

**The City of Granite Falls Traffic Worksheet and Traffic Study Requirements for Developments in Snohomish County**

The City of Granite Falls, through an interlocal agreement (ILA) with Snohomish County, may request traffic mitigation measures from any new development in the unincorporated County that impacts the City’s streets. The County will impose the requested mitigation measures to the extent that the County determines that the mitigation is reasonably related to the impacts of the development. To determine the impacts, and to determine reasonable mitigation measures, Snohomish County requires a traffic study from any development in the County that may have impacts on the City’s streets. This ‘traffic study’ may be as simple as completing sections one and two of the City traffic worksheet below, or having a professional traffic engineer conduct a formal traffic study consistent with the requirements in section three below.

- If a development generates less than ten peak-hour trips and the applicant chooses Option A for mitigation payment (standard payment by percent of the City impact fee), then the applicant will generally only have to fill out the first two sections of this traffic worksheet and complete a mitigation offer (see section four).
- However, if a development generates more than ten peak-hour trips, or if the applicant chooses Option B for mitigation payment (comprehensive impact analysis), then the applicant will have to fill out the first section of this worksheet, complete a separate traffic study consistent with the requirements in section three, and complete a mitigation offer (see Section Four).
- Applicants should submit all documents *to the County* as part of their initial submittal.
- Traffic study requirements for impacts on City streets are based on the City’s traffic mitigation ordinance and the County/City ILA. At the end of this document the address of the County web site is shown at which copies of the ILA are available.
- Following review of the documents submitted, the City may request supplemental information and analysis as necessary to determine the impacts of the development in accordance with the County/City ILA. The County will require the proposed development to submit the supplemental information and analysis to the extent that the County determines that it is necessary to determine the impacts of the development.

**Section One (1) Worksheet General Information**

1. Name of Proposed Development \_\_\_\_\_  
County Development File Number (if known)\_\_\_\_\_
2. Name, Address and Phone Number of Applicant \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. Development Site Address \_\_\_\_\_  
\_\_\_\_\_
4. Does this development have frontage on a City street? \_\_\_\_\_
5. Description of Development (size and specific type) \_\_\_\_\_  
\_\_\_\_\_
6. How many new vehicle trips are expected to be generated by the proposed development? (For many common types of developments this information can be provided by the County or the City. For more complex developments trip generation may have to be determined under section three below)  
\_\_\_\_\_ AM Peak Hour \_\_\_\_\_ PM Peak Hour \_\_\_\_\_ Average Daily Trips (ADT)
7. Passenger Car Equivalents (PCE) of ADT \_\_\_\_\_ [Trucks with 5+ axles = 4 PCEs and Trucks or Buses with 3 or 4 axles = 2 PCEs]
8. Proportionate Share Impact Mitigation: Choose option A or B.  
\_\_\_\_\_ Option A based on standard payments by percent: go to section two  
\_\_\_\_\_ Option B based on comprehensive impact analysis: go to section three

**Section Two (2) Proportionate Share Determined by Percentage of the City Impact Fee**

**2(a) Calculation of Payment Amount**

1. Standard default estimated percentage of trips impacting the City streets based on subareas (See below) \_\_\_\_\_ % or 2. Other Percentage: (Note: See author's qualifications in section three below.) Estimated percentage of trips impacting the City streets from attached trip distribution: \_\_\_\_\_ %

| Sub-Area ID# | * County Traffic Shed  | Percentage for Developments that Extract Natural Resources | # Percentage for All Other Types of Developments |
|--------------|--|--|--|
| CO-GF-1      | Parcels taking access directly or indirectly from the Mountain Loop Highway            | 98%  | 90%  |
| CO-GF-2      | Parcels taking access directly or indirectly from Menzel Lake Road                     | 70%  | 70% ≤ 1 miles<br>50% ≤ 3 miles<br>25% > 3 miles  |
| CO-GF-3      | Parcels taking access directly or indirectly from Robe Menzel Road                     | 70%  | 70% ≤ 1 miles<br>50% ≤ 3 miles<br>25% > 3 miles  |
| CO-GF-4      | Parcels taking access directly or indirectly from Jordan Road or Engebretson Road      | 70%  | 70% ≤ 2 miles<br>50% > 2 miles                   |
| CO-GF-5      | Parcels taking access directly or indirectly from Burn Road or 100 <sup>th</sup> ST NE | 20%  | 30%  |
| CO-GF-6      | Parcels taking access directly or indirectly from 84 <sup>th</sup> ST NE               | 2%   | 10%  |
| CO-GF-7      | Parcels taking access directly or indirectly from 163 <sup>rd</sup> AV NE              | 2%   | 10%  |
| CO-GF-8      | Parcels taking access directly or indirectly from SR-92                                | 2%   | 10%  |

\*Note: Defines traffic sheds in terms of major arterials. In each case, the traffic shed includes all of the parcels of property that obtain access either directly or indirectly from the major arterial. If a parcel is located in such a spot as to be able to access more than one of the major arterials, then the traffic shed for that parcel will be determined by a trip distribution which will show which major arterial will be used by the majority of the vehicles accessing the parcel.

# Distances measured from closest City limit boundary.

3. Passenger Car Equivalent PCEs (#7 above) \_\_\_\_\_

4. Impact Fee Rate for Single Family Rate (SFR) \$ \_\_\_\_\_

(Note: Consistent with the ILA, developments pay the rate in effect at the time of their submittal. As of 2003 the rates were \$2,500 per SFR. Through ordinance, the City Council can change these rates at any time, so consult with the City to find the latest fee rates.)

**5. Calculation of Proportionate Share Impact Mitigation**

$$\begin{array}{ccccccc}
 \text{SFR Rate} & & \text{PCEs} & & \text{\% of Trips} & & \\
 \$ \underline{\hspace{2cm}} & \times & \underline{\hspace{2cm}} & \div & \underline{9.57} & \times & \underline{\hspace{2cm}} \\
 \text{\#4 above} & & \text{\#3 above} & & \text{ADT per SFR} & & \text{\#1 or 2 above} \\
 & & & & & & = \$ \underline{\hspace{2cm}} \\
 & & & & & & \text{Mitigation payment}
 \end{array}$$

**2(b) Determining whether or not an additional traffic study is necessary**

Will the development generate more than 10 peak-hour trips *or* are there other impacts that need to be addressed (e.g., level of service, safety, or access and circulation)

\_\_\_\_\_ No. Skip section three and go to section four.

\_\_\_\_\_ Yes. Read the introduction to section three and skip to section 3(b).

### **Section Three (3) Traffic Study Requirements**

Introduction: This section outlines requirements for traffic studies for impacts on City streets. If an applicant chooses (or is required) to complete a traffic study, then it should be submitted along with this worksheet and a mitigation offer. (Note on Author's Qualifications: A traffic study under this section must be conducted by an engineer licensed to practice in the state of Washington with special training and experience in traffic engineering and, preferably, membership in the institute of transportation engineers. For individuals/firms not on the County's approved list, the developer will provide, with the traffic study, the credentials of the individual or firm performing the traffic study certifying compliance with these qualifications.)

#### **3(a) Proportionate share impact mitigation based on comprehensive impact analysis:**

General Requirements for Traffic Studies to Determine Proportionate Share Obligations of The following describes a general outline for use in the preparation of traffic impact analyses for the City of Granite Falls. This outline is not intended to be all inclusive nor will all items be applicable for all types of development. The City of Granite Falls reserves the right to request additional information for unique or unusual developments.

##### 1) INTRODUCTION/PROJECT DESCRIPTION

Elements to be included as part of narrative or as figure(s).

- Project name and proponent - Location of project
- Vicinity map
- Proposed uses, if known (e.g., names of stores)
- Project magnitude (square footage, number of units, etc.)
- Access locations
- Current and proposed zoning
- Description of current use of property
- Copy of site plan
- Roadways/intersections to be impacted and reviewed in the analysis
- Horizon year of project (completion and occupancy); state phasing and time-frame if applicable
- Parking (if applicable)

##### 2) INVENTORY OF EXISTING CONDITIONS

- Elements to be included as part of narrative or as figure(s).
- Description of impacted streets in the area (number of lanes, width, pedestrian facilities, speed limit, lighting, etc.)
- Daily traffic volumes (if available), or estimated from peak hour counts
- Noon and PM Peak hour counts (as appropriate)
- Accident history (when required by the City)
- CapaCity analyses at critical intersections
- Transit service

##### 3) DEVELOPMENT IMPACTS

Elements to be included as part of narrative or as figure(s).

- Trip generation
- Trip distribution/assignment
- CapaCity analyses (with and without the project) at critical locations for the horizon year
- Projected daily traffic volumes and peak hour volumes (with and without the project) for the horizon year and describing the characteristics of the traffic volumes (i.e., passenger vehicles, trucks, truck/trailer combinations, hours of operations, etc.).
- Need for turn storage lanes at access(es) (if appropriate)
- Other concerns (if applicable, such as cut-through traffic in residential areas)

##### 4) CONCLUSIONS/RECOMMENDATIONS

Brief summary of above analyses with recommendations

##### 5) MITIGATION

Mitigation shall be in accordance with Granite Falls Municipal Code, Granite Falls Comprehensive Plan, State Law and interlocal agreements.

##### 6) OTHER

Unusual developments may require analysis of off- peak hours, the AM peak hour, weekends, or ability to serve large trucks, for example, if deemed necessary by the City of Granite Falls. Studies performed as part of an EIS document may also require additional analysis.

#### **3(b) Trip Generation and AM and PM Peak Hour Trip Distribution and Assignment**

Calculate AM, PM and Daily trip generation consistent with the ITE Trip Generation Handbook and the Snohomish County Public Works Rules. Determine the trip distribution and assignments consistent with the County's document titled "Format for Trip Distributions"(available at the County web site, see below).

- The distributions will be carried out to each key intersection in the City at which the approach or departure volumes on any leg have three (3) or more peak hour trips. Trips should be distributed onto the street system as it is expected to be in six years.

- The distribution should be a schematic map showing the broad distributions of trips in terms of percentages on different streets. Show all County boundaries.
- The assignment should be a schematic map with the impacted key intersections identified and turning movements for each shown in separate diagrams on the same page or on different pages. The assignment should also be presented in tabular form listing each intersection and the number of trips at each movement.

### **3(c) Additional Analysis**

The City may request mitigation for impacts on the level of service of City streets, documented safety locations, frontage improvements and access or circulation. The traffic study requirements below are intended to disclose impacts. Based on this information the City may request through the County that the applicant provide additional information showing possible mitigation measures. If any off-site improvements are needed for mitigation the City would work with the applicant to determine requirements for right-of-way, construction plans, right-of-way use permits, construction/maintenance bonds, and other issues.

#### **Impacts on Level of Service (LOS) of City Intersections for Developments Adding More Than 100 trips per day to City Streets**

Contact City of Granite Falls Public Works for the most current list of intersections with failing level of service. Identify any of these intersections impacted by three or more directional peak-hour trips.

#### **Impacts on Documented Safety Problem Locations**

Contact the City of Granite Falls Public Works for a list of current locations with documented safety problems. Identify any of these locations impacted by thirty or more daily trips. Note: unlike LOS impacts in which at least three or more peak hour trips have to be added in one direction to require disclosure (e.g., 3 westbound), for documented safety problems, any thirty daily trips added to a documented safety problems location is considered an impact for which disclosure is necessary. (e.g., 20 westbound plus 10 eastbound).

#### **Impacts on Access or Circulation**

The City may request improvements to existing streets to provide safe and efficient access and/or circulation. In some instances, the City might request provisions for future City streets identified in the Comprehensive Plan or in the City's adopted map of conceptual linkages and approximate corridors (See Exhibit 3 of the ILA). If so, the City will request specific additional information through the County.

#### **Frontage Improvements, Right of Way, and Access Point Requirements**

Any County development which takes access from a City street or fronts on the right-of-way of the City may also be required to provide frontage improvements, dedicate or deed right-of-way, and meet access-point requirements consistent with City standards. If this may be the case, provide appropriate analysis and documentation to enable a determination by the City and the County as to what standards and requirements to apply.

### **Section Four (4) Traffic Mitigation Offer to the City of Granite Falls**

The applicant should complete a traffic mitigation offer to the City of Granite Falls that summarizes the mitigation identified in the City traffic worksheet and any additional traffic study. This will facilitate timely review of the development and processing of the application. The form to use for the mitigation offer is titled "Traffic Mitigation Offer to a City by a Development in the Unincorporated County." This form is typically provided to all applicants along with this traffic study checklist. In addition, copies are available from the City contacts or the County web site shown below.

**City Contact** Darla Reese, City Clerk, City of Granite Falls , 206 South Granite Ave, Granite Falls, WA 98252, (360) 691-6441

#### **Additional Information**

County Web Site

Snohomish County Public Works has a web site with many of the documents related to traffic studies and mitigation requirements for developers. From the Snohomish County home page go to:

Departments/Public Works/Divisions/TES/ProgramPlanning/3066B