

Information and Instructions

Disclaimer: The following information is not an exhaustive list and may be modified by staff at any time. This document is intended only as a guide. Please consult with City of Redmond staff if further instruction and/or clarification is necessary.

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| <input type="checkbox"/> | If the project will generate 20 or more net PM peak hour new trips, then the Phase I traffic study will also include trip distribution and identify intersections that are affected by 20 or more PM peak hour new trips. |
| <input type="checkbox"/> | Upon approval of the Phase I traffic study, a decision will be made if a Phase Two Traffic Study is required and if the project is subject to transportation concurrency review in accordance with section 21.52 of the Redmond zoning Code. If applicable, the applicant shall submit a request for a certificate of concurrency. Please note that additional traffic related analyses such as, but not limited to, Entering/Stopping Sight distances may be required. |
| <input type="checkbox"/> | In Phase One of the traffic analysis process, the traffic consultant is required to submit a technical memorandum summarizing the forecasted trip generation for the proposed project, along with justification for the methodology used in the forecast. This memorandum is then reviewed by the City and possibly by other affected public agencies. Upon approval of the trip generation estimate a determination will be made if the project is subject to transportation concurrency review in accordance with section 21.52 of the Redmond Zoning Code. If applicable, the applicant shall submit a request for a certificate of concurrency. The project applicant will be required to pay for the traffic modeling that is part of the concurrency evaluation. |
| <input type="checkbox"/> | If required, phase two of the transportation impact analysis process entails scoping of the analysis and preparation of the report by the transportation consultant. Once the traffic modeling is complete, the applicant's consultant should contact the City to set up a meeting to formally scope the transportation impact analysis. The analysis will be based primarily on the outline presented on the following pages. The specific list of intersections that will need to be reviewed in the transportation impact analysis will be developed from the trip assignment for the project. Depending upon the size and character of the proposed project, certain elements of this outline may be reduced in scope or eliminated. However, other items may also be added if special issues relating to transportation exist on the project. |
| <input type="checkbox"/> | Information from the City of Redmond's traffic database is located on the City of Redmond's website . In addition, the city may provide the following information if available: <ul style="list-style-type: none"> ▪ Current AWDT information (current shall mean within one year of the study date). ▪ Current PM peak hour counts (current shall mean within one year of the study date). |
| <input type="checkbox"/> | All sheets must be submitted in a searchable PDF format (non-scanned). |
| <input type="checkbox"/> | The Traffic Study shall be prepared by a professional licensed in the State of Washington. |

Standard Information

Introduction

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| <input type="checkbox"/> | Location of the Project Site <ul style="list-style-type: none"> ✓ On local vicinity map. ✓ In relation to other major uses or landmarks. ✓ In relation to the adjacent street system. |
| <input type="checkbox"/> | Description of Proposed Project or Action <ul style="list-style-type: none"> ✓ Proposed land use and/or character of project. ✓ Size of project (square feet, number of units, number of employees, etc.) ✓ Number of parking spaces provided. ✓ Number and location of accesses to street system. ✓ Anticipated project phasing, if applicable. |
| <input type="checkbox"/> | Scope of Analysis/Organization of Report <ul style="list-style-type: none"> ✓ Specific issues analyzed. ✓ General layout of transportation report. |

	<ul style="list-style-type: none"> ✓ Additional Information Required
Existing Conditions	
<input type="checkbox"/>	<p>Definition of Study Area for Analysis</p> <ul style="list-style-type: none"> ✓ All signalized intersections impacted by 20 or more project-generated trips in the PM peak hour (total one-way trips through the intersection). ✓ Intersection of site accesses with street system. ✓ Non-signalized intersections as directed by the City.
<input type="checkbox"/>	<p>Physical Characteristics of Study Area Street System</p> <ul style="list-style-type: none"> ✓ Streets within study area. <ul style="list-style-type: none"> ▪ Number of lanes (typical and at intersection). ▪ Street and shoulder widths. ▪ Posted speed limit. ▪ Approximate street grades. ▪ Other geometric features. ✓ Non-motorized & transit facilities. <ul style="list-style-type: none"> ▪ Location of sidewalks and trails within the area. ▪ Residential projects should identify walk routes to schools within 1-mile radius. ▪ Location of bike lanes within the area. ▪ Location of transit facilities within the area. ✓ Key intersections in study area. <ul style="list-style-type: none"> ▪ Traffic Control (signals, signs, etc.). ▪ Turn restrictions. ▪ Lane alignment. ▪ Sight distance restrictions.
<input type="checkbox"/>	<p>Operational Characteristics of Study Area Street System</p> <ul style="list-style-type: none"> ✓ Traffic Volumes <ul style="list-style-type: none"> ▪ Average weekday traffic volumes (AWDT) on streets. ▪ PM peak hour turning movement volumes at key intersections. ▪ Schematic of street system showing AWDT and PM turning movements. ✓ Traffic Operations <ul style="list-style-type: none"> ▪ Level of service at all signalized intersections using Circular 212 Critical Volume Sum methodology. Summary table should include level of service ranking from A to F, and critical volume sum for intersection. ▪ Level of service at all non-signalized intersections using Highway Capacity Manual (Special Report 209). Summary table should include level of service ranking from A to F, and reserve capacity for each critical movement. ▪ Warrant analysis of non-signalized intersections as determined by the City. ▪ 85th percentile speed on streets.
<input type="checkbox"/>	<p>Traffic Accident History within Study Area</p> <ul style="list-style-type: none"> ✓ Three-year accident summary at all key intersections. Include accident diagrams. <ul style="list-style-type: none"> ▪ Intersection accident rates shall be stated in million entering vehicles (MEV) = (annual # of accidents X 106)/ (annual traffic entering) ▪ Accident rates for street sections shall be stated in million vehicle miles travels (MVM) = (annual # of accidents X 106)/ (annual vehicle-miles of traveled) ▪ Vehicle-miles = AADT x 365 days/year x section length ✓ Identification of problem areas and accident trends.
<input type="checkbox"/>	<p>Parking Supply/Demand</p> <ul style="list-style-type: none"> ✓ Existing location and supply. ✓ Existing use characteristics (demand, turnover, etc.). ✓ Additional Information Required

Forecasted Conditions

<input type="checkbox"/>	<p>Forecast of Non-Project Traffic Volumes</p> <ul style="list-style-type: none">✓ Forecast year.<ul style="list-style-type: none">▪ Year of project build out.✓ General traffic volume growth.<ul style="list-style-type: none">▪ Annual percentage growth in traffic volumes (typically 2%).✓ Specific traffic volume growth.<ul style="list-style-type: none">▪ Trip generation from other planned developments.▪ Diversion of traffic due to planned street improvements.
<input type="checkbox"/>	<p>Forecast of Project Generated Traffic Volumes</p> <ul style="list-style-type: none">✓ Trip Generation<ul style="list-style-type: none">▪ ITE Trip Generation (7th Edition) or City approved methodology.▪ Breakdown of new, pass-by and diverted trips.✓ Mode Split<ul style="list-style-type: none">▪ Proportion of trips via SOV, HOV, walking, bicycle, or other modes.✓ Trip Assignment<ul style="list-style-type: none">▪ Assignment of project trips to specific travel routes as per the short-term trip assignment provided by the City of Redmond traffic model (if used for concurrency testing).▪ Show all streets and intersections impacted by 20 or more trips in the PM Peak Hour. Show other intersections as directed by the City.
<input type="checkbox"/>	<p>Analysis of Forecast Year Traffic Operations with and without Project</p> <ul style="list-style-type: none">✓ Level of Service<ul style="list-style-type: none">▪ All signalized intersections using Circular 212 Critical Volume Sum methodology. Summary table should include level of service ranking from A to F, and critical volume sum for intersection.▪ All non-signalized intersections using Highway Capacity Manual (Special Report 209).▪ Summary table should include level of service ranking from A to F, and reserve capacity for each critical movement.▪ All project accesses to street system using applicable methodology outlined above.▪ Schematic of street system showing AWDT and PM turning movements.✓ Project Specific Mitigation: Use the following guidelines in determining whether mitigation is required at specific intersections:<ul style="list-style-type: none">▪ If the intersection will operate at LOS-D or better in the forecasted year with the proposed project, no mitigation is required.▪ If the intersection will operate at LOS-E/F in the forecasted year with the proposed project, and the addition of the project traffic decreases the LOS, mitigation may be required to alleviate project impacts. For signalized intersections, the consultant should then use the HCM 209 methodology to assess potential physical improvements to improve the operation of the impacted intersection. The City will review these potential improvements and may require their construction to mitigate project impacts.
<input type="checkbox"/>	<p>Safety Condition within Study Area</p> <ul style="list-style-type: none">✓ Analysis of safety problems identified in Existing Conditions section.✓ Residential projects should coordinate with the City and Lake Washington School District to identify gaps or hazards for school walk routes.✓ Options available to reduce or eliminate safety problems.✓ Analysis of entering and stopping sight distance at project accesses and along street frontage(s).✓ The design speed used in any analysis shall be 10 mph over the posted speed limit unless otherwise approved by the City.
<input type="checkbox"/>	<p>Parking Supply/Demand</p> <ul style="list-style-type: none">✓ Proposed parking supply.

	<ul style="list-style-type: none">✓ Analysis of expected parking demand.<ul style="list-style-type: none">▪ ITE Parking Generation (2nd Edition) or City approved methodology.✓ Comparison of supply/demand to City Code Requirements.✓ Additional Information Required.
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Summary of Analysis and Mitigation

<input type="checkbox"/>	Executive Summary of Transportation Impact Analysis
<input type="checkbox"/>	Summary of Impacts and Project Specific Mitigation