

WCOG Freight System Assessment

Report of Findings



whatcom council of governments

June, 2015

Introduction

Whatcom County is home to more than 8,000 companies. Most of these companies depend on the transportation system for their delivery and shipment of goods. In recent years, freight has become a prioritized element for transportation planning efforts. To improve the freight system in our region by informing regional goals and prioritizing investments, the Whatcom Council of



Governments (WCOG) solicited feedback from county businesses. This Freight System Assessment (FSA) report summarizes local stakeholders' perspectives on freight system performance in Whatcom County and will be used to inform the Regional & Metropolitan Transportation Plan update in 2017.

Project Organization

In spring 2015, WCOG was awarded project funding through the Washington State Department of Transportation to conduct a regional freight system assessment. WCOG managed the project and hired two temporary student employees through Western Washington University to assist in efforts to gather and analyze feedback.

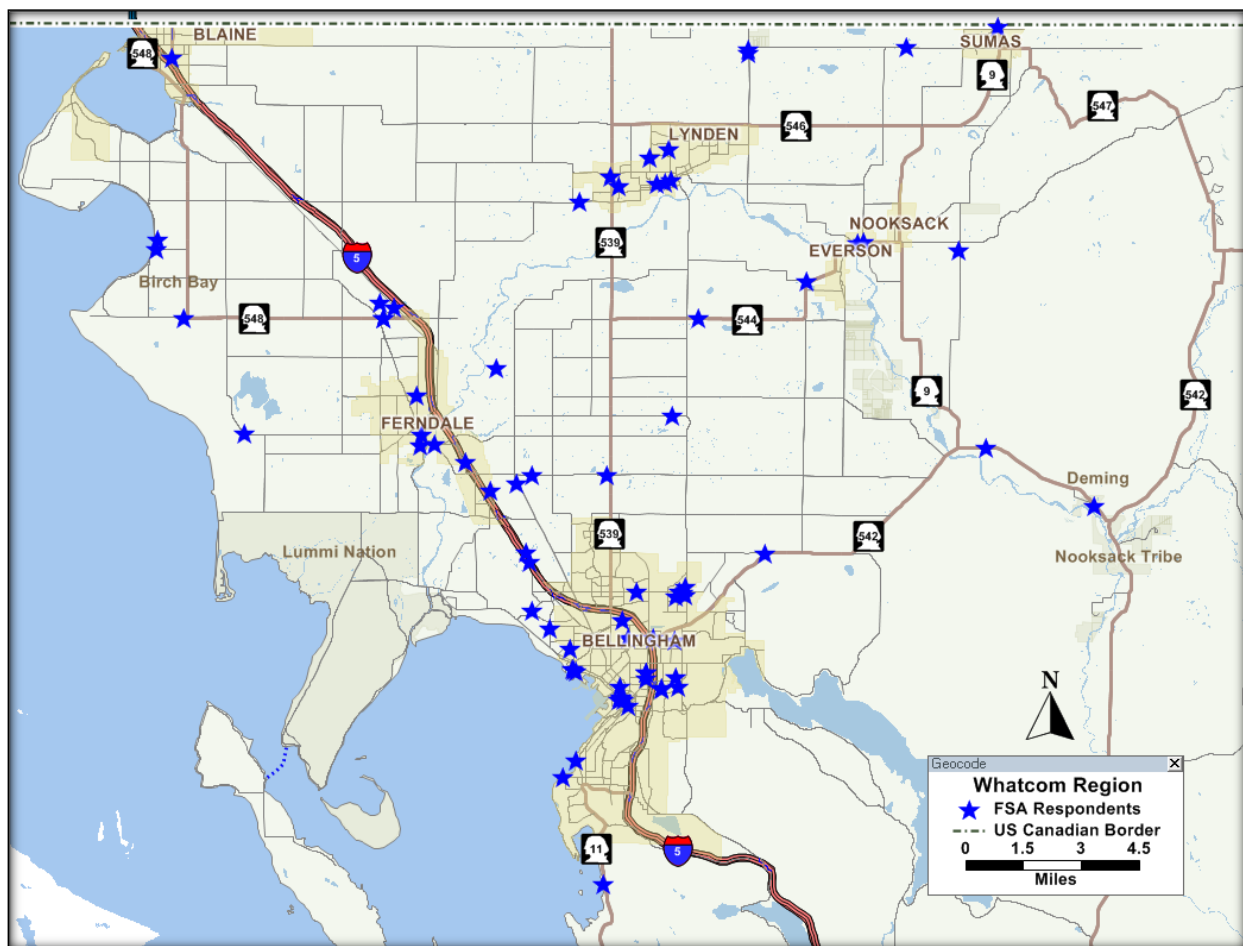
Total Freight System Assessment time period: March – June 2015

Outreach

From April through early May, WCOG applied several methods to garner maximum feedback from local companies including: mailed letters, follow-up phone calls and email, word-of-mouth, and news releases in the *Bellingham Business Journal* and *Bellingham Herald*. All methods of outreach requested that prospective respondents visit WCOG's website where a link to the FSA questionnaire was prominently displayed on the front page. Companies were researched using WCOG travel demand model demographics, along with local knowledge. The solicitation summary and respondents are as follows:

Letters to Companies	1,100
Follow-up Phone and Email	350
Local News Articles	2
Total Assessment Respondents	80

A primary goal of the assessment was to get feedback from all areas of the county with freight activity. As the urban center, it's commonly known that Bellingham generates the bulk of freight activity. However, from a regional transportation perspective, it's important to understand the spectrum of both urban and rural areas as well as linkages between them. FSA respondents were almost evenly split between Bellingham and the rest of the county. The map below displays the respondent's locations.

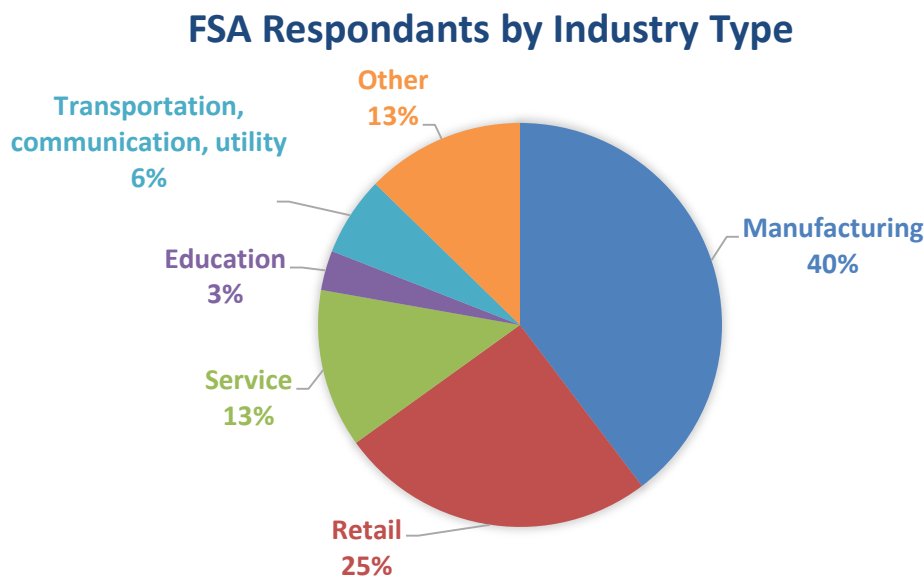


FSA Questionnaire

Questions focused on the local company's shipping and receiving of freight by way of Whatcom County's freight transportation system. The regional transportation system, as introduced to the prospective respondents for this study, entails the combination of:

- Public owned infrastructure: local roads, highways, marine terminals, airports
- Private owned infrastructure and components: commercial motor vehicles, railroads and trains, planes, pipelines, marine vessels, etc.
- Laws and policies that regulate freight transportation.

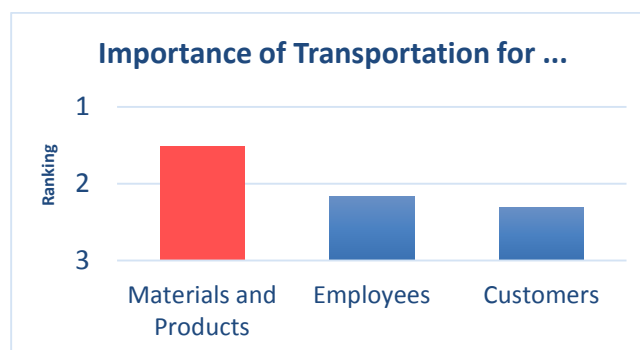
Questions covered company location and business-related transportation, shipments and deliveries, and company assessments of system performance and investment needs. The chart below illustrates industry types represented by the respondents.



Analysis: Manufacturing produced the most respondents, followed by retail, service, and other.

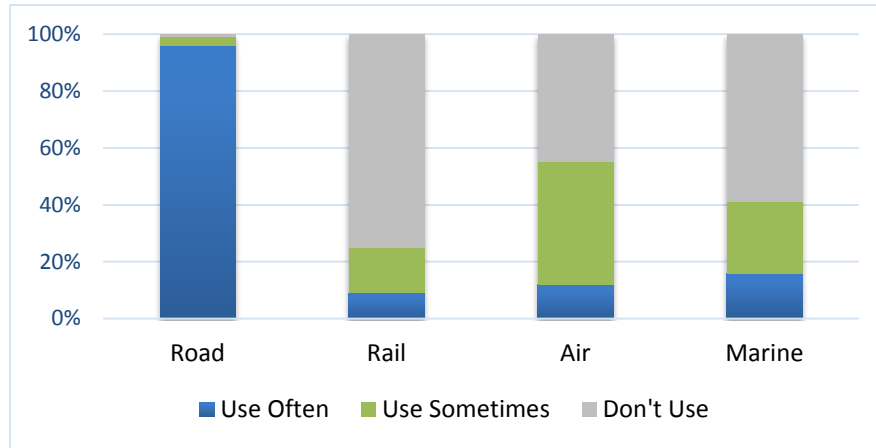
Company Transportation

Companies ranked the following types of transportation by their relative importance to day-to-day operations. The following graph illustrates the overall average rankings.



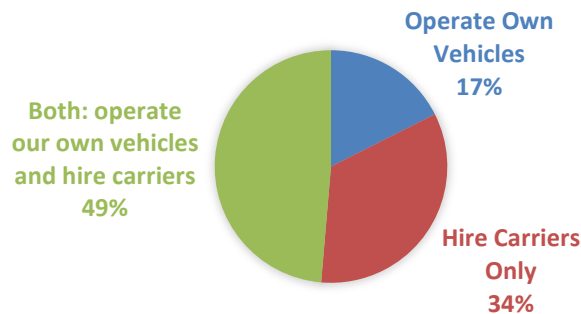
Analysis: With most respondents from the manufacturing sector, it's not surprising that "materials and products" is the most common company transportation priority.

To understand how much local companies rely on regional, national and global logistics chains, they were asked to relate their freight activity to the specific modes. The following graph illustrates the transportation modes used and how often.



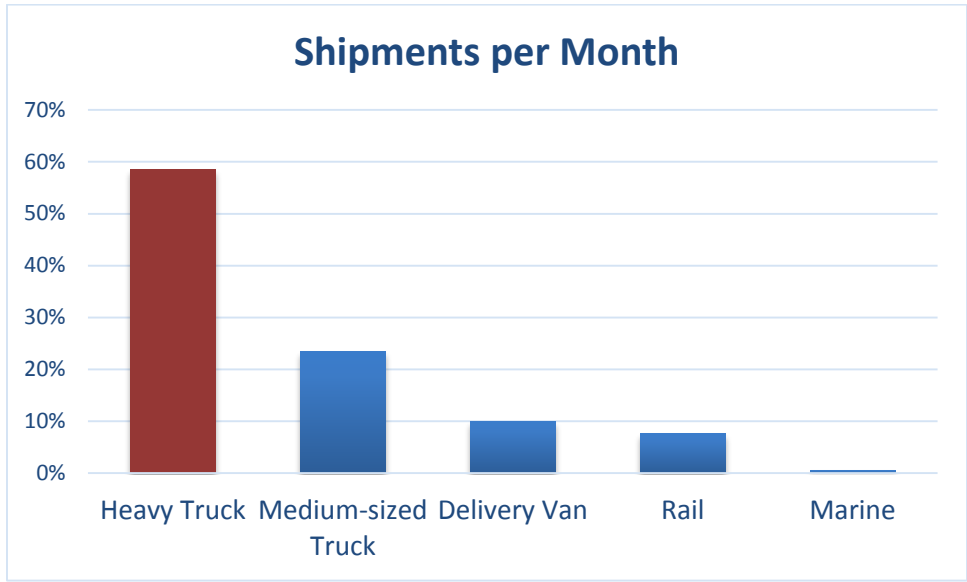
Analysis: Clearly roads has the highest regular usage. Despite the presence of class-1 rail, marine terminals, and an international airport in the county, these modes are used significantly less across the companies who responded to the Whatcom FSA.

For vehicle usage, companies were asked if they operated their own, hired carriers, or some blend of both. About half the companies both operated their own vehicles and hired carriers.

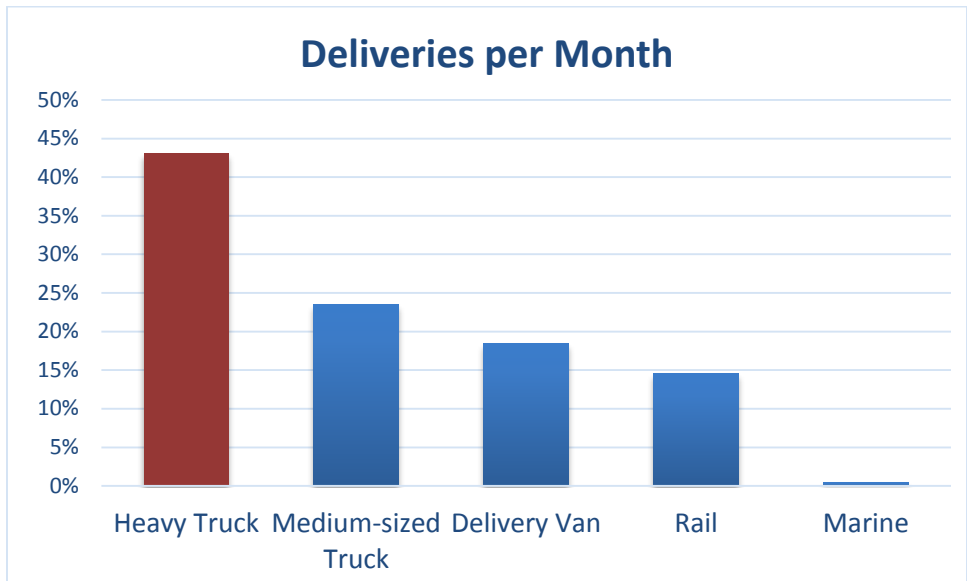


Shipments and Deliveries by Mode

Companies were asked to provide some details about their shipment and delivery activities. The first question asked for approximate freight volume by conveyance types over time. To simplify the results, the responses were standardized to a monthly estimate. The following graphs illustrate the average percentage of shipments and deliveries by conveyance type.



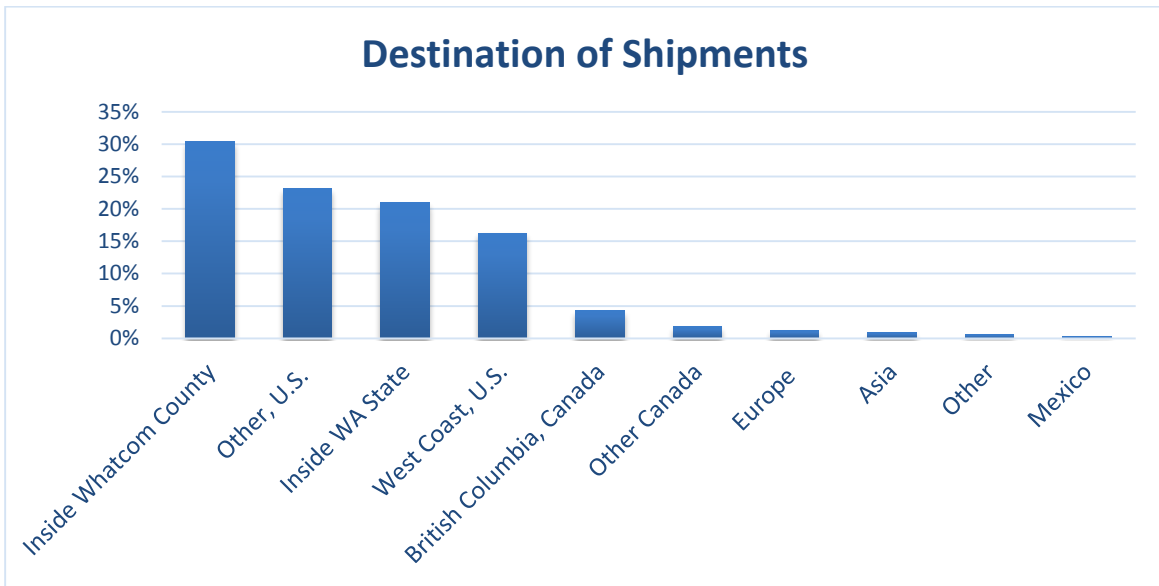
Analysis: Respondent companies used **Heavy trucks** for most shipments, by far. **Marine**, accessible in Whatcom County, ranked lowest.



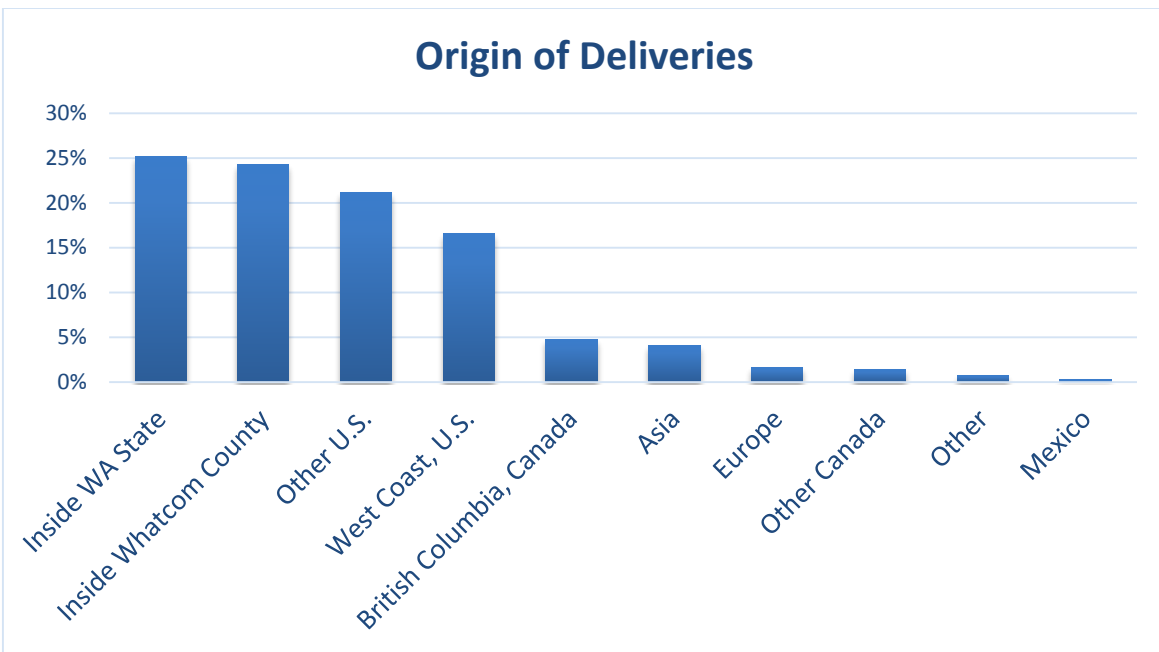
Analysis: Similar to shipments, the highest portion of respondents' deliveries came via **heavy truck**. Marine, like for shipments, ranked lowest.

Origin and Destination of Freight Activity

To gauge where freight activity occurs in Whatcom County and beyond, companies were asked to estimate allocations of their delivery origins and shipment destinations to geographical zones. The geographic areas used began within Whatcom County and proceeded outward to cover state, west coast, other U.S., and international areas.



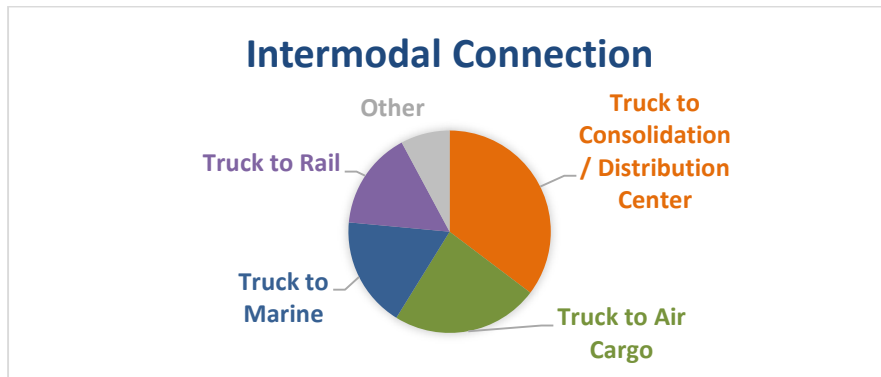
Analysis: Respondent companies identified Whatcom County as the most frequent shipment destination. Additionally, roughly 90 percent of shipments were in the United States versus 10 percent international.



Analysis: Nearly 50 percent of respondents' deliveries originated within Washington State. Similar to shipment destinations, the majority of activity occurs within the United States. About 13 percent of delivery activity originates outside the US.

Shipment's Intermodal Connections

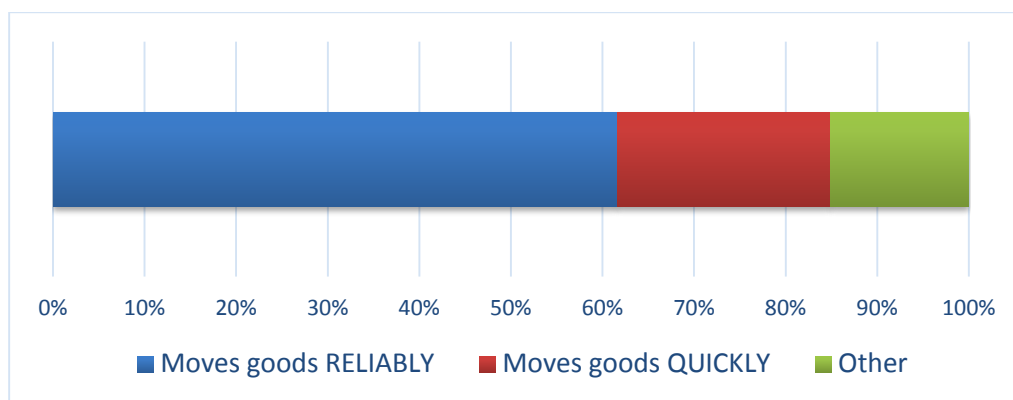
For shipments we asked companies to identify any intermodal connections and transfers. All respondents' intermodal shipments began with trucking. Nearly **70 percent** of respondents' company shipments required an intermodal connection.



Analysis: Truck connections to a consolidation or distribution center rated as the highest intermodal connector with 35 percent, followed by air cargo at 24 percent, marine 18 percent and rail 16 percent. Respondents answering **other** listed multiple connections. It is noted that while many respondents are aware that the freight they receive and ship often comes and goes by way of rail, marine, and air, they don't, as indicated by previous questions, feel that they control these parts of the logistics chain.

Assessments of the Regional Freight System

The following questions focused on the companies' perspective on the freight transportation system in Whatcom County. Companies were first asked to complete the following statement one of three ways, "Our company needs a freight system that can: a) moves good RELIABLY, b) moves goods QUICKLY or c) Other."

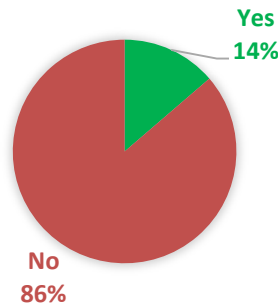


Analysis: Though most of the respondents who chose **other** commented that moving goods reliably and quickly were both the priority. These characterizations of freight transportation needs are common, but while not all shippers require quickness, all companies want reliability. There were also comments for moving goods: Efficiently, Ecologically, Safely, and not applicable.

Recent Improvements

Respondents were asked if any recent (in the last five or ten years) changes in Whatcom County's transportation system improved their company's ability to receive and/or ship goods.

Recent Improvements?



Companies were asked to explain if they chose yes. Notable improvements included:

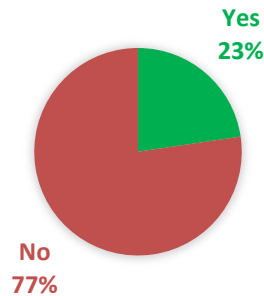
- Widening of Guide Meridian
- Roundabouts on Slater/I-5
- 3-way stop at Slater and Northwest
- Bakerview Rd / I-5 overpass reconfiguration
- Realignment of SR 9
- US/Canada border crossing improvements
- Rail improvements

Analysis: WCOG estimates that in the last five years, over \$700 million has been spent in Whatcom County on freight transportation and apparently most companies didn't notice anything.

Current Concerns

Respondents were asked if there are any current concerns about the sufficiency of the regional transportation system, such as: infrastructure and operations, the transportation services industry, or regulatory issues.

Current Concerns?



Respondent's answering yes explained their concerns as follows:

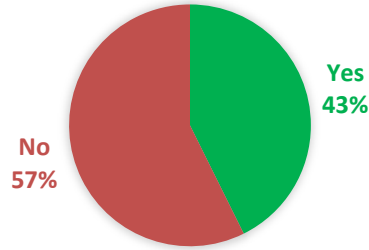
- Traffic congestion experienced entering Bellingham from the north on either Guide Meridian or Hannegan Rd.
- Worn out pavement.
- Maintenance and construction have not kept up with traffic.
- Increasing difficulties delivering goods to San Juan Islands.
- Overall infrastructure hasn't kept up with increased demand and congestion.
- North Bellingham developments along Bakerview will increase burden at Bakerview Interchange. Specific concerns over northbound outgoing and southbound incoming routings.
- Concerns over safety of transport for both environment and people.
- South Pass Road weight restrictions problematic.
- Processing times for cross border shipping could be improved.
- More container barging operations to service Bellingham market.
- Congestion on Grandview Rd and Guide Meridian.
- Mitigate truck delays at flood areas like Slater Rd.
- Improve rail service, it's too slow and unreliable.

Analysis: On top of the broader observation that very few companies felt compelled to participate in this assessment (probably a good sign), very few of those that did respond feel system is coming up short for their business.

Looking Ahead

Respondents were asked to look ahead five or ten years and consider potential freight system problems or constraints that they foresee negatively impacting their business (public, private, or regulatory).

Future Freight System Problems?



Respondents' answering **yes** explained their concerns:

- Too much government control.
- Traffic congestion on I-5 corridor in Seattle and Tacoma will continue to worsen, thereby further isolating Bellingham as a freight destination.
- Traffic congestion
- Cross-border delay
- Increasing transportation costs
- Coal trains
- Concern over Thornton St rail overpass proposal
- Social media
- Bad weather
- I-5 traffic
- Shortage of truck drivers (specifically because of new medical requirements).
- Lack of east/west connectors between Bakerview Rd and Smith Rd.
- Having interchange access at Smith Rd and I-5.

Public Investment and Regional Goals

As a final and overarching question, we asked companies what our regional transportation system goals should be when we make investments in our freight transportation system. The graph below illustrates the respondents' average prioritized ranking of five goals; **1** the highest priority and **5** the lowest.



Analysis: Safety ranked as the highest priority with a 1.84 average, followed by system efficiency and productivity with a 2.03 average. Other goals written in by respondents included: **costs**, **aesthetics**, and **non-mode interactions**.

Comments

Companies contributed additional comments about our regional freight transportation system:

- Don't add roundabouts that cannot accommodate large freight trucks.
- Trains cause traffic jams. Moving the rail system to the eastern region to mitigate impacts on people and business.
- Guide Meridian at I-5 interchange needs work.
- Airport access is bottlenecked at Bakerview/I-5 interchange.
- SR 9 from Sumas to Sedro Woolley needs upgrading for truck traffic.
- Consider seasonal impacts to freight – storage and transport.

Conclusions

Whatcom County's Freight System Assessment provided companies an opportunity to inform government entities about freight activities, needs, and priorities. The 80 company respondent's provided information about their industry type, company transportation, shipment and delivery activities, and assessments of the regional freight system.

Findings:

- Roads are by far the most heavily used mode for transporting freight.
- Whatcom County's freight activity is diverse and depends on state, national, and global network.

- Safety ranks as the top priority for informing investment decisions according to respondents, followed closely by system efficiency and productivity.
- A low response rate could be taken to mean that, in general, there are not a lot of concerns about our regional freight transportation system that companies feel compelled to give feedback about.

Other Takeaways

The assessment observations solicited important perspective of the companies who use the freight system on a day-to-day basis. In the beginning, our solicitation strategy consisted of an initial mailing to the 500 largest companies in the county, then follow-up phone calls to those companies and subsequent calls to additional companies. As time went by and staff encountered a general reluctance by companies to engage over the phone, our efforts shifted towards strategic mailings and follow-up emails. Companies simply wanted the website link to the online assessment questionnaire to complete at their discretion.

The two local news articles were posted the last week of the open assessment period, perhaps a release of these articles earlier, along with potentially other media outlets, may have resulted in more respondents. Overall, the assessment was successful in providing valuable information and perspectives to apply to Whatcom's regional transportation planning efforts.

For more information

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