

Amtrak Stop Evaluation – Blaine, WA



Station Stop Report

The city of Blaine, WA has tasked international business students at Western Washington University with researching the feasibility of an Amtrak passenger rail stop. The following report discusses the demand for a station stop, a market analysis, the benefits and challenges of this project, a survey of potential demand and suggestions for further research. This report should help with establishing future station stop assessments as well as provide decision makers with the information necessary to determine how and if they should proceed with the proposed project.

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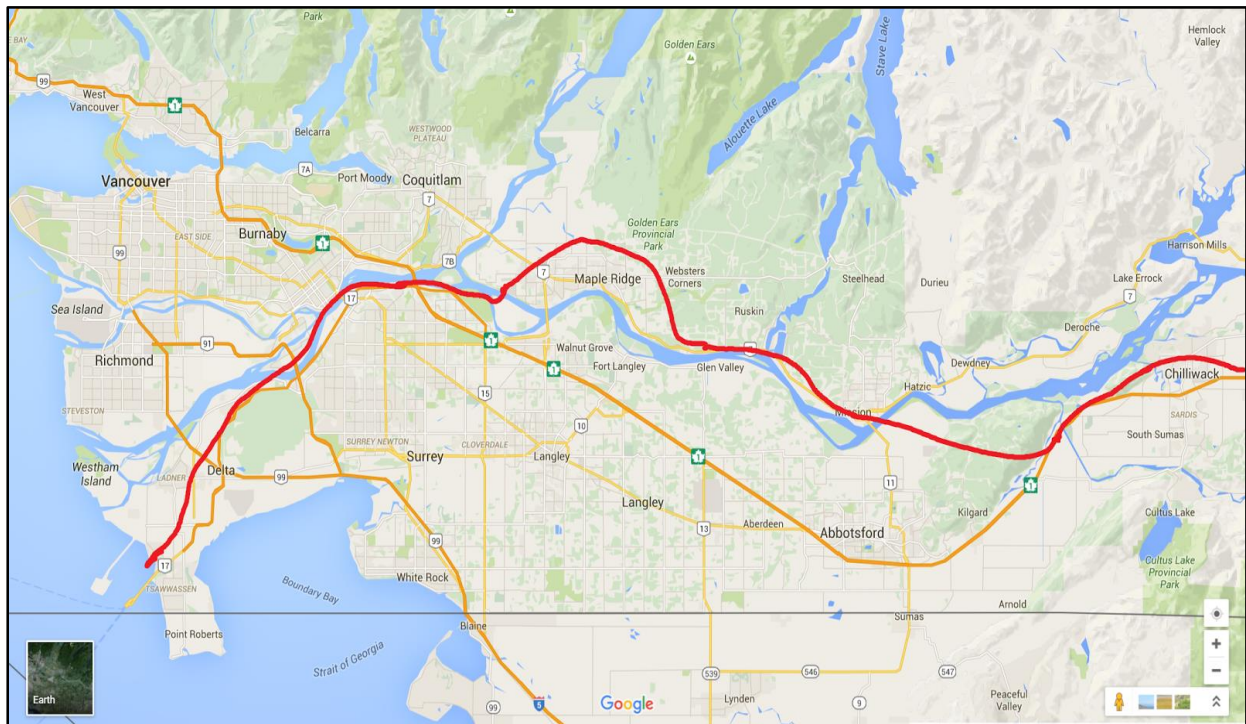
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Market Analysis

Target Market:

Customers for the proposed station stop in Blaine would primarily come from lower British Columbia, with a secondary market in Blaine and the surrounding areas. This study has concentrated on the market in lower mainland Canada, where the majority of our target market lives. The target market in B.C. can see several advantages of taking the train out of Blaine, including time saved, money saved, and more. The map below identifies a boundary where the Canadian cities below the red line can drive to Blaine faster than they can drive to Vancouver. This line could be moved even further north when the 60-minute wait time for customs at the Vancouver station is taken into account.

Within this boundary, we identified several major Canadian cities where passengers would have a time based advantage of taking the train from Blaine rather than from Vancouver. These cities amount to a population of approximately **1.1 million** people, making it a sizeable target market. This station could also be utilized by residents of Blaine and the surrounding areas, as well as business people traveling south to Seattle.



Boundary for Canadian cities where drive time to Blaine is faster than drive time to Vancouver

Source: Google Maps

Time Saved: Blaine v. Vancouver

The graph below shows how much time passengers from these cities can save by taking the train from Blaine, taking into account average border wait times and the time it takes to ride the train from Vancouver to Blaine. On average, passengers would save **2 hours** by **taking** the train from Blaine. It is important to note that a new station in Blaine would not so much be taking customers away from Vancouver, but rather creating new customers that are more willing to ride the train with the addition of the stop in Blaine.

City	Drive Time Saved	Station Wait Time In Vancouver	Border Wait	Train Time Saved	Total Time Saved
White Rock	22 min	60 min	- 10 min	60 min	2 hr 12 min
Surrey	16 min	60 min	-10 min	60 min	2 hr 6 min
Langley	13 min	60 min	-10 min	60 min	2 hr 3 min
Abbotsford	10 min	60 min	-10 min	60 min	2 hr
Chilliwack	6 min	60 min	-10 min	60 min	1 hr 56 min
Delta	4 min	60 min	-10 min	60 min	1 hr 54 min
Maple Ridge	0 min	60 min	-10 min	60 min	1 hr 50 min

Alternative Modes of Transport:

Transportation Type	Daily Frequencies from Vancouver	Average Cost (Van. to Sea.)	Travel Time
Amtrak	2	\$48.00	4hrs. 25 min.
Quick Shuttle	4	\$50.00	4 hrs. 30 min.
Bolt Bus	4	\$28.50	4hrs.
Greyhound	3	\$35	4 hrs. 20 min.
Personal Car	N/A	\$23.10	2 hrs. 50min.

As seen above, we estimate there are five key modes transportation that people utilize when travelling between Vancouver, B.C and Seattle. The cheapest and quickest is driving your personal car assuming you get around 20 miles per gallon, but this does not factor in having to pay for parking or any other hassles involved in driving around in a large metropolitan city. This number does not include the additional cost of driving that comes from insurance and wear and tear. Potentially a better way to look at the cost of a personal car would be to use the government rate of 57.5 cents per mile, which would drastically change the price to a much higher cost (141 miles x 57.5 cents= \$81.08). The train stacks right

in with the rest according to cost and travel time but has the least flexibility when it comes to daily departures. For those staying overnight, it would be perfectly attractive.

SWOT Analysis: Evaluation of a Stop in Blaine

The following table outlines the strengths, weaknesses, opportunities, and threats to an Amtrak station stop in Blaine. Strengths and weaknesses pertain to the town of Blaine itself, while the opportunities and threats relate to the external environment. All of these factors should be considered in determining the feasibility of adding a station and will be addressed in more detail below.

Strengths	Weaknesses
<ul style="list-style-type: none"> ● Location ● Time savings ● Money savings ● Convenience <ul style="list-style-type: none"> ○ Less traffic ○ Parking availability ○ Avoid double customs ● Enjoy the city of Blaine 	<ul style="list-style-type: none"> ● Location <ul style="list-style-type: none"> ○ Unpredictable wait at border ○ Miss the view between Vancouver and Blaine ● Current lack of parking/station
Opportunities	Threats
<ul style="list-style-type: none"> ● Growing economy ● Large target market ● Market for eco-friendly travel 	<ul style="list-style-type: none"> ● Other modes of transport ● Ridership stagnation ● Seasonal ridership ● Foreign travelers can't get to Blaine by car

In the SWOT analysis above it is important to note that leaving from Blaine would let you get to the station at 8:00 AM versus having to be in Vancouver at 6:00 AM, resulting in 2 extra hours of sleep.

In the weakness category we have much more to discuss because those would go away if a new station is built in a new location. In the threats category we spoke with Amtrak and some passengers and found that many of the passengers riding are from Europe during the winter months and the threat would be them not having a way to get to Blaine because they are most likely going to be touring Vancouver, not cities closer to Blaine.

Positives and Negatives for Train Riders:

<ul style="list-style-type: none">• Flexibility of travel – ability to work or relax during transit• Less security hassle• Comfortable ride• WIFI• Scenic views• Eco-friendly<ul style="list-style-type: none">○ More energy efficient per passenger than cars or planes	<ul style="list-style-type: none">• Uncertainty of border wait times• The ease of Skytrain/bus travel in B.C.• Only two trains per day• International travelers (46% of passengers in Vancouver) will not have a car to travel down to Blaine• Miss the beautiful ride between Vancouver and Blaine• Ridership in Vancouver stagnating
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Keep in mind that the pros and cons outlined above are for overall train ridership on the Amtrak Cascades line out of Vancouver. The biggest positive is the extra space and comfort that the train provides, allowing for a more comfortable (less cramped) ride. The largest negative impact is that there are only two trains per day, allowing for low flexibility on one day travel, but for travels lasting longer than one day the low availability can be overlooked.

Advantages of a Station in Blaine:

- Less traffic to the station
- Sleep in
 - Train in Vancouver requires an arrival time of 6:00 am vs. 8:00 am in Blaine
- Other amenities
 - Pick up groceries, gas, and mail in the U.S.
 - Enjoy the city of Blaine
- Avoid the slow train ride between Vancouver and the US border
- Faster border crossing
 - Don't have to clear customs 45 minutes before train departure as in Vancouver
 - Border crossing in the morning averages 5-15 minutes, which is made faster with a Nexus pass

Advantages for the City of Blaine:

- Get Blaine “on the map”
- Economic stimulus
 - Increased tourism and business for the rest of WA state
 - Bring in money through parking and passengers patronizing local businesses
 - Potential to lead to new businesses and jobs being created

Travel Demographics:

One of the important aspects of this study is to determine why and to where people are riding the train. Lacking information on train travel destinations, we have used data from a study conducted on passengers crossing the Peace Arch – Douglas Border by car. This data was compiled from a poll of approximately 3,000 people, 77% of whom were Canadian. This information will serve to help determine how to market the proposed station. It can also be used to extrapolate data regarding demand at the Blaine station stop.

Destinations of Travelers:

Residence – Destination matrix: Peace Arch - Douglas, Summer 2013

		Destination										Total
		E. Lower Mainland	Eastern WA	Point Roberts	Puget Sound	Rest of BC	Rest of USA	Western Lower Mainland	Western USA	Western WA	Whatcom County	
Origin-Residence	Alberta				0.08%					0.02%	0.11%	0.21%
	Eastern Canada				0.03%						0.02%	0.05%
	Eastern Lower Mainland		0.03%		0.68%		0.03%		0.02%	0.02%	1.46%	2.24%
	Eastern WA					0.16%		0.41%				0.57%
	Point Roberts			0.02%							0.02%	0.05%
	Puget Sound			0.03%		1.44%		8.01%				9.48%
	Rest of BC				0.87%		0.10%		0.10%	0.05%	0.47%	1.58%
	Rest of USA					0.25%	0.09%	1.33%				1.67%
	Western Canada				0.03%							0.03%
	Western Lower Mainland		0.12%		14.26%		0.48%	0.01%	1.85%	0.85%	57.59%	75.16%
	Western USA			0.03%		0.34%		1.66%				2.02%
	Western WA					0.49%		0.72%				1.21%
	Whatcom County			0.37%		0.24%		5.02%				5.73%
	Total	0.10%	0.15%	0.45%	15.96%	2.92%	0.69%	17.17%	1.97%	0.94%	59.67%	100.00%

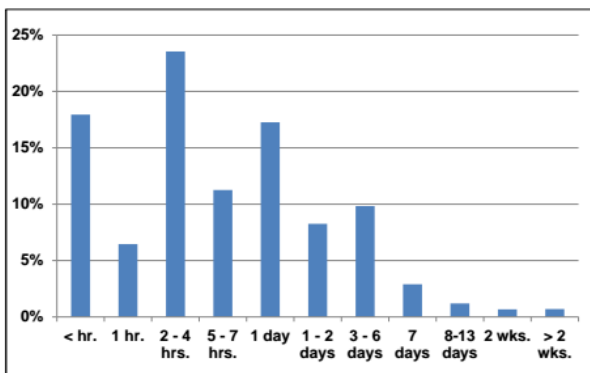
Summary observation: Over half of all trips at Peace Arch – Douglas (58 percent) are residents of West Lower Mainland traveling to destinations in Whatcom County.

Source: IMTC Passenger Vehicle Survey, 2013

Based on the graph above, we can determine that 59.67% of travelers stay within Whatcom County. Trains have a certain luxury about them for travelers, thus making them more popular for longer trips. The fact that over half of travelers entering Blaine are staying in the same county could mean less demand for services like the train.

Length of Trips:

Distribution of trip duration. All Cascade Gateway Ports (excludes Boundary Bay-Point Roberts)



Summary observations:

- Three quarters of all trips are same-day trips.
- One quarter of all trips are for 1 hour or less.

Over ¾ of all trips across the Cascade Gate Ports in the summer of 2013 were same-day trips. The train would only depart Blaine twice per day, making a day trip less convenient

Source: IMTC Passenger Vehicle Survey, 2013

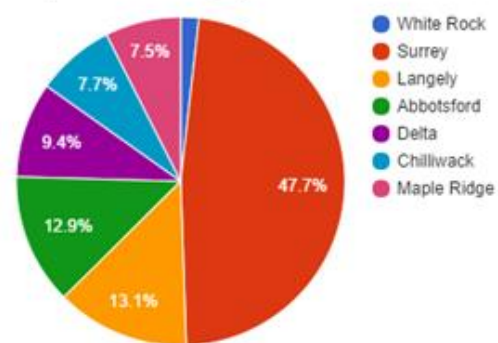
Marketing Strategies

If a train station is added in Blaine, it will be important to consider who to market to and how to market the station. Based on our observations, the stop in Blaine will need to create brand new customers, primarily from the target cities identified, who currently do not currently ride the train. Blaine will need to market the benefits of the station (and Blaine itself) in order to attract the target market.

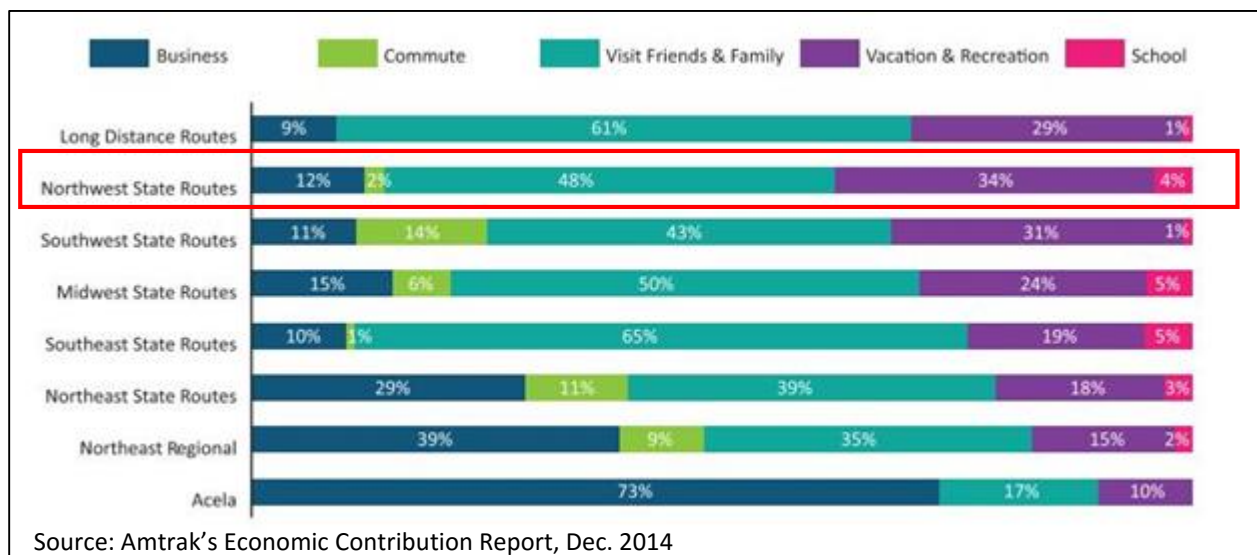
Marketable Population Densities:

- Cities below the Fraser River
- Total population that could be served: 1,076,762
- 47% of marketable population from Surrey
- Narrow down to the largest cities to get into contact with to begin demand surveys

Population Demographics



Reasons for Traveling by Train:



In regards to the Northwest State Routes, 48% ridership is due to Visiting Friends and Family, and 34% for Vacation and Recreation. When beginning to think about how to market the Blaine Train Station, it is important to take account for why people are using the train. Since a large number of people are using

the train to visit family and friends and as well as vacation and recreation, it would be good to use some marketing strategies to cater to this particular set of people.

Factors to Consider

When looking at the feasibility of a station stop in Blaine, we wanted to look at some examples of other areas where new stations have been added to existing rail lines. We found two examples on the east coast, in North Brunswick, New Jersey and in Wallingford, Connecticut. The stations were added in hopes to improve time performances and streamline commuting for residents. The station alone in New Brunswick will cost about \$30 million, while the one in Wallingford is estimated at about \$24 million. However, this would include the cost of new sidings for the locations. Since Blaine already has a siding leftover from when the train stopped there previously, this would reduce the cost of a station down to an estimated \$1.5-2 million. It should also be noted that the two east coast stations were added to busy commuter lines, where trains run about 12 times a day, compared to the Amtrak line which runs much less frequently. In addition, a new stop in Blaine would add to the travel duration. If Blaine is to apply for a station, it will have to explain to Amtrak how the train will make up the time from the stop at Blaine. Called, 'mitigation,' this cost will have to be considered in any analysis of the Blaine station. Leavenworth, in building the case for its station, was able to combine local, state and national funding sources for the mitigation.

This map of the northwest Amtrak stations shows that the distance between the Bellingham and Vancouver stops is the longest uninterrupted stretch on the line. A Blaine station could potentially serve a customer base of well over 1 million people, which is far greater than some of the populations that other stations such as Stanwood or the Mt. Vernon service. This raises the question of if Amtrak is missing untapped market potential.



Source: Amtrak Cascades, 2015

Survey of Potential Demand for the Blaine Station

Purpose:

Our goal was to create a survey that we could use to gauge the potential interest and demand for a station stop in Blaine. Once again, the target demographic for a Blaine station are Canadian residents in the lower mainland area of British Columbia, business travelers, and residents of Blaine and the surrounding areas. We wanted to understand the demand of these demographics in order to determine their interest in a station in Blaine.

Distribution:

We distributed this survey through advertisements on the city of Blaine website, newspaper publicity in the White Rock Sun and the Peace Arch news, flyers around Blaine, inserts in Blaine city electric bills and distribution to train enthusiasts via email. The Surrey Board of Trade was also kind enough to send out a survey to their community, which helped us reach a large number of Canadian respondents. At the end of our survey, we received 929 responses, 223 from Canadians.

Method:

We first needed to divide our sample into two separate populations; Canadian residents and American residents. This information will prove particularly valuable when we arrive at later questions about where and why the train is being used. From our 929 responses we were able to gather information from 443 American residents and 486 Canadian residents (219 from our survey and an additional 267 from our assistance with the Surrey Board of Trade). It is important to note here that the Surrey Board of Trade did not separate their findings into these two populations. It is assumed all responses received from the Surrey BOT are from Canadian residents. Having separated our two populations, the following questions were directed at each group independently.

Table 2: Have you ever taken an Amtrak Train? – American Response

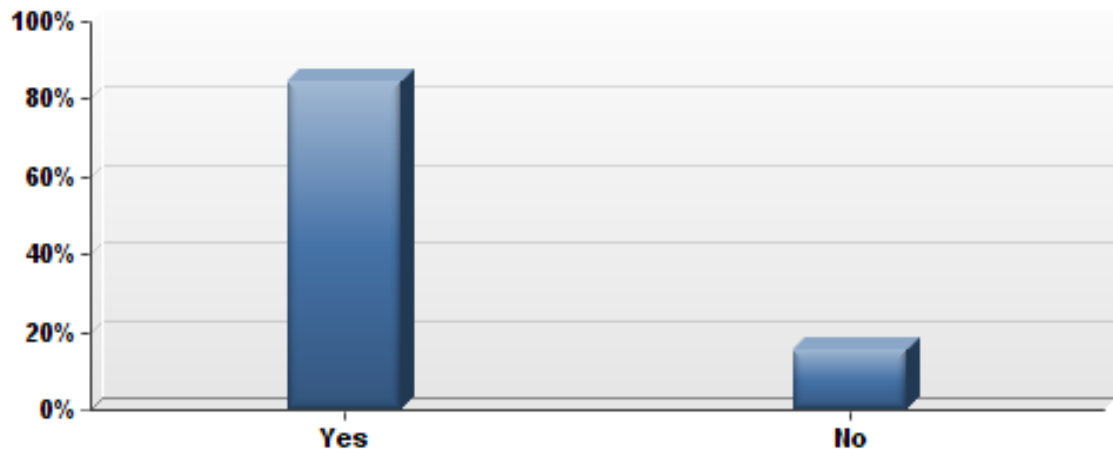
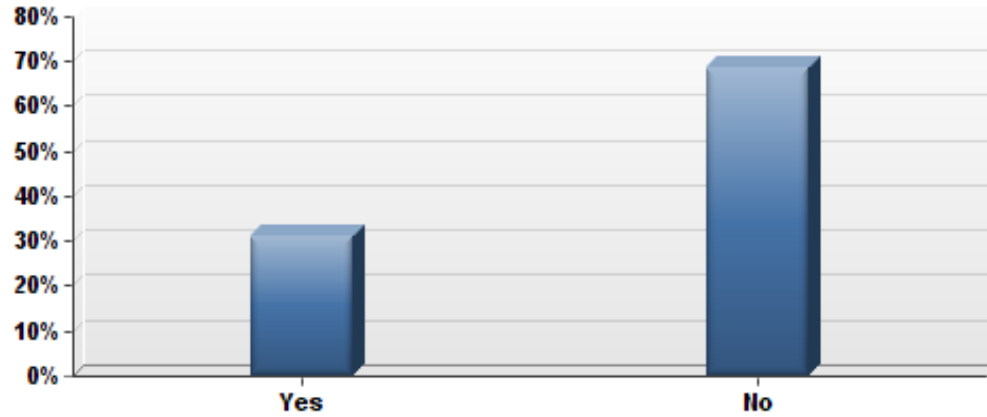


Table 2.1: Have you ever taken an Amtrak train? - Canadian Response



Ridership Frequencies:

As shown in Table 2.1, there are a significant number of Canadian residents who have never ridden an Amtrak train. Almost 70% of Canadian respondents have never considered the train as an option. This is a sizable market that could be captured by Amtrak. In addition, those who have taken the train previously could start to ride the train more frequently. In order to determine if this rider base could be captured by a station in Blaine, we need to know why these residents are not riding the train.

Table 3: Why don't you take the train? - American Residents

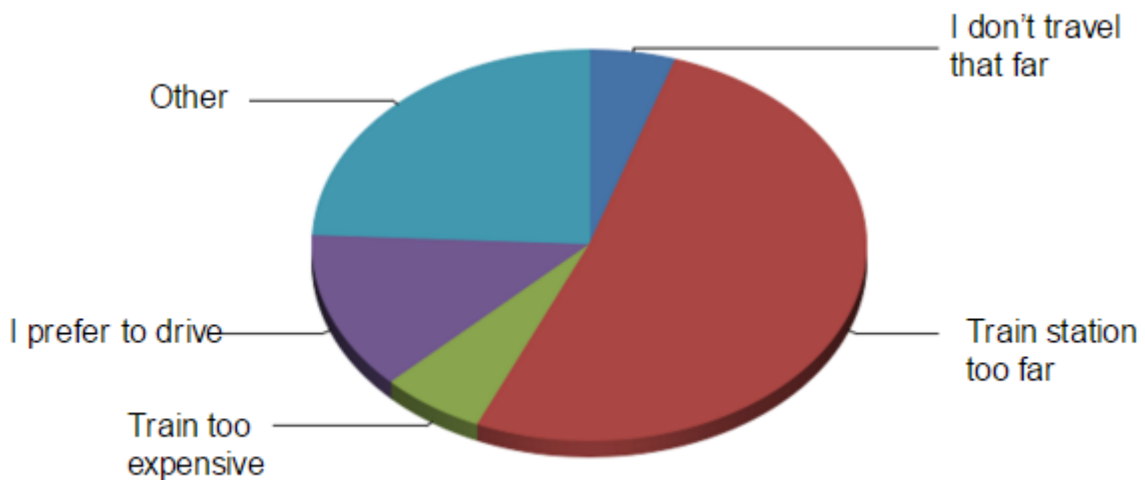
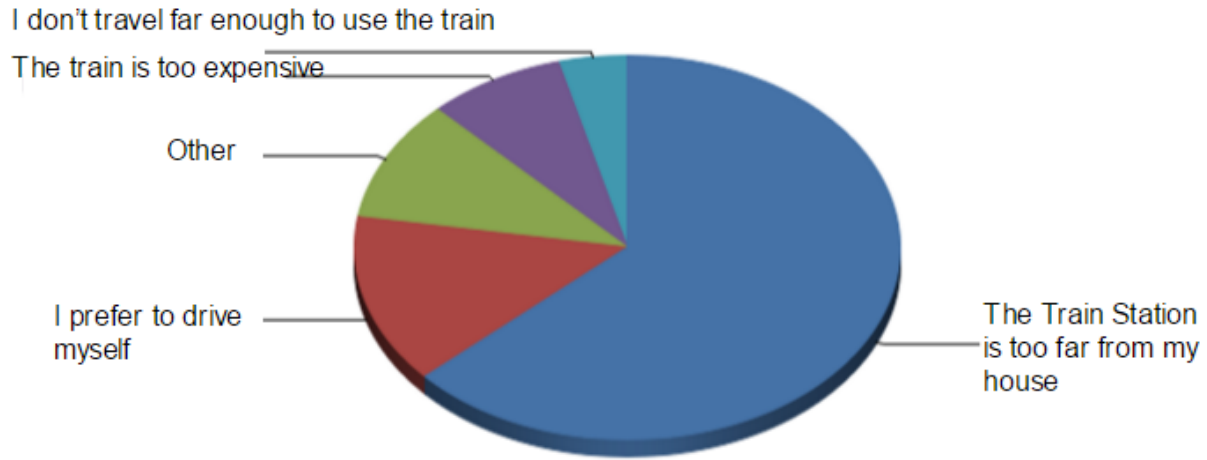


Table 4: Why don't you take the train? - Canadian Residents



The general consensus drawn from our responses is the current station options are simply too inconvenient. Over 50% of respondents on both Table 3 and Table 4 feel that the current stations are too far from the passenger's homes. We gave our respondents an opportunity to type their reasoning if they chose the "Other" option, and the responses led towards a similar conclusion. Whether it be a timing inconvenience or a departure/arrival scheduling issue, almost all responses we received from those who currently do not ride the train say this is due to inconvenience.

We know that this significant population is not riding the train, and we are starting to get an idea of why. However, we also need to know a few things about the travel habits of those who *have* taken an Amtrak. For those that responded "Yes, I have taken an Amtrak Train" we need to know how often they ride the train per year.

Table 5: How Often Do You Take the Train? - American Respons

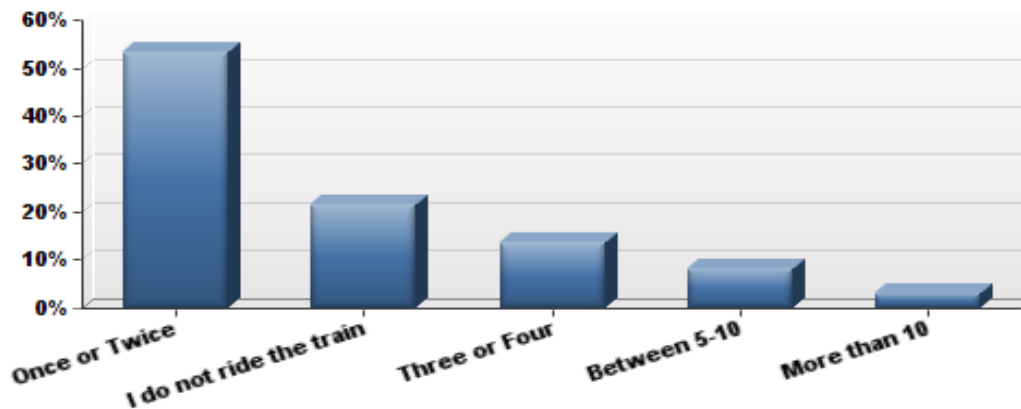
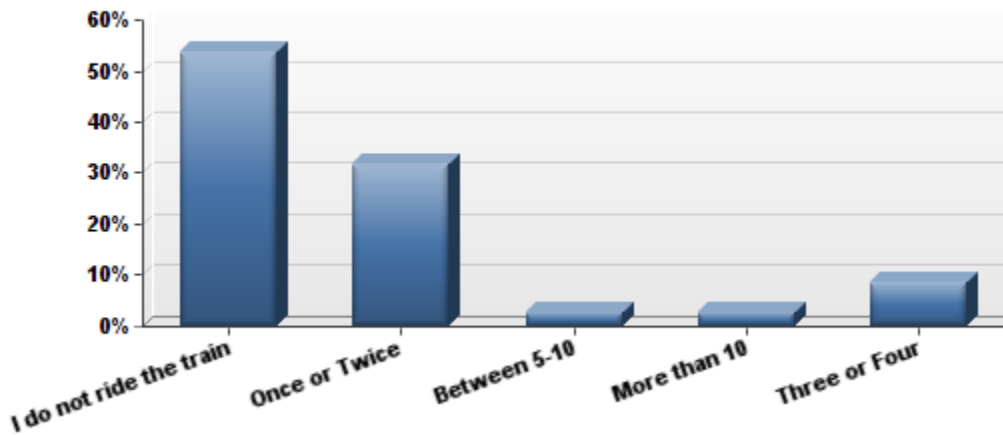


Table 6: How Often Do You Take the Train? - Canadian Response



As shown in the first two bars of Table 5 and Table 6, a majority of those riding the train are only doing so once or twice per year. This low frequency begs the question of whether there will be enough ridership to justify the cost of a station in Blaine.

Business or Pleasure?

Table 7: American Response

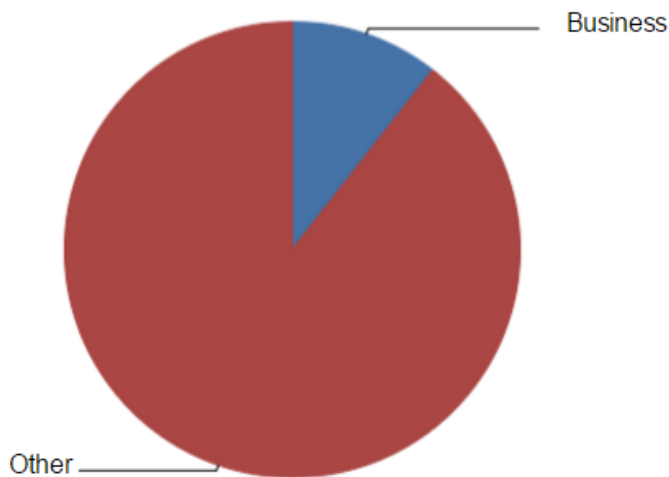
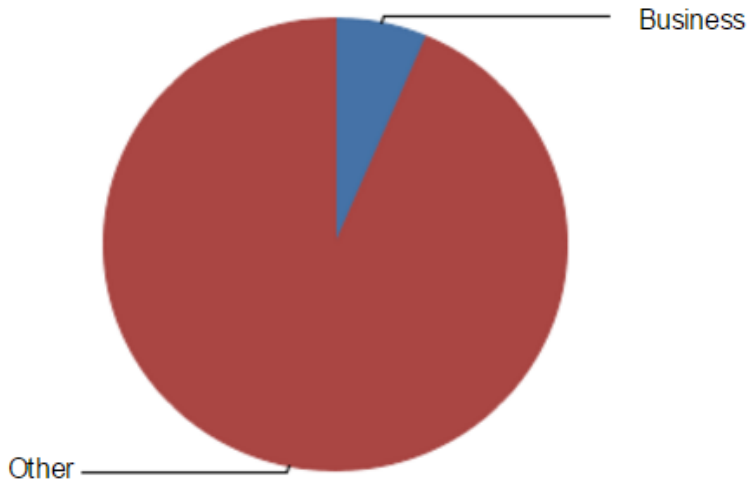


Table 8: Canadian Response



Our immediate assumption upon creating this survey was that a large portion of our target demographic would be those traveling for business purposes; travelers that would potentially use the train once a quarter or even once a month for business trips.

Almost all of the respondents stated they would not be using the train for business purposes. Due to our large sample of responses, this leads us to believe that there might not be a large market of business travelers willing to take the train. To proceed in attracting business ridership in the future, further investigation should be undertaken to specifically gauge what business travelers want and need in regards to train travel.

Why Do You Take the Train?

Table 9: American Response

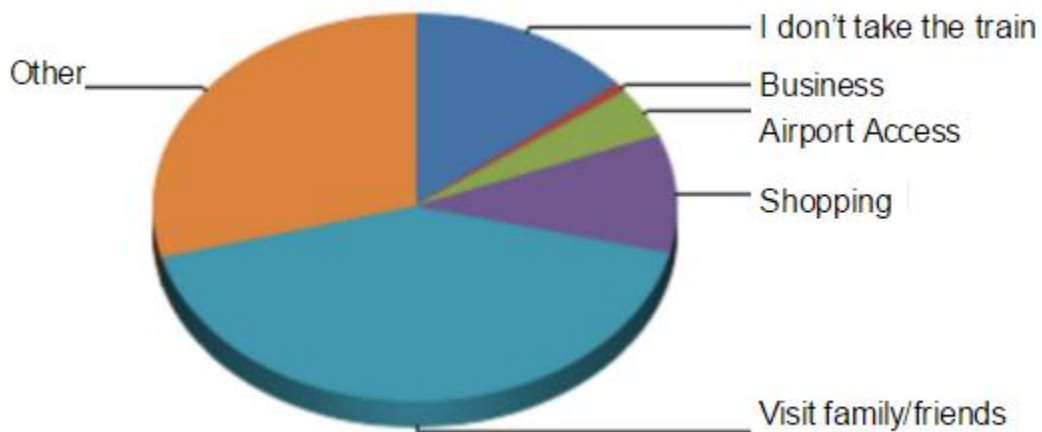
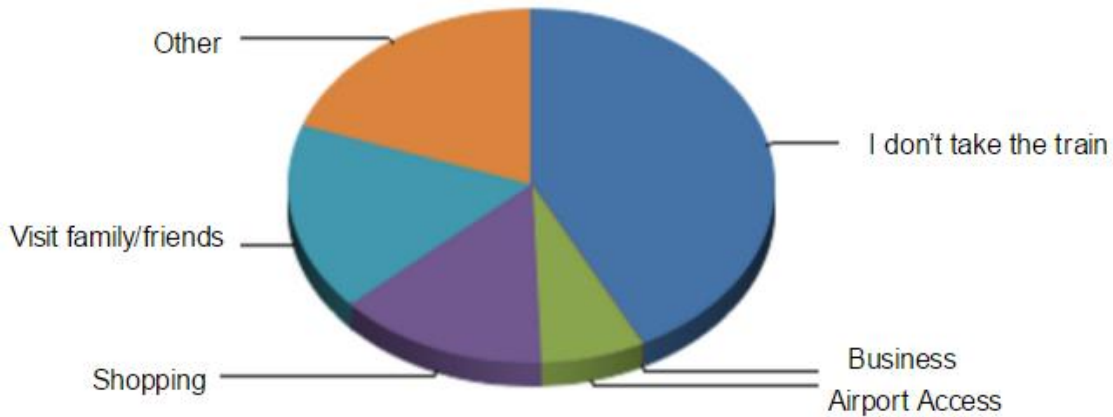


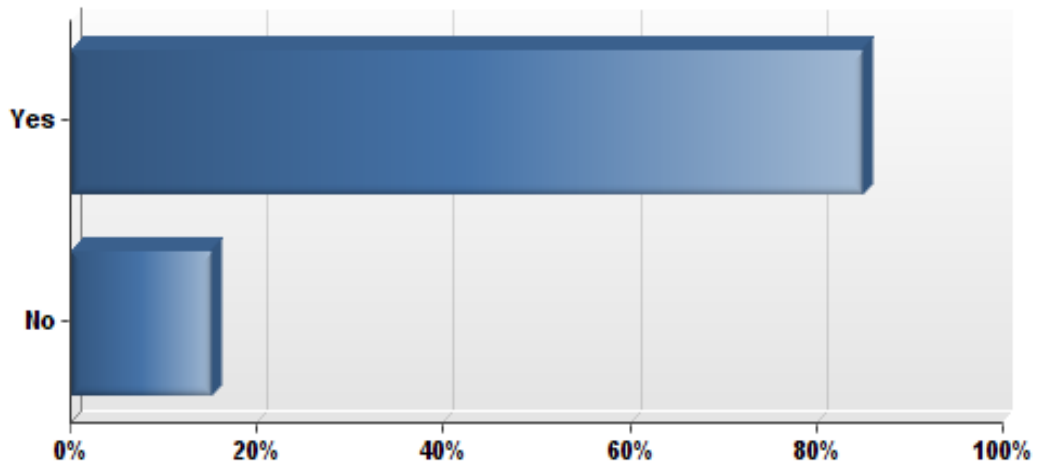
Table 10: Canadian Response



We asked whether our respondents were taking the train for business or leisure purposes, and our responses were almost exclusively leisure. The largest portions of Table 9 and 10 show passengers are riding the train for leisure activities such as shopping and visiting relatives. Again, respondents were given the opportunity to type in a response if they chose “Other”. These were largely leisure activities such as traveling to sporting events, concerts, vacationing, etc. This reinforces the market we reached is riding the train only once or twice per year solely for leisure purposes.

If there were to be a station in Blaine, would you take the train?

Table 11: American and Canadian Responses



Most importantly, our survey was intended to find whether or not people would feel more inclined to ride the train with a station in Blaine. For those of us who would like a station in Blaine, we received

exactly the response we were looking for. An overwhelming 80% of all who responded believe that if there were to be a station in Blaine they would feel more inclined to take the train. If passengers speculate that they are more likely to ride the train from Blaine, we need to know at what level of frequency.

How often per year would you take the train from Blaine?

Table 12: American Response

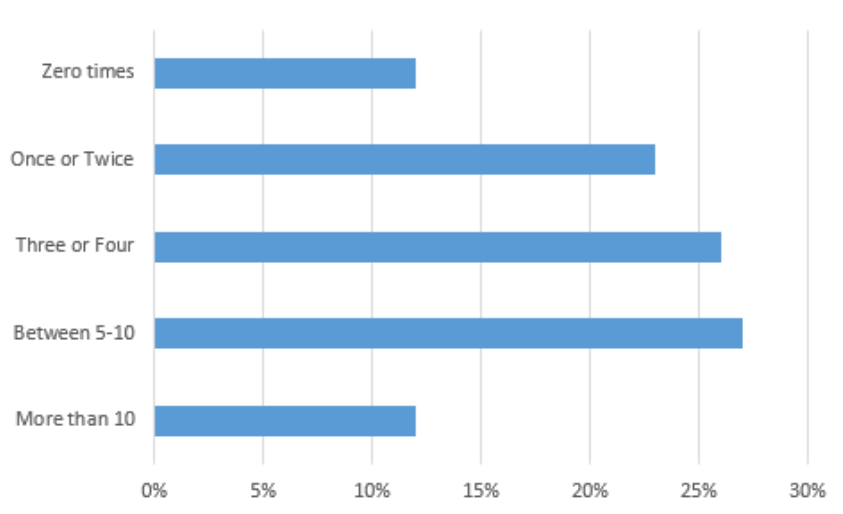
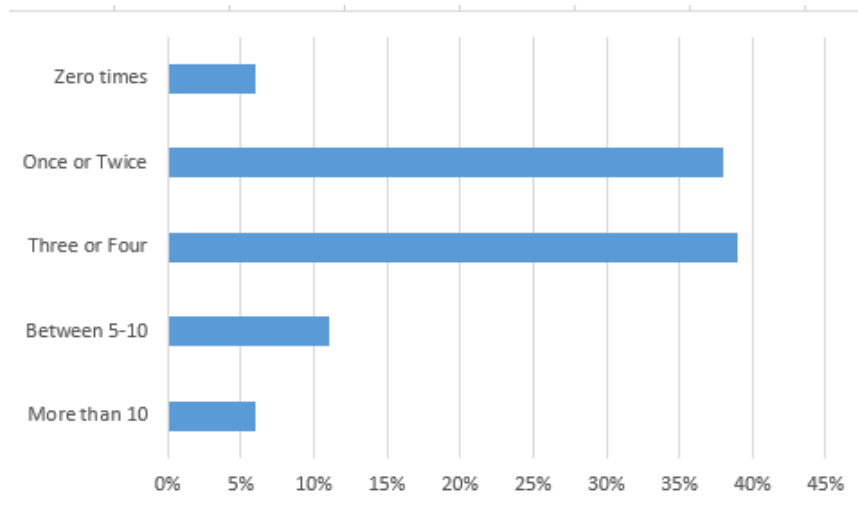


Table 13: Canadian Response



These results are overwhelmingly optimistic. Respondents believe they will increase their usage from one to two times per year, to three, four, maybe even five or more trips with the added station in Blaine. It is important to note that these results are merely speculations made by the respondents and are subject to exaggeration. It is important to note that if a significant proportion of the total population amounting to over 1 million residents in the lower mainland and Blaine area start to ride the train even

just once or twice a year, this could potentially generate a high level of ridership frequency and become a lucrative market for Amtrak.

What would make you ride the train more from Blaine?

Table 14: American Response

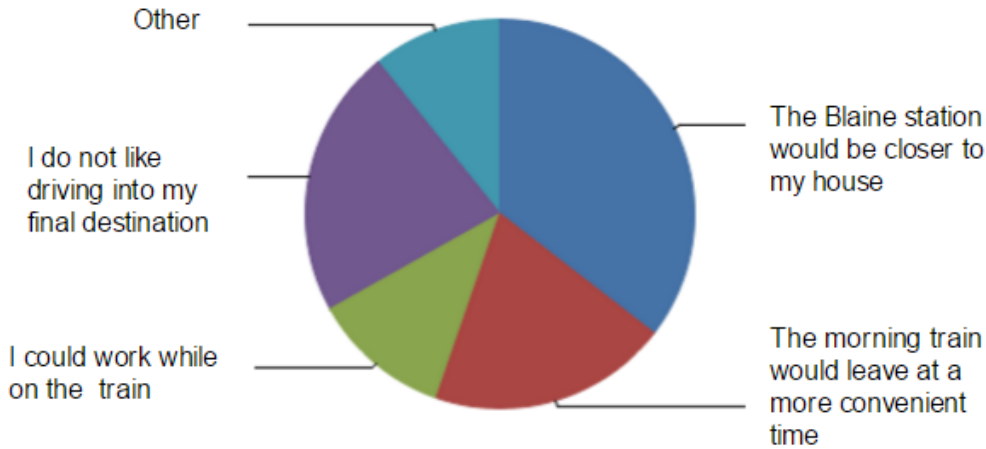
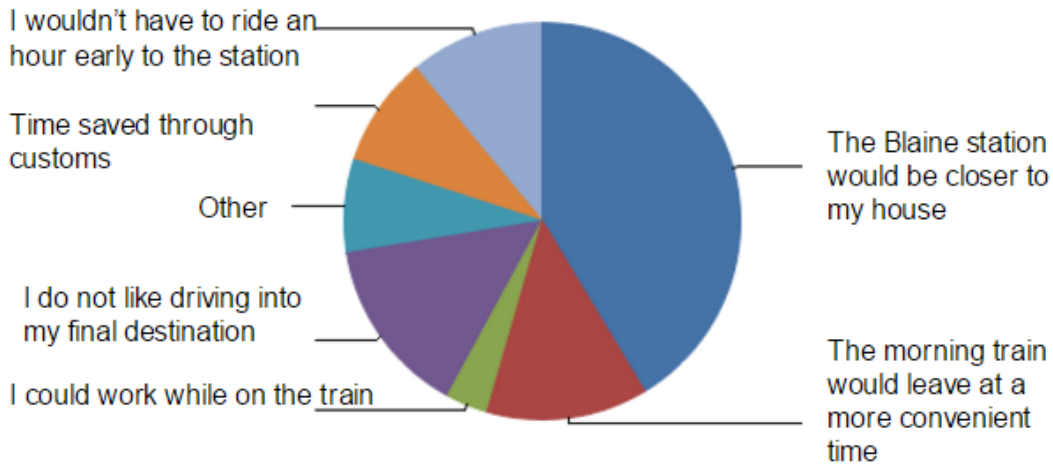


Table 15: Canadian Response



Exactly as expected, these potential new commuters believe they would ride the train more often because it will be more convenient. The large blue section of the chart in both Table 14 and 15 show that residents would ride more because the station in Blaine would be closer to their residence. The large red section shows the train leaving at a more convenient time. Collectively these two pieces alone account for over 50% for both the Canadian and American residents. These results show that the biggest incentive for potential customers is convenience, and a Blaine station would be able to meet that need.

Statistical Conclusions

From the data collected by our 929 respondents, we can draw a few statistical conclusions.

- Current riders of the train are using the train about once or twice per year.
- They are riding for leisure purposes such as going to sporting events and shopping.
- A main reason why people are *not* riding the train is due to the inconvenience of the large distance to the nearest station as well as scheduling conflicts.
- Just about 80% believe they would utilize the station in Blaine because it would be more convenient. We believe with an added station in Blaine we will be able to attract more riders; however, they too will only be riding the train between two and four times per year for leisure purposes.
- There is little doubt that the Blaine station will be used. This data just begs the question of how frequently the added station will be used.

Final Thoughts

In response to the open comment portion on our survey, we received a large amount of positive feedback regarding how a station in Blaine would be received by the community. Many respondents who live in the area mentioned the inconvenience of getting to either Vancouver or Seattle for train travel, and felt that a station in Blaine would increase the likelihood that they will utilize the train. The convenience and proximity of the Blaine station were the biggest incentives according to our respondents. Respondents stated that the Vancouver and Bellingham stops were too far or inconvenient, but felt that a stop in Blaine would cause them to ride the train more frequently.

The distance between the Vancouver stop and the Bellingham stop is one of the longest stretches on the northwest Amtrak line. This begs the question of whether Amtrak is really serving all its potential customers, and whether they are not tapping a possibly lucrative market in the lower mainland and border area.

If Blaine is to apply for a station, it will have to explain to Amtrak how the train will make up the time from the stop at Blaine. Called, 'mitigation,' this cost will have to be considered in any analysis of the Blaine station. Leavenworth, in building the case for its station, was able to combine local, state and national funding sources for the mitigation. There is also the possibility of removing a lesser used station from the line to make way for the market at the Blaine station.

After looking over our survey results, we think it is obvious that most train riders are currently using it for leisure purposes, and the number of riders using it for business travel is a very small portion of users. If this research is continued, it would be important to reach those who travel frequently between Vancouver and the surrounding area to southern destinations and find out what would motivate them to use the train more frequently. Since the respondents declared that they would be using the train for leisure purposes, it is unclear whether this would create enough rider frequency to warrant a station in Blaine. However, if a large portion of the entire 1 million population of the lower mainland rode once or twice a year, than it could be a lucrative market for Amtrak. Marketing research shows a lack of understanding in products people have not yet been exposed to or experienced. The use of this

potential station could be lower or higher than projected. Once passengers realize the great convenience of this new station it is also quite possible it be used more than projected.

Despite the great benefits it brings to Canada, the Canadian government does not currently give any funding towards the operation of the AMTRAK trains between Vancouver and Seattle. If more Canadian customers rode the train from a Blaine stop, the States of Washington and Oregon would have a better chance of getting Canadian officials to collaborate and provide support for the AMTRAK service from Vancouver to Seattle.

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