

SUBJECT	ISSUED BY	EFFECTIVE DATE	REVISION
Traffic Impact Policy	Board of County Commissioners	02.17.2021	1.0

Gravel Roadways:

A. Passenger Vehicles Only:

1. 0-24 vehicles per day (48 vehicle trips) is \$0.
2. 25 vehicles per day (50 vehicle trips) and more is \$72.00/passenger vehicle.

Note: Public works budgets \$7,200 per mile for gravel roadways. Acceptable volume on a gravel roadway is 200 trips per day (Kansas State University Gravel Road Paving Guidelines – November 2016) before consideration in improving the roadway including hard surfacing. $\$7,200/200=\36.00 . Fee is based on 1 mile of impacts. One (1) vehicle to the site is equal to two (2) trips per day. $\$36.00 \times 2 = \$72.00/\text{vehicle}$

B. Commercial Vehicles (Vehicles with a greater classification than 12,000 lbs including trailer or daily combined gross vehicle(s) weight including trailer(s) greater than 60,000 lbs):

1. 0-4 vehicles per day (8 vehicle trips) is \$0.
2. 5-20 vehicles per day (10-40 vehicle trips) is \$216.00/vehicle.

Note: Fee is based on 3 times the passenger vehicle fee.

3. County Engineer shall determine if a Drainage Structure Assessment is required based upon load rating information available from bridge and culvert inspections of record.

C. 50 and more Passenger Vehicle trips per day or 10 or more Commercial Vehicle trip per day requires a Traffic Impact Study to include physical roadway assessment along the proposed gravel road traffic route. If the applicant’s traffic study indicates that the traffic generated by their proposed use will have a detrimental impact on the safety of the public or will require the county to subsidize the business as a result of the degradation of the roadway created from the additional traffic, roadway improvements will be Staff’s recommendation as part of the approval of the Special Use Permit.

Hard Surfaced Roadways:

A. Passenger Vehicles Only:

1. 0-49 vehicles per day (98 vehicle trips) is \$0.
2. 50 – 149 vehicles per day (100 – 298 vehicle trips) is \$72.00/vehicle.

Note: Asphalt pavement life cycle cost for replacement per year is \$83,101 per mile. Public Works recommends the following existing roadways to set fee schedule (see below).

Average trips per day is 2,250. $\$83,101/2,250 = \$36.93/\text{passenger vehicle}$. $\sim \$36.00$

- a. CR 29 (187th Street) – vehicles per day: 1650-1750
- b. CR 5 (Tonganoxie Rd) – vehicles per day: ~ 2300

- c. CR 10 (Eisenhower Rd) – vehicles per day: 1800-2200
 - d. CR 2 (158th Street) – vehicles per day: ~3000
- B. Commercial Vehicles (Vehicles with a greater classification than 12,000 lbs including trailer or daily combined gross vehicle(s) weight including trailer(s) greater than 60,000 lbs):
- 1. 0-4 vehicles per day (8 vehicle trips) is \$0.
 - 2. 5-20 vehicles per day (10-40 vehicle trips) is \$216.00/vehicle.

Note: Fee is based on 3 times the passenger vehicle fee.

- 3. County Engineer shall determine if a Drainage Structure Assessment is required based upon load rating information available from bridge and culvert inspections of record.
- C. 50 and more Passenger Vehicle trips per day or 10 or more Commercial Vehicle trips per day requires a Traffic Impact Study. 299 or more Passenger Vehicles trips per day or 10 or more Commercial Vehicle trips per day requires a physical roadway assessment along the proposed traffic route. If the applicant’s traffic study indicates that the traffic generated by their proposed use will have a detrimental impact on the safety of the public, or will require the county to subsidize the business as a result of the degradation of the roadway created from the additional traffic, roadway improvements will be Staff’s recommendation as part of the approval of the Special Use Permit.

General Requirements:

- 1. Traffic Impact Study, Road Assessment, and Drainage Structure Assessment shall be completed by a professional engineer registered in the State of Kansas. The County will engage an engineering firm to complete the required referenced studies and assessments. The Applicant is responsible for the costs incurred by the County for said studies. All improvements are to be paid by the Applicant and shall be built per County and/or State standards and specifications. County Staff acceptance/approvals of studies and/or assessments does not guarantee acceptance by KDOT or other jurisdictional agencies. County Staff acceptance/approvals of studies and/or assessments is one factor in the Board of County Commissioners consideration of a Special Use Permit and does not guarantee approval of the proposed use.

Initially, the application will be reviewed by the County Engineer for applicability to County Standards to determine if studies and/or assessments, based on sound engineering judgement, are required.

Note: The conclusion of said studies and assessments may recommend and warrant further investigations, studies, and assessments to be completed. Applications may be subject to different investigations, studies, and/or assessment mentioned above due to the proposed use and existing site/route conditions. County Engineer will determine if additional requirements are necessary.

- 2. KDOT’s Access Management Policy (<https://www.ksdot.org/accessmanagement/>) shall provide guidance on generating a traffic impact study. 50 and more total vehicle trips either commercial or passenger or combination (commercial and passenger) per day requires a traffic impact study.

3. Improvement costs as of a result of recommendations from any studies or assessments will qualify for a credit to the Traffic Impact Fee schedule.
Fee reduction amounts will be determined prior to Special Use Permit approval and will be documented as part of the conditions of approval of the permit.
4. Trip is a single-or one-directional vehicle movement with either the origin or the destination being the site. A vehicle leaving the public roadway and entering the site is one trip, and the vehicle leaving the site is a second trip. One (1) vehicle to the site is equal to two (2) trips per day.
5. Applications that may not produce consistent traffic in the form of “vehicles per day” due to the nature of business, shall provide a quantitative calculation to a “vehicle per day” unit. The calculation of vehicles per day shall be approved by the County Engineer prior to any studies commencing.
6. Drainage Structure Assessment Minimum Requirements: The Applicant shall inspect and complete a structural health assessment for the structures along the route. This assessment shall evaluate the condition and ability for all drainage structures under the public roadway to satisfactorily carry the anticipated truck loadings. The structures shall be defined as all bridges (including those with a length less than FHWA’s 20-foot bridge length), culverts, and storm pipes greater than 15 inches in diameter. The assessment shall include a photo log of each structure, condition assessment (utilize NBI ratings criteria, where applicable), tabulation of deficiencies, and recommendation for suitability to sustain the proposed traffic loadings. The assessment shall be signed and sealed by a professional engineer registered in the State of Kansas. The photo log shall include two structure end elevations, one photo looking in each direction along the roadway at the structure, one photo looking upstream, one photo looking downstream, and at least one photo through the opening of the structure.
7. Road Assessment Minimum Requirements: The assessment shall be signed and sealed by a professional engineer registered in the State of Kansas. The Applicant shall inspect and complete an assessment to include the following: A layout of the proposed route (Assessment route will be defined by County Engineer). The existing traffic data for the route. Anticipated vehicles per day including number of trucks, type of trucks and loads. Growth factor of traffic along route. Perform a visual pavement assessment analysis of the route (Typically use ‘Distress Identification Manual for the Long-Term Pavement Performance Program, by US DOT FHWA-RD-03-301). Perform pavement cores at approximately 1/4-mile increments along the route and at the intersections. Perform borings at the core locations, where the subgrade is sampled using thin walled tubes to a minimum depth of 5 feet. Perform laboratory testing on the thin walled tubes and observations of the core samples. Laboratory testing should be used to provide minimum CBR for the weakest subgrade conditions. Provide calculation of the existing pavement structural number for the existing pavements using AASHTO Flexible Design Procedure (hard surface only). Provide required structural number for additional traffic. Compare existing to required structural number. Determine what, if any, road improvements are necessary to meet the calculated structural number or need to be made to meet the calculated structural number for the anticipated additional traffic. Evaluate gravel roadways

per Unified Facilities Criteria (UFC) 3-250-09FA “Aggregate surfaced Roads and Airfields Areas”. Determine what, if any, road improvements are necessary to meet UFC 3-250-09FA.

8. Upon initial review of the application, the County Engineer has authority to require a Traffic Impact Study, Road Assessment, and Structures Assessment on utilized roadways as part of the application even if such application is below the detailed limits requiring such to ensure the safety of the general public and the protection of the existing infrastructure.

RESOLUTION 2021-05
A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF THE
COUNTY OF LEAVENWORTH, KANSAS, ESTABLISHING A TRAFFIC
IMPACT FEE POLICY AND FEE SCHEDULE.

WHEREAS, the office of planning and zoning of Leavenworth County accepts and processes certain applications for matters pertaining to planning and zoning, and provides other services to the public which subsequently provide for private benefit; and

WHEREAS, the board of county commissioners has considered a schedule of fees as proposed and recommended by the staff of the office of planning and zoning; and

WHEREAS, the board finds the schedule of fees as proposed and recommended is reasonable;

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of the County of Leavenworth, Kansas, that:

1. The policy and fee schedule for Traffic Impact Fee attached hereto and fully incorporated herein, is hereby adopted.
2. That the office of planning and zoning shall account for the fees collected and that said fees be maintained in an identifiable account of the county.
3. Resolution No. 1999-14 and Resolution No. 1991-34 is hereby repealed.
4. Any provision of any previously adopted resolution in conflict with this resolution is declared null and void.

RESOLVED THIS 17 DAY OF FEBRUARY, 2021.

ATTEST:

KANSAS

Janet Klasinski
Janet Klasinski
County Clerk

Michael Smith

Michael Smith, Chairman

Jeff Gulbertson

Jeff Gulbertson, Member

Vicky Kaaz

Vicky Kaaz, Member

Doug Smith

Doug Smith, Member

A handwritten signature in blue ink, appearing to read "Mike Stieben", written over a horizontal line.

Mike Stieben, Member