

Document Code No.: PUT-10-3-4-PR
Title: Intersection Standards
Effective Date: December 17, 2020
Authorities: King County Code 14.80
Keywords: Intersection Standards
Sponsoring Agency: Road Services Division,
Department of Local Services



King County

Signature: John Taylor
Date signed: 11/17/2020 11:37:26 AM PST

1.0 SUBJECT TITLE: Intersection Standards

1.1_EFFECTIVE DATE: December 17, 2020

1.2 TYPE OF ACTION: Superseding PUT 10-3-3(PR)

1.3 KEY WORDS: Intersection Standards

2.0 PURPOSE: To establish standard procedures for the determination of intersection improvements required of proposed developments (implementing King County Code Chapter 14.80.)

3.0 ORGANIZATIONS AFFECTED:

3.1 Landowners

3.2 Development permit applicants

3.3 Department of Local Services; Road Services Division, Strategic Business Operations Section and Engineering Services Section;

3.4 Department of Local Services, Permitting Division

4.0 REFERENCES:

4.1 King County Charter, Section 850, Delegation of Authority.

4.2 King County Code, Section 14.80, Administrative rules – intersection standards.

4.3 Growth Management Act, RCW Chapter 36.70A.

4.4 State Environmental Policy Act and King County Code Chapter 20.44.

4.5 Countywide Planning Policies, King County Code Chapter 20.10.

4.6 King County Comprehensive Plan, King County Code Chapter 20.12.

4.7 King County Code Title 14, Roads and Bridges.

4.8 King County Code Chapter 2.98, Rules of County Agencies.

4.9 King County Administrative Policies and Procedures, INF 7-6 (EP).

5.0 DEFINITIONS: These definitions supplement the definitions contained in King County Code Chapter 14.80.

5.01 "Adequate" means that transportation facilities provide for meeting or exceeding the County's established level of service standards.

5.02 "Applicant" means a person, business, corporate entity, or agency that applies to the Department to participate in a SEPA traffic impact review of a proposed development.

5.03 "Calculated LOS" means a forecast level of service that includes existing traffic, ambient traffic growth, traffic that is expected to be generated by previously approved developments based on Permitting records, and the traffic anticipated from the subject development and other proposed developments. The LOS is calculated for the horizon year of the development, unless otherwise required by the Director.

5.04 "Capacity" means a quantified estimate of the maximum number of vehicles that can be accommodated by a roadway section or intersection in the Committed Network during a peak travel period and under specified operating conditions. The calculation of capacity will be done according to the most recent edition of the Highway Capacity Manual (HCM), or by alternative methods approved by the Director. For traffic modeling purposes, the Section uses a look up table of link type capacities, based on the HCM and on link type characteristics.

5.05 "CIP" means the current adopted Capital Improvement Program.

5.06 "Permitting" means the Department of Local Services, Permitting Division or its successor agency.

5.07 "Department" means the King County Department of Local Services or its successor agency.

5.08 "Development Approval" means the approval of an application for a development permit by the Department of Local Services, Permitting Division. The definition and usage here does not apply to a rezoning action or to an Urban Planned Development.

5.09 "Direct access" means the area in which a driveway or street serving as access to a development site intersects with a street immediately adjacent to the site.

5.10 "Direct traffic impact" means the volume of new trips from a development that, when added to the existing trips at a direct access or a directly serving access intersection, creates a warrant for safety or operational improvements at that intersection.

5.11 "Directly serving access" means any intersection within the immediate area of a development that is directly impacted by traffic generated by the development in route to or from the direct access.

5.12 "Director" means the Director of the King County Department of Local Services, or the Director's designee.

5.13 "DLS" means the King County Department of Local Services or its successor agency.

5.14 "Engineering Services Section" means the Engineering Services Section of the King County Department of Local Services, Road Services Division.

5.15 "Examiner" means the King County Hearing Examiner.

5.16 "HCM" means the latest version of the "Highway Capacity Manual"

5.17 "IS" means Intersection Standards, as described in KCC 14.80.

5.18 "K.C.C." means the King County Code. References to the King County Code are to the King County Code as it now exists or is hereafter amended.

5.19 "LOS" means level of service for signalized or unsignalized intersections, which for Intersection Standards is described in the current Highway Capacity Manual. An alternate method of calculation may be used if approved by the Director.

5.20 "MUTCD" means the Manual of Uniform Traffic Control Devices issued by the United States Department of Transportation.

5.21 "Peak Period" means the Peak Period as defined in KCC 14.01.220.

5.22 "Peak hour" means, for purposes of IS, the one-hour period during which an intersection experiences its worst level of service. For the purposes of IS, the peak hour may be morning or afternoon, depending on which time experiences the worst traffic conditions. In determining which time period to analyze, both traffic volumes and turning movement volumes for specific intersections will be considered. The Director shall have the discretion to determine whether, for purposes of IS, intersection analyses are required for either or both AM and PM peak periods.

5.23 "Proportionate cost" means the amount of cost obligation for an intersection improvement to be shared by applicants and public agencies. It is calculated on the basis of the total trips being generated by their developments and the number of trips generated by each development.

5.24 "SEPA" means the State Environmental Policy Act as implemented by King County in K.C.C. 20.44.

5.25 "Transportation Strategies" means actions which reduce travel by single occupant vehicles predominantly in the peak morning and afternoon travel periods. Generally, strategies include actions to increase commuter travel by public transit and by high occupancy vehicles, and to reduce the need to travel in the peak periods. Such strategies are used to implement transportation demand management programs and commute trip

reduction programs. Credit for trip reduction due to such strategies will be calculated on an individual basis.

5.26 "Urban Planned Development (UPD)" means a large-scale type of land development that is defined by Permitting. Concurrency tests for UPDs only will be completed prior to the approval of the development permit application.

5.27 "WSDOT" means the Washington State Department of Transportation.

6.0 POLICIES: These rules are to be used in the administration of King County Code Chapter 14.80. Individuals pursuing development applications in King County may expect the Department to follow these rules and procedures in its determinations of intersection standards. Nothing in the rules shall supersede or conflict with state law or County ordinances. These rules may be amended periodically as determined by the Department. Situations which are not clearly specified in K.C.C. Chapter 14.80 and for which no provisions are made in these rules shall be determined on an individual basis by decision of the Director.

6.1 INTERSECTION STANDARDS

6.1.1 Significant Adverse Impacts. The determination of significant adverse impacts shall be based solely on the analysis set forth in a traffic impact study that follows procedures and techniques approved by the Director. The approved impact study will be used in determining transportation mitigation needs and safety improvements. Needed mitigation shall take into account the scheduling of critical safety improvements. The Director may require at least the following information as part of the traffic impact study:

*Project identification and full description; proposed trip generation and substantiating references; traffic distribution and assignment for the morning and afternoon peak hour; existing and calculated LOS at designated intersections; proposed mitigation measures and resultant LOS; and identification of existing and future safety problems and appropriate corrective measures.

For the purposes of intersection analysis, the peak period may be morning or afternoon, depending on which time experiences the worst traffic conditions. In determining which period to analyze, both traffic volumes and turning movement volumes for specific intersections will be considered.

The Director will require the use of cumulative development data, trip generation, trip distribution, and trip assignment methods that are acceptable to the Department.

6.1.2 Trip Generation Rates. Trip generation rates developed and published in the most recent edition of the Trip Generation Manual by the Institute of Transportation Engineers are used unless a local trip generation rate is available that is based on local studies. If the applicant provides a traffic study, it will be evaluated by the Engineering Services

Section, and used as approved by the Director in individual situations to determine trip generation and distribution

6.1.3 Standards and warrants. Standards and warrants shall be those approved by King County in accordance with its Comprehensive Plan, approved traffic impact analysis, and Title 14 of the K.C.C.

6.1.4 Turning Lanes. Turning lanes must be provided at the direct access and directly serving access intersections if they are warranted in the horizon year of the development using the standards in the WSDOT design manual. The Director may require turning lanes at the direct access and directly serving intersections for potential safety improvements, or, in conjunction with the construction of road improvements that affect (e.g. direct access in proximity to, but not within the existing limits of) an existing turn lane.

6.1.5 Traffic Signals and Roundabouts. Traffic signals or roundabouts must be provided at the direct access and directly serving access intersections if warranted by the MUTCD and the WSDOT Design Manual at the horizon year of development.

6.1.6 Intersection Improvements. Developments which will create a traffic safety or operational problem according to their traffic impact studies, or which will result in or add to a LOS "F" condition at intersections providing direct access, will be subject to the following conditions for final development approval:

* **Conformance with Road Design and Construction Standards.** The applicant will provide the improvements needed to conform to the Road Design and Construction Standards. The applicant will provide the intersection improvements needed to achieve LOS "E" or return the intersection to its pre-project condition, whichever results in a better LOS; and

* **Reducing Traffic Impacts.** The applicant may reduce the traffic impacts of the proposed development by reducing the size of the project, by altering the mix of uses in the project, or by using approved transportation demand management strategies to reduce the number of new peak hour direction trips.

6.1.7 Exceptions

6.1.7.1 Director/Judgment Authority. Exceptions to the conditions and requirements of the IS chapter of Title 14 and to these rules may be granted by the Director when, in the director's judgment, extraordinary conditions exist which make full compliance infeasible. Final decisions on such exceptions will be determined as follows:

* **Exceptions in Approving Ordinance.** For subdivisions, UPD's, unclassified use permits, and urban planned developments, the Director must find that there are valid reasons for an exception, and such exception must be granted in the approving ordinance. The ordinance will be determinative and conclusive as to the development's compliance with the IS;

* **Conditional Use Permits.** For conditional use permits, the written decision of the Director will be determinative and conclusive regarding the development's compliance with the IS, unless the decision is subsequently appealed to the Hearing Examiner, whose decision will then be determinative; and

* **Commercial Building Permits.** For commercial building permits, the written decision of the Director is determinative, unless the decision is appealed to the Hearing Examiner, whose decision will then be determinative.

6.1.8 Frontage Improvements. The County may require applicants to construct the required frontage improvements in accordance with K.C.C. 14.42 Road Design and Construction Standards.

6.1.9 Appeals of Director's Final Decisions. Appeals of the Director's final decisions, together with appeals arguments, shall be made to the Director for hearing by the Hearing Examiner within ten working days of receipt of such final decision. The results of such appeals will be filed with Permitting within ten days of the decision by the Hearing Examiner.

6.1.10 State Facilities and Other Local Jurisdictions. The Intersection Standards chapter of Title 14 will apply to roads in unincorporated King County. Improvements to State and other Local Jurisdiction's facilities will only be required under these rules if an interlocal agreement to provide specified improvements is executed by the County, the State or Local Jurisdiction, and the applicant. Such an agreement will only be initiated when the State or Local Jurisdiction requests specific improvements.

6.1.11 Meeting Interlocal Agreement Conditions. A development will not receive final approval until it has fulfilled all IS conditions required by the County and required by an interlocal agreement. Fulfillment may be achieved by the applicant providing a financial instrument to the Director in a form satisfactory to the County.

6.1.12 One Time Application of IS. The conditions imposed by the IS chapter of Title 14 and administered by these rules will be applied only once to a development, unless the development is changed or modified so as to require further County review and approval and which would result in greater traffic impacts than those considered in the traffic impact study.

6.1.13 County Authority. These rules do not limit the authority of the County to deny or to approve with conditions the following:

- * Zone reclassification requests based on traffic impacts;
- * Development or zone reclassifications if determined to be a hazard to the public health, safety, or welfare, or that would result in adverse environmental consequences from direct traffic impacts that cannot be fully mitigated by intersection improvements; and
- * Developments reviewed under the authority of SEPA.

6.2 Actions Not Covered By Rules/Regulations.

6.2.1 Relation to State laws and County ordinances. Nothing in these rules shall supersede or conflict with State law or County ordinances. These rules may be amended periodically as determined by the Department. The language of these rules shall be broadly interpreted within the context of Title 14 and the adopted Comprehensive Plan.

6.2.2 Authority of Director. Situations which are not clearly specified by ordinance, and for which no provision is made in these rules, shall be determined by the decision of the Director using legal and technical advice from county sources.

7.0 PROCEDURES:**7.1 Intersection Standards**

Action by:	Action:
Applicant	7.1.1 Submits development application to Permitting.
Permitting	7.1.2 Refers IS evaluation to Engineering Services Section.
Engineering Services Section	7.1.3 Determines intersection improvements and sends report to Permitting.
Applicant	7.1.4 Completes required improvements as part of development approval. Files appeal as needed.

8.0 RESPONSIBILITIES:**8.1 The Department is responsible for:**

8.1.1 Analyzing and evaluating development applications involving traffic studies, and intersection operation.

8.1.2 Assessing intersection improvements.

8.1.3 Making SEPA recommendations regarding traffic safety, operational impacts, on-site circulation, and direct access to Permitting.

8.2 The Department of Local Services, Permitting Division is responsible for:

8.2.1 Making available appropriate information and forms regarding the county's permit application process.

8.2.2 Making SEPA determinations based on King County Department of Local Services recommendations regarding traffic safety, operation impacts, on-site circulation, and direct access.

8.3 The Hearing Examiner is responsible for:

8.3.1 Adjudicating appeals of the County's decisions.

8.4 The applicant is responsible for:

8.4.1 Appealing, as needed, mitigation or intersection improvement decisions rendered by the Department of Local Services.

9.0 IMPLEMENTATION PLAN:

9.1 This public rule is effective thirty days after filing with King County Archives, Records Management and Mail Services (ARMMS). The Department of Local Services, Road Services Division, or its successor agency, is responsible for the implementation of this rule.

10.0 MAINTENANCE:

10.1 This rule will be maintained by the Department of Local Services, Road Services Division, or its successor agency.

11.0 CONSEQUENCES FOR NONCOMPLIANCE:

11.1 Denial of development plans as described in Section 6.0 above.

12.0 APPENDICES:

None