

**King County**

Department of Local Services

**Road Services Division****WAC 197-11-960: SEPA Environmental Checklist****A. Background****1. Name of proposed project, if applicable:**

2022 King County Transportation Concurrency Management (TCM) Program update to King County Code (KCC) 14.70.

**2. Name of applicant:**

King County Department of Local Services, Road Services Division

**3. Address and phone number of applicant and contact person:**

Broch Bender, Communications Manager  
206-263-1189, [bbender@kingcounty.gov](mailto:bbender@kingcounty.gov)  
King Street Center (Mail Stop: KSC-LS-0315)  
201 South Jackson Street  
Seattle, WA 98104-3856

**4. Date checklist prepared:**

February 5, 2023

**5. Agency requesting checklist:**

King County Department of Local Services, Road Services Division

**6. Proposed timing or schedule (including phasing, if applicable):**

The King County Executive transmitted the 2022 King County TCM Program ordinance to the King County Council (Council) in July 2022. The State Environmental Policy Act (SEPA) Determination of Nonsignificance (DNS) public legal notice and comment period must be completed prior to the Council taking action on the ordinance. Hence, Road Services Division prepared this SEPA Environmental Checklist document and will inform the Council staff when SEPA is complete. The Council is expected to adopt the ordinance before the end of 2023, and the concurrency update would become effective 10 days after the ordinance is signed by the Executive, or approximately 25 days after Council adoption.

**7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**

The King County Transportation Concurrency Map of unincorporated King County is divided into 13 travel sheds. Travel sheds are geographic areas within which development would be likely to use, or be affected by, traffic on arterials within the travel shed. In even numbered years, the KCC 14.70.270 requires a bi-annual review and analysis of the concurrency test results map. If an update is required to the King County Transportation Concurrency Map, then KCC 14.70.230 requires Council adoption of any revisions to the travel shed boundaries map.

The 2022 King County TCM program test results received a concurrency rating of “pass” for all 13 travel sheds. This means that there was a rating change (i.e., update) in one travel shed: the Green River Valley. The Green River Valley travel shed historically, and as recently as 2020, received a concurrency rating of “fail”. This travel shed contains the Green River Valley Agricultural Production District and, due to its unique agricultural zoning, has minimal development potential. In accordance with the Washington State Growth Management Act (GMA), the concurrency test results map will be used to determine whether proposed development projects meet concurrency requirements. The updated concurrency rating of “pass” for this travel shed is not expected to have significant impacts for development, given the shed’s lack of buildable land.

The next review and analysis to the King County Transportation Concurrency Map will be completed in 2024. If an update is required to the King County Transportation Concurrency Map, it is expected to be completed and adopted in 2024.

The King County Transportation Concurrency program is guided by policies in the King County Comprehensive Plan. Major updates to the Comprehensive Plan are adopted on a 10-year cycle, with opportunities for limited updates at the 5-year midpoint of the cycle. The next major Comprehensive Plan update is scheduled for 2024 in accordance with the Revised Code of Washington (RCW) 36.70A.130. However, since the details of the plan are adopted and implemented through Title 14.70 of the King County Code, minor programmatic changes could be completed more frequently.

**8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

The following document was prepared in July, 2022:

- Road Services Division 2022 Transportation Concurrency Update Report.

**9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.**

There are no known applications pending for governmental approval of other proposals directly affecting this proposal.

**10. List any government approvals or permits that will be needed for your proposal, if known.**

The King County Council will need to review and adopt the ordinance.

**11. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)**Proposal:

This is a non-project proposal by King County Department of Local Services, Road Services Division to update the TCM program by adopting an ordinance and map to amend the transportation concurrency chapter of the KCC 14.70. The proposed ordinance adopts a 2022 Transportation Concurrency Test Results Map (attachment A to the ordinance).

Background:

The TCM program began in 1995 and is administered by the Road Services Division. This program satisfies requirements of the GMA, RCW 36.70A.070, and transportation concurrency policies found in Chapter 8 "Transportation", of the current 2022 adopted King County Comprehensive Plan. The purpose of the TCM program is to ensure the road level-of-service (LOS) standards in the King County Comprehensive Plan are achieved concurrently with development. According to the GMA, concurrent with development means that either transportation facilities or strategies are in place at the time of development, or that a financial commitment is in place to make the necessary transportation improvements, or implement strategies, within six years of the development.

Under the TCM program, unincorporated King County is divided into 13 travel sheds. Travel sheds are geographic areas within which development would be likely to use, or be affected by traffic on, arterials within the travel shed. King County will only accept development applications for development in travel sheds that pass the concurrency test as shown on the Concurrency Test Results Map in effect at the time of application, or for minor developments specifically identified in KCC 14.70.285.

KCC 14.70.270 (A) requires updating concurrency testing in even numbered years and submitting a report to the Council explaining the technical assumptions and parameters used to update concurrency testing, including any resulting changes to the Transportation Concurrency Map. To this end, every two years, travel time data are collected for principal and minor arterials within each travel shed and concurrency testing evaluates travel time by arterial roadway mileage within each travel shed. Travel sheds that contain 15 percent or less of failing arterial mileage receive a concurrency test rating of "pass". When a travel shed receives a concurrency test rating of "fail", the travel shed is subject to development restrictions.

The 2022 TCM program test results received a concurrency test rating of “pass” for all 13 travel sheds. This means that there was a rating change (i.e., update) in one travel shed: the Green River Valley. The Green River Valley travel shed has historically and as recently as 2020, received a concurrency rating of ‘fail’. This travel shed contains the Green River Valley Agricultural Production District. Given agricultural zoning, the Green River Valley travel shed has minimal development potential. As a result, the transportation concurrency rating change from “fail” to “pass” is not expected to result in an increase in development. The updated 2022 King County Transportation Concurrency Map was transmitted to Council for approval, per requirements outlined within KCC 14.70.270.

- 12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

Adoption of the TCM program update is not associated with a specific site, but applies to unincorporated King County as a jurisdiction.

## **B. Environmental Elements**

*Per WAC 197-11-960, “the lead agency may exclude any question for the environmental elements (Part B) which they determine do not contribute meaningfully to the analysis of the proposal.”*

Adoption of the TCM program update is not associated with a specific site, but applies to unincorporated King County as a jurisdiction; therefore, Part B of this SEPA Environmental Checklist is excluded as it does not contribute meaningfully to the analysis of the proposal.

## C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

 DocuSigned by:  
**X** Jim Ishimaru  
2C078A920BCE467...  
SEPA Responsible Official

**Type name of signee:** Jim Ishimaru

**Position and agency/organization:** Transportation Planner, King County Department of Local Services, Road Services Division

**Date signed:** 2/22/2023

The following documents are included with this Environmental Checklist:

- Ordinance
- 2022 Transportation Concurrency Test Results Map (Attachment A to the Ordinance)
- 2022 Transportation Concurrency Update Report

## D. Supplemental sheet for nonproject actions

### 1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

The TCM program update is a planning-level action. Further environmental analysis in compliance with SEPA will be required at the site-specific project level to determine water, air, hazardous material, and noise impacts. At a non-project level, the TCM program update will not result in significant adverse impacts to the environment.

- **Proposed measures to avoid or reduce such increases are:**

Since there is no significant adverse effect on the environment, no mitigation is proposed as part of the TCM program update.

### 2. How would the proposal be likely to affect plants, animals, fish, or marine life?

The TCM program update is a planning-level action. Further environmental analysis in compliance with SEPA will be required at the site-specific project level to determine impacts to plants and animals. At a non-project level, the TCM program update will not result in significant adverse impacts to the environment.

- **Proposed measures to protect or conserve plants, animals, fish, or marine life are:**

Since there is no significant adverse effect on the environment, no mitigation is proposed as part of the TCM program update.

### 3. How would the proposal be likely to deplete energy or natural resources?

The TCM program update is a planning-level action. Further environmental analysis in compliance with SEPA will be required at the site-specific project level to determine impacts on energy and natural resources. At a non-project level, the TCM program update will not result in significant adverse impacts to the environment.

- **Proposed measures to protect or conserve energy and natural resources are:**

Since there is no significant adverse effect on the environment, no mitigation is proposed as part of the TCM program update.

### 4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection, such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

The TCM program update is a planning-level action. Further environmental analysis in compliance with SEPA will be required at the site-specific project level to determine impacts on sensitive lands and habitats. At a non-project level, the TCM update will not result in significant adverse impacts to the environment.

- **Proposed measures to protect such resources or to avoid or reduce impacts are:**

Since there is no significant adverse effect on the environment, no mitigation is proposed as part of the TCM program update.

**5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?**

The purpose of the TCM program is to ensure the road LOS standards in the King County Comprehensive Plan are achieved concurrently with development. The program is a tool to help ensure development proposals are consistent with the King County Comprehensive Plan LOS policies. For this reason, the TCM program update will not result in significant adverse impacts to land, shoreline use, or the environment.

- **Proposed measures to avoid or reduce shoreline and land use impacts are:**  
Since there is no significant adverse effect on the environment, no mitigation is proposed as part of the TCM program update.

**6. How would the proposal be likely to increase demands on transportation or public services and utilities?**

The TCM program update is a planning-level action. Further environmental analysis in compliance with SEPA will be required at the site-specific project level to determine impacts on transportation, public services, and utilities.

At a non-project level, the 2022 TCM program test results produced “pass” ratings for all 13 travel sheds, which reflects a rating update in the Green River Valley travel shed. The Green River Valley travel shed has historically and as recently as 2020, received a concurrency rating of “fail”. This travel shed contains the Green River Valley Agricultural Production District and, due to its unique agricultural zoning, has very limited development potential. The updated ‘pass’ rating for this travel shed is not expected to have significant impact for development, given the shed’s lack of buildable land, and therefore, does not result in significant adverse impacts to the environment.

- **Proposed measures to reduce or respond to such demand(s) are:**  
Since there is no significant adverse effect on the environment, no mitigation is proposed as part of the TCM update.

**7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.**

The TCM program is required by state law as part of the GMA. The TCM program is required by KCC to be updated bi-annually (in even numbered years) based on updated travel time surveys, standards, and methodologies. As this non-project action is required by state and local laws and codes, the proposal does not conflict with local, state, or federal laws and requirements.

Date Created:	<b>July 5, 2022</b>
Drafted by:	<b>Rey Sugui, Intergovernmental Relations, Road Services Division</b>
Sponsors:	
Attachments:	<b>A. Transportation Concurrency Map</b>

1 ..Title

2 AN ORDINANCE adopting a new concurrency test results  
3 map in accordance with K.C.C. 14.70.270.

4 ..Body

5 STATEMENT OF FACTS:

6 1. K.C.C. 14.70.270 requires the concurrency test results map to be  
7 reviewed and updated in even-numbered years, or when directed by the  
8 council by motion, and be submitted to council for approval by ordinance  
9 no later than July 31.

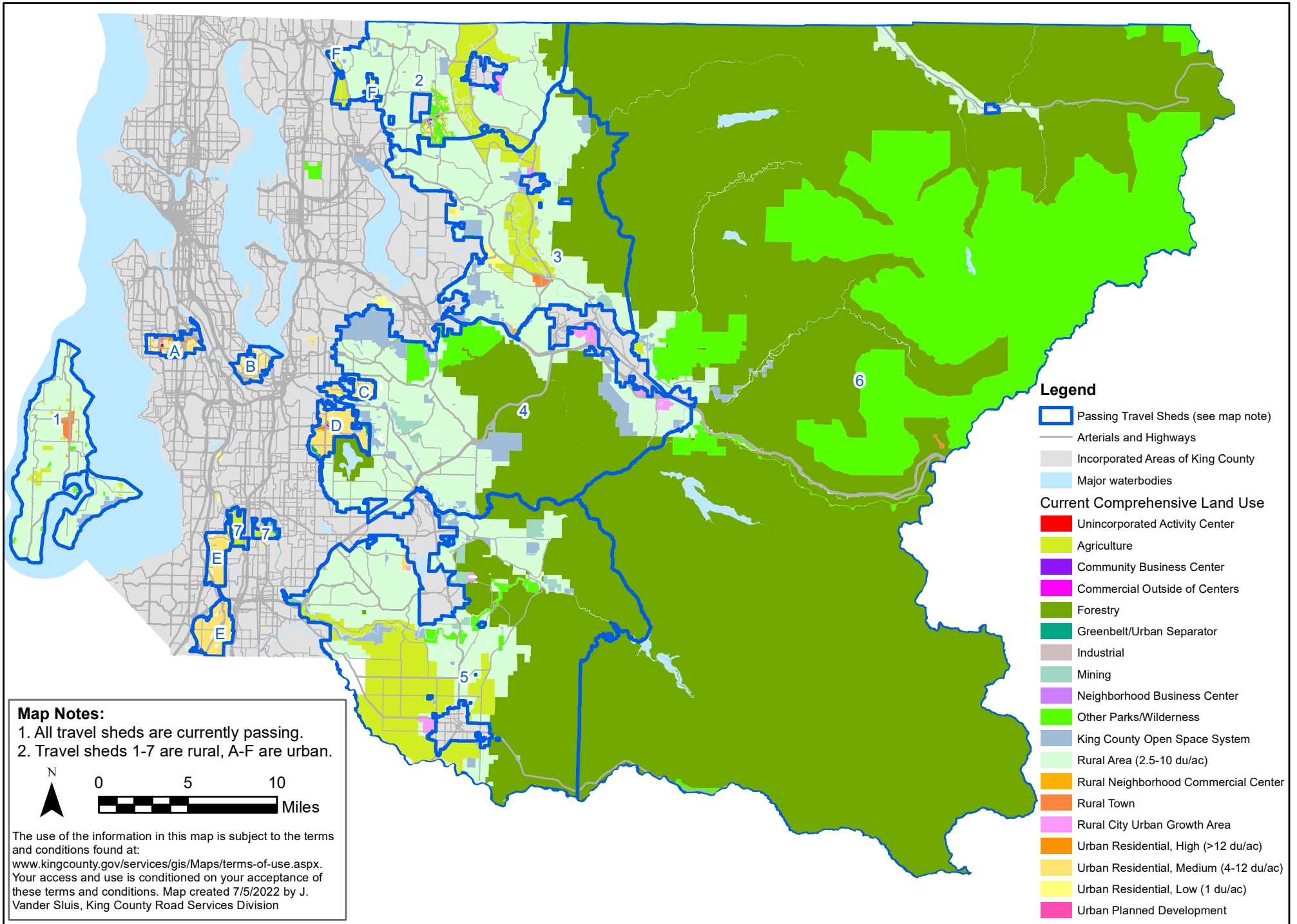
10 2. To meet the requirement for 2022, concurrency testing has been  
11 completed and evaluated for each travel shed. That resulted in a change to  
12 one of the travel sheds requiring an update to the current concurrency test  
13 results map.

14 BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

15 SECTION 1. The concurrency test results map displayed in Attachment A to this  
16 ordinance is adopted as the official concurrency test results map for King County.



# Attachment A. 2022 King County Transportation Concurrency Map



The use of the information in this map is subject to the terms and conditions found at: [www.kingcounty.gov/services/gis/Maps/terms-of-use.aspx](http://www.kingcounty.gov/services/gis/Maps/terms-of-use.aspx). Your access and use is conditioned on your acceptance of these terms and conditions. Map created 7/5/2022 by J. Vander Sluis, King County Road Services Division

## **Road Services Division 2022 Transportation Concurrency Update Report**

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July 2022



**King County**

Department of Local Services

**Road Services Division**



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Department of Local Services

**Road Services Division**

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## 1. Executive Summary

Concurrency is a land use regulatory framework under the [Washington State Growth Management Act \(GMA\)](#), passed in 1990. It is used by local governments to ensure that sufficient public facilities are in place for any new land use development.

King County's Transportation Concurrency program began in 1995 and is administered by the Department of Local Services, Road Services Division (Roads). This program satisfies requirements of the Growth Management Act (GMA), Revised Code of Washington [RCW 36.70A.070](#) and transportation concurrency policies can be found in Chapter 8 ("Transportation") of the [current adopted King County Comprehensive Plan](#). King County Code [14.70.270 \(A\)](#) requires updated concurrency testing in even numbered years and submittal of a report to the County Council explaining the technical assumptions and parameters used to update concurrency testing, including any resulting changes to the Transportation Concurrency Map.

The 2022 Transportation Concurrency Program test results produced 'pass' ratings for all 13 travel sheds (Table 1). Under King County's Transportation Concurrency Program, unincorporated King County is divided into 13 travel sheds (Appendix B, Map 1). Every two years, travel time data is collected for principal and minor arterials within each travel shed and concurrency testing evaluates travel time by arterial roadway mileage within each travel shed. Travel sheds that contain 15 percent or less of failing arterial mileage receive a concurrency test rating of 'pass'. When a travel shed receives a concurrency test rating of 'fail', the travel shed is subject to development restrictions. Though a total of 10 arterial road segments across travel sheds received a 'fail' test result (Table 3), concurrency standard thresholds were not exceeded in any of the travel sheds. The Green River Valley travel shed has historically and as recently as 2020, received a concurrency rating of 'fail'. This travel shed contains the Green River Valley Agricultural Production District and, due to its unique agricultural zoning, has very limited development potential. The updated 'pass' rating for this travel shed is not expected to have significant impact for development, given the shed's lack of buildable land. The updated 2022 Transportation Concurrency Map (Appendix B, Map 2) is being transmitted to King County Council for approval, per requirements outlined within KCC 14.70.270.

Table 1. 2022 King County Transportation Concurrency test results, by travel shed

Travel Shed ID	Travel Shed Name	Travel Shed Result (pass/fail)
1	Vashon	PASS
2	Woodinville/Duvall	PASS
3	Snoqualmie Valley	PASS
4	Lake Youngs/Hobart	PASS
5	Black Diamond /Enumclaw	PASS
6	East King County	PASS
7	Green River Valley/Ag District	PASS
A	North Highline	PASS
B	West Hill	PASS
C	East Renton	PASS
D	Fairwood	PASS
E	East Federal Way	PASS
F	English Hill	PASS

## 2. Background

### Department Overview

King County is the local service provider for the estimated 247,000 people who live in the unincorporated areas of King County. <sup>[1]</sup> The Department of Local Services (DLS), created in 2018 by Ordinance 18791, is dedicated to improving local services for unincorporated areas by improving coordination and collaboration between County agencies, communities, and other entities. <sup>[2]</sup>

The mission of DLS is to promote the well-being of residents and communities in unincorporated King County by seeking to understand their needs and delivering responsive local government services.

DLS has two divisions:

- The Permitting Division (Permitting) providing infrastructure and land use planning services; land use, building, and fire regulatory and operating permits; Code Enforcement; and a limited number of business licenses in unincorporated areas of the County.
- The Roads Services Division (Roads) is responsible for 185 miles of County-owned roads, 185 bridges, and related infrastructure in the unincorporated areas of King County. The unincorporated King County road network is comprised of 1500 miles of road, 185 bridges and related infrastructure.

### Context

Concurrency is a land use regulatory framework under the [Washington State Growth Management Act \(GMA\)](#), passed in 1990. It is used by local governments to ensure that sufficient public facilities are in place for any new land use development. It also supports the overarching goals of the GMA: focusing growth in urban communities, reduction of sprawl, and protection of natural and agricultural resource lands.

As part of the requirement to develop a comprehensive plan, state law requires jurisdictions to establish level-of-service standards (LOS) for arterials, transit service, and other facilities [RCW 36.70A.070\(6\)\(a\)](#). Once a jurisdiction sets a LOS, it is used to determine whether the impacts of a proposed development can be met through existing capacity and/or to decide what level of additional facilities will be required.

King County first implemented the Transportation Concurrency Management program by adopting its first [Comprehensive Plan](#) following the GMA in 1994, with the program becoming effective in 1995. Transportation concurrency policies, including LOS standards for urban and rural unincorporated areas, can be found in Chapter 8 ("Transportation") of the [current adopted King County Comprehensive Plan](#).

Section 14.70.270(A) and Section 14.70.270 (B) of the King County code address Transportation Concurrency:

**SECTION 14.70.270(A).**

The concurrency test results map shall be reviewed and updated in even-numbered years or when directed by the council by motion. The update process shall reflect the most recently adopted roads

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<sup>[1]</sup> Statistical Profile on Unincorporated King County, 2018 [\[LINK\]](#)

<sup>[2]</sup> Ordinance 18791, p. 25 [\[LINK\]](#)

CIP, the current boundaries of the unincorporated area, current traffic volumes and current travel time. If the update requires changes in the concurrency test results map, the new concurrency test results map shall be submitted to council for its approval by ordinance no later than July 31, together with the report required in subsection B. of this section. The approved map shall be deemed adequate for the purposes of concurrency analysis and shall be used to determine the concurrency of proposed development projects.

SECTION 14.70.270(B).

The Road Services Division shall prepare a report on the concurrency program update for submission to the council by July 31, together with any ordinance required by subsection A. of this section. The report shall explain the technical assumptions, land use changes, network changes and other parameters used to update the concurrency test results map and travel shed boundary map.

SECTION 14.70.240(A)

The Department of Local Services, Permitting Division, shall accept applications for a development approval only for development in areas that pass the concurrency test as shown on the concurrency test results map in effect at the time of application, except as provided in K.C.C. 14.70.285.

In 2016, King County updated the Transportation Concurrency program by [Ordinance 18459](#) to (1) create a more streamlined and efficient process for data collection; (2) update travel shed boundaries to reflect incorporations and annexations as well as separation of urban and rural areas, so they can be tested to adopted level of service standards; and (3) delete regionally-significant state routes from Concurrency testing. The 2016 revised methodology and travel shed boundaries guided preparation of the 2018, 2020 and 2022 Transportation Concurrency test and report updates.

## **Methodology**

The 2022 Transportation Concurrency Update Report was prepared by Roads staff, with concurrency data analysis and testing conducted by [Fehr & Peers](#), a national consulting firm with extensive experience in Transportation Concurrency. The 2022 Report used the same methods that guided preparation of the 2020 Report. An overview is provided below, with additional methodological detail provided within Appendix A:

- Concurrency testing was completed for 13 travel sheds, where travel patterns share common characteristics (Appendix B, Map 1). There were no changes made to travel shed boundaries for the 2022 update. Of the 13 travel sheds, seven are rural and six are urban travel sheds.
- The 2022 Transportation Concurrency Update was informed by evaluation of March 2022 travel time data purchased from Wejo, Inc. for principal and minor arterials that comprise the concurrency arterial road network. Geographic information systems (GIS) were used for all data evaluation, processing and calculations, improving precision, mapping, and accuracy of calculations.
- Concurrency testing evaluates travel time by roadway mileage within each travel shed. A concurrency rating of pass or fail is generated for each travel shed. Eighty-five percent of a travel shed's arterial mileage must meet concurrency standards for the travel shed to pass the concurrency test.
- Rural Mobility Areas are designated rural areas (the towns of Vashon, Snoqualmie Pass and Fall City) that support a greater variety of transportation mode choices than typically found in most rural areas. These areas have level of service standards that support and encourage people to use alternative modes of transportation.

- Concurrency evaluation results in the identification of failing arterial routes that contribute to the failure of individual travel sheds.

### 3. Findings

Thirteen travel sheds were evaluated as part of the 2022 Transportation Concurrency update. This evaluation resulted in one change in concurrency travel shed status from the previous 2020 Transportation Concurrency Update Report (Appendix B Map 2). Of the 13 travel sheds evaluated, all six urban travel sheds (Table 2, Travel sheds A through F) and all seven rural travel sheds (Table 2, Travel sheds 1 through 7) received a rating of 'pass' (Table 2).

The 2022 Transportation Concurrency test results resulted in a change to the rating for one travel shed, the Green River Valley travel shed, which changed from 'fail' to 'pass'. This travel shed is predominantly characterized by the rural-designated Green River Agricultural Production District and it contains three arterial roads that carry heavy, urban pass-through traffic from the adjacent cities of Kent, Auburn, and Des Moines. These three arterial roads are being tested at the rural level of service standard of B, rather than at the urban level of service standard of E since they are located in a rural unincorporated area outside of the Urban Growth Boundary. Given agricultural zoning, the Green River Valley travel shed has minimal development potential. As a result, the transportation concurrency rating change from 'fail' to 'pass' will not result in an increase in development.

Throughout the 13 travel sheds, the 2022 Transportation Concurrency test results revealed 10 failing arterial road segments, as compared to 13 that were identified as failing in the 2020 Transportation Concurrency Report (Table 3). Of these 10 failing roads, three are newly identified as failing as of 2022, and seven continue to fail from 2020. In addition, six of the failing roads identified in the 2020 update are now passing. The cumulative effect of the 2022 Transportation Concurrency test results is no change to travel shed ratings, with the exception of the Green River Valley travel shed.

Table 2: Concurrency test results by travel shed

Travel Shed ID	Travel Shed Name	Total Mileage	Failed Mileage	Percent of Travel Shed miles failing	Travel Shed Results*
1	Vashon	26.62	1.22	5%	PASS
2	Woodinville /Duvall	36.74	3.42	9%	PASS
3	Snoqualmie Valley	22.90	0.22	1%	PASS
4	Lake Youngs /Hobart	39.81	1.44	4%	PASS
5	Black Diamond /Enumclaw	61.44	0.00	0%	PASS
6	East King County	0.00	0.00	0%	PASS
7	Green River Valley	1.94	0.00	0%	PASS
A	North Highline	7.14	0.29	4%	PASS



<b>Travel Shed ID</b>	<b>Travel Shed Name</b>	<b>Total Mileage</b>	<b>Failed Mileage</b>	<b>Percent of Travel Shed miles failing</b>	<b>Travel Shed Results*</b>
B	West Hill	3.97	0.00	0%	PASS
C	East Renton	1.69	0.00	0%	PASS
D	Fairwood	8.28	0.00	0%	PASS
E	East Federal Way	11.84	0.00	0%	PASS
F	English Hill	1.55	0.00	0%	PASS

\*The King County Transportation Concurrency Program tests arterials within a travel shed against their level of service standard and calculates the percentage of failing arterial segments in that travel shed. If more than 15 percent of tested miles fail, the travel shed fails the concurrency test and the shed is closed for development. The designated Rural Towns (Fall City, Snoqualmie Pass, and Vashon) and Rural Neighborhood Commercial Centers (Cottage Lake, Cumberland, Maple Valley, and Preston) all pass concurrency testing.

Table 3: 2022 Failing Arterial Routes, by Travel Shed

Travel Shed ID	Travel Shed Name	Route Segment	Arterial Classification	Distance (Miles)	Level of Service (LOS)* Standard	Speed	LOS (route segments)	Travel Shed Status
1	Vashon	SW Bank Rd (Beall Rd SW – Thorsen Rd SW)	Minor	0.99	B	23	C	Pass
1	Vashon	103 <sup>rd</sup> Ave SW (SW 112 <sup>th</sup> St – Boat Dock)	Minor	0.23	B	22	C	Pass
2	Woodinville/Duvall	NE 128 St / NE 128 Wy (172 Ave NE – Avondale Rd)	Principal	0.29	B	25	C	Pass
2	Woodinville/Duvall	Novelty Hill Road (218 <sup>th</sup> Ave NE to 234 Ave NE)	Principal	0.16	B	22	C	Pass
2	Woodinville/Duvall	Novelty Hill Road (Redmond CL – 218 Ave NE)	Principal	2.00	B	23	C	Pass
2	Woodinville/Duvall	NE Woodinville-Duvall Road (W. Snoqualmie Valley Rd – Snoqualmie River)	Principal	0.97	B	20	D	Pass
3	Snoqualmie Valley	244 <sup>th</sup> Ave SE (Redmond Fall City Rd – NE 30 <sup>th</sup> Pl)	Minor	0.22	B	24	C	Pass
4	Lake Youngs/Hobart	Issaquah-Hobart Rd (Issaquah CL – SE 127 St)	Principal	1.44	B	19	D	Pass
A	North Highline	16 <sup>th</sup> Ave SW (Roxbury – SW 100 St)	Principal	0.25	E	9	F	Pass
A	North Highline	14 <sup>th</sup> Ave S (Des Moines Memorial Dr – SR 99 on-ramp)	Minor	0.04	E	9	F	Pass

\*Level of service (LOS) standards are further described in Appendix A

#### 4. Conclusion

The 2022 King County Transportation Concurrency testing produced one change to the pass/fail status of travel sheds. Of the 13 travel sheds evaluated, one travel shed, the Green River Valley travel shed, changed from 'fail' to 'pass'. This change will not result in significant development given the travel shed's agricultural zoning and lack of buildable lands. The 2022 test results are incorporated into an updated 2022 Transportation Concurrency Map (Appendix B, Map 2), which is subject to King County Council approval, per King County Code.

## Appendix A. Methodology Detail

This appendix provides additional methodological detail regarding level of service (LOS) standards and travel time information used to produce the 2022 Transportation Concurrency Update Report.

### Level of Service Standards

The level of service (LOS) standards adopted in the King County Comprehensive Plan are used to appropriately encourage growth in the urban area and to determine if future growth can be accommodated on the existing roadways. LOS on roadways range from standard A for free flowing traffic to standard F for heavily congested traffic. King County Code 14.70.220.B.2 uses average travel speeds to defines LOS standards for principal and minor arterial road classifications.

There is a different LOS standard for urban areas (standard E) than for rural areas (standard B). Mobility areas established in the rural areas have their own LOS standard. Rural Towns (Fall City, Vashon, and Snoqualmie Pass) have a standard of E, and selected Rural Neighborhood Commercial Centers (Cumberland, Cottage Lake, Maple Valley, and Preston) have a standard of D.

Table 4: Concurrency level of service standards and travel speeds\*

	Principal Arterials	Minor Arterials
LEVEL OF SERVICE STANDARD	AVERAGE TRAVEL SPEED (MILES PER HOUR)	
A	>35	>30
B	>28 – 35	>24 – 30
C	>22 – 28	>18 – 24
D	>17 – 22	>14 – 18
E	>13 – 17	>10 – 14
F	<=13	<=10

\*From King County Code 14.70.220.B.2

### Travel Time Methodology

Traffic data for March 2022 was purchased from Wejo, Inc. The data was organized using road segment ID numbers, UTC Date Time increments, and average speed data. For every tested roadway segment, there were two segment ID numbers (one for each direction).

Travel time standards were applied to designated principal and minor arterials in the concurrency network. State routes, defined as either statewide-significant (e. g. I-5, I-90, portions of SR 99) or regionally significant (all other state routes), are not included in concurrency calculations. Statewide-significant routes are explicitly exempt from concurrency, while regionally significant routes have level of service standards adopted into the Puget Sound Regional Council's regional transportation plan.

The travel time analysis took the average speed of travel in each direction from 4:00 p.m. to 6:00 p.m. The analysis combined 15 days of data: all Tuesday, Wednesday, and Thursdays for March 2022. A sample of the Wejo, Inc. data is shown below.

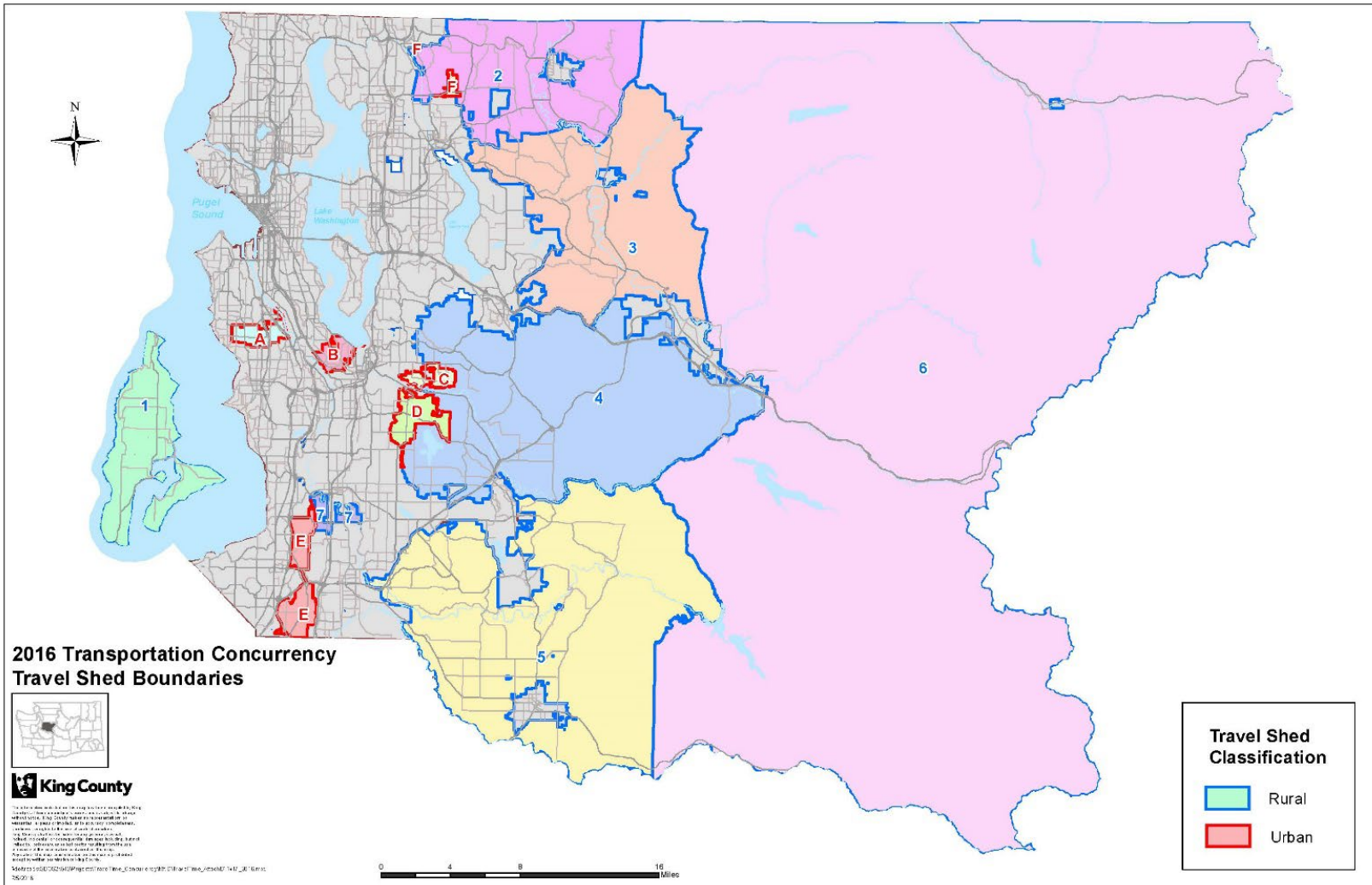
Table 5: Sample input data

Route Name	Route Length (mi)	2022 4-6pm average speed Direction A	2022 4-6pm average speed Direction B
140 Ave SE (Fairwood Blvd - SE 192 St)	1.755	35.20	32.81
140 Ave SE (SE 192 St - Kent City Limits)	1.017	36.27	38.41
140 Way SE (City of Renton - Fairwood Blvd)	0.435	43.43	37.13
148Aw/140PL (NE 147 - NE 171 St) R	1.185	36.97	39.50
148Aw/140PL (NE 147 - NE 171 St) U	0.121	19.29	30.68
154 PL/156 Ave SE(SR-169 - Renton CL)	0.877	26.77	32.24
156 Ave SE (City of Renton - City of Renton)	0.154	32.06	31.10
16 Ave SW (Roxbury - SW 100 St)	0.254	9.01	11.21
16 Ave/17 SW (SW 112 St - Roxbury St)	1.033	21.52	22.09
164 Ave SE (SR-900 - SE 128 St)	0.861	27.00	30.20
196 Ave SE (Petrovitsky Rd - SE 227 St)	1.872	37.49	40.12
196 Ave SE (SE 227 St - SE 240 St)	0.809	35.16	33.20
196 Ave SE (SR-169 - Petrovitsky Rd)	2.524	39.98	41.01
196th Ave NE (Novelty Hill Rd - Union Hill Rd)	0.86	38.43	39.14
204 Ave/208 Ave NE (SR-202 - Union Hill Rd)	1.235	29.41	30.32
208 Ave NE (Novelty Hill Rd -Union Hill)	1.204	33.82	34.91
212th Ave SE (SE 384th - SE 376th)	0.499	38.31	40.99
212th Ave SE (SE 400th - SE 384th)	1.011	38.31	36.94

Each number shown in Table 5 is the average speed for that road segment for all Tuesdays, Wednesdays, and Thursdays in March. The lower average speed of the two directions was used to test the road segment against its designated level of service standard. This determined the passing or failing of each route, and the combined result for arterials within each travel shed determined the concurrency test result of passing or failing.

## Appendix B. Maps

### Map 1. King County Transportation Concurrency Travel Shed Boundaries



## Map 2. 2022 King County Transportation Concurrency Map

### Attachment A. 2022 King County Transportation Concurrency Map

