peak commuter periods based on the nature of the uses.

Below are a few facts about the new traffic to be added along Sproul Road in front of the property by the proposed Preservation Plan versus development possible under the Current Zoning:

<b>Development</b>	<b>Sproul Road New Traffic</b>
<b>Proposed Preservation Plan:</b>	About 10,375 vehicles per day About 440 vehicles during the morning commuter peak hour About 700 vehicles during the afternoon commuter peak hour
<b>Possible Under Current Zoning:</b>	About 10,150 vehicles per day About 1,000 vehicles during the morning commuter peak hour About 900 vehicles during the afternoon commuter peak hour
<b>Sproul Road Traffic with</b>	33,000 vehicles per day plus 10,375 vehicles per day = 43,375 vehicles per day



***So how will Sproul Road and the area roadways accommodate this new traffic?***

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***Who reviews all this information to make sure what the applicant says is correct?***

Both PennDOT and Township Engineers will review the applicant's traffic study in great detail to ensure the requirements are satisfied and the development will not make traffic conditions worse in the study area. The traffic study is completed by a licensed Traffic Engineer at the applicant's cost. Preparation of the traffic study is a very mathematical process, with industry standard requirements that the engineers must follow.

***What is the applicant's responsibility with regard to the roadway improvements needed for the development?***

All roadway improvements that are required by PennDOT in order to accommodate the traffic from the new development must be designed and constructed at the applicant's cost prior to the opening of the development.