

Louisville Metro Speed Hump Guidelines

INTRODUCTION

The use of *Speed Bumps* and *Speed Humps* to control speeding, on neighborhood streets, is documented within many jurisdictions, across the country.

Kentucky Revised Statutes (KRS) Section 189.337 is the controlling statute that states “all traffic control devices shall be controlled by a manual of standards and specifications for a uniform system of official traffic control devices for use upon all roads and streets in the state, including incorporated cities.” The Kentucky Transportation Cabinet issued 603 Kentucky Administrative Regulation 5:050 Uniform Traffic Control Devices, which establishes the manual referenced by KRS 189.337, and states that the standards and specifications set forth in the Federal Highway Administration publication Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) shall apply to all traffic control devices installed on any publicly used highway, road or street in Kentucky.

In 1999, the Federal Highway Administration (FHWA) announced their plans to release a revised edition of the *MUTCD*. The FHWA announced that they were including a section on the proper signage and markings for jurisdictions choosing to install *Speed Humps*. The FHWA chose signage and marking standards based on research conducted and published by the Institute of Transportation Engineers, (ITE). The ITE published standards for construction, signage and markings of *Speed Humps* in their recommended practice entitled Guidelines for the Design and Application of Speed Humps, and this was adopted by the FHWA for inclusion in the *MUTCD*.

Based on the adoption of the ITE guidelines by FHWA, the revised *MUTCD* now refers to *Speed Humps*. The Louisville-Jefferson County Metro (Metro) has interpreted this action to infer that the decision to use *Speed Humps* is a local decision and would not violate KRS 189.337.

The Louisville Metro Public Works and Assets Department (PW) has developed the following guidelines based on the ITE Guidelines for the Design and Application of Speed Humps and policies adopted by other jurisdictions.

A. GENERAL

A review of the available national literature has shown that speed humps can be an effective and appropriate measure for safely reducing vehicle speeds on certain types of streets, when installed according to the provisions of these guidelines. In order for speed hump installation to be effective, they will be located selectively following defined transportation engineering criteria and traffic engineering studies for ameliorating documented speeding problems. Proper installation, based on the ITE guidelines, is also intended to minimize driver frustration and encourage safe driving practices.

These guidelines promote reasonable opportunities for residents and property owners most

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affected by a proposed speed hump have some input and participate together in the process that leads to its installation. It also provides for a potential sharing of the speed hump installation cost between a Metro Council District and the neighborhood.

It should be noted that under Kentucky law, adjacent property owners do not have any greater interest in city streets than the traveling public (except for reasonable ingress and egress from their property). **Therefore, the decision to install or remove speed humps is solely within the discretion of PW.** However, when possible, PW will be sensitive to the wishes and preferences of households affected by the decision.

B. DEFINITIONS

These are some of the definitions used in the guidelines.

AFFECTED PROPERTY OWNERS – Includes only those properties adjacent to the right-of-way of the segment of the street where the speed humps are proposed.

APPLICATIONS for SPEED HUMPS - Includes a petition by ballot of the affected property owners.

FUNCTIONAL CLASSIFICATION - “The process by which streets and highways are grouped into classes or systems according to the character of service they are intended to provide.” (*Highway Functional Classification and Needs Study Manual*)

- ⇒ Arterial System - provides for through traffic movement between areas and across the city, with limited access to abutting property, but subject to access controls and curb uses.
- ⇒ Collector System - provides for traffic movement between arterials and local streets, with limited access to abutting properties.
- ⇒ Local System - provides direct access to abutting properties.

ITE - The Institute of Transportation Engineers.

LOW DENSITY RESIDENTIAL DWELLINGS - Includes single-family houses, townhouses, duplexes, triplexes and quadraplexes.

MUTCD - *Manual on Uniform Traffic Control Devices*.

ROADWAYS - That portion of a highway improved, designed, or ordinarily used for vehicular travel, exclusive of the berm or shoulder. If a highway includes two (2) or more separate roadways, the term "roadway," as used herein, shall refer to any roadway separately, but not to all such roadways collectively.

SPEED HUMPS - Geometric design feature of a roadway, consisting of a raised area in the roadway pavement surface, extending transversely across the travel way, whose primary purpose

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is to reduce the speed of vehicles traveling along the roadway.

SPEED - This refers to the operating speed, especially the range and frequently of speeds on the street. Operating speeds are collected in accordance with the ITE *Guidelines for the Design and Application of Speed Humps*. The study period shall be a minimum of 48 hours in length.

SPEED CRITERIA - This pertains to speed that is 10 mph over the legal speed limit on the roadway.

STREET - Refers to the length of the street with proposed speed humps that must be petitioned. It is a minimum 1,200 foot segment generally centered on the location of each hump, or length of the block, whichever is greater. If the 1,200 foot segment extends into any part of an adjacent block of the same street, it includes the entire length of the adjacent block, unless separated by an intervening thoroughfare, traffic signal, stop sign, or offset intersection.

C. ELIGIBILITY REQUIREMENTS

The following criteria will be reviewed before a street is considered eligible for speed hump installation.

1. **Support** Although PW will utilize processes in order to determine if a segment of street is deemed appropriate for speed humps, generally the neighborhood representative(s) will be responsible for forwarding evidence of support for speed humps. Usually, PW will not consider speed humps unless approximately 70% of the affected property owners favor their installation.
2. **Location of the Street** The land uses of the properties abutting the street where the speed hump is proposed shall be composed of low density residential dwellings. This would include public roadways where 50% or more of the residents are single family residential dwellings.
3. **Operational Characteristics of the Street.**
 - a. The street shall be used to provide access to abutting low density residential properties. The street shall not be identified as a Collector or higher level street, as defined in the Cornerstone 2020, Core Graphic 10. Speed humps shall not be considered on streets defined as Metro Thru Streets.
 - b. There shall be no more than one (1) moving lane of traffic in each direction.
 - c. Traffic volumes shall be more than 300, but less than 2,500 vehicles, for the two-way volume, per day.
 - d. Vehicle Speed shall exceed the Speed Criteria.
 - e. The street shall have a speed limit of 25 mph, or less, as determined in accordance with the Metro Code of Ordinances.

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- f. The street shall not be so close to a Fire Department facility as to significantly interfere with emergency vehicle operations.
- g. PW will also solicit comments from the appropriate Metro Police Division, appropriate Metro Fire District, EMS, JCPS and appropriate service departments. If no comments are received within two (2) weeks, PW will assume there are no objections. Should they identify significant concerns which cannot be corrected, PW will not install speed humps.
- h. Speed Humps shall not be considered on alleys.

4. Geometric Characteristics of the Street

- a. The street should have adequate sight distances, as defined in the *Traffic Engineering Handbook*, to safely accommodate the hump. This should be documented in writing by Louisville Metro.
- b. The street shall not have curves or grades that prevent safe placement of the humps. Therefore, Humps may be located on streets that contain curves and/or grades, but the hump itself should not be located within a significant horizontal curve, or a vertical grade greater than eight (8%) percent.
- c. The street shall be paved. If there are no curbs, a special design of speed hump may be used to prevent vehicles from going around the speed hump.

D. COST RESPONSIBILITY

The cost for the speed hump installation (including signs, pavement markings, and, if necessary, special design features such as curbing) may be shared between the appropriate Metro Council District and residents or other funding sources.

The term “Applicant,” when used in cost sharing, does not necessarily refer to the petitioners. It is used to define the share of the cost that is not the responsibility of the appropriate Metro Council District and could be paid by one or more citizens, or from other private sources. Applicants may be able to expedite hump installation by voluntarily paying the full installation cost.

The appropriate Council District may fund the entire cost of installation by using the Council District’s discretionary funds, i.e., NDF and or CIF.

E. SPEED HUMP REMOVAL AND ALTERATION

The process for speed hump removal or alteration by citizens is the same as the process for installation.

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Applicants may be required to assume 100% of the cost for alterations or removal of speed humps that were installed under this policy.

The appropriate Council District may fund the entire cost of removal or alterations by using the Council District's discretionary funds, i.e., NDF and or CIF.

F. SPEED HUMPS LOCATION

Louisville Metro Public Works and Assets (PW) will work with the property owners to the extent possible on the location of the Speed Hump. For engineering and/or safety reasons, the best location for a Speed Hump may be in front of a property where the property owner opposes it. PW will take those preferences into consideration, but PW will make the final decision on placement.

G. DESIGN STANDARDS AND PROCEDURES

Louisville Metro Public Works and Assets will prepare and maintain current design standards and installation procedures for speed humps according to these guidelines.

The design and installation of speed humps shall comply with the Institute of Transportation Engineers' Recommended Practice, *Guidelines for the Design and Application of Speed Humps*.

All signage and pavement markings shall comply with the current edition of the MUTCD and ITE's Recommended Practice, *Guidelines for the Design and Application of Speed Humps*.

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PROCEDURES FOR SPEED HUMPS INSTALLATION

1. The initial request for the installation of speed humps shall originate from a representative of the property owners on a segment of the street or neighborhood group. The request should be in writing and forwarded to the following address:

Louisville Metro Public Works and Assets
Neighborhood Speed Hump Program
601 W. Jefferson Street, Suite 10
Louisville, Ky. 40202

Any request for information through the “MetroCall 311” System (phone @ 311 or 574-5000, email, on-line customer service, on-line chat, or Mobile 311 App) shall still require a written signed request to proceed with a determination.

2. Louisville Metro Public Works and Assets will make a preliminary determination of eligibility. PW will conduct the necessary transportation engineering studies, including, but not limited to: traffic volume, accident analysis, speed study, field review, etc. PW will solicit comments and recommendations of other agencies, including, but not limited to, emergency service and appropriate service departments. A determination of the street’s eligibility for speed hump installation will be made in writing, in a timely manner, to the applicant’s representative, based on the speed hump guidelines.
 - a. If the street is determined to be ineligible, the applicant’s representative will be given written notification of that determination and its reasons.
 - b. If the street is determined to be eligible for consideration, Louisville Metro Public Works and Assets will
 - 1) define the petition area
 - 2) define the proposed speed hump locations
 - 3) determine the total cost
 - 4) provide the petition letter & ballot to the applicant’s representative

The applicant’s representative shall subsequently distribute, collect, and submit ballots to PW showing that approximately 70% of the property owners on the street support the installation of speed humps, as provided in the speed hump policy. In gauging the level of support or opposition, PW will apply one (1) “vote” per household. Unsigned or unreturned ballots will be considered as voting opposed to speed humps.

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Once a street is approved for speed hump installation, Louisville Metro Public Works and Assets will submit a statement to the applicant's representative for the cost of the speed hump installation. Depending on the method used to pay for the cost of the speed hump installation, either section "a" or section "b" below shall apply. Section "a" will apply if there is no Metro participation in the cost (i.e., the cost will be fully paid with voluntary private funding). Section "b" will apply if the applicant requests any Metro Council District's participation in paying for the cost of the speed hump installation, if that option is available under Section D of the speed hump guidelines.

- a. Upon receipt of payment of the cost, the humps will be installed as scheduling permits. If full payment has not been received within one (1) year from the statement date, the street may no longer be eligible for speed humps.
- b.
 - i. When the budget amount for speed hump installations has been approved by the appropriate Council District, the Applicant's representative will be notified.
 - ii. If the budget amount for speed hump installations is not approved by the appropriate Council District, installations of speed humps can still proceed provided that the full installation cost is voluntarily paid as provided in Section 4a.
 - iii. A street that does not receive funding approval will automatically be considered in the following years, for a maximum of three (3) additional years. After that time period, a new request and petition may be required.

Upon funding approval and receipt of payment of the applicants' share, the humps will be installed as schedule permits. If payment of the applicants' share has not been received within one (1) year from the statement date, the street may no longer be eligible for speed humps.