BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

THE BURLINGTON NORTHERN AND SANTA FE RAILWAY COMPANY, Petitioner, v. SNOHOMISH COUNTY, Respondent.	)	Docket No. TR-010194 Volume IV Pages 114 to 342

A hearing in the above matter was held on October 11, 2001, at 9:30 a.m., at 600 - 128th Street Southeast, Everett, Washington, before Administrative Law Judge MARJORIE SCHAER.

The parties were present as follows:

THE COMMISSION, by JONATHAN THOMPSON, Assistant Attorney General, 1400 South Evergreen Park Drive Southwest, Olympia, Washington 98504-0128, (360) 664-1225, jthompso@wutc.wa.gov.

THE BURLINGTON NORTHERN AND SANTA FE RAILWAY COMPANY, by ROBERT E. WALKLEY, Attorney at Law, 20349 Northeast 34th Court, Sammamish, Washington 98074-4319, (425) 868-4346, rewalkley@earthlink.net.

SNOHOMISH COUNTY, by JASON CUMMINGS, Attorney at Law, 2918 Colby Avenue, Suite 203, Everett, Washington 98201, (425) 388-6332.

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION, RAIL DIVISION, by JEFFREY STIER, Assistant Attorney General, 905 Plum Street, Building 3, 3rd Floor, P.O. Box 40113, Olympia, Washington 98501, (360) 753-1623, jeffreys@atg.wa.gov.

Joan E. Kinn, CCR, RPR
Court Reporter

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JAMES BLOODGOOD

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P R O C E E D I N G S

JUDGE SCHAER: Let's be on the record. We're here this morning for a hearing in Docket Number TR-010194, which is a filing by Burlington Northern and Santa Fe Railroad seeking permission to close a railroad crossing at 156th Street Northeast in the Lakewood neighborhood by Marysville, Washington. We are convened at the WSU Cooperative Extension office in Snohomish County. I am Marjorie Schaer, and I am the Administrative Law Judge assigned by the Commission to this proceeding.

I would like to note that we had scheduled a continuation of yesterday's prehearing conference to take place in this room between 9:30 and 10:00 where we were going to use our time in order to identify exhibits and mark those exhibits. We did that informally and did not convene that prehearing conference, so if anyone is reading yesterday's transcript and wondering if there is something missing, there is not. We are going directly to the hearing this morning.

I am going to start by taking a brief appearance by counsel. We had complete appearances yesterday, so I'm going to ask you just to state your name and who you represent, and then I'm going to go through the exhibit list that we have compiled and mark

for identification the exhibits and then find out if there is a stipulation that would allow those exhibits to be admitted.

So let's start with you, Mr. Walkley.

MR. WALKLEY: Your Honor, thank you, my name is Robert E. Walkley, W-A-L-K-L-E-Y, Attorney at Law, 20349 Northeast 34th Court, Sammamish, Washington 98074-4319, telephone and fax number is (425) 868-4846, and I'm here representing the Commissioner of the Burlington Northern and Santa Fe Railway Company.

JUDGE SCHAER: Thank you.

Mr. Stier.

MR. STIER: My name is Jeff Stier, Assistant Attorney General, representing intervenor Washington State Department of Transportation, Rail Division. My address is --

JUDGE SCHAER: And I don't need the rest of the appearance.

MR. STIER: Oh, okay, great.

JUDGE SCHAER: Because I got that yesterday.

MR. STIER: Thank you.

JUDGE SCHAER: Mr. Cummings.

MR. CUMMINGS: Good morning, Your Honor, Jason Cummings present on behalf of Snohomish County.

JUDGE SCHAER: Thank you.

MR. THOMPSON: I'm Jonathan Thompson, Assistant Attorney General, representing the Staff of the Washington Utilities and Transportation Commission.

JUDGE SCHAER: Thank you.

Are there any preliminary matters before we get started with dealing with exhibits?

Hearing none, then I'm going to direct the attention of everyone in the room to a document with Mr. Walkley's name at the top left-hand corner, today's date, and the heading BNSF Exhibit List. And actually, I'm not going to do that yet.

First I'm going to look at the document which was provided by Mr. Stier this morning, which says WSDOT's Exhibit List and on it describes Exhibits 1 through 13. Unless anyone sees a benefit to me reading these into the record, I'm merely going to give a copy of this list to the court reporter and have her list the exhibits from this information. We do need that in the record. I don't think we need to go through them one at a time unless someone sees a benefit to that.

And hearing no one clamoring for me to read this list, then I am going to ask the parties present if there is any concern about these documents or whether anyone wants to propose a stipulation at this point.

MR. CUMMINGS: Your Honor, I propose we

stipulate to accept all of these into the record. I believe all counsel have discussed this matter and agreed to all the exhibits today.

JUDGE SCHAER: Is that everyone's understanding, that all of these exhibits may be admitted at this point?

Thank you, Exhibits 1 through 13 are admitted.

(The following exhibits were identified in conjunction with the Washington State Department of Transportation.)

Exhibit 1 is Resume of Jeffrey Schultz. Exhibit 2 is Statutory Authorities for Intercity Passenger Rail Program. Exhibit 3 is WSDOT Amtrak Cascade Plan. Exhibit 4 is WSDOT Amtrak Cascade Executive Summary. Exhibit 5 is RR-00152 - WSDOT/BNSF Agreement for High Speed Rail Corridor Improvements. Exhibit 6 is Synopsis of Seattle-Vancouver BC Corridor Improvement Expenditures through June 2001 under RR-00152 and Projected Ten Year Corridor Improvement Budget. Exhibit 7 is Detail of Projected Ten Year Corridor Improvement Budget - North and South of Seattle. Exhibit 8 is Snohomish GMA Planning Policies. Exhibit 9 is Map Portfolio - Snohomish GMA Planning

Policies. Exhibit 10 is Summary of Key Snohomish GMA Planning Policies. Exhibit 11 is Summary of English Siding Coordination Activities. Exhibit 12 is 156th St NE BNSF Railway Crossing Closure Traffic Analysis with Addendum 1. Exhibit 13 is Resume of Gary Norris.

JUDGE SCHAER: Next we will turn to the page discussed from Mr. Walkley, which says at the top BNSF Exhibit List with today's date. On that printed sheet we have identified Exhibits 21 through 33, and I'm going to add to that list at this point Exhibit 34 for identification, which will be a late filed exhibit, which will be the Burlington Northern and Santa Fe response to the letter that is at present identified as Exhibit 43, and that response will be due by October 31st of this year.

Is there any objection to the admission of any of those documents, including the late filed exhibit?

Hearing none, those documents are admitted.

(The following exhibits were identified in conjunction with the Burlington Northern and Santa Fe Railway Company.)

Exhibit 21 is DOE Petition of August 23 and

attachments Nizam letter to Stigall; Cummings letter to Ritchie; Walkley letter to Ritchie; Revised SEPA Checklist (Aug 01); JARPA "Project Submittal Documents" booklet. Exhibit 22 is Aerial Photograph of 156th area. Exhibit 23 is Project Area Schematic. Exhibit 24 is six Schematic Charts and one "Train Graph". Exhibit 25 is June 2, 2000 "Alternatives Report". Exhibit 26 is Railroad Safety Statistics Annual Report 2000. Exhibit 27 is BNSF Grade Crossing Closure Program brochure. Exhibit 28 is FRA Hwy-Rail Crossing Consolidation brochure. Exhibit 29 is City/County Agreement and print. Exhibit 30 is Photos of 156th and 172nd crossings. Exhibit 31 is Hwy-Rail Grade Crossing Accident Reports (2). Exhibit 32 is "Using Data Produced by WBAPS". Exhibit 33 is US DOT - AAR Crossing Inv. Information (4).

JUDGE SCHAER: Next I would like to turn to the exhibit list prepared by Mr. Cummings on behalf of Snohomish County, and I'm going to work from the WSDOT exhibit list that reflects those and check with Mr. Cummings to see that those are properly represented on this list.

Have you had a chance to check that list?

MR. CUMMINGS: I haven't completely

confirmed, but I imagine I can just run down them rather quickly.
It's correct, Your Honor.
JUDGE SCHAER: Thank you, so we have the items identified as Exhibits 41 through 58.
MR. CUMMINGS: And actually, Your Honor, there's a 59 that --
JUDGE SCHAER: I'm getting there.
MR. CUMMINGS: Oh, okay.
JUDGE SCHAER: And then this morning another exhibit was distributed by Mr. Cummings which I marked for identification as Exhibit 59, and it is a document entitled Engineering Design and Development Standards with a date of 6-01.
MR. CUMMINGS: It's actually a section number.
JUDGE SCHAER: I'm sorry, with a section number, thank you, 6-01.
Have all counsel seen that document and had a chance to review it?
MR. STIER: I have seen it.
JUDGE SCHAER: Okay, is there any objection to admission of any Exhibits 41 through 59?
Hearing none, those documents are admitted.

(The following exhibits were identified in conjunction with Snohomish County.)

Exhibit 41 is 156th St NE Closure Vicinity. Exhibit 42 is 5/09/01 Bob Carden, Marysville Chief of Police, letter to UTC. Exhibit 43 is 9/27/01 Stigall letter to Nizam re: Comments upon BNSF's revised SEPA checklist. Exhibit 44 is 6/89 - Design Manual, Ch. 930 - Railroad Grade Crossings. Exhibit 45 is 5/09/01 Greg Corn, Marysville Fire Chief, letter to UTC. Exhibit 46 is NFPA 1710 - fire suppression standards. Exhibit 47 is 12/24/91 Everett Herald article re: derailment. Exhibit 48 is 9/24/01 SnoCo Sheriff letter to UTC. Exhibit 49 is 6/28/01 Lakewood School District 306 comment letter to UTC. Exhibit 50 is DOT RR Crossing Information Form. Exhibit 51 is 1/21/00 Amtrak/DOT meeting minutes. Exhibit 52 is FRA Guide to Rail Crossing Consolidation and Closure. Exhibit 53 is 3/22/00 Schultz e-mail. Exhibit 54 is 3/2/00 DOT Crossing Closure report with SnoCo comments. Exhibit 55 is 6/23/00 Kirk Fredrickson e-mail re 1103C application. Exhibit 56 is WB Accident Prediction System report - data through 12/31/99. Exhibit 57 is Land Use General Policy Plan. Exhibit 58 is SnoCo GMA Future Land Use map.

JUDGE SCHAER: Finally, we have received from Commission Staff two documents that were marked yesterday as Exhibits 61 and 62, and those are identified on the exhibit list, and we have discussed this morning marking for identification and admitting as a late filed exhibit Exhibit 63, which would be the Washington Utility and Transportation Commission's SEPA threshold determination involving the crossing that is the subject matter of this hearing as well.

And the process we have discussed there is that that document should be filed as late filed Exhibit 63, and that from the date that that is filed, we will have a ten day period during which parties may review that, and if they wish to seek to add additional information into the record, they may contact the other parties and me regarding that. And if the ten days pass and I have not heard from anyone, then the record will close at that point. If on the other hand there are requests to put in responses, we will at that time discuss a time line for those and when that record would close.

Is there any objection to the admission of 61, 62, or late filed 63 with that understanding?

MR. STIER: I only have one comment, and my -- the WSDOT exhibit list has misnumbered those items,

and I assume you have corrected that.

JUDGE SCHAER: I have on my copy, yes.

MR. STIER: Okay.

JUDGE SCHAER: I have identified them as 61, 62, and 63. Thank you.

I believe there was some discussion yesterday about a stipulation regarding use of the some of the documents. Is there something that needs to be said on the record regarding that?

MR. CUMMINGS: I don't believe so, Your Honor. It's been admitted into the record, all exhibits have been admitted into the record, and counsel can make whatever arguments they deem appropriate as to the weight of the exhibit.

JUDGE SCHAER: Okay, thank you.

Then, Mr. Stier, are you ready to call your first witness?

MR. STIER: Yes, Your Honor, thank you, call Jeff Schultz.

JUDGE SCHAER: Mr. Schultz.

Whereupon,

JEFFREY SCHULTZ,

having been first duly sworn, was called as a witness herein and was examined and testified as follows:

JUDGE SCHAER: Thank you, your witness is sworn, Mr. Stier.
MR. STIER: Off the record, Your Honor?
JUDGE SCHAER: Yes.
(Discussion off the record.)

D I R E C T E X A M I N A T I O N

BY MR. STIER:

Q. Mr. Schultz, would you please identify yourself for the record?
A. My name is Jeffrey, J-E-F-F-R-E-Y, Schultz, S-C-H-U-L-T-Z.
Q. And what is your occupation?
A. I am the rail operations and technical expert for the Washington State Department of Transportation.
Q. And what do you do in those duties?
A. My job at the Washington State Department of Transportation involves working with Amtrak, the Burlington Northern and Santa Fe Railway, in the improvement of rail passenger and freight service within the state of Washington. Some of my duties include working specifically with the Washington Utilities and Transportation Commission regarding speed and grade crossing issues, contracting with Amtrak, Burlington

Northern to provide services for the state of Washington. I am also the project manager for passenger equipment acquisition.

Q. Are you familiar with the resume' that's been attached as Exhibit 1, your resume'?

A. Yes.

MR. STIER: Pardon for the inconvenience, but I think we're just going to have to set up shop here, Your Honor.

JUDGE SCHAER: That's fine as long as you stand if such a way that Mr. Walkley can see.

MR. STIER: All right.

JUDGE SCHAER: If you want to angle that table out a little bit, you may.

MR. STIER: Okay, great, thank you, I appreciate that.

BY MR. STIER:

Q. What's your involvement in this matter?

A. We have been working -- the rail office has been working in conjunction with Amtrak and Burlington Northern and Santa Fe to improve rail passenger general service between, specifically in this case between Seattle and Vancouver, B.C. as part of our overall rail improvement project.

This specific issue revolves around a siding

extension at a railroad location by the name of English and associated with a Railroad crossing, a grade crossing closure.

Q. Now what's the source of DOT's authority to be involved in this project, which is essentially development of a BNSF right of way?

A. The Department of Transportation was authorized under RCW 47.79 to incrementally improve rail passenger service between Seattle, Vancouver, B.C., and Portland as part of an incremental rail improvement project within the state.

Q. And what exactly is the legislative intent expressed in 47.79 that guides your activities?

A. To incrementally improve the rail passenger service on existing rail lines, to provide high quality intercity rail passenger service to people, residents of Washington state.

Q. Now does it -- have there been appropriations in that regard?

A. Yes, there have.

Q. And how long has this program been in existence?

A. This program got its start basically in 1993 through the legislature at that time.

Q. And what is the ultimate goal expressed by

the legislature with regard to this program?
A. The legislative intent has been to have improved rail passenger service between our major metropolitan areas, specifically to reduce travel times and so forth. But our current level of plans are to have two and a half hour service between Seattle and Portland with 13 round trips and carrying approximately in our estimates 2.2 million passengers annually.
Q. And what kind of speeds would be required to achieve that goal?
A. Our plan currently envisions 110 miles per hour as the top operating speed within this corridor.
Q. And with respect to --
MR. STIER: Your Honor, I would like to bring your attention to Exhibit 2, which is statutory authority for the program.
JUDGE SCHAER: Yes.
BY MR. STIER:
Q. Now on Exhibit 2, there is also reference to RCW 47.82. I'm sure you're familiar with that source of authority as well?
A. Yes.
Q. And what does that relate to?
A. RCW 47.82 relates to working in conjunction with Amtrak in determining -- in terms of improving

Amtrak rail passenger services and improving services in conjunction with the local jurisdictions in the state of Washington.

Q. Okay. And are you working with Amtrak in regards to the English south siding?

A. Yes.

Q. Okay. And what is the nature of that working relationship on that project?

A. In this particular case, Amtrak received a appropriation several years ago to make improvements on this section of the Burlington Northern and Santa Fe rail line between Everett and Vancouver, British Columbia. And Amtrak's appropriations have been going towards in this specific case the English siding extension, which is a project that we have all agreed to. I should say -- I should explain that, we meaning the Burlington Northern and Santa Fe, Amtrak, Washington State Department of Transportation Rail Office agreed that this is necessary for enhanced rail passenger service on this line.

Q. Okay. Now I'm going to refer you to Exhibit 3, could you briefly describe that and Exhibit 4 and what the purpose of those documents are?

A. Yes. Exhibit 3 is the Amtrak Cascade's plan for Washington state, 1998 2018 update. This is a plan

that the rail office has been -- has developed and been updating on a regular basis since 1998 that outlines the specific objectives and goals for the intercity rail passenger program within the state of Washington, and it outlines service levels, ridership, costs and expenses, and basically a capital plan for investment to enable the legislatively mandated project to move forward. Exhibit 4 is an executive summary of the plan, basically a condensed version of that.

Q. Now does the plan have the specificity to refer to the English siding project?

A. It's mentioned in the plan as one of the projects that needs to happen to improve rail passenger service as part of the incremental improvement program that must occur to enable more and faster intercity rail passenger service to occur on this line.

JUDGE SCHAER: Can you give me a reference to which page, please.

THE WITNESS: Just a moment, Your Honor.

JUDGE SCHAER: Thank you.

THE WITNESS: Your Honor, it's mentioned generally on page 17 where we talk about siding and siding extensions, first off.

JUDGE SCHAER: Thank you.

THE WITNESS: And also on, Your Honor, it's

mentioned on page 22 in the bullet points on the right-hand column under English siding extension in Snohomish County.

JUDGE SCHAER: Thank you.

MR. STIER: Excuse me, Your Honor, do you have any further questions on that?

JUDGE SCHAER: No.

BY MR. STIER:

Q. So, Mr. Schultz, so what -- so this project involves a siding extension. Can you tell me a little bit more about what a siding extension is?

A. Yes. A siding is a location where trains meet and can pass each other on a single track railroad. Some railroads have one set of tracks, some railroad lines have two sets of tracks. This particular rail line between Everett and Vancouver, B.C. is classified as a single track rail line, which means that there are one set of tracks that trains run on in both directions. And on occasion, the trains will need to meet and pass, and so siding -- passing tracks called sidings are constructed that allow one train to move to another track and allow trains to pass.

Q. Okay. Now with reference to the Seattle to Vancouver, B.C. aspect of the project, I would like you to identify Exhibit 5, what that document is.

A. Exhibit 5 is an agreement between the Washington State Department of Transportation and Burlington Northern Railroad, which is the predecessor of the Burlington Northern and Santa Fe Railway, and it's Contract Number RR-0152.

Q. And what does that document do?

A. This agreement is a fixed facility agreement to improve the Burlington Northern and Santa Fe rail line between Seattle, Washington and Vancouver, British Columbia.

Q. Is this the document that is the vehicle for State investment of public money into this line?

A. This is the vehicle for this specific line, yes, this is the vehicle.

Q. Okay. Is this document the vehicle for the investment of Amtrak moneys, or is that handled by a separate document through -- between BN and Amtrak?

A. There is a separate agreement between BN and Amtrak for that portion of the investment.

Q. Now are there federal matches involved in these State investment of moneys in the corridor?

A. In this particular agreement, there was -- there was no federal match in this specific agreement. There were some federal rail crossing funds that had flowed through the agreement, but it wasn't a specific

match. The overwhelming majority of the funds in this agreement were State dollars.
Q. I see. And is there a -- is this agreement still in effect?
A. Yes, it is.
Q. And is this agreement going to be extended, or is there a new agreement being formulated?
A. This agreement has been extended several times and I believe is being -- in the process of being extended and to modify and incorporate additional improvements in the future.
Q. Would the improvements at English south be within the scope of this agreement or the new replacement agreement?
A. This agreement the way it was laid out originally incorporated specific lists of improvements that needed to happen for additional rail passenger service to occur, and contained within this is an obligation by the State to extend English siding as part of the overall packet of rail passenger improvements funded by the State. And as a result of that, the Burlington Northern and Santa Fe would allow additional rail passenger service to occur on their line.
Q. So with reference to -- please explain Exhibits 6 and 7, if you would.

A. Yes, Exhibit 6 is a briefing paper that was provided to Governor Locke and his staff regarding -- showing what we would like to do and provide a background and budget request for the future to enhance rail passenger service between Seattle and Vancouver. So this was provided to the governor and his staff requesting additional funding for the rail line in the future.

Q. Can you explain, go to page, excuse me, on Exhibit 6, go to the box chart on page two and explain what that is.

A. Yes, the box -- the table contained at the bottom of the page is a table that indicates the current -- the 2001 budget, what we call the current law budget, for the next ten years that -- as well as a next ten years governor's new law, which was a request by the governor for additional funds for the intercity rail passenger program. And within this, the rail office and the Department of Transportation as approved by the Washington State Transportation Commission have requested over $32 Million for improvements for this specific rail line.

Q. North of Seattle?

A. North of Seattle, between Seattle and Vancouver, B.C.

Q. And so it says under the current law, are you referring to the 2001 session as extended?
A. Yes.
Q. And so there was no additional appropriation in the last session for this?
A. That is correct, there was no additional funding provided.
Q. So the source of the funding though is -- relates to the prior period, the source of the funding, excuse me, for this project relates to the prior period, 2001-2003 biennial?
A. The source of funding for the existing English siding project?
Q. Yes.
A. Yes, it relates to funds that were provided prior to this time period.
Q. Okay. And so there is State funding involved for administration?
A. There was some minor State dollars in the English siding project for design that was expended prior to the end of this biennial.
Q. And then the balance of the actual construction and so forth is funded by Amtrak?
A. That is correct.
Q. Okay. Please look at Exhibit 7 and explain

what that is.
A. Exhibit 7 is a spreadsheet that has been provided to the governor and the legislature outlining how the -- and this is the ten year rail passenger capital improvement plan. This has been approved by the Department of Transportation. And this is, if you will, an expenditure plan for the next ten years that the DOT rail office has developed to improve rail passenger service on the Pacific Northwest rail corridor.
Q. Now this is north and south, correct?
A. That is correct. This covers from the entire Pacific Northwest rail corridor, the entire rail line from Vancouver, B.C., Seattle, down to Portland.
Q. And is this particular project referenced in this list?
A. In this specific list, this specific project, the specific English siding extension is not referenced as a new project. It's a project that is assumed to be completed very shortly.
Q. So in other words, once again, this list is prospective for the 2001 to 2003 biennium and thereafter?
A. Right, this project is looking out in the future ten years to outline how and why and where the rail passenger program will go and what logical list of

improvements would be invested in by the State as part of our comprehensive rail passenger improvement plan.
Q. And so the funding in relation to this project is in existence and in place and precedes the extended funding that's referenced on page one, correct?
A. Correct.
Q. Okay. In these two exhibits, is there a summary of preexisting expenditures into the line?
A. Yes, there are in Exhibit 7.
Q. 6?
A. 6, I'm sorry, Exhibit 6, the Amtrak Cascade's Seattle - Vancouver, B.C. upgrade's paper, the State has invested since 1993 more than $125 Million in completing a logical series of safety improvements in tracks, station, train service, equipment upgrades, and so forth over the last eight years.
Q. Would this be within the borders of the State of Washington?
A. Yes.
Q. And from Vancouver, Washington to Blaine?
A. That is correct.
Q. Okay. And that's State money, not federal money?
A. That is correct.
Q. Okay.

A. To the extent that there has been some minor federal grade crossing dollars in that as well, but the overwhelming majority of the funding here has been State.

Q. All right. So let's talk a little bit about English siding specifically. I would like to refer you to the County's Exhibit 41, and I recognize it's the County's exhibit, but are you familiar with what that exhibit depicts?

A. Yes, I am.

Q. And what does it depict?

A. The exhibit is a map of the general location of the area around 156th Street Northeast in Snohomish County, and it indicates the location of the rail line as well as the location of the 156th Street Northeast and where that would be closed.

Q. Okay. And so can you describe the extent of the proposed improvements with reference to Exhibit 41?

A. Yes. The -- on Exhibit 41, there is a rail line marked BNSF that traverses generally from the bottom right corner of the page to the top left-hand corner of the page. The siding is located from approximately just north of 172nd Street Northwest on the map and extends in a southerly direction, southeasterly direction to approximately the location of

156th Street. That's the location of the existing siding. The siding -- the plans are for the siding to be extended south of that location to a location approximately adjacent to Interstate 5, where Interstate 5 crosses over the rail line.

Q. Okay. And so that would be to a location that would -- that is roughly somewhat north of 140th?

A. Yes, that's correct.

Q. As extended into Interstate 5 there?

A. Approximately, yes.

Q. Okay. And why is it necessary to make that extension?

A. It's necessary based on modeling and analysis by Amtrak, the State, the State's consultants, and Burlington Northern and Santa Fe. It was determined -- the existing siding was determined to be too short for the level of rail service that is occurring and will occur in the future. And in order to safely and quickly get freight trains out of the way of intercity rail passenger trains, the siding needed to be extended to accommodate the longer train lengths that are coming as well as -- so it would be lengthened so trains could easily pass there, both freight -- as well as freight and -- freight and -- freight trains as well as passenger trains.

And this will also enhance the overall capacity of this rail line. Rail lines have a limited or finite capacity. They can not hold an unlimited amount of trains. And certain sidings are some use to some trains, and sometimes they're too short for certain trains. So by extending the siding, it allows trains -- additional trains to operate on this line that -- as well as some longer trains and enable trains to meet and pass at this location, whereas otherwise they may not be able to because of their length and size.

So this is an overall project that will enhance capacity on the rail line and allow additional rail passenger as well as rail freight traffic to occur.

Q. So you say trains are increasing in length, that would be freight trains?

A. That is correct.

Q. And can you tell me, you know, what is the source of that comment? What facts do you derive that comment from?

A. That train lengths are increasing?

Q. Yes.

A. In our conversations with Burlington Northern and Santa Fe, they have informed us that their business from British Columbia has been growing over the past several years and that their trains are -- they are

lengthening their train lengths to accommodate this growth in business as it occurs as part of NAFTA and the overall growth in rail freight service.

Q. Okay. So if this siding is not extended, would the trains still be able to increase in length?

A. It would limit the ability of Burlington Northern and Santa Fe to operate those trains. Only certain sidings on this line are -- have adequate capacity to handle these trains, and you need to use those sidings to meet longer trains. And so without this siding extension, Burlington Northern and Santa Fe's ability to handle this increased business would be severely limited.

Q. So can you explain the relationship those considerations have to the passenger program?

A. The rail passenger program has been directed to incrementally improve the existing rail freight line, to use the existing rail line, if you will, more fully rather than build separate rail lines that are both expensive and environmentally difficult to build. And so by improving existing transportation facility, we're able to both -- there's benefits to both the passenger and freight sides of things as part of the incremental improvement project.

One of the objectives of the rail program is

not to degrade the freight service on these lines, because that's very economically important to our state for trade as well as our economic well being in this state. So it's -- we have always worked in cooperation with the Burlington Northern and Santa Fe, because they could say, no, we're not going to allow you rail passenger service because it adversely impacts our rail freight service. And so we need to work cooperatively and develop plans that work jointly for both rail passenger service as well as rail freight service so we can both coexist on this railroad.

Q. And you mentioned modeling, can you explain to me what that means?

A. Modeling is a process where the railroad and our consultant have examined existing traffic patterns, looked at the existing -- the physical layout of the rail line and using computer tools examined what would happen in the future with increases in both rail passenger service and rail freight service. What -- and through the modeling process, areas of constraint, areas of bottlenecks come forth and are indicated through this process of modeling that looks at -- that basically speeds up what we see every day out there over a process, you know, through the computer and then enables us to predict with a fair degree of accuracy what would

happen if we just -- if we added increased rail service. And through the modeling process, we can identify what areas are bottlenecks, and then we can improve those areas in a proactive manner.

Q. If this extension, siding extension or a siding extension in this vicinity is not completed in the near future, would that have impacts upon the passenger program?

A. Yes, it would. Our contract with the Burlington Northern and Santa Fe to operate our second train, which currently only goes to Bellingham from Seattle, this train could be discontinued if the siding extension does not occur.

Q. And why would that be?

A. It's one of the -- the siding extension is a requirement of the contract to enable that train to go on. And without that siding increment, the railroad could require that that train come off.

Q. Okay. And how often a day; is that a single run a day?

A. It's one round trip between Bellingham and Seattle daily.

Q. Okay. And is that roughly half the State train program?

A. There's another -- on this line, that's

roughly half, yes. There's one -- another round trip that goes between Seattle and Vancouver, B.C. over this rail line daily, so there are four passenger moves over this rail line each day.

Q. For the benefit of the Judge, could you indicate or briefly describe the capital, the capital assets that are owned by the State with regard to this program?

A. The State, several years ago the legislature provided $20 Million, approximately $20 Million for the purchase of two rail passenger train sets that operate on -- along this corridor. And so the State has -- owns two high speed passenger train sets that operate along this corridor.

Q. Those would be the Talgo trains?

A. Yes, they were built by Talgo.

Q. And can you explain briefly the relationship with Amtrak in terms of operation of those trains?

A. Amtrak has -- our relationship with Amtrak is one of a contractor. Amtrak is designated by federal law as the national rail passenger operator within the United States. They are -- and so they have, if you will, the national franchise to provide rail passenger service for the United States. The State is allowed to contract with Amtrak to provide additional service above

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and beyond their basic service level.
And Amtrak did not have service to Vancouver, B.C. in the early '90's and late '80's. They did prior to that point but discontinued it. In 1995, service was restored between Seattle and Vancouver, British Columbia through a contract with the State to operate that service with Amtrak.
Q. So in terms of passenger counts, do you have any information regarding the relative percentage of overall passengers in the corridor that relate to State as opposed to just Amtrak activities?
A. The State -- State supported trains carry a majority of the riders in the Northwest rail corridor. Well over half a million riders last year rode the we call it the Amtrak Cascade's service. It's a brand, if you will.
Q. And is that projected to continue growing?
A. Yes, our plans as contained in the Amtrak Cascade's plans along with our capital improvements, we indicate within 20 years we will be operating -- we will be carrying approximately 2 million passengers annually.
Q. Okay. So with respect to this particular project, give me a little quick history as to how you proceeded to implement the project.
A. Well, in examining -- in working with the

Burlington Northern and Amtrak on the siding extension, it became apparent to us that the siding could go one of two directions, north or south, and that there were implications going either direction.

Going south was a substantially -- appeared to be a substantially lower cost and a substantially lesser impact option, and so it seemed logical to pursue extending the siding south. The one issue that was plainly obvious to us was that there was a rail crossing that would be right in the middle of the siding, and operationally that is not something that the railroad could accept, having a grade crossing in the middle of a new siding extension. So we proceeded to approach the County, Snohomish County staff, regarding this, the potential for closing the crossing.

Q. So let me ask you, what is essentially incompatible between an at grade crossing and a siding?

A. Well, a siding, a rail siding could be blocked for a long period of time by a train that is waiting to meet another train, effectively closing it off for a period of time, making it unusable. Another thing that's important to note about having a siding or a grade crossing, excuse me, in the middle of a siding is that not every rail grade crossing accident that occurs is a fact -- is a result of a train, moving

train, running into a vehicle of some type. There also are accidents where cars just run into the sides of trains at roadway railroad intersections. So by eliminating this at grade crossing in the middle of the siding, you reduce the potential for accidents as well as make it a usable siding.

Q. Now presently does the siding extend north of 172nd?

A. For a short distance.

Q. And how does the railroad deal with -- do trains block 172nd on that siding?

A. On occasion they may. I don't know the exact operational details on that, and I believe our friends from the Burlington Northern and Santa Fe will be testifying to that.

Q. Okay. Will this project move that type of activity away from 172nd?

A. That's one of the objectives of this is that it would move the -- by extending the siding south of 156th Street, that 172nd would be blocked -- blockages at 172nd would be reduced by the extension of the siding.

Q. Now briefly describe 172nd, what is that?

A. 172nd is also a State Route 531. It's a -- I believe it's a minor arterial connecting Smokey Point,

Lakewood area, with Arlington and I-5.
Q. And is there an interchange there?
A. Yes, there's an interchange at Interstate 5 and State Route 531.
Q. Okay. And where is the next interchange south of there; do you know right off hand?
A. Not right off hand.
Q. Okay. I don't see it on Exhibit --
A. Oh, 116th Street.
Q. 116th Street?
A. Northeast.
JUDGE SCHAER: Let's go off the record for a moment.
(Discussion off the record.)
JUDGE SCHAER: While we were off the record, we attempted to make the sound system work a little better.
Go ahead, please, Mr. Stier.
MR. STIER: Thank you.
BY MR. STIER:
Q. Real briefly here, I would like you to describe some of the remaining exhibits in our group. The Snohomish County general policy plan for their GMA comprehensive plan, that's Exhibit 8, why is that relevant to your considerations?

A. This document is a general policy level document that the County uses to develop its planning policies and follows that generally in their -- developing their plan.

Q. And did you consider -- did you -- have you reviewed those policies?

A. Yes, I have reviewed them.

Q. And do you feel that any of those policies are relevant to this matter?

A. Yes, I think the transportation goals and objectives and policies listed within the general policy plan are relevant for our discussions today. They certainly seem to support our request to close this crossing.

Q. And would those policies be set out in Exhibit 10 in summary?

A. Yes.

Q. Are there any specific policies that are directly applicable from this group?

A. Yes, I think that there are several that I would just like to highlight, that I can highlight real briefly. I think it's important that one of the County's goals is to develop transportation systems that has the economic competitiveness that the County, the region, and the State, and that one of their objectives

is that in cooperation with the DOT and the cities that they -- the County will encourage continued and enhanced freight rail transportation as one of their objectives. And certainly their objectives to TR-10-C, which mentions that in cooperation with the DOT, the cities -- and the cities, they're encouraged to continue and enhance passenger rail transportation within the county. And that policy 10-C-1:

> That programs shall be established in cooperation with DOT and Amtrak to upgrade interstate rail passenger service.
> Policy 10-C-2:
> That the DOT shall be supported in pursuing development of a Western Washington rail corridor.
> Policy 10-C-3:
> That rail transportation operators shall be assisted in improving the market for rail passenger travel by making improvements to rail speed, safety, and amenities in connection with local public transportation.
> Objective TR-10-D:
> Pursuing transportation programs and

policies that directly enhance the operating and capital resources of freight and passenger rail transportation.

Their policy 10-D-3:

Rehabilitation or construction of new rail facilities that enable services to be maintained or enhanced shall be encouraged and supported.

And that policy 10-D-4:

Land use types and densities shall be established along rail corridors and urban growth areas that support freight and passenger rail transportation consistent with other elements of the plan.

Q. So you did have meetings, and were these issues discussed with Snohomish County representatives?

A. We had three meetings with Snohomish County to go over the issues associated with 156th Street over the course of the last year and a half, and it was our objective to meet with the County to discuss the issues, to find out what their concerns were, and to try to address those concerns in a cooperative and collaborative way.

Q. And is there a general characterization of the concerns that they raised?

A. They raised some of the -- some concerns about traffic and emergency vehicle response.

Q. With regard to what area on the map?

A. With regard to the area immediately adjacent to 156th Street Northeast and the area from north of there up towards 172nd.

Q. And that would be on the east side of the line?

A. On the east side of the railroad between the railroad and Interstate 5.

Q. And did you -- what did DOT do to address those concerns?

A. Well, as a result of our initial meeting, the State developed and launched a study of the traffic impacts of this area, what would happen with the closure, how would these various concerns of the County be affected by the closure, what would happen to the traffic, how do the fire and police, sheriff services, what were their thoughts about it and so on, school district, school bus routing, and so on. And so the State at its cost developed a study that we presented to the County.

Q. And that would be Exhibit 12, the Struthers

Associates study, including Addendum 1?
A. That is correct.
Q. And who is the I guess the supervising engineer on that study?
A. Gary Norris was the prime engineer who developed the study for DOT under, yeah, through Gary Struthers.
MR. STIER: No further questions at this time.
JUDGE SCHAER: Thank you.
MR. STIER: Thank you very much.
JUDGE SCHAER: Mr. Cummings, do you have questions of this witness?
MR. CUMMINGS: I believe it would be more appropriate if Mr. Walkley went next as a proponent.
JUDGE SCHAER: Let's go off the record for a moment and talk about this.
(Discussion off the record.)
JUDGE SCHAER: Go ahead, Mr. Cummings.
MR. CUMMINGS: Thank you very much.

C R O S S - E X A M I N A T I O N

BY MR. CUMMINGS:
Q. Good morning, Mr. Schultz.
A. Good morning.

Q. As I understand the testimony you just set forth then, the project itself is primarily being funded by Amtrak?
A. That is correct.
Q. Now at the rail office, are you the main decision maker when it comes to rail issues for this corridor in terms of improving the passenger rail system?
A. I am one of the decision makers involved.
Q. Who else do you work with in that regards?
A. We have several folks, Ken Yazanski, Junior is the manager of the rail office. Kevin Jeffers is the rail office engineer. Finn Posner is another rail office engineer. Staff person Steven Anderson is the manager rail programs out there. So we work in a team approach.
Q. Okay. In terms of this project, they have also shared and participated in the decision making, right?
A. That is correct.
Q. Have you also relied on others, for example, Tom White?
A. Yes.
Q. Who is Tom White?
A. Tom White is a consultant for Transit Safety

Management or TSM.
Q. So is this somebody you rely upon to provide safety issues for you?
A. Tom is an expert rail modeler and planner.
Q. Okay. Now you indicated that modeling was done on this project, or actually I should say on this whole rail line, correct?
A. That's correct.
Q. Seattle north. I guess when I talk about this rail line, I'm talking about Seattle north, and when I'm talking more specific, I will ask you about 156th.
A. Sure.
Q. You obviously have much greater detail and a lot more rail track to be aware of than this one crossing that I'm familiar with.
In terms of modeling that was done, was there an attempt to do modeling of the traffic patterns?
A. In what --
Q. The highway traffic patterns.
A. In terms of the highway traffic pattern, the modeling that was conducted by the railroad and the DOT in regards to the overall rail infrastructure was done only on the rail side of things. Now of course additional studies have been -- I'm not sure if you mean

the additional report that we produced through Gary Struthers Associates.

Q. No, what I mean is in terms of when you do your modeling to identify the impact of rail within the corridor, does it also look at the rail's impact on highway use at crossings?

A. No.

Q. Okay. In terms of blockage issues then, does modeling address concerns addressed by local officials regarding blockings at crossings, for example, 156th and 172nd?

A. Well, modeling is only a tool, if you will, to look at where the constraints happen. And then, of course, you have to take that information and work with each specific location and what can you do and how can you do it. The model doesn't tell you how to solve the problem. It tells you where the problem is.

Q. Okay. In that regards then, modeling is a predictor?

A. The model is a -- it's a tool and a predictor.

Q. Now you talked about passenger usage on the we will call it the State trains. You said there's four daily routes that take place. Last year you said there was a half a million riders?

A. On Amtrak Cascade.
Q. On Amtrak Cascade. Do you know what the capacity is an Amtrak Cascade; how many riders could we have had if every train were full?
A. I don't know that off the top of my head.
Q. I'm just trying to get an idea, are these heavily used trains?
A. These trains have a -- are very heavily used on the weekends. Friday, Saturday, Sunday these trains are often sold out, these trains are used extensively. The weekdays ridership is not as strong.
Q. So primarily this seems to be more, I don't know how to characterize it, maybe as a tourist type usage?
A. The primary use of our -- the primary, if you will, characteristic of our ridership is recreational in nature.
Q. Okay, recreational is a much better characteristic. Let's talk about the policies that you mentioned in Exhibit 10. I will bring this back up to you. Now you went through several policies. I want to point out policy 4.B-1; could you read that?
A. Yes.
Safe and effective traffic control at grade separations shall be maintained at

railroad crossing where practicable.
Q. Now these are the policies of Snohomish County, correct, from the comp plan that you identified?
A. It's in their GMA.
Q. So the County obviously expressed an interest in maintaining a safe and effective crossing, not just the elimination of all grade crossings?
A. They have mentioned.
Q. Now there are -- let's see some other policies here. It talks about in objective 7, let's go to transportation 7.B.
A. Objective TR-7-B?
Q. Yes. Could you read that one.
A. (Reading.)
Coordinate transportation improvement programming to actively assign the cost of transportation system improvements associated with new development to developers, the County, and cities.
Q. In terms of the siding, would you consider it a new development?
A. I don't know.
Q. Has others in the Washington Department of Transportation considered it a new development?
A. There are some that have that opinion.

Q. And as a result, have they asked for mitigation to be extended to other traffic improvements in the area because of the impact of closing 156th?
A. They have made that request.
Q. And you have apparently disagreed with the idea?
A. We have had an internal discussion regarding that.
Q. Okay. Now as a rail engineer or in your position with Washington Department of Transportation and rail service, are you familiar with guidelines set forth by the Federal Rail Administration when it comes to closing crossings?
A. Yes.
Q. And let me hand you this exhibit book. I've actually got them tabbed, so it can help you to just go through if you just grab the tab.
A. Certainly.
Q. It will give you an idea. Right now if you would turn to Exhibit 52.
JUDGE SCHAER: If you have both references --
MR. CUMMINGS: I will give the page as well.
JUDGE SCHAER: Some of us have the first list with the lettering on it if you could tell us the letters.

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MR. CUMMINGS: Oh, boy.
JUDGE SCHAER: If you can't do it easily, don't worry about it.
MR. CUMMINGS: I think everyone should have a number. Oh, I'm sorry, oh, it's just this one right there has that, I'm sorry, Your Honor. Exhibit 52 would be the Federal Rail, it's the Highway Railroad Rate Crossings Guide to crossing closures. I'm trying to think in terms of helping Your Honor out.
JUDGE SCHAER: I have somewhere that list with both letters and numbers. I'm just taking a moment to look for it.
MR. CUMMINGS: Have you been able to locate that, Your Honor?
JUDGE SCHAER: Thank you, go ahead.
MR. CUMMINGS: It should be the 12th one down.
JUDGE SCHAER: The number was?
MR. CUMMINGS: It's Exhibit 52.
JUDGE SCHAER: Which is L if anyone else has letters.
BY MR. CUMMINGS:
Q. On page 14, if you could turn to page 14.
A. Yes.
Q. It talks about concerns or recognitions when

doing a consolidation or a closing of crossing, and it talks about the emergency response personnel concerns. Could you read the first paragraph here following emergency response personnel.

A. Emergency --

JUDGE SCHAER: Page again, please.

Q. Page 14.

A. (Reading.)

Emergency vehicle response time is a critical issue in all crossing closure proposals. A successful proposal requires a statement from the police and fire departments that emergency vehicle response time will not be materially affected by the crossing consolidation.

Q. Now in the present case, have you had an opportunity to go out and speak with the emergency officials that provide those essential services in the Lakewood 156th Street area?

A. I have not.

Q. But you have hired consultants to go out and talk with them?

A. Yes, we have.

Q. And you have heard probably by different meetings with the County some of the concerns of these

local police and fire officials?
A. Yes.
Q. And is it your understanding they support this closure?
A. Is it my understanding that the --
Q. Local fire and police officials support this closure?
A. No, it's my understanding they are not supportive.
Q. Now in terms of making a decision to close a grade crossing, wouldn't you want to have the support of the local officials?
A. Ideally.
Q. Now in this case, the local officials have made representations, and if you haven't heard these, let me know, that they need 156th as an alternate crossing; is that correct?
A. I have heard that argument.
Q. Have they also represented to you that they need 156th and use 156th as an alternate crossing?
A. I have heard that they use it in varying degrees depending upon whether it was the fire or the sheriff's district sometimes occasionally, sometimes more than that.
Q. Okay. Well, let's look at Exhibit 62, and I

will bring a copy of it. This is an exhibit from the Washington Department of Utilities and Transportation Commission. And on page 93 of the exhibit, I'm going to bring this up, this is just the County exhibits, I have highlighted some language again, and this is considered the Railroad Highway Grade Crossing Handbook, Second Edition; is this the book that you use and are familiar with?

A. Yes.

Q. I have highlighted some language at the very bottom of the page, and the sentence carries on to the top, could you read those two sentences.

JUDGE SCHAER: What page, counsel?

Q. Page 93.

A. (Reading.)

Crossings that are frequently utilized by emergency vehicles should not be closed. On the contrary, these crossings should be candidates for grade separations or the installation of active traffic control devices. Specific criteria to identify those crossings that should be closed are difficult to establish because of the numerous and various factors that should

not be considered.

Q. Okay, that's fine, you have read enough. So in terms of what the Federal Rail Administration is suggesting, they say that when you have local officials of the law enforcement and fire fighter's position that they use and need a crossing that it should not be closed, in fact, that it should be kept open and look at other alternatives?

A. It's actually Federal Highway Administration.

Q. I'm sorry.

A. But yeah, if frequently utilized by emergency vehicles.

Q. So in terms of this situation, the Washington Department of Transportation itself hasn't contacted local officials, you just had your consultants go out and talk with them?

A. That is correct.

Q. Is the motivation -- well, what is the motivation behind this crossing? And I will give you -- well, let me back up and strike that question.

Is money motivating the decision as to where to place the crossing?

A. I'm not sure I understand your question.

Q. Okay, I will back up even further. You identified earlier that there were two different

discussion points, you could either go north of 172nd or you could go south of 172nd to extend the existing siding.

A. Yes.

Q. When you looked at the issue of where to go, was public safety a concern?

A. Public safety is always a concern.

Q. Is it the paramount concern?

A. It's one of the concerns that we always look at and consider.

Q. Okay, but what's more important, I guess; which concern weighs in making a decision as to where you want to go with the crossing?

A. There's always a wide variety of factors that need to be considered in any decision that we make at the Department of Transportation.

Q. So it's not just one issue?

A. It's not just one issue.

Q. In this case, was it your understanding that the railroad actually wanted to go north of 172nd?

A. There were a number of discussions that we had at various points in time in which there was some discussion of going north 172nd. And upon discussions with the railroad and discussing the various costs and impacts and associated operational issues, it was

thought that going south made more sense for a number of reasons.
Q. And what reasons were those?
A. Cost.
Q. Okay.
A. Clearly it was cost. Reduced impacts on the environment.
Q. Okay.
A. Another important issue. Operationally, the siding works better, if you will, for the railroad at that location than the other location because it's not on a grade at that point that is severe. So operationally it makes more sense to go that way. Also it's closer to, if you will, from an operational standpoint the nearest next siding, if you will, is closer to the north at a place called Stanwood. So, if you will, the travel time for a train operationally to go to the next siding to the north was less. But going to the south, the time it takes a train to travel between the siding and Everett was longer, so it made more sense to extend the siding, if you will, south to reduce that travel time for a train.
Q. Okay, well, let me turn your attention to Exhibit 51. Exhibit 51 is apparently a meeting between Amtrak, Washington Department of Transportation Rail

Division, and Burlington Northern and Santa Fe representatives to discuss various projects; is that correct?

A. I have never seen these minutes before.

Q. Okay. Well, let me ask this. Did you have occasion to meet with the various officials from Amtrak and from Burlington Northern on January 21st of 2000 concerning this crossing?

A. Yes.

Q. Okay. And at that meeting, did not the Burlington Northern and Santa Fe representatives tell you that they wanted to go north?

A. Yes.

Q. In fact, does it not say that the north option was chosen for various reasons, one of them being the uninterrupted length and that it would actually provide operational improvements for them?

A. That's what the meeting minutes say.

Q. Okay. Let's take a look at Exhibit 52, I'm sorry, 53.

A. 53?

Q. Yes. This is an E-mail correspondence between yourself and Tom White, and actually what I would like is you to start with, I know these E-mail things start going on, but it appears the conversation

starts right about here with a March 22nd, 2000, 11:26 a.m. statement by yourself. Could you read that.

A. (Reading.)

Based on the memo that we got from Snohomish County, we could expect stiff opposition at closing 156th Street.

Q. Continue on.

A. (Reading.)

I'm not too inclined to pursue it unless we can save some serious $$$ and then offer some traffic improvements, et cetera to the sheriff and fire district. Perhaps a new fire truck would make them happy.

Q. Okay. And in response to that, did Tom White give you some analysis? And again, Tom White is the person you said is the consultant that the Department hired to advise on rail issues, correct?

A. That's correct.

Q. What did Tom White say in response to your E-mail?

A. I see where they are coming from; is that what you're referring to?

Q. Yes.

A. Okay.

If a train has stopped on one crossing (bad order, et cetera) it is not likely that the other will be blocked. With one crossing, the west side is cut off from the freeway, fire house, copshop, et cetera. Normal circumstances there would be no problem as the distance to that area either side of the track from 172nd is equivalent.

It would take closure of 156th AND grade separation of 172nd to fix for them.

Q. So apparently Mr. White identified that some of the County's issues were actually of merit?

A. I think Tom saw that there were some issues that needed to be dealt with. I don't necessarily agree that --

MR. STIER: Your Honor, we're getting into the area of hearsay here. I mean I can see the document. Is that what the goal of the questioning is, that he's supposed to know what Tom White is thinking?

JUDGE SCHAER: I'm going to ask you, Mr. Cummings, if there's something in this document that would indicate Mr. Schultz knows this, or if you want to get some foundation that would indicate that he might know that. Otherwise, you can ask him about what his

thoughts were.
MR. CUMMINGS: Well, and that's actually all I was doing, Your Honor, with that question.
BY MR. CUMMINGS:
Q. And what was your response to Mr. White then?
A. (Reading.)
You are probably right, but then we would only have to add 4,000 feet to the siding, as we could use the existing siding. Maybe there is a cost savings here.
Q. So in response to identified concerns from the County concerning public health and safety, i.e., fire and police officials need to get access to the area, and your response was, yeah, you're probably right, but we can save money if we go with siding to the south.
MR. STIER: I object to that characterization, that's not in there at all. The comment public health and safety I don't see referenced anywhere. That's a paraphrase that's not supported by the record, Your Honor.
JUDGE SCHAER: Is there any reason that this document doesn't speak for itself?
MR. CUMMINGS: There's no reason why the

document doesn't speak for itself. I guess I want to understand what Mr. Schultz's concerns were, whether or not he identified the public health and safety issues were apparently outweighed by the monetary issues in terms of putting the siding to the south.

JUDGE SCHAER: I will allow you to ask that question, not the previous one.

BY MR. CUMMINGS:

Q. So the question then is were the public safety concerns from the fire district and the sheriff's office minimized in terms of the economic reduction by an approximately $800,000 by siding to the south?

A. Probably the best way to answer your question is that we understand that there were concerns by the fire district and by the sheriff, and in our -- that's why we conducted an analysis, and that's why we had our consultant go and try to talk to the sheriff which -- and try -- and actually meet with the fire district. And when the fire district responded that they very -- they don't use that crossing very often at all, that the primary response route is via 172nd, we felt as though that the closure of the crossing would not adversely impact their services.

Q. I see. So if the fire district were to actually say that they do utilize 156th Street as an

available alternate access in times when 172nd is blocked, would that change your consideration?
A. I think the issue is more of one of is it something that is used, I think as determined by the FHWA manual, is it used on a regular basis or a continuing basis. I can't recall the exact wording.
Q. Okay.
A. But, you know, the issue could be to the degree that we need grade crossings everywhere to provide access everywhere, and that certainly isn't a practical policy matter either.
Q. Well, in terms of then let's say the sheriff's office response, are you familiar with what they responded to Mr. Norris?
A. My understanding is that the sheriffs did not respond to Mr. Norris. Mr. Norris attempted to get ahold of them quite frequently, but they were unable to discuss with them at length about their concerns, and that only until recently we had not heard from the sheriffs about their concerns.
Q. Okay. And in terms of the sheriff's concerns then, what have you learned?
A. Nothing specific.
Q. Okay.
A. Just a general we are opposed to the closure.

Q. Okay. And that wasn't enough to raise any issues of concerns from your perspective?
A. No.
Q. You mentioned that there were other concerns regarding the project to the north on an environmental level.
A. Yes.
Q. The railroad had actually undertaken some environmental review of the north option as well, correct?
A. I believe they have.
Q. Was it your understanding that the environmental review said they were unable to go north?
A. I am not aware that they were unable to go north.
Q. Okay. In terms of making improvements in the area, do the Federal Rail Administration guidelines often suggest that a siding project or a closing of one crossing project should be built in conjunction with the improvements of another adjacent crossing?
A. Yes, that's called, if you will, a consolidation.
Q. Okay.
A. Yes
Q. Has consolidation been looked at at all in

the present case?
A. In this particular instance, no, although the DOT rail office has recently completed some improvements on State Route 531 to improve the at grade crossing safety.
Q. Okay. In terms of are you familiar with the Washington Department of Transportation guidelines for grade crossings?
A. Yes.
Q. And they set up a -- do they not set up some form of table or a suggestion saying, based on a certain exposure factor that certain improvements should be made at a crossing?
A. There is a table within the booklet, yes.
Q. Would you turn to Exhibit 44.
A. Yes.
Q. Now in terms of the improvements that were made at 172nd, were they related to the closure of 156th?
A. No, not directly.
Q. Okay. And in this case, you elected not to do a consolidation or it wasn't looked at?
A. No, it was not looked at in this particular instance.
Q. Okay.

A. This grade crossing at 156th Street had been upgraded I believe about eight, nine years ago before I became really involved in this.

Q. Okay. Well, how about let's talk about 172nd then. If we close 156th, there is the likely result that traffic that normally uses 156th would go out to 172nd; is that correct?

A. That's correct.

Q. In terms you identify of safety issues, would it not be more important to make safety improvements at 172nd then if we're adding additional traffic onto that roadway and at that crossing?

A. Well, we just did.

Q. Okay. But that wasn't related to the closure of 156th you just said.

A. It was already planned several years ago. The SR 531 crossing was one of the crossings that we had looked at and examined throughout the corridor as one to install median separators on, and median separators are a raised median with, if you will, plastic delineator tubes that basically prevent people from driving around the downed gates.

Q. Sure.

A. And we're installing these in various crossing locations throughout the state.

Q. Now are you familiar with the -- are you very familiar at all with 172nd?
A. Yes.
Q. Do you have an idea what the average daily travel is on that road?
A. I don't have the exact numbers.
Q. Okay. Well, I can talk with someone who does have that information then. I certainly don't want to waste your time in having to have you pull it out.
Let's talk instead about you indicated in your testimony that 172nd currently suffers certain blocking issues from trains that are stopped across the road; is that correct?
A. Yes, it does.
Q. And you have insinuated that by going south, we may somehow alleviate those concerns.
A. Reduce is probably a better term.
Q. Okay. So there's still a substantial, or I won't say substantial, there's still a likelihood that there will be blockage at 172nd?
A. There's always the likelihood as long as there's an at grade railroad crossing that a train could be there and stop traffic at some point, yes.
Q. Right now the siding is sufficient for some freight trains?

A. Yes.
Q. Is that correct?
A. Yes.
Q. And the goal is to make it longer so we can accommodate longer freight trains?
A. As well as reduce the blockages at 172nd and accommodate passenger service and so on, yes.
Q. Okay. But what you mentioned before is with the NAFTA and various other economic benefits, Burlington Northern is looking at adding additional cars and wanting to have longer freight trains, correct?
A. They're always trying, they're, you know, a business, they're trying to make a buck like anybody else.
Q. And actually I should be encouraged, it actually benefits our region, for example?
A. It's a substantial benefit by taking trucks off the road and so on.
Q. Now in terms of if we have a siding that's longer, if we're using say modeling and that sort of thing, wouldn't the goal then be that the longer the siding, the longer the trains we can have?
A. Yes, to some extent that's true. Part of the modeling process that was done is that the siding is, if you will, slightly longer than practical so the train

can pull into it and have some extra room at the end to stop, so the train can move into the siding at a slightly higher speed and then slow down as it goes into the siding and stop before the end.

Q. So as we have longer trains, is it conceivable then we could have additional blockages at 172nd greater than we experience now?

A. It's conceivable that there could be additional blockages as the number of trains overall on the rail line increase whether or not -- yeah.

Q. Could I have you take a look at Snohomish County's Exhibit Number -- well, it's the very first exhibit, the map. I believe it's 40 --

JUDGE SCHAER: 41.

MR. CUMMINGS: 41, thank you, Your Honor.

A. Yes.

BY MR. CUMMINGS:

Q. As you look at the map, you can see where we have obviously identified 156th as where it's going to be closed, and you can identify where the crossing is at 172nd, correct?

A. Yes.

Q. Now the map also identifies where the sheriff's district is and the north precinct as well as the fire district response.

A. Yes.
Q. And from what you have said, it's your understanding that say the fire district if they're responding to a call, they come up Smokey Point Boulevard and go across 172nd?
A. That's my understanding.
Q. Okay. Now let's say hypothetically speaking that 156th is closed and the fire truck is responding to a call west of the railroad tracks say on Third Avenue. This is Third Avenue right here.
A. Oh, okay.
Q. And if they're stopped at, well, let's say hypothetically speaking 156th is closed and there is a train crossing at 172nd that may have a bad order like Tom White suggested.
A. Okay.
Q. And there is a delay. What is the fire district supposed to do to get to the west side of the tracks?
A. Well, it indicates that there's two additional, Fire District 20, Station Number 2, and there's another one indicated on the map as well, which I don't see a name by it, but there appear to be two fire district stations relatively close to Third Avenue Northeast.

Q. Okay. So your response would be then if a fire truck -- let's make another assumption, that there is a primary responsibility on Third Avenue for the fire district that's on Smokey Point Boulevard, so your response would be that if a fire truck is stuck at 172nd, bad order, something having to do with a closing of the crossing, that another fire district should then mobilize and respond to the call while that fire district truck is struck?

A. Well, I don't know what the fire district's plan of action is to responding to various incidents in this particular area, so I can't answer how they would respond or when they would respond and what their, if you will, minimum response time is. I don't know what their order of response is.

Q. Okay.

A. In their plan.

Q. In terms of your meeting with Snohomish County, the County's obviously voiced opposition against the project going south. Has the County ever voiced opposition to the project going north?

A. I don't recall.

MR. CUMMINGS: Thank you, no further questions.

JUDGE SCHAER: Thank you.

Do you have any questions?
MR. THOMPSON: I do actually just have a couple of questions, Mr. Schultz.
THE WITNESS: Yes.

C R O S S - E X A M I N A T I O N

BY MR. THOMPSON:

Q. I wanted just to maybe ask you a couple of questions to clarify this issue surrounding the choice of whether to go north or south with the siding, and, well, specifically I think either you indicated or Mr. Stier did in his questions to you that a siding is incompatible with an at grade highway crossing; is that correct?

A. That sounds approximately, yeah, that sounds --

Q. I mean it must not be absolute, because there's obviously a siding crossing at 172nd.

A. That's correct, yeah.

Q. Okay.

A. It's not desirable is probably one way to put it, and it's not a desirable situation by any means.

Q. Okay. Are you aware of any rules that require the breaking or separating of a train if it's going to occupy a crossing for a certain amount of time?

A. Yes, there are rules in -- I believe UTC has those rules that require that if a public crossing is blocked for longer than I recall ten minutes by a stopped train that they need to block, to cut the train, if you will, into two pieces and allow traffic to proceed.

Q. Okay.

A. In a public crossing, I believe.

Q. Okay. I see, okay. Given that rule, if the Commission were to not order the closure of this crossing, would that -- would the effect of that rule render this a less attractive place to build --

A. Absolutely.

Q. -- a siding for that reason?

A. Absolutely, the -- what would -- the result by if 156th Street was left open, a train could not block that crossing for longer than ten minutes without having the train be broken in two. And that whole entire process is very long, labor intensive, can take upwards of an hour to do to, you know, complete tests, reconnect air hoses, and couple the train back together. And I'm sure Burlington Northern and Santa Fe staff will go into great length about that, but it is a -- it would effectively render that unusable.

MR. THOMPSON: Okay, that's all I have.

Thank you.

JUDGE SCHAER: I have just a couple of questions.

THE WITNESS: Yes, Your Honor.

E X A M I N A T I O N

BY JUDGE SCHAER:

Q. You had a discussion about the policies for when you are going to close something, and you're talking about this whole line from Vancouver, Washington basically to Vancouver, B.C.; is that correct, in your overall job?

A. Yes, ma'am.

Q. And you're trying to get, currently your goal is to get trains on that to is it average 110 miles an hour or hit 110 miles an hour?

A. The plan, that's the top speed, Your Honor.

Q. Okay.

A. Where our goal, if you will, is to have a travel time, travel time is more readily understandable by the public, so our goal is to get the travel time down to under three hours from Seattle to Vancouver, B.C. and two and a half hours between Seattle and Portland, and to do that would require that we have top speeds of up to 110 miles per hour, top speeds.

Q. And isn't there -- is there a longer term goal set out in legislation that at some point that line should average 150 miles an hour?

A. That is also part of the longer term goal that the legislature set out, and we're just trying to do the first level of that, if you will.

Q. So looking to the long-term, if you're going to get to the trains averaging 150 miles an hour, are you going to be able to have grade crossings or many of them?

A. No, not at all. The federal policy -- and basically to get to those speeds, you basically need to build something like the French TGV or the German ICE or the Japanese Shinkansen, which is a dedicated high speed line set aside and apart from the existing rail network, a grade separated tunnels, bridges, that sort of thing, Your Honor. And our current, if you will, goal is to do the incremental improvement, and we have been directed to do the improvements incrementally on the existing rail line. If and when we accomplish that goal, hopefully before I retire we will be able to leap frog, if you will, and think about building the next step, if you will, the dedicated high speed rail lines.

Q. How do you decide whether to recommend closing a crossing or as opposed to recommending that a

crossing be redesigned so that there's an underpass or an overpass and there isn't a crossing grade?

A. There's a number of variables that we look at. One of those I think that's real important is what is the level of traffic on the road. Is there a lot of traffic. Is there just a little traffic. Can that traffic be easily rerouted. Is there existing development that uses that needs to get to both sides of a particular location on a regular basis, for example, a plant with an office on one side of the tracks and another facility on the other side. And by closure, if you will, they would have to go quite a ways out of their way to do that. So those are traffic -- emergency response, will emergency response be materially impacted, or is it not materially impacted by the closure.

Q. And was that kind of analysis done in shaping your recommendation to close this crossing rather than to build under or over it?

A. Building a grade separation is an expensive proposition, and we had done some preliminary analyses, you know, what would it cost to do this, and it was in the neighborhood of, you know, $5 Million. And in these times of tight budgets, nobody's got $5 Million just lying around that we could put toward grade separating

this specific grade crossing. And it would be hard to justify spending that level of money, if you will, grade separating 156th Street because of the low level of traffic that's on that road. Approximately 600 daily trips are on that road.

The State does have a policy of looking at areas to grade separate. We have been working with, if you will, the fast corridor, which is the freight corridor between Seattle and Tacoma and Everett, and a lot of very major at grade crossings, we're talking major arterials that have 40,000 trips, are just getting grade separated now, because they are being -- their traffic levels have been degraded over the years. But those are, if you will, you know, very high priority freight and passenger corridors, have high levels of travel, and there's very scarce resources for those.

So it's hard to find funding, if you will, for a grade crossing of this level, to grade separate it with this level of traffic. It's a closure, and looking and examining how that traffic would redistribute seemed like a more reasonable answer to this situation and a more effective use of limited public dollars.

Q. Well, you outlined a number of criteria that you would use in deciding whether to change a crossing or to close the crossing. Were those criteria applied

in your decision to recommend closure here? Did you say there's not enough traffic or there's not -- there's adequate alternate routes or the list of things that you gave to me? Did you go through that thinking process in making your decision on what to recommend?

A. Yeah, based on the analysis that our consultant had done and looked at this and based on his recommendation, we agreed that it made sense to request to close this based on his analysis that the traffic impacts were minimal, that the fire response was not materially affected, and so forth. Going through that logical process of analysis by our consultant, it made sense that this was a reasonable and prudent thing to do.

JUDGE SCHAER: Okay, thank you.

Did you have any redirect, Mr. Stier?

MR. STIER: Just one question.

R E D I R E C T E X A M I N A T I O N

BY MR. STIER:

Q. Is there an ongoing evaluation of closures of crossings throughout the corridor with respect to the incremental improvement program?

A. Any time we do improvements along the rail passenger corridor, we're always looking at how can we

improve grade crossing safety. I think the first -- one of the first -- the first level is do we need the crossing and can we live without it. That's always one of the first criteria we look at is, is this crossing really necessary. And sometimes that answer is no, it's not, and so. And then, of course, there's the, well, what can we do to improve things, you know, add flashing lights and gates, and it does potentially even go to grade separation where it's warranted.

Q. Does the statutory authorization for this program address grade crossings?

A. It does mention grade crossing safety, yes.

Q. Does it mention grade crossing closures?

A. I believe it does.

Q. Wouldn't that be 47.79.030?

A. I believe so.

Q. Sub 2?

A. I don't have it memorized, I'm sorry. Yes, 47.79.030 number 2, improved grade crossing protection or grade crossing elimination is one of the, if you will, issues laid out in the RCW that we're to pursue.

Q. So that is a law and express intent by the legislature that in this program to get these trains, you're supposed to consider grade crossing closures where practicable; is that true?

A. That's correct.
MR. STIER: Thank you.
JUDGE SCHAER: Anything further for this witness?
Are you expecting to need to recall this witness, or may he be excused, Mr. Stier?
MR. STIER: Well, he's going to sit next to me, so he can be excused.
JUDGE SCHAER: If you need to call him back, you will be able to do so.
MR. STIER: Yes.
JUDGE SCHAER: Thank you for your testimony.
THE WITNESS: Thank you, Your Honor.
JUDGE SCHAER: Let's go off the record for a moment and talk about where we are and what happens next.
(Discussion off the record.)
(Recess taken.)
JUDGE SCHAER: Would you like to call your first witness, Mr. Walkley.
MR. WALKLEY: Thank you, Your Honor, I would like to call Mr. Ron Ries.

Whereupon,

RON RIES,

having been first duly sworn, was called as a witness herein and was examined and testified as follows:

JUDGE SCHAER: Thank you.
Your witness is sworn, Mr. Walkley.
MR. WALKLEY: Thank you.

D I R E C T E X A M I N A T I O N

BY MR. WALKLEY:

Q. Good morning, Mr. Ries. Would you please identify yourself or your name for the record, please.

A. Yes, my name is Ron Ries, R-I-E-S.

Q. And, Ron, what is your current employment and your title?

A. I work for the Federal Railroad Administration out of Washington, D.C. I am the staff director for the crossing safety and trespass prevention division.

Q. And just for the record, could you give the address, please, to the reporter.

A. Yes, it's 1120 Vermont Avenue Northwest, Washington, D.C. 20590.

Q. And could you please explain, first of all,

what general programs your division is in charge of or conducts.
A. We are responsible for overseeing and working with FRA's policy in national programs on crossing safety and trespass prevention. Between those two issues, that accounts for 95% of all rail related fatalities, with grade crossing collisions being number two. Last year there was 425 fatalities at grade crossings. Trespassing fatalities were slightly higher than that.
Q. And does the FRA have any goal as far as reduction of grade crossings?
A. Yes, FRA has a stated goal. It began in 1991 by the then administrator Gilt Carmichael, where the goal is stated that we would like to reduce the number of collisions, I mean number of grade crossings by 25% in a ten year period.
Q. And when was that program started?
A. That goal was in the fall, I believe, of 1991.
Q. Okay. And so roughly a ten year period of time has gone by, how is the program doing?
A. We have achieved slightly over half of that goal. We are at about 13% reduction from the figures in 1991, roughly 4,000 or 40,000 crossings have been

closed, have been taken out of the inventory since that time.
Q. That's both public and private crossings?
A. Yes.
Q. Okay. And so I understand from your testimony that since grade crossing accidents are a concern, does the FRA generally support the closure of crossings as a policy?
A. We think it is a good policy to close crossings whenever possible. FRA does not have regulatory oversight of that, but certainly the safest crossing is one that does not exist. So we encourage looking at corridors and removing, consolidating crossings that might be considered redundant.
Q. And does the FRA work with various people, railroads, public authorities, and so on to achieve consolidations or closures at crossings?
A. Yes, we do.
Q. Okay.
A. We encourage it from a policy point of view. Also we have 16 full time field personnel that work closely with state DOTs, railroads, communities, utilities commissions to find ways to improve grade crossing safety, with consolidation certainly being one of them.

Q. And just for our region, is it Region 8?
A. Yes, this is FRA's Region Number 8 with the regional headquarters.
Q. And what is the name of our local head of the Region 8 office?
A. Debora Spurgeon is the crossing manager for Region 8.
Q. Okay. You said that the safest crossing is no crossing, I believe, or something of that nature.
A. Yes.
Q. So when you use the word consolidation, you're taking about making let's say two crossings and making them one crossing?
A. Yes, two or more.
Q. That would be one and the same?
A. Yes, depending on the situation.
Q. Okay. We heard for a moment about accident prediction. One of the things that all of us, I think, concentrate on is, because we are all drivers, is safety of motor vehicle passengers and motor vehicles, but we have also heard this morning testimony about an increasing passenger service, that is railroad passenger service. Generally speaking, is the FRA concerned in the area of safety to rail passengers as well as vehicles? And if so, maybe you could tell us a little

bit about that.
A. Most definitely we are very concerned about rail passengers as well as to occupants of motor vehicles. In the typical grade crossing collision that's occurring now, it's the motor vehicle occupants that are at risk. But as we move to improve rail transportation for passengers, as train speeds increase, certainly the risk to rail passengers being harmed by a grade crossing collision certainly is there.

This, you know, there's evidence in, as an example, in 1999 in Bourbonnais, Illinois, an Amtrak train ran into a semi-truck, and 11 rail passengers lost their lives because of that. We do have regulations in place concerning high speed crossings and with certain requirements depending on train speed. And, in fact, our regulations are track regulations that require that if a train speed is in excess of 125 miles an hour, there can be no at grade crossings.

Q. We heard some discussion this morning in introduction to and some reference to this being a high speed corridor. Has the rail line that's involved at 156th crossing we're talking about, has that been designated a high speed rail corridor?

A. Yes, the Cascadia high speed rail corridor extends from Eugene, Oregon to Vancouver, B.C. as one of

00200
the original five high speed rail corridors that were designated, and special funding was set aside beginning in the Ice Tea Act to provide for enhanced safety at highway rail grade crossings on the high speed corridors.

Q. And how many such corridors are there in the United States roughly?

A. Currently there are 12 in existence, and I believe that the 13th is still to be designated.

Q. And I think you have heard some reference this morning, you were here, to this line, the line that we're talking about here of railroad and also one of the passenger trains serving Vancouver, British Columbia; that's an international connection. And could you tell us how many of these corridors have an international connection?

A. The only corridor I'm aware of that has an international connection as actually part of the corridor is this one here.

Q. Okay. Now we have been talking about passenger trains this morning a great deal, but I believe there was a mention to freight mobility. Can you tell us whether the FRA is, or your office at least, has any thoughts about freight mobility when we're talking about a high speed corridor?

A. Certainly, you know, as an agency and also as a part of the U.S. Department of Transportation, freight mobility is something that we are very concerned as well. My specific office is housed in the office of safety, and so safety is one of the -- is certainly our primary goal. But an increased mobility of freight as well as passengers is important. And access to good transportation systems is certainly the goal of FRA as well as the department.

Q. Now in the event -- do you have any thoughts on this, the possibility that there could be a crossing accident at 156th or any other crossing, does the FRA have an opinion about whether a collision like that can affect rail traffic in a broader area than just the crossing itself?

A. Certainly a collision at a highway rail grade crossing will have an effect, sort of rippling effect, if you will, across the transportation system of that particular railroad. While the train is stopped, injured or casualty folk are treated, and any investigation that is going along, that train is -- could be stopped for a matter of hours at times. And that's assuming that there's not a derailment that could tie up the line further. And once you stop one particular portion of track, the train traffic in either

direction is going to have to be stopped up, and so that certainly has a very long range effect on transportation.

Q. Now we're talking about the rail corridor so far between Vancouver, B.C. and Seattle, let's say. Is there another major highway connection near the vicinity of the 156th?

A. Certainly, Interstate 5.

Q. Okay.

A. Parallels this corridor.

Q. And would you say that Interstate 5 connects; is it an international connection also?

A. Interstate 5 runs the whole length of the West Coast and would have connections both at the Canadian border to the north and the Mexican border to the south and is certainly a primary commerce route, transportation route for both countries through the United States.

Q. So in your thinking about freight mobility, is there any thought to, having been given by the FRA, to the amount of freight moving on railroads versus the amount of freight moving on highways; could you tell us about that as far as your thinking on that?

A. Certainly it is a -- I think a -- there is a great deal of capacity issues and problems on the

Interstate 5 corridor, that is very heavily traffic. I'm not a highway traffic engineer, but you, you know, if you drive along Interstate 5, it is very heavily congested. And one of the goals of the agency and the department is to enhance mobility, and certainly moving the truck traffic that is off of -- that is on Interstate 5 and putting it onto rail will help relieve traffic congestion and increase mobility for those traveling on Interstate 5.

Q. And is freight mobility important to the nation as far as, you know, as a general matter, in other words? And if it is, could you tell us just briefly what that importance would be?

A. Well, definitely freight mobility is of great importance to the commerce of this nation. I mean we work on -- many companies work on a just in time delivery system requiring dependable shipments and to meet their manufacturing needs. And I think one of the necessary things for a strong commerce is to have good access to freight transportation of all types. Testimony was received earlier about the fast corridor, and this is a real effort to help freight mobility from marine transportation coming in on cargo ships to put onto rail and to provide ways that the highway traffic will not be detrimentally impacted by this type of

movement.
Q. Okay. We have heard some reference or we will possibly be hearing some reference to the 1994 Highway Rail Crossing Handbook that everybody seems to have. And I think, if you give me a moment, I think it may be Exhibit Number 61. And I will just show it to you for identification. I think you can find it in the County -- I will show you the County's cover page here and just ask you whether you recognize the document and then whether the document being relied upon, if I can find it --

JUDGE SCHAER: Mr. Walkley, are you looking for Exhibit 62 from Commission Staff?

MR. WALKLEY: No, Your Honor.

MR. THOMPSON: This one?

MR. WALKLEY: No, I'm not looking for that one. I'm looking for -- I'm looking for this exhibit, Your Honor, the Highway Railroad Grade Crossings in the County's -- it's also in ours, I believe.

MR. CUMMINGS: I believe that's Number 52, Your Honor.

JUDGE SCHAER: Exhibit 52, thank you.

BY MR. WALKLEY:

Q. Exhibit Number 52, I will just show you the cover of this. I think it's the same thing you have.

A. Yes, I'm familiar with the guide to crossing consolidation and closure that was published jointly between FRA and Federal Highway in 1994.
Q. Okay. It is 1994 dated, and it's been eight years. Are there any ongoing efforts to update or change this?
A. We have plans to update the grade crossing consolidation guide, yes, we do.
Q. And could you tell us just briefly some of the ideas that you have for updating?
A. State department of transportation, railroads, utility transportation commissions, and other people that are involved in transportation improvements and safety find this document to be a very useful guide, and we want to try and keep it fresh, and we will be looking at ways that we can take the experiences that have been gained over the last seven to eight years and provide a useful tool to transportation specialists on how they can find ways to improve crossing safety through consolidation.
Q. And I will show you just quickly another document. Again, it's in the County's, but it was also produced by Burlington Northern. It's entitled Using Data Produced by WBAPS.
JUDGE SCHAER: That will be Exhibit 56.

Q. Right, that's the one. Is this the Web accident prediction system, are you familiar with this?

A. Yes, I am familiar with it.

Q. Okay. And could you tell me just for a moment, we certainly don't want to go through an analysis of this document, we have other witnesses, but could you tell me just generally whether you believe the data base that makes this up is absolutely current and up to date?

A. The data that is used by WBAPS comes from two sources. One is the U.S. Department of Transportation grade crossing inventory, which is submitted voluntarily by the state department of transportations and railroads. It contains information about the physical characteristics at the crossing, number of lanes, number of tracks, operational data such as the number of trains that move through the crossing, the average annual daily traffic counts, speed of the trains, the type of warning devices that are at the crossing, and other pertinent fields. This is not a mandatory requirement. It's done voluntarily. Some states and railroads are very good about maintaining the data. Others are not. So as any voluntary situation, it's not always what we would hope it would be.

The other source is the required reporting by

railroads when grade crossing collisions occur. They are required to file a report with the FRA. And while certainly there could be some omissions by that, we are very confident about the accident grade crossing collision portion of that.

Information from both sources are used in the U.S. DOT accident prediction formula which is used to predict the probability of a grade crossing collision occurring based on a number of factors at the crossing. And that is what WBAPS is all about.

MR. WALKLEY: Thank you very much. That's all I have.

JUDGE SCHAER: Any cross exam, Mr. Cummings?

MR. CUMMINGS: Yes, Your Honor.

C R O S S - E X A M I N A T I O N

BY MR. CUMMINGS:

Q. Mr. Ries, are you familiar with Region 8; is that -- that's where we're at. I should back up. Region 8 is the area we're sitting in today.

A. Yes, I worked for four years, from October '94 to November of '98, as the regional crossing manager out of Vancouver, Washington. Debora Spurgeon replaced me after I moved to D.C.

Q. Okay. So in terms of the FRA's goals, you

updated or you stated earlier that basically, or maybe I'm mischaracterizing, are all grade crossings dangerous?

A. That wouldn't be the word I would, you know, I would use.

Q. Okay.

A. The amount of -- any time you have a highway that intersects a railroad at grade, there is the possibility of a grade crossing collision occurring. I wouldn't necessarily handle that -- classify that as dangerous.

Q. Okay. So there may be some crossings that are more dangerous than other crossings?

A. There certainly are crossings that could have a higher probability of a collision occurring based on a number of factors. But even the crossings that have, you know, lights and gates, which is the typical highest standard, those devices can be circumvented or ignored by a motorist, and a collision could occur.

Q. And in looking at the terms of this accident prediction, that's what WBAPS is all about?

A. Yeah, WBAPS is based on a formula that was developed in the late '70's, early '80's, and has been updated. It takes, using a nonlineary direction formula, you take a look at the national experience and

develop an accident prediction formula that can be used to look at the risk of or probability of a collision occurring at a crossing. Many states will use the DOT accident prediction formula as one of the tools in determining where grade crossing improvements need to be made.

Q. Okay. And in terms of you mentioned there's two types of reportings for data that helps with this type of information, and you said that some partners in the project aren't as diligent in the voluntary reporting efforts. Where does Burlington Northern fall within that?

A. I would have to check to find out to know that for sure. I don't have that information on a railroad by railroad basis.

Q. Okay.

A. And also, with a railroad as large as the Burlington Northern, some of the other Class 1s could even vary from within divisions or regions.

Q. Okay.

A. One of the things we have developed that is not available on WBAPS is a program we call PCAPS, which actually was developed first. That allows a modification of the information. So if a community or a state or railroad is looking at making improvements, you

know, looking at the risk of a particular crossing and they are aware that the data is incorrect, whether it be ADT or train traffic, they're able to make changes and then get a -- reflect that's actually out there and not necessarily be reliant on the inventory form itself. So we try to provide tools with some flexibility that will allow for modifications where there might be inaccuracies in the reporting.

Q. So in terms of the accident prediction that's made in the WBAPS, is it safe to say it's a good starting point, or is it something that's safe to rely upon?

A. It certainly is a tool that we think needs to be looked at, but it is just a -- certainly is just a tool to provide guidance in looking at the entire situation.

Q. Okay. Mr. Walkley showed you and I can show you, it's the highway railroad grade crossings, an FRA manual; are you familiar with this manual?

A. Yes, I am.

Q. Okay.

A. It's a guideline.

Q. Or guideline, thank you. In terms of the FRA's position on matters, when it comes to looking at consolidation or closing of a crossing, are the concerns

of local fire departments, law enforcement agencies to be given weight in making a determination as to whether a crossing should be closed or not?

A. Most definitely the emergency response people need to be part of the process.

Q. So if the emergency response entities, agencies express concern in their response times that would be materially affected, would that be a consideration to give on whether or not a crossing should be closed?

A. It certainly would be something that would need to be addressed. And how you address, you know, what is material and/or significant is certainly something that needs to be settled on the individual basis. We try to provide a framework or guideline, if you will, of things that need to be considered in looking at the situation. If you take a look at the front cover of the document, you can see I think there's like four or five crossings, one every block, and that situation occurs at a number of locations, and so we're providing a framework for people to make decisions on things that they need to look at.

Q. And to that end, has there been again a guide in terms of saying you should only have one crossing per mile or there should be no more than X number of

crossings per mile depending on whether an area is rural or urban?
A. We have provided once again some guidelines in our -- in the guide book that would suggest some parameters that would allow or would give some guidance on where potential consolidations could be used.
Q. And do you recall off the top of your head the designations say for rural areas to how many crossings should occur within a mile?
A. Certainly not off the top of my head.
Q. Okay that's fine.
MR. CUMMINGS: Thank you, I have no further questions.
JUDGE SCHAER: Okay, does Staff have any questions of this witness?
MR. THOMPSON: I think I might just have one.

C R O S S - E X A M I N A T I O N

BY MR. THOMPSON:
Q. Mr. Ries, I'm Jonathan Thompson, I'm the attorney for the Staff. I just want to, maybe this is kind of an abstract question, but I'm trying to understand the benefits to be gained from consolidating crossings. If you have two at grade crossings and they're carrying a certain number of average trips a

day, if you consolidate it to one but it still has the same total number of average trips per day, is that -- is there a gain there in terms of public safety?

A. Most definitely there is. If you take a look at the predicted frequency of a collision occurring at two crossings similar to maybe 156th Street and 172nd Street and closed one crossing and then just took that additional traffic volume and plugged it into the formula, the risk does not go up, would not double. Say if the two crossings were of equal predicted risk, closing one, putting the traffic on an adjacent crossing would not double the risk of a grade crossing collision occurring.

Q. Okay. But there is some increase just due to the fact that you're adding more traffic to another?

A. Correct and using -- just playing with, not playing, looking at the -- using the PCAPS program that I had -- I have available, and it was using data that was current at the end of 1999, taking the traffic volume that was at 156th Street, putting it on 172nd Street would only increase the probability of a collision occurring at 172nd Street by 1/1000. So the additional 750 or actually I think I put in 1,000 vehicles, which I think is higher than 156th Street, would only increase the risk by 1/1000 above what the

prediction is on that model that I have.
Q. And I gather that increased risk is less than the gain of eliminating the other crossing?
A. Yeah, the overall reduction of risk between the two for two crossings, there would be a reduction of risk between the two crossings by closing the one and putting the traffic at the other.
Q. Okay, thank you.
A. As far as a grade crossing collision occurring.
MR. THOMPSON: Thank you, that's all I have.
JUDGE SCHAER: I have just a couple of questions triggered by your last testimony.

E X A M I N A T I O N

BY JUDGE SCHAER:
Q. Do I understand that you have actually done an analysis of the two crossings that we have been talking about today, the 156th and the 172nd?
A. Your Honor, I wouldn't use the term analysis. You know, knowing that I was coming, I wanted to be familiar with at least the, you know, the general parameters that were there, and I used a tool that is available to the state DOTs and we make available to the railroads and certainly can provide it to anybody that

would like it -- would like to do it and just took a look at what would happen if 156th Street was closed and the traffic diverted to 172nd Street. And what I found was that the increase in the predicted accident factor of a grade crossing collision occurring at 172nd Street would be increased by 1/1000, and that's rounding up actually, by diverting the traffic to that street.

Q. Okay.

A. It does not take into any consideration traffic flow issues that might arise or emergency response. It's just looking at the predicted value of a grade crossing collision occurring at that location by increasing the traffic volume there.

JUDGE SCHAER: Thank you, nothing further.

Do you have any redirect?

MR. WALKLEY: Just one question.

R E D I R E C T E X A M I N A T I O N

BY MR. WALKLEY:

Q. And obviously to continue that thought, the exposure factors would disappear at 156th if that were to be closed?

A. Correct.

Q. Because no crossing means no accident?

A. That is correct.

MR. WALKLEY: Okay, thank you very much. We very much appreciate you coming.

JUDGE SCHAER: Is there anything further for this witness?

Thank you for your testimony, and you may be excused.

Okay, let's go off the record for a moment.

(Discussion off the record.)

JUDGE SCHAER: Back on the record just to announce that we're going to take our lunch recess at this time, and please be back and ready to go at 1:25, and I believe we will have your next witness, Mr. Ketchem.

MR. WALKLEY: That's correct.

JUDGE SCHAER: So Mr. Ketchem, please have him set up at the witness bench and ready to go by 1:25.

(Luncheon recess taken at 12:25 p.m.)

A F T E R N O O N S E S S I O N

(1:25 p.m.)

JUDGE SCHAER: I believe you are ready to call your next witness, Mr. Walkley.

MR. WALKLEY: Thank you, Your Honor. I would like to call Mr. Ketchem to the stand.

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Whereupon,

STEVE KETCHEM,

having been first duly sworn, was called as a witness herein and was examined and testified as follows:

JUDGE SCHAER: The witness is sworn, Mr. Walkley.

D I R E C T E X A M I N A T I O N

BY MR. WALKLEY:

Q. Good afternoon, Mr. Ketchem. Would you please state your name for the record.

A. Steve Ketchem, that's S-T-E-V-E, K-E-T-C-H-E-M.

Q. And, Mr. Ketchem, are you employed by the Burlington Northern and Santa Fe Railway Company?

A. Yes, I am.

Q. What is your current title?

A. I'm superintendent of operations north.

Q. And could you tell us very briefly what your work history is with BNSF and its predecessors.

A. I've got a little over 25 years of service. I started out as an operator. Then I worked as a train dispatcher, assistant chief dispatcher, exempt chief

dispatcher, turtle train master, road train master, power manager, director of coal operations, terminal manager, now superintendent of operations.

Q. And for the record, perhaps you could tell us just very briefly what is an operator and a dispatcher and so on; what are their positions and duties?

A. An operator is the communicator between the train and the train getting its orders. The train dispatcher used to put out the orders, the operator would copy the orders and hand those up to the train crew, which gave instructions for the movement of the train.

Q. Okay. So now in your position as superintendent, do you have a territory of the railroad that you're responsible for?

A. My territory extends from Kruse Junction, which is --

THE WITNESS: Can I step up there?

MR. WALKLEY: Well, okay.

JUDGE SCHAER: Certainly.

MR. WALKLEY: We will do that.

JUDGE SCHAER: If that's what your counsel wants you to do.

A. From Kruse Junction to Vancouver, B.C., which also includes the Anacortes line which is out of

Burlington to Anacortes, the Sumas line which is out of Burlington up to Sumas, also the Cherry Point line out of Bellingham to the end of Cherry Point and again up to Vancouver B.C.

MR. WALKLEY: Okay, and already admitted as exhibits, and I will be referring, Your Honor, to Burlington Northern and Santa Fe's Exhibit Number 24, there are six schematic charts and one train graph, and we have prepared a large blow up in charts for the convenience of everybody so that the witness can point to various aspects.

I would only ask Mr. Ketchem to remember that the record has no video, so when you say right there, the record doesn't know what you mean. So if you would be a little more specific about, you know, 200 feet from here or whatever, 200 feet from this line in identifying.

JUDGE SCHAER: Mr. Walkley, may I just ask one question, where is Kruse Junction or what is it close to?

THE WITNESS: Kruse Junction is right here, it's just south of English.

JUDGE SCHAER: Thank you.

THE WITNESS: And north of Marysville.

BY MR. WALKLEY:

Q. Okay. Just standing up there, Mr. Ketchem, possibly if you could briefly explain the limits of your territory as shown on the schematic chart which is entitled the corridor chart, corridor track schematic.

A. Okay. Like I say, my territory goes right here from Kruse Junction to Vancouver, B.C., and all train operations between these two points I supervise.

Q. Okay.

A. Which includes Amtrak's freight trains and locals.

Q. Okay. And now present day, roughly how many freight and passenger trains are operated on an average now on your territory between Kruse Junction and say Vancouver?

A. Right now we're averaging 17 to 18 trains per day. That includes 4 Amtrak's. The rest of them are freights and locals.

Q. I noticed depicted on the chart there are several other things. Perhaps you could point out some of the other facilities, and then we will show the people where English is on this chart.

A. Okay.

Q. If you could show some other side tracks, for example.

A. Okay. Just north of Kruse Junction is the

siding at English. The next siding north is Stanwood. The next siding north of that is Mount Vernon. And then we've got Burlington Station, which here is a branch line that goes off to Anacortes. And we have local and switching operation at Burlington. The next siding or station is Bellingham, which we have switching operations at Bellingham along with three locals that originate and tie up at Bellingham. The next siding is Ferndale, and then the next one after that is Custer. And these are all to the north. And we're currently doing a track project at Custer at this time. And the next siding is Swift. And then, of course, we've got Blaine, which is the border crossing between the U.S. and Canada. And then once up into Canada, we go through White Rock and then further right into New Westminster, which we have switching operations around the clock at New Westminster and also at Vancouver, B.C.

Q. So perhaps also you could show on the bottom chart there some of the other important stations that perhaps are directly south of your territory.

A. Okay. South of the territory once you leave Kruse Junction, the next area that you come to is Marysville on into Everett, which Everett is the main switching yard. And then from Everett, you've got double track. As you can see, there's two double tracks

here that take you right on into Interbay, which is Seattle, which is also a main switching yard.

Q. Approximately how long today is the average freight train? And I realize that they probably vary in size, but what --

A. They do, they do vary. We sometimes run freight trains -- I will speak southbound first because we originate three trains, freight trains daily going south out of the C.N. Thornton yard, which is at the south side of Brownsville here. And then one out of New West and one out of Vancouver, B.C. Those trains can vary, they can go anywhere from 5,000 feet up to 6,000, 7,000, 7,500 feet. It depends on what the interchange from the foreign carriers are on how big our trains are coming southbound. Northbound trains coming out of Interbay and trains that are made up in Everett, it's the same, depending on how many cars we have determines how much the footage is. And again, they may go anywhere from 5,500 to 7,500 feet.

Q. And are the trains run on rigid time schedules, or perhaps you could explain whether they're run on time schedules or could run any time?

A. The only trains that we run on what you say is a time schedule are Amtrak trains. Those are scheduled trains. The freight trains, we do have a kind

of a set pattern on when we want to call these freight trains, but it always doesn't happen that way because of the variables that come into play here, so.

Q. And is most of the territory single track main line?

A. Yes, my whole territory from Kruse Junction to Vancouver, B.C. is single track other than when you get up to Canada up at New West, we do have double track up to C.N. Junction.

Q. So I think as was alluded to in earlier testimony, if you have a northbound train and a southbound train meeting, is that when you need a siding?

A. Yes, that's correct.

Q. Okay. And so are these sidings strategically placed so that they allow the most efficient use of equipment and the most options to a dispatcher, for example?

A. Yes, they are.

Q. Okay. And so typically it's important to have -- is it important to have consistency in the system? In other words, if you have -- if you have sidings that were able to take 8,000 foot trains and then you had one siding that was able to take much less, would that -- what would that do, would that constrict

your choices?
A. Yeah, you would be very restricted on your choice. Maybe I can explain what a train dispatcher does and how trains get by each other.
Q. Okay.
A. Train dispatcher works with a cruise directly. He calls the cruise, he lines up the terminal as far as when they're going to run the train. The terminal actually puts the train together, but the train dispatcher, once a train is ready to leave a terminal, he directs the movement of that train from point A to point Z, okay.
For example, we will have a train that's made up at Everett that's going to go northbound, and we will have a train coming southbound. Well, once this train leaves going northbound, and this territory out here is called CTC, which is centralized traffic control system, the dispatcher in Fort Worth actually lines the signals for these trains. It gives them the direction of movement. So when a train leaves northbound and you got a train leaving southbound, a dispatcher has to determine by time when and where those trains are going to meet. And then he has to, by that meeting point, he has to determine which siding you're going to go into, so one can clear the main track for the other one.

It multiples because you will have, like for example, the southbound and northbound out there, well, they may call another northbound and another southbound and another northbound and then a southbound, so now he's got six or seven trains out there, and he's trying to weave in and out of sidings, and he has to do that all by calculating time in between each other, so.

Q. Okay.

A. And so the siding links are very important out here, because if you have a train that may be too long for a particular siding, then he can't use that siding. So if he takes him somewhere else where that train will fit, it could disrupt the whole flow of the rest of the trains. So that's why you have to have trains with sidings that will -- in our project here of the 9,000 foot sidings to where they're all the same size so we can head the trains in and keep the trains moving fluently.

Q. So an effect of a short siding someplace could be felt all up and down the line?

A. It would be a domino effect.

Q. Okay. Perhaps we could turn now to the next chart, which is the existing configuration chart, existing English track schematic it's called. And I will move this slightly out of the way, and I -- by the

way, we, again just for emphasis, if you could point again to where English is and possibly read the milepost and so on.

A. English is at Milepost 45.9.

Q. And is English where, in that vicinity at least is 156th, the subject of this hearing, located at or near the English location?

A. Yes, it's located to the south end of the siding switch near English.

Q. So pointing at the existing English track schematic, do you see 156th?

A. Yes.

Q. Noted there?

A. (Indicates.)

Q. And then if you would point out, please, the siding the way it now exists.

A. (Indicates.)

Q. And point out 172nd Street.

A. (Indicates.)

Q. Okay. And what is the length of -- what is the length of the siding indicated from 172nd to 156th?

A. As indicated on the board here, it's 6,025 feet, and I don't believe that that takes into account the clearance points, so the actual footage would be less than that.

Q. Okay.
A. You got to figure -- you got to subtract 250 feet from the clearance point.
Q. Now did you indicate that the train lengths can vary, but if you could please tell us what -- when this siding was constructed, what was the general design of it in terms of the length of train? In other words, what was that really designed to handle as a practical matter?
A. Well, of course, it's less than 6,000 foot of trains, but back when the siding was constructed, the trains were usually around 45 to 50 car lengths to where they're up to date at 100 car lengths, so.
Q. And is traffic increasing on your corridor?
A. Yes, the corridor, actually the I-5 corridor and it was as stated earlier all the way up from Mexico to the Canadian border is the highest growth corridor on the Burlington Northern and Santa Fe right now.
Q. And do you have any idea from your experience and so on how traffic may have grown in say the last five years and what we might expect over the next five years?
A. Well, I have only been here for almost two years, but just in the two years that I have been here, I can testify that we have added one more southbound

since I have been here, and we have ran one extra northbound about every three days, and that's just traffic growth since I have been here.

Q. Is there any -- do you have any idea of the percentage that might be involved there in terms of an increase say over a five year period if this continues?

A. The expected growth over here is at least 20% to 25% in the next two years, two to three years. So in five years, it could be greater than that.

Q. And if the trains are kept short by siding restrictions, length of sidings, would you be running more trains then to handle the additional business?

A. Right, if the trains are restricted on train length, then we would have to add more trains into the corridor to move more traffic.

Q. So is it expected that the train lengths will increase?

A. I'm sorry, what was that?

Q. Is it expected then that the train lengths will increase in order to keep you from having to run additional trains?

A. That's correct.

Q. And approximately what footage capacity are we now trying to build on these sidings?

A. Well, we're trying -- our goal is to have all

of these sidings at 9,000 feet is our goal.
Q. In order to what, handle 8,000 foot --
A. To handle an 8,000 foot train.
Q. Now turning again to the existing configuration chart, existing English track schematic, perhaps it would help everybody if you could tell us as a practical matter how a train going southbound would be switched and would be handled in the event that it got orders to get off the siding at English today, and also assume that that train is 6,000 feet or greater in length, if you could take us through that, please.
A. If we had a southbound train that was going to meet a northbound train in English, the territory out here for a freight train is 50 mile an hour for freight, 79 miles per hour for passenger service trains. So the dispatcher would line that train up to the siding at English, and the dispatcher also controls the switches. He would reverse the switch to allow the train to enter the siding. By signal indication, that would tell that train that he's going to take the siding, a diverging route.
So once the train comes up here to the switch, which is the 30 mile turnout, the engineer has to slow down and proceed into this siding to where he is able to stop at the other end and clear this end also.

If the train is 6,000 feet, and granted here the figure that we have here, the 250 feet of clearance point, so you're looking at 5,790 feet or something like that train length, that constitutes that we have to cut this crossing.

Q. In other words, even for today's 6,000 foot trains, you would have to cut the train at the crossing?

A. That's correct.

Q. Could you tell the judge and the audience what is involved in cutting a train.

A. Okay. When the train pulls up and starts to head into the siding here, he will drop the conductor off, and there's just an engineer and conductor on the train. The engineer actually operates the locomotives, the conductor is in charge of the train. So he will drop the conductor off, and then the engineer will pull the rest of the train in.

Q. Is he required to stop when he does drop the conductor off?

A. Yes, he is. Those are our safety rules, he has to come to a complete stop. So after he lets the conductor off and the train pulls in, the conductor will stop him short enough to where he will cut the crossing and pull -- and the engineer will pull those cars ahead, and then the conductor will come back here and tie a

hand brake on those cars. Then it depends on where the northbound is, or he could be just sitting in the siding there waiting because he can't get into Everett yard because Everett yard is full. The conductor can either wait out here, or he can walk all the way back up to the head end and get on the head end and wait there for whatever delay he has.

Q. So how long might it take him to walk that distance between 172nd and 156th?

A. Well, he's going to walk approximately almost 5,500 feet, and it could take him a good 15, 20 minutes.

Q. Okay. Now in that, if I'm understanding correctly then, even at today's 6,000 foot lengths, it is necessary to do that stop, and then pull the train across and cut it in order to simply clear 172nd. Now is that because you expect if the siding is being used that it will be used for longer than ten minutes?

A. Oh, yes.

Q. Okay.

A. Which that's the law, ten minutes. I mean they have to cut it if they're there for over ten minutes.

Q. And we have rules that require the train to be cut?

A. That's correct.

Q. In a ten minute period.
A. Yes.
Q. But as I understand it, when the train is cut, the train has to stop with a conductor standing on the ground at 172nd?
A. Yes, that's correct.
Q. And it has to stop on the crossing on 172nd?
A. Well, he will actually stop short of the crossing to let the conductor off so he's not actually sitting on the crossing.
Q. But then he has to pull it?
A. Down to the other end.
Q. And then does he have to stop it again on 172nd to let the guy cut it?
A. Yes, he does.
Q. Okay. All of that is taking a lot of time, correct?
A. That's correct.
Q. Okay, we will get to estimates of that time in a few minutes.
Let's now turn to the English south track schematic, and that would be the next chart that shows the proposed extension. We are now looking at English south track schematic, which again is part of that Exhibit 24. Mr. Ketchem, could you indicate on this,

take a look at the schematic, how the proposed track extension has been drawn into it.

A. The proposed track extension here is the dotted line which is just -- would be north of 156th Street extending across 156th and coming out, I'm not sure what the milepost is, but I think it's -- would be close to probably Milepost 46.5, I think somewhere in there.

Q. Okay. And there is an indication below of 9,250 feet; what does that indicate?

A. This 9,250 feet is the total length between the crossing and the switch at the south end.

Q. Okay. So let's assume for a moment that you have the same southbound train that we were just talking about and the thing was 6,000 feet or longer, but you had the extended siding and you had no 156th Street. Let's do that first. Could you explain then how the train would behave as it entered the siding.

A. Okay. The train would enter on the north end with a diverging route. And once a unit is sent in here, he would not have to stop to let the conductor off because the train would fit in the siding. So he would just pull right on down to the other end. And they've got counters on their train, footage counters, that tell them where the rear end is at. So when he hits his

crossing here, he will punch that counter. And once he gets down here at the other end, he knows what his train length is, and when he notices that he's over that counter length, then he knows he's in the clear.

Q. And would you expect there to be a considerable savings of time that the train is occupying 172nd?

A. Yeah, he would just pull right in. It would just be a minimal amount of time for him to come in here. If it's a 9,000 foot siding, he doesn't have to come in the same way that he would a 6,000 foot siding, because he's got to have more control of his train in a shorter siding than he does a longer siding.

Q. Okay. Now let's assume for a moment that 156th Street remains in but the siding were constructed. What would then happen to the train operation, that same train headed southbound having to take the siding; how would you foresee that working?

A. It would be --

Q. Forgetting for a moment that nobody is proposing that.

A. It would be the same operation we have now today with 172nd. Instead, we would have to be cutting 156th. So the engineer would have to stop the train, let the conductor off, pull the train up, conductor

would stop, he would make the cut 250 foot on each side of the crossing there, and either wait there or walk to the head end depending on how long it's going to be.
Q. And when the train stops at close to 152nd, would it be blocking 172nd?
A. Yes, it would be.
Q. Just to let the conductor off?
A. Yes.
Q. Okay.
A. From the time that he stops there and lets the conductor off and then starts to pull ahead again, he would have 172nd blocked.
Q. Okay. Because he would have to stop the whole train and then start it back up again, and then he would have to -- what would he then do as he pulled up after letting the conductor out?
A. After he lets the conductor off, the conductor would handle radio communication with him. The engineer would pull down close to the south end of the siding here. The conductor would stop him. The conductor would have to walk up to the crossing, bust the air on the train, which the engineer would pull, head into the train across the crossing there to open up the crossing.
Q. So can you give us, we will get to the time

later, but just so everybody understands, you could have, do I understand correctly that you could have to stop the train twice, once before 172nd if it was necessary to cut it there or at least at 156th if the train was longer than 6,000 feet?

A. I guess I really don't understand your question here. If the train is over 9,000 feet, of course you would have both of them possibly blocked, and you would have to cut both crossings. But if the train is less than 9,000 feet, then he would have the availability of just blocking one of these crossings.

Q. But he would still --

A. Which would be this crossing.

Q. But he would still have to block 172nd while he's letting the conductor out at 156th; is that correct?

A. That's correct.

Q. Okay. In your opinion, would that be a feasible operation if 156th were left in?

A. No, not only the delay that's caused by that train of having to stop and cut the crossing, he also has to put the crossing back together. So you might lose anywhere from 30 to 45 minutes on the initial cut and then lose another 30 to 45 minutes for him to put the train back together, and then he's got to walk up to

the head end and get on the head end before he can depart, so.
Q. Some of that time at least, 172nd is being blocked while he's doing those movements?
A. It depends on if the south extension was here and what the train length of that train was, chances are he would probably have 172nd clear. But if he is over 9,000 feet, he would have that blocked, so. And then and if that happened, then he would also have to go back here and put this together, because he would have both of them cut, so you're looking at --
Q. You're talking about somebody walking at some point 9,000 feet or something like that or 8,000, whatever?
A. Yeah, it would take a conductor 30 to 40 minutes to walk 9,000 feet.
Q. And that could -- do I understand correctly that could conceivably at some times or another involve blocking 172nd?
A. Yes, sir.
Q. For that length of time?
A. Yes.
Q. But without 156th, you testified that the train would come in basically nonstop across 172nd?
A. That's right, he would head in on the north

end and just pull right down to the south end.
Q. Okay. There has been some talk this morning about the north track schematic, the north -- the so-called north proposal, and we have a schematic that shows that, again referring to Exhibit Number 24, the schematic entitled English north track schematic. Okay, Mr. Ketchem, if you could show, please, the possible configuration of a north siding as shown on that schematic, if it is shown?
A. The north extension is the dotted line here that extends up to the current English siding we have right now.
Q. Okay. I notice a kind of a funny looking line down below labeled track rate. Could you explain what that means, please?
A. All right. If you're going southbound into Everett, this is a .56 ascending grade. This right here is a .25 descending grade.
Q. Okay. So outline for us, if you would, let's assume now that there is no south extension of the English siding, 156th is the end, 172nd is where it is, but the north extension has been constructed.
A. Okay.
Q. Could you lead us through the operation of a train southbound as it enters the north extension?

A. Okay. The dispatcher would still have the train lined into the siding here on a diverging route. The train would pull up through the siding here. And as you can see, there's no crossings involved, but now the train is sitting on a grade, a .56 grade. When that train stops down here, depending on how many locomotives he has, if he has two locomotives, he has got to leave continuous air in the train. And in adverse weather that air can bleed off. So the conductor is required to go back and tie hand brakes on the train if he's going to be there for any length of time. And to do that on a .56% grade, he's going to have to go back and tie 20 to 25 hand brakes.

Q. Now by tying a hand brake, maybe you could just describe that a little bit better. What does that mean?

A. A hand brake is a chain brake that -- there's a wheel on the car that they -- that the conductor has to turn to tighten up this brake, which puts the brake shoes continuous against the wheels of the car.

Q. Okay. And he does that because the train has air brakes?

A. The train -- the system that the train runs on, air brakes, yeah.

Q. Right, and you said they could bleed off.

A. They have to have continuous air through the train to keep the pistons pumped up and the brake shoes against the wheels.

Q. Okay. And when the locomotive brake control is put in the brake position, I think what you're saying is, by bleeding off, would you explain what that means?

A. What that means is that a train that sits for any length of time will lose air just normally out of the cylinders, whether it's the valve itself or whether it's gaskets or just a number of things. The air hoses might not fit properly, but it will actually lose air.

Q. Okay. Now the train -- I think where we left off is that the train is stopped, it's stopped before 172nd; is that correct, the engine would be stopped before 172nd in that scenario?

A. Yes, the engine would be right down here.

Q. If the train doesn't exceed what length?

A. 9,000 feet.

Q. Okay. And now the 20 to 25 cars are hand set, the brakes are hand set and all the rest of it, and then he gets the signal to go; what then occurs?

A. Then the conductor has to go back and replace the hand brakes on that train, and then the engineer, once the conductor gets back up on the engines, then the train will pull.

Q. Does he ever have to do an air test?
A. Only if he breaks the train.
Q. Okay.
A. In the other scenarios over here where we do cut the train in two, the rear portion of the train that did not have air in it has to be air tested.
Q. Okay. Now you mentioned this grade, the engine is starting up, could you tell us what is -- is there any difference between the way the train would accelerate on a grade going up hill and a flat?
A. Best example I can give you is if you're behind a semi on a road that is starting up a hill, how slowly it has to gather the momentum to pull itself up the hill.
Q. So the locomotive would be stopped in your scenario north of 172nd?
A. That's correct.
Q. And then it would be pulled slowly ahead over 172nd?
A. That's correct.
Q. Okay.
A. Another issue here we would have too is where this breaks right here from your ascending and descending grade, which is going to be right here on the switch. Chances of it -- if you're got a lot of

horsepower and a heavy train, that once three quarters of this train gets over this hump right here, the draw bar stresses. We could break draw bars here to.

Q. And then what would occur?

A. Then it would be blocking 172nd until the conductor walks back here and replaces them. And if the draw bar, then we've got to set the car out.

Q. And that could take how long?

A. Hours, it would take over an hour.

Q. So we would have a train sitting on the crossing for over an hour?

A. Well, what he would do is he would try to open up the crossing as much as he can, but he's still going to have to go back and forth over it while he does -- gets his train back together.

Q. Okay. And going up hill, do you need more horsepower?

A. Yes, we do.

Q. And so if the north configuration were used instead of the south, are you saying that we probably would need more horsepower on the trains than -- for the north configuration versus the south, again, in the southbound direction?

A. I would say that it would need more horsepower to pull out of here on a normal train. For

example, if you got a 6,000 or 6,500 ton train, he's got two locomotives on it, if you're on what we call the river grade or flat grade, then his start up is almost going to be instant. But if you take that same 6,500 ton train with two locomotives starting up on a hill, he is gradually going to pull that train until he gets enough momentum to get it up to track speed.

Q. Okay, let's turn now to the combination overall English track schematic, and that would be the one again in Exhibit 24.

JUDGE SCHAER: Counsel, would you check that exhibit number. I think it might be 23.

MR. WALKLEY: On mine, Your Honor, it's Exhibit 24, it's six schematic charts and one train graph.

JUDGE SCHAER: Okay. And is this the first page of it, this combination overall English track schematic?

MR. WALKLEY: Yes, the combination --

JUDGE SCHAER: Okay, thank you.

MR. WALKLEY: -- track schematic is the first one. I mean the corridor track schematic is the first one in that set, and then the next one is English track, existing English track schematic. The next one is the English south track schematic. The next one is the

English north track schematic. And combination overall English track schematic.

JUDGE SCHAER: Thank you.

MR. WALKLEY: Okay.

BY MR. WALKLEY:

Q. Up on the, well, first of all, could you indicate whether both the north extension and the south extension are depicted on this?

A. Yeah, the south extension is south of the current siding at English. The north siding extension is shown here north of the current siding at English.

Q. Okay. And we have done that, we have done that just for convenience. In other words, there's no plan to build both of them?

A. No, there's not.

Q. Okay. Now up in the upper right-hand corner of this combination overall English track schematic exhibit, I notice there are some figures. Could you kind of go through those figures now that we have explained the --

A. Okay.

Q. -- the movement of the train at least in the southbound direction.

A. What we're seeing here is a northbound train pulling into the siding at English on the existing side

takes eight minutes that he's going to block 156th while he's pulling into that siding. On the south end of the extension --

Q. Is that 172nd?

A. That would be, yeah, 172nd.

Q. Okay.

A. That he would block up. On the northbound on the south extension coming into here would pull into the siding, and he -- and it would take him eight minutes also from the time the head end to the rear end clears the switch. Also northbound on the north extension going north, the train would head in here, come down to this end here, it would take him ten minutes to clear 172nd.

Q. So, excuse me, but just for clarity. In other words, on the south, given the south extension on a northbound train, you're not -- you're not looking at very much blockage, if any, blockage of 172nd by the head end, but if you do --

A. Yeah, if he's 6,000 foot, he's going to actually cut that crossing and put his locomotives on this side of the crossing just because of his train length compared to the footage he has to clear it by.

Q. Right. But if there's an extension and he's 6,000 foot, then would he need to block 172nd at all?

A. No, he wouldn't.
Q. So the train would clear, and 172nd would not be affected when the train stopped?
A. That's correct.
Q. Okay. Continue on then.
A. Now a southbound train coming up to the existing siding would also take eight minutes to pull down and clear 172nd. Or when it -- movement showed these figures had actually cleared the switch here. The south extension, coming in the south extension and pulling down, it would also take eight minutes to get in the clear.
And then on the north extension, the southbound train would actually take 18 minutes to clear, and the reason being is because of the grade, he's going to set air coming into the siding and just because of the grade is going to just by force slow him down. So he's going to have to kick his air off and let it glide in a little bit, set it again, glide it in, set it just to get in the clear.
Q. So what I'm hearing is that if we built the north extension instead of the south extension, there would be more blockage of 172nd both north and southbound?
A. It would be longer going northbound because

of the time it's going to take him to throttle up and to pull out of the siding. As far as coming southbound --

Q. Well, no, I think you have that reversed.

A. No, on the grade here, if he's going -- yeah, if he's going southbound, that's correct. If he's going southbound and going into Everett there, it would take him longer to pull out of the siding because of the grade and getting his momentum up. And then coming in northbound, it would also take him -- are you talking about with this north end built or --

Q. Right. In other words, just to kind of summarize it for everybody, what is the impact on 172nd Street of building it north versus building it south, in other words? Does that chart up there help with those numbers?

A. Okay. Building the train on the north or building the siding on the north extension operationwise will hamper our railroad due to the fact that this train is pulling up here on a grade and stopping on a grade. If we built to the south extension, which is pretty much almost level track, there would be no, with 156th removed, there would be no restrictions to the railroad.

Q. Okay. And I noticed these -- so that's how this chart is read, you have already talked about the 10 minutes, the 8 minutes, the 18 minutes.

A. 18 minutes?
Q. The 8 minutes. What are these figures here, the 30 minutes and the 45 minutes?
A. Okay, the way the siding is right now at English, if you got a southbound or northbound train coming into the siding and he's over 6,000 foot and he's got to cut maybe his locomotives and a couple of cars and pull those ahead over the crossing, it's going to average him 30 minutes that he's going to block that crossing while he's making that move.
On the southbound side, if he's pulling in here and pulling down and he will not clear 172nd, of course, the conductor has got to get off and wait until the train pulls down, cut the crossing, and that's going to take 45 minute on an average.
Q. Okay. So there's quite an impact on 172nd?
A. There is.
Q. Of building north versus building south?
A. That's correct.
Q. Okay. The final one is the so-called train graph.
MR. WALKLEY: That's the last exhibit in this group, Your Honor. That's the colored funny looking.
BY MR. WALKLEY:
Q. Okay. Now I'm sure that there may be

somebody else in the room that does not understand this chart, so if you could please take us gently through this so that we can understand what this chart depicts.

A. Okay. This is a streamline of trains that operated between we will go Everett and Blaine, Washington. As you can see, right here BNG, that stands for English, this is the siding at English. And this is the train, actual train movement that went through there in a 24 hour period depicted by these lines. And these lines, as you can see up here, are the times starting at midnight, 1:00 a.m., 2:00 a.m., 3:00 a.m., 4:00 a.m.

So this particular train that's HBBC-9 that was going southbound came through English just before midnight. Then we had a northbound, which is a Pasco to Brownsville went through English it looks like just about 12:30 a.m. Just prior to him was an LPAC 627 which was a southbound that he met right there at English, so there was a train actually meeting there at English at that point. Now the LPAC 626, that's a local and normally runs probably anywhere from an average of 55, 60 cars, so he would have fit perfectly in the siding. Then you go across here, here's another local that's going north. Here's another local RPAC going north. Then you've got a southbound here, a southbound here, a southbound here, a southbound here, and then

here's a northbound, northbound. And these blues are south, so. And these are Amtrak's, the ones in the purple are the Amtrak trains. So this kind of just gives you an idea of what the traffic is like going through English.

Q. So if the siding were not built at all, let's say that the siding were not built at all, is this train graph showing us that there would be an impact on the operation of your corridor?

A. Yes, the only sidings that I have between Blaine and Everett that I can actually meet trains in here right now with a 6,000 foot track capacity, because English, Stanwood, Bow, Ferndale, and Swift, so I've only got five sidings out here that I can actually meet a 6,000 foot train in. Now we're in the process of increasing the siding capacity to make it easier for us to move the traffic over here, and that's what this whole thing is about, so.

Q. So if the south extension is built and 156th is not there, are you saying, is it your testimony that of all these scenarios we talked about, is that the optimum scenario from a point of view of occupation of 172nd Street?

A. Operationwise, yes, it is. That would be my opinion.

Q. In other words, the least occupation of the street of 172nd would occur with a south extension proposal and 156th gone?
A. You would have less occupancy on 172nd, that's correct.
Q. Both north and south?
A. Both north and south.
Q. As opposed to the building of the north extension?
A. That's correct.
Q. Or can I -- would you also say or the building in no extension?
A. The building in no extension would just leave us what we have right now currently, and we're going to always have the delay of 172nd of having to cut the crossing and the conductor delay, the train delay. If we build a north extension, that's going to hamper our operation because of the capabilities of the locomotives and the equipment. So the best scenario for operation is the south extension.
MR. WALKLEY: Okay, thank you very much, that's all I have.
JUDGE SCHAER: Thank you.
Did you have any cross, Mr. Cummings?
MR. CUMMINGS: I do. I just wasn't sure if

Mr. Stier --

JUDGE SCHAER: Mr. Stier had his opportunity to jump up and wave his hand, and he didn't take it yet.

C R O S S - E X A M I N A T I O N

BY MR. CUMMINGS:

Q. Mr. Ketchem.

A. Yes.

Q. Couple of questions. Why do you suppose Burlington Northern originally proposed in January of 2000 to site the siding to the north?

A. I can't say. I wasn't here. I wasn't in those meeting, and so I don't know.

Q. That's fair. How about on an operational level if when the siding -- if a siding is constructed to the north?

A. Uh-huh.

Q. I imagine there's an opportunity to do some cut and fill in the grading of a siding.

A. That's an engineering question.

Q. Okay.

A. You would have to ask them.

Q. So let's hypothetically say that they did do a cut and fill and brought the grade from .56 up to a .25, what would that do in terms of your analysis?

A. Operationwise I wouldn't have a problem with that, because it would be no different than the south end.
Q. And in terms of -- in terms of the siding analysis that you have presented in terms of saying if we built to the south it would be optimal because there would be less blockage, does that take into account the passing trains that come through and cause a close at 172nd as well?
A. Well, the trains that are going to be operating on the main line is a short time period closing.
Q. Mm-hm.
A. The biggest delays you're going to have are trains that are going in and out of the siding.
Q. Okay.
A. Because of the speed they go in, the speed they come out.
Q. What's a bad switching order?
A. I don't understand the question.
Q. Okay. I was wondering if there's a terminology of a bad switching order. Is there a way for a train to somehow get a wrong order that will cause them confusion and possibly delay?
A. No, the train operates off a single

indication, so the dispatcher up in Fort Worth lines the signals up with that train, so they don't actually have anything in their hand that gives them authority. It's all done by CTC which is like traffic lights, for example.

Q. Okay. So in a way, it's kind of like air traffic control but train traffic control in one central location.

A. Only an air traffic control in which there are three different dimensions, time, altitude, and speed. Train dispatcher don't have that luxury.

Q. Sure. I was wondering if imagine 156th Street were left open and the siding was extended to the south, would there not be the possibility to bring a southbound train through the 172nd interchange, maintain the conductor on the train past 156th, stop the train, have the conductor exit, walk back to 156th, this is assuming it's cleared 172nd, then separate the trains, and allow the train to continue pulling forward?

A. Yeah, you could do that, but if -- what we are looking at on the railroad is if there's an opposing train that he's waiting for and that's all he's going to wait for, then you don't want him trampling back and forth, you know, from one end of the train to the other end of the train.

Q. So it's a convenience factor?
A. No, it's not really a convenience factor, because these guys are trained that if 156th is in here and they're pulling down, that conductor is going to get -- the engineer is going to stop the train, the conductor is going to get off, and he's going to wait there until the engineer pulls down. Because he's in a position right there to see where his rear-end is if he can see it, or he's in a position to see what traffic he's got there, so when he does make the cut that he can allow the traffic to go.
Q. And he wouldn't have this ability to do that if he exits the train and walks back to 156th?
A. I don't understand why you would do that. Why would you want to pull the train all the way down here and then make the conductor walk all the way back and then cut the crossing? You're going to be delaying the traffic that much longer.
Q. Wouldn't that actually leave 172nd open?
A. Well, still I don't understand your question here. If the south extension was built here, he would be able to pull right down in here. He wouldn't block 172nd other than his time pulling into the siding.
Q. Well, what Mr. Walkley was asking you earlier --

MR. CUMMINGS: You don't mind if I approach?
JUDGE SCHAER: That's all right.
MR. CUMMINGS: To articulate.
BY MR. CUMMINGS:
Q. We have the 156th.
A. Right.
Q. Then we have the extension, proposed extension.
A. Okay.
Q. Now imagine if we have a southbound train, so imagine heading this way.
A. Southbound train.
Q. And it pulls into the siding. Now you were indicating before, at least what Mr. Walkley I think was pointing out, that there is a potential if he has to stop right here to allow the conductor out that he could be trailing back here and blocking 172nd.
A. That's correct.
Q. Now what I was asking is what if you pulled through, cleared 172nd, could the conductor then exit, walk out to the brake point, allow the breakage, and allow him to pull through?
A. He could do that, but would I tell the person to do that? No, I wouldn't.
Q. Why?

A. The reason being is because if this train is pulling into the siding here and the conductor has got to cut this crossing, it's only going to take a minute or two or five minutes for him to stop, the conductor get off, for him to start pulling again.

Q. But would that result in blockage?

A. You're going to block this crossing, but I'm not going to ask that conductor to walk in that ballast from this end all the way down to this end for convenience. I mean his job is to stop at this point, this location, get off, and wait until that train pulls out, and cut the crossing. That's the normal procedure.

Q. So procedures could be changed to accommodate 172nd?

A. Yeah, it could be changed.

Q. Okay.

A. But I don't know if I would enforce it, unless I had to. I mean it doesn't make sense.

Q. I was going to say, are you sure you want to say that.

A. Well, it doesn't make sense to me is the only reason I say that.

MR. CUMMINGS: I have no further questions.

JUDGE SCHAER: Do you have any questions, Commission Staff?

MR. THOMPSON: Well, I do just have one brief question.

C R O S S - E X A M I N A T I O N

BY MR. THOMPSON:

Q. From an operational standpoint, I just want to pose a third hypothetical to these two, the north and south. I can't quite read the combination overall English track schematic from here, the numbers on there, but is there adequate room in feet between 172nd Street and the farthest one to the south, what's the name of that street?

A. 136th.

Q. 136th, is there 9,000 feet between those two?

A. Are you saying if we moved the switch back on this side of the track?

Q. Yeah, in other words, could there be a siding, a third possibility of a siding that would only cross 156th and not 172nd?

A. That's a question you would have to ask engineering as far as the actual train or actual footage out here.

Q. Let me just pose it to you. If it were an engineering possibility, from an operational standpoint, would it meet your needs?

A. Yeah, you wouldn't have two tracks across 172nd is what you would gain. You would have a single track across there versus two.

MR. THOMPSON: Okay, thanks.

MR. WALKLEY: But, Mr. Ketchem, is there any --

JUDGE SCHAER: Actually, Mr. Walkley, I did have a couple of questions.

MR. WALKLEY: Oh, I'm sorry.

JUDGE SCHAER: Although I believe counsel just asked one of them.

E X A M I N A T I O N

BY JUDGE SCHAER:

Q. I was going to ask you to look at the south track schematic. We probably can look at this one as well.

A. Mm-hm.

Q. On the south track schematic or on this, as I understand it, from the middle of 172nd to the far end you're showing 9,250 feet?

A. Yes, from this crossing down to the point where the switch enters the main track.

Q. So that's from the street and not further back from the switch; is that correct?

A. That's correct, that doesn't include the 250 feet that we would have to clear that crossing.
Q. So if you --
A. It would be 9,000 feet.
Q. So you are still proposing to have the siding cross 172nd, so there will be two tracks up there under the proposal that's currently made; is that correct?
A. That's correct.
Q. Okay. And then just because I don't think in feet very well, I'm sitting here in my head and I'm thinking that it's about 1,700 yards or 5,100 feet for a mile; is that correct?
A. 5,280 feet.
Q. So each one of those segments of 6,025 feet is more than a mile?
A. That's correct.
Q. And what kind of surface is there for the conductors to walk on; is it that rough rock that's --
A. It's usually the big ballast or the big rock.
Q. Okay. So that's why you're thinking that walking a mile on that would take probably 15 to 20 minutes?
A. That's correct.
Q. So if you were to pull ahead and then have the engineer walk back to 156th, it seems to me it might

be possible that it would take more than ten minutes for him to get there?

A. That's correct.

Q. And then you would be violating our rules; is that correct?

A. That's correct.

JUDGE SCHAER: Thank you.

Mr. Stier, did you want to ask anything, just to double check?

MR. STIER: No.

JUDGE SCHAER: Okay, Mr. Walkley, go ahead, please.

MR. WALKLEY: I have nothing further, Your Honor.

JUDGE SCHAER: Okay.

MR. WALKLEY: Thank you very much, Mr. Ketchem.

JUDGE SCHAER: Thank you, Mr. Ketchem, for your testimony, and you may be excused.

Let's go off the record for just a moment to look at where we are and to change witnesses.

(Discussion off the record.)

(Recess taken.)

JUDGE SCHAER: Would you like to call your next witness, Mr. Walkley.

MR. WALKLEY: Thank you, Your Honor, I would like to call Mr. Powrie to the stand.

Whereupon,

MICHAEL S. POWRIE,

having been first duly sworn, was called as a witness herein and was examined and testified as follows:

JUDGE SCHAER: The witness is sworn.

MR. WALKLEY: Thank you.

D I R E C T E X A M I N A T I O N

BY MR. WALKLEY:

Q. Mr. Powrie, would you state your name, please, for the record.

A. My name is Michael S. Powrie, and that's M-I-C-H-A-E-L and S, P-O-W-R-I-E.

Q. And, Mr. Powrie, are you employed by BNSF?

A. Yes, I am.

Q. And what is your title?

A. My title is project engineer.

Q. Okay. And do you have any connection with the English south extension proposal?

A. Yes, I am the project engineer on that for BNSF.

Q. Okay. I want to refer you to the drawing of the English south extension. I believe this is the correct one. I'm referring again to this Exhibit 24 called the English south track schematic. I believe it was suggested by Mr. Cummings that we could simply relocate the north end of the present siding to somewhere south of 172nd. Could you just for a moment explain what kind of costs and factors might be involved in such a move.

A. Well, if the south siding extension was built, the object was, of course, to ensure train clear 172nd, stay south of it completely. To relocate this section of track here is about 1,700 feet, and all the signalization involved, I really wouldn't have the exact cost for that. And to move the switch on this side, if we did that, we would have to move this switch a little bit this way. Because as well as the 250 feet you have to keep clear of the crossing, there's about 300 feet short of the switch you have to keep clear to keep clearance of the switch so the train can go by. You can't follow an area there because the tracks come together. It takes that long for them to get apart. So if we moved this switch here up to here, we would be extending just a little farther to connect up to here.

Q. Now would you tell the group what is a

turnout, and is there a turnout located on the English siding right now?
A. Turnout switch is a mechanical diversion of tracks from one to the other that is a actual mechanical device that switches over so the train coming this way, for example, this switch going in a diverging route here. It can be swapped either way where the train will turn automatically.
Q. If you were to remove that turnout, could it simply be moved to south of 172nd?
A. Physically, yes, this turnout could be moved from here to here.
Q. But could you give us just some kind of estimate or some kind of indication of what you mentioned the signal system, the --
A. Okay, if that was going to --
Q. What kind of work would be involved in doing that?
A. If that was going to be done, first of all, you wouldn't move this one most likely. You would build a new one here. You would buy a new switch and put it in here, and that way you can still have an operating, you know, an operating railroad here until such time as this is in. Then you would cut this off, and then you would connect this up. Then you would remove this

trackage here and the switch and the crossing.
Q. But before you did that, I think it's been testified to that the whole thing is CTC territory and so on, could you just give us an idea of what else could be involved in this?
A. Okay.
Q. It isn't just moving track, is it?
A. I'm not a signal expert in any means, but at the moment there's a signal on that -- there would be three signals involved, a signal pointing to the south, the train is coming from south to the north here, and then there's a signal here and a signal here. There's three signals here. This signal on this side of the switch would handle the trains coming this way to tell them whether they go straight or they turn into the siding. The signal here stops the train coming this way from entering the siding or the main, entering the main. And the switch here stops the train coming from the south to the north so it will not, in case there's one in the siding that you're going to run ahead of it or there's one coming south into the siding, train holding there. So actually all three signals would have to be moved. Now these signals are tied to an approach signal ahead of it. So like I said, I'm not a signal expert, but moving of these signals that distance might have an

effect on the location of this previous signal and the signal behind it.
Q. In other words, it's an interlocking system, because Mr. Ketchem testified that the guy in Fort Worth is operating these things, correct?
A. That's true.
Q. All right. And then I think you mentioned too that you think you would have to extend the current proposal even further south?
A. Yes, we would be extending about 300 feet farther south. If we did move this switch to this side of the crossing, to get the clearance that we're asking for for 8,000 plus train, we would move this particular switch probably a good 300 feet south to give us the same clearance distance because -- well, actually, it would be more than that, it would be about 500 feet. See, what we do is this switch has to be clear of this crossing by a good 100 feet for signalization. Then you've got the 300 feet to clear the switch here, so that would be 400 feet or so from the 200, plus you got to move this down. So you're talking about moving that down probably a good 300 to 500 feet farther than it is today or is proposed today.
Q. And so doing that would not be particularly -- you have no cost estimate of that?

A. I have no cost estimate off the cuff at the moment, but the moving this down other than there would be two crossings in here, the operation of the trains wouldn't be affected very much. So if we left it this way, we're bringing the train in, the train is coming from the north to the south or pull in the siding, slowing down to stop here, it would be the same effect as if the signal was here, because it would be slowing down to stop here. If the train is going to the north, it would be, in this case, it would be stopped short of the crossing before it starts. It would take off then from here coming in this way, or it would be stopped short of the switch and coming in this way. So the blockage of 172nd actually would have no effect whether the switch was here or here. The difference is you would have two tracks in the crossing.

Q. Okay. Now turning -- what I'm going to do is turn you to an exhibit which we have listed as the so-called alternatives report.

MR. WALKLEY: And that's Exhibit 25 on my list, Your Honor.

JUDGE SCHAER: Yes.

MR. WALKLEY: And I will give you a copy of that, Mr. Powrie.

I'm handing the witness BN Exhibit 25, which

is the --
BY MR. WALKLEY:
Q. Would you please, have you ever seen that report before, Mr. Powrie?
A. Yes, I have.
Q. And could you, just for the record, could you identify the document.
A. This is an alternative to English south alternative. We hired HDR to take a look at that particular proposal, and it was when we were reviewing our options for this particular siding extension.
Q. And so is it fair to say that the subject of the report is an analysis of the north proposal versus the south proposal from an engineering point of view?
A. Yes.
Q. Okay. Now I think you were in the room this morning when Mr. Schultz was asked about a memorandum and more specifically a meeting that took place at BNSF. Do you remember that conversation, the meeting of January 2, 2000?
A. If we're referring to the particular minutes of the meeting that Mr. Schultz is trying to respond to regarding one of our bimonthly meetings at WSDOT, yes, I recollect the conversation.
Q. And this, excuse me, I misspoke, it's the

minutes of the January 21, 2000, meeting. It's listed as K in the original exhibit list.

MR. CUMMINGS: 51, Exhibit 51.

MR. WALKLEY: That's Exhibit 51.

MR. CUMMINGS: Mr. Walkley, I've got a copy.

MR. WALKLEY: Thank you, that would be helpful.

BY MR. WALKLEY:

Q. Now, Mr. Powrie, were you at that meeting?

A. Yes, I was.

Q. Okay. And it's been sort of characterized today by some that BNSF basically at that time had already decided to build the north and that somehow it was suggested we should go south, so we decided to go south. Is that exactly the way it happened, or is it a little more complicated than that?

A. It's a little different, it's a little more complicated than that. But for the record, at this meeting I was not presently the project engineer for this particular project. I was designated the project engineer for the Amtrak north project at a later date.

Q. All right.

A. But I was at this meeting. In our normal procedures for looking at siding extensions and/or various capacity projects, we do an initial view. And

in this particular case, we looked at an area that was recognized as a restriction, which is English, and a need for a crossing or I mean a siding extension or a siding in excess of 8,000, 9,000 foot. We immediately looked at other areas and noticed that there was distances between the crossings here that are shown on the map where it wouldn't have fit, so we obviously initially looked at the north end because it would not fit in between the crossings of 172nd and 156th or 136th. You can not fit a siding extension in between any of those without affecting one of the other crossings. So initial look was could we build it to the north so we would not have to affect those crossing issues.

So what we did is we laid out a north extension to how we could handle it and what would be done. Then what we did is we laid it so the switch would be to the south of 172nd so we would only have to clear the crossing by 250 feet instead of come to the crossing for the minimum 100 plus foot clearance to the crossing, add 300 foot plus clearance to the -- actually, it's a little longer than that, that's another 20. But anyway it's plus the distance to clear the switch and the crossing. We put the switch on the south side of the 172nd and used our existing siding that was

there today, so we have a shorter clearing distance once we get past 172nd to build the north siding. And that was our initial review, and that's why we started with the north end.

Q. Okay. I want to focus now on the alternative support, the exhibit that we first looked at in the alternatives report, and I will give this back to Mr. Cummings with my thanks.

Turning through the alternatives report, I wonder if you could find the, first of all, the two cost estimates that are in the report.

A. Okay.

Q. But before we do that, am I correct in saying that or am I asking did HDR, the consulting firm, prepare this report?

A. Yes, they did.

Q. Okay. And were you involved as project manager when that report was --

A. No, I was not.

Q. Okay. But you were -- were you in contact with Mr. Rikel or --

A. Yes, I was.

Q. Okay. Now turning to the two cost estimates, could you indicate what those mean just very, very simply, in other words, no detail. But first of all,

are those two pages a comparison of the cost of the north extension versus the south?
A. Yes, they are for the simple track construction. They are not taking into consideration any further mitigation requirements or requests due to permitting issues or other impacts of the project.
Q. In other words, that's pretty nuts and bolts right there?
A. Those are nuts and bolts proposals.
Q. So if the north were built versus the south but not taking into account, any what, costs of mitigation that might require --
A. True.
Q. -- in the north or the south?
A. Or the south, that's correct. There is money in there shown in estimates for that, but that's just minor mitigation dollars. We're not looking at anything that would be --
Q. Okay. So with that understanding, what was the, if you can tell from that, from those tables, what was the projected cost of the north proposal?
A. Projected cost of the north proposal according to this was about $3.96 Million.
Q. And what about the south proposal?
A. The south is showing at about 3.15.

Q. Okay. Now I would like to refer you to a map in the report which shows Milepost 44. In other words, if you would turn to that for a moment, and what he's doing for the record is turning to probably the second foldout page in the exhibit. And if you could identify this for the record, please. What does it, first of all, what is the title of the document you're looking at?

A. Title is English south siding extension.

Q. Okay. And up on the upper left-hand corner and on the upper right-hand corner, what do those numbers mean?

A. The milepost is listed across the top, a little mention there PA Junction, Washington, and the U.S. Canadian border would reflect more to that corridor schematic that was shown. It gives the directions to each.

Q. Okay. And is 156th Street shown on that print at all?

A. Yes, it is, it's shown on closer to the right side of the print.

Q. Okay. And to the left of that is shown Kruse Junction?

A. Correct.

Q. Correct. That's simply to help people

identify in that alternatives report the location of the crossing as it appears in that report.

If you will turn now to page two, there is a page two of that report. There is a -- I direct your attention to what you were saying earlier, Paragraph 2.2, if you could just briefly answer the question, that's what you were talking about, it's basic estimates, correct?

A. Yes, that's just showing what the extension of the English siding would entail. It would entail the installation of a new number 20 turnout, and that would be this construction of 3,500 feet, which would be this, and the relocation of some track use that's connected into here to take out this turnout and turn this -- or to realign this track line up.

Q. Okay. Now turn please to page five of the report, and you will see a big paragraph 3.3, costs.

A. (Complies.)

Q. If you would, notice what it says as far as that sentence up on top, and maybe you would want to reed that and then one, two, three, four.

A. It's relating the two alternatives, north and south, saying alternative two is approximately $810,000 less expensive than alternative one. The difference of the cost is less new construction, a more equally

balanced cut and fill quantities, fewer turnouts, and less permitting and environmental mitigation.

Q. Okay. On the -- in other words, it wasn't just a suggestion from somebody at a meeting in January that caused us to -- caused the railroad to decide on the south?

A. No, our initial look at it was in order to just -- it was our -- so we don't block any crossings, let's see what it's going to take to look at the north. In our review of that, it was brought up during one of our bimonthly meetings at WSDOT and Amtrak, they asked if we had looked at the south, and one of the issues was we were very careful of doing that because of the crossing closure and the timing it takes to close a crossing or timing it takes in doing that in case there was some rebuttal from the County and issues involved in that scenario. So we were concerned on that issue, but we did look at that in our review we -- after that, this report here is listed in June of 2000. We did have our consultant take a second or look at that review in more detail, and as an alternative report shows there are some definite benefits to going south.

Q. So what I'm hearing you say is that cost was one consideration but certainly not the only consideration for the south; is that correct?

A. That's true.
Q. And in other words, are you saying that timing is -- timing was important too?
A. The timing of construction, the timing, yes, that was very important.
Q. Now why would there be any conceivable difference between the timing of construction south versus the timing north?
A. Well, if 256th is closed, then this is the very minimal cut and fill period, very smallest amounts of material, and very simple construction to build this, so it would be a very fast thing to take care of. On the north side, we're building 8,000 foot, much longer distance. There's a lot of excavation coming through here. It would take longer to construct. There are various culvert extensions and more wetland issues going this way. And there's a fish brook here that would rule the construction of a -- extension of an eight foot arch, concrete arch.
Q. Okay. Now we have a lot of evidence in the record, and we're not going to certainly go through that or we will be here for a week, but just briefly, could you tell us from an environmental point of view in your working the project, what kind of permits are really involved for the south extension? Are there federal

permits?
A. With the south extension, there's -- there is wetlands on this, on the west of us, but the way it's going to be constructed, there would be very minimal fill.
Q. Okay.
A. Which would put us into a federal permitting issue, which is a nationwide permit.
Q. Okay. And on the north, if you were to build the north --
A. If we were to build the north --
Q. -- what would that be?
A. -- our impact is greater than the allowed amount for a nationwide permit. And so we would be going to an individual permit for that, and that would take a little longer to acquire.
Q. In fact, it could take much longer, correct?
A. Much longer.
Q. Okay. So what I'm hearing you say is -- why is timing important, by the way? Why does it matter whether it takes us two years to build it or two months?
A. Well, as was initially noted, this capacity improvement was to be installed before the second Amtrak train went on. Now that the second Amtrak train is on, it is impacting our operations in a manner where this

siding is extremely important to us. And the longer we wait, the more impact it has. So if we wait two years or however this permitting issue here would take to go through our procedures for individual permits, that's just that much more that we are impacted on regarding the passenger services.

MR. WALKLEY: Okay, thank you, Mr. Powrie, that's all I have.

JUDGE SCHAER: Okay, let's take another moment to see where we are.

(Discussion off the record.)

JUDGE SCHAER: Go ahead, Mr. Cummings.

C R O S S - E X A M I N A T I O N

BY MR. CUMMINGS:

Q. Mr. Powrie, in terms of your project engineering status, it looks like designs and different aspects along those lines, correct?

A. Yes.

Q. If the project were built to the north, is there a way to adjust the grade? We heard from Mr. Ketchem -- I will back up. Mr. Ketchem indicated that there was some problems because it was a little bit of a steeper grade, a .56 slope.

A. Yeah.

Q. If you were to construct a siding to the north, is there a way to mitigate that slope?
A. What this means is .56% slope, that's a half a foot or almost, well, 7 inches for every 100 feet. Okay, I got 9,000 feet, so that's 900 I mean 90, I mean we're talking about a large amount of footage of raising the track.
Q. Sure, if that was to make if even. But what if it was only going to bring it up to a .25 grade like you have on the other side?
A. Okay, well, that would just be half, that would be half that amount.
Q. So it is possible to do?
A. Well, it's not very feasible, because if you raise this a half a foot, you got to raise -- you got to extend that out. So if you're raising this 9,000 feet a half a foot or more, you're going to raise the 9,000 foot behind it to get it to mellow your grade so it fits into the existing grades. Whatever the existing grades are behind you, you have to match those.
Q. Okay.
A. So it's just like coming in here and starting here and raising a grade up to match whatever you need to hit the crossing, the .5% grade here, .25, let's see, half a foot times -- this is, see, a quarter foot times

9,000 foot, you're talking about quite a lift here.
Q. Okay.
A. And also, when you lift up this, you're spreading it out, the load out. You're planning on under passes?
Q. Well, if there are any grade crossings up there. Are there any grade crossings up here?
A. There are north of here there is a grade crossing. There's a steep hill up here where the track -- name of that road -- there's a road that comes along here and --
Q. Possibly Sill Road?
A. -- and it winds down just over here to a farmer here, so there's a private crossing here to somebody who owns some property right over here, and there's a private crossing ahead of this.
MR. WALKLEY: And for the record, you're pointing to north of the proposed northern extension?
THE WITNESS: Yes, just north of the proposed switch.
BY MR. CUMMINGS:
Q. In terms of the south extension, there's been some discussion regarding moving the switching operations south of 172nd.
A. Okay.

Q. Is that feasible?
A. As far as the south extensions, I tried to go over that once, but --
Q. You don't need to go over it again, Mr. Powrie.
A. -- moving this switch to the south of 172nd.
Q. Okay.
A. To do that, what it will take is right now it's 250 foot break at the crossing. To move this to the south, we have to move a clearance from the crossing to the switch, say 100 feet, plus the clearance from the switch here, which is over 300 feet, so we would end up extending this on farther to get our same clearance distance.
Q. So it's feasible?
A. It is feasible. The difference according to -- also added on to that is the fact there's signalizations that would be affected that would also have to move with it, and the interconnected signals ahead of us and behind us would have to be double reviewed to make sure, you know, review the impact on those and see where they would have to be relocated to keep our distances between our signals.
Q. Again, it's feasible?
A. Is it feasible? Yes, anything is feasible if

you have the right amount of money.
Q. Now you commented you had some concerns about the environmental impacts to the north. Did you hire HDR to review those environmental impacts?
A. Yes, we did.
Q. And did they suggest that you could go north and mitigate those environmental impacts?
A. I believe that is a possibility.
Q. In fact, didn't they submit documentation to the Army Corps of Engineers saying that you could do that?
A. Yes, they did.
MR. CUMMINGS: Okay, thank you, I have no further questions.
JUDGE SCHAER: Did you have any question, Mr. Thompson?
MR. THOMPSON: No questions.
JUDGE SCHAER: I have just one thing I would like to understand.

E X A M I N A T I O N

BY JUDGE SCHAER:
Q. You're the project engineer for the proposed south extension; is that correct?
A. Yes.

Q. And so looking at your schematic combination overall English track schematic and looking at where this goes back out to the main line currently at 156th, are there signals there and the kinds of things that you were talking about being at the other end of this siding?

A. Yeah, we have the same signal -- on the existing siding, we have same signalization system as we did on that side. We have a signal here, a signal here, and a signal here, and they work the same way.

Q. So would the costs be roughly --

A. These would be moved to here.

Q. So would the costs of that move be roughly equivalent to the cost of moving the same things at the other end if you were to move the entry to the siding to be --

A. If we were to move --

Q. -- south of --

A. -- this here, would it be approximately the same? Yes, it would be in addition to that.

Q. Certainly, but it would be about the same?

A. I really can't say, because I don't know the -- signalization is a very unusual animal, and it's the ties between the adjacent signals is what I can't answer for you.

Q. But you would be moving the same kinds of machinery?
A. You would be moving the same type of machinery, correct.
Q. And do you have in your cost estimates some indication of how much that piece of the project costs?
A. They've got listed here about $1 Million.
JUDGE SCHAER: Thank you.
Go ahead, sir.

R E D I R E C T E X A M I N A T I O N

BY MR. WALKLEY:

Q. And I want to be sure that it's clear after all this, Mr. Powrie. You are saying that if, as I understand it, am I correct that if the switch which is now north of 172nd were placed south, that is all work that is not now planned; is that correct?
A. That's true.
Q. And so all of this work would be, at 172nd, would be in addition to the work that you had planned at the south extension plus adding additional track here?
A. Correct.
Q. To the south?
A. Correct.
Q. Okay. So it's not only $1 Million more but

possibly more even for the track?
A. Yes, it would be more.
Q. Or even grading or whatever. Okay, the only other question is again going through all of that expenditure of $1 Million plus, would there be any effect on the occupation of 172nd if the switch were placed here as far as the occupation of that by trains?
A. No, no, there would not be. As listed up here, it's hard for anybody to see, but if we were going from -- if we have this -- had English south built and we were putting a train -- had a train in here coming from south to the north, it would come in, pull in, and not affect 172nd, because it would be stopped prior to the crossing. It would not block the crossing. It would block the crossing when it took off to the north northbound, and it would cross the crossing, go through the switch, and take on. It would be starting from a dead stop and continue on, and it would take about eight minutes to do that.
Now if the switch is moved to this side of the crossing, it's extended. It would have the same effect. It would stop short of the switch and then take through the switch, from a dead stop again, through the switch and on through here. It would only be one track, but it would be the same operational result and would

probably take still about eight minutes. So there wouldn't change the blockage of the crossing anyhow. It wouldn't eliminate the crossing in or railroad crossing within it though.

MR. WALKLEY: Okay, thank you very much.

MR. STIER: Could I ask one question?

JUDGE SCHAER: Yes, you may.

C R O S S - E X A M I N A T I O N

BY MR. STIER:

Q. Could you go through the same analysis southbound?

A. Sure. Going through the south to bring an 8,000 foot train going this way, you would come into the crossing, come into the switch here, you would swing down through the switch here, you would be going across the crossing, and you would stop it up here. If you continue a motion, it would take you about eight minutes, because you're going about the same speed. Because you're slowing down for the speed, turn the speed out or speed of the turnout, and you're going across the crossing and slowing down, be prepared to stop on this end.

If the switch was on south of 172nd --

Q. Before you get there, sir, would the tail of

the train clear eventually, when the front stops, would the tail clear 172nd?
A. Yes, because it -- yes, if we bring it all the way down to here if this was not here, or even if it was here, we would bring it all the way down and stop. If this was not here, it would be one continual motion. As Steve explained, if this was here, we would have to stop, which would stop the train here.
Q. And it would block?
A. And it would block.
MR. WALKLEY: And the word this.
A. If this was not here, it would be one fluid motion on here slowing down to stop here, and the train would be stopped beyond the clearance of 172nd.
MR. STIER: Thank you.
MR. WALKLEY: Just for the record to be clear, when you were saying this and this --
THE WITNESS: Oh, I'm sorry.
MR. WALKLEY: -- you were referring to 156th Street?
THE WITNESS: Yes, I was.
JUDGE SCHAER: Thank you for your testimony.
MR. WALKLEY: Thank you very much, Mr. Powrie.
JUDGE SCHAER: And now would you like to call

Mr. Bloodgood.

Whereupon,

JAMES BLOODGOOD,

having been first duly sworn, was called as a witness herein and was examined and testified as follows:

JUDGE SCHAER: Your witness is sworn, Mr. Cummings.

MR. CUMMINGS: Thank you.

D I R E C T E X A M I N A T I O N

BY MR. CUMMINGS:

Q. Can you please state your name for the record.

A. James Bloodgood.

Q. And what is your occupation?

A. Traffic engineer for Snohomish County.

Q. And what are your present duties as traffic engineer of Snohomish County?

A. We maintain operations on about 1,600 miles of County roads, review development proposals and activity for the impacts on County roads. My organization, traffic engineering, also maintains the traffic signals that the County owns and operates. We

review safety and operations on all of those miles of roads that I had previously identified.
Q. And before coming to Snohomish County, what did you do?
A. I have been a traffic -- in traffic engineering for the last 21 years. Prior to coming to Snohomish County, I did traffic engineering consulting work from 1989 to '93. Prior to that from 1980 to 1989, I was with the City of Sacramento, the last six years of which I was the city traffic engineer.
Q. Did you have the occasion to work on any rail projects?
A. I did have occasion to work on some rail projects with Sacramento. We implemented a light rail system in the city, and as part of that program, there were three grade separation projects that we worked on to make that system as efficient as we could.
Q. Let's turn to the present matter. Are you familiar with the area in question surrounding 156th Street vicinity?
A. Yes.
Q. And behind you is what has been marked as, the blown up version of what has been marked as Snohomish County's Exhibit Number 41.
JUDGE SCHAER: And admitted, counsel.

Q. And admitted. Does that accurately reflect the area, the main roads to the area?
A. Yes.
Q. Okay. Now do you have any personal knowledge aside from basically maybe looking at documents like this, have you been out in the area before?
A. Certainly I have been out in the area many times. Traffic operations used to have our traffic signal maintenance shop in the Warm Beach area. Don't ask me why, but it was there. And so many times I would be out there in the area driving on the roads.
Q. And so to get out to the Warm Beach signal shop, you would have to use 172nd?
A. Yes.
Q. And that would be exiting off of I-5 heading west across the railroad tracks?
A. Yes.
Q. In your experience of heading out there, have you ever experienced delays in trains?
A. Yes, I have. The trains -- I have been delayed, you know, 25 minutes as the trains have been moving around on those tracks certainly.
Q. And do you have any other knowledge, have you reviewed any other project applications or documents for development proposals in the area?

A. Well, yes, the Lakewood School District is currently seeking to expand the middle school just on the west side of the railroad tracks, and I believe they also have a future elementary school that will be to the south of the high school on 11th Avenue.

Q. Okay.

A. So there has been development activity.

Q. And are those schools shown on Exhibit Number 41?

A. Yes, they are.

Q. And for the purposes of the members here in the audience, could you point out exactly where those schools are located?

A. Schools are identified here on the map with the boxes and red flags.

Q. Okay. And for purposes of the written record, that would be just west of the railroad tracks and just south of 172nd?

A. Correct.

Q. Okay. Now in terms of coming in and preparing for your testimony today, what other documents have you reviewed?

A. Well, I reviewed the traffic impact analyses for this proposed closure of 156th Street. The original report, and which was I think actually called a draft,

dated in October of 2000, and an addendum that was prepared after that.

Q. And these are the reports performed by Mr. Norris of Gary Struthers and Associates?

A. Yes.

Q. Have you also reviewed the Snohomish County engineering design and development standards?

A. Certainly.

Q. And how about the Washington Department of Transportation design manual?

A. Yes.

Q. As the County's traffic operations manager, what are your concerns regarding this proposed closure of 156th?

A. Well, it has to do with the circulation of traffic in the vicinity of Twin Lakes or that area to the east of the railroad tracks and south of 172nd Street and west of I-5. Because what we're going to wind up with is a long, long cul-de-sac, one way in and one way out. And this is a developing area identified as an urban growth area, and we will see traffic volumes continue to increase as urbanization takes place. So when we restrict traffic to only one way in and only one way out, it places a constraint on our circulation ability as well as the response of emergency services.

Q. Are you familiar with what types of uses are made of the area?
A. In terms of current or proposed?
Q. Well, let's actually back up. The area itself is -- how would you describe the character of the area funneling in off of 172nd into the 156th Street crossing?
A. Sporadic residential development and a pretty nice regional park.
Q. Okay. I have -- in terms of its geographic boundaries, how is it made up?
A. It's triangular in terms of bounded by the railroad tracks, 172nd Street, I-5.
Q. Okay. And in terms of its discussion as a triangle, you indicated that if the closure of 156th were to occur, it would result in just one avenue in and one avenue out?
A. That's correct, and that's 27th Avenue Northeast as it intersects 172nd Street.
Q. Okay. And aside from the residents living there, are there other members of the county that make use of the we will call it the triangular area?
A. Well, those people who frequent the park, and as I said, the emergency services personnel that we have had discussions with.

Q. From a basic traffic engineering standpoint, if you were in a vehicle heading on 172nd westbound and you're stopped at the crossing of 172nd and with a train blockage, what would be the reasonable route to take if you needed to get across to the west side of the tracks in a expeditious manner?

A. Taking 27th Avenue to the south, down Twin Lakes Road across 156th Street is the most expeditious manner in which to do that at this time.

Q. Now what if 156th Street were closed?

A. Well, if 156th Street were closed in the same scenario where you're stopped at the tracks, you know, I mean while the alternative is you have to go back from Smokey Point Boulevard, which is on the east side of I-5, you would have to come back to I think it's 132nd Street, 36th Street, to take that approach, Forty Five Road up to 172nd Street or SR 531. Or alternatively you may go to the north to what we call the Island Crossing area interchange and then take Pioneer Highway, come down Sill Road, so it's circuitous.

Q. Okay.

A. It would add, you know, I don't know, 15, 20 minutes.

Q. Okay. Now you have had an opportunity to review the traffic analysis materials prepared by

Mr. Norris?
A. Yes.
Q. What are your specific concerns regarding this proposal or this analysis?
A. Well, I think the primary concern is that there are conclusions drawn in the report that don't seem to be supported by the report. And I reviewed each one independently, so maybe I can present those to you.
Q. Okay. Well, let's start then with the first analysis, the October 2nd, 2000, analysis.
A. Okay. And I have sort of touched on the first issue. The report concludes that the closure of 156th Street is something that would be acceptable per the County standards because it would result in a cul-de-sac that would be -- have less than 250 trips a day on it. And that's not really consistent with the County EDDS or County standards or County policy in that it's a set of -- that conclusion is drawn if you -- if you determine that the cul-de-sac length or the cul-de-sac that they're looking at is from Twin Lakes Road to the west, to the railroad crossing.
Q. Okay.
A. But really the cul-de-sac is one way in, one way out from 27th Avenue Northeast at 172nd Street. That length from 172nd Street to the railroad crossing

via 27th Avenue and Twin Lakes Road and 156th Street is 8,500 feet. And as I looked at the traffic data contained for the intersection, I found that there was in the neighborhood of 3,000 ADT going in and out of 27th Avenue at 172nd Street.

Q. For purposes of some of us who aren't traffic engineers, what do you mean by ADT?

A. Average daily traffic.

Q. Okay, so it's 3,000 vehicles or something?

A. 3,000 vehicles in a day, yes.

Q. Okay.

A. And that's clearly not consistent with County Policy and County Standards.

Q. You indicated that was one of your first concerns.

A. Right.

Q. What's --

A. Well, we talked about the schools on the west side. Currently the Lakewood School District has a proposal to I believe expand the middle school, and I said that there was a future elementary school off of 11th Avenue Northeast. As we reviewed these traffic impact analyses with WSDOT, one of the issues that they brought forward was to reduce impacts on 172nd Street or SR 531 related to the schools, they asked us to consider

having a public road between 11th Avenue Northeast and 16th Avenue Northeast south of 172nd so to relieve some issues on SR 531.

Q. Okay. Now I can imagine what some of my colleagues here probably want to say in regards to that, well, that's not 156th, and that's not located by the crossing, that's off to the west somewhere. How does that become significant for the impact on SR 531?

A. Well, where I was going with this is that 156th Street would provide a broader benefit to the circulation in the area, yet on one side -- one hand of DOT was saying there's no impact to closing 156th Street, yet on the other side they were saying, well, we need to have an additional public street to reduce impacts on SR 531.

Q. I see. Do you have any other concerns with this report?

A. Well, in the original report, we were quite concerned that future land use conditions weren't analyzed, and it was reported in that that that was done simply because the area was developing slowly. Now it is analyzed later on, so I can comment on those in the addendum probably in more detail, but it did kind of concern me. And it said, well, you know, as those other developments come forward, they can review those impacts

at a later date. So it's not typically something that we would do to say the project proponent would put the analysis of future conditions onto someone coming in behind them.

Q. Okay.

A. Other things in the report, particularly dealing with the school district, it said that because -- because the school district does not use the crossing, it would not have a significant impact on the circulation of school bus traffic in the area. Yet we did get a letter from the school district indicating, in fact, that they do use this crossing and that they have concerns, particularly at the intersection of 27th Avenue Northeast and 172nd, so there's an inconsistency there.

Q. Okay. Is that letter Exhibit 49? You will see to your left on the corner of the table there are the exhibits. One of them is tabbed Number 49. Can you turn to that. I just want to confirm that that's the letter you were indicating the concerns expressed by the school district.

JUDGE SCHAER: I was checking that, counsel, he has made several references to a report. Could you give me that exhibit number.

MR. CUMMINGS: I'm sorry, that is Exhibit

Number, it has been offered by the State, I believe.
MR. STIER: 11.
MR. CUMMINGS: It is 11. Thank you very much. I apologize.
JUDGE SCHAER: Go ahead.
A. Yes, that's Exhibit 49.
BY MR. CUMMINGS:
Q. Okay. Were there any other initial concerns that you had with the October 2nd analysis performed?
A. Well, the issues related to emergency services. The fire district -- within the report, again, it talks about their discussions with the fire department and that the Marysville Fire District expressed concerns that their response times would be severely constrained with the closure of 156th Street as they're dealing with the area, how they respond to emergencies. Yet in the conclusions of the report, it says that the fire district would only be minimally impacted, and it would not create a significant adverse impact on the district. So there is that contradiction that's going on within the report.
Q. Okay. Could I have you take a look at Exhibit Number 54.
A. Okay.
Q. Exhibit Number 54 is comments by the County

00300

on the proposed closure of 156th. I believe it's dated March 2nd of 2000. And what I would like you to do is turn to the fourth page, and at the bottom of the fourth page, does the County set forth the sheriff department's and the fire district's concerns or some of their concerns concerning the proposal?

A. Yes, they do.

Q. Okay. So as of March 2nd, it appears this was faxed to Mr. Schultz at the Department of Transportation that at least as of March 2nd, the County had expressed the concerns of the local public service agencies?

A. Yes.

JUDGE SCHAER: And pardon me again, counsel, but you said 2000, and I actually have a fax slip with a date on mine, so is it 2000 or 2001?

MR. CUMMINGS: It's 2000.

JUDGE SCHAER: Okay.

MR. CUMMINGS: And if you look on the upper left-hand corner, you will see March 6, 2000, on the actual fax line.

JUDGE SCHAER: Thank you very much.

MR. CUMMINGS: And also the page six identifies comments from meeting on possible closure of 156th Street, March 2nd, 2000.

BY MR. CUMMINGS:
Q. Did you have any final concerns regarding the October 2nd report?
A. Well, I think in terms of overall circulation, again, as I mentioned, that this area, this triangular area, is identified as an urban growth area or that sort of land where we have identified an area to encourage development. And part of the reason that that has been identified is that there is circulation in the area. There is more than one way in and one way out. And I think that that is missing from the report, the importance of that. And future circulation again is left for others to sort of figure out.
Q. Okay. Let's now turn to the May 22nd, 2001, addendum prepared by Mr. Norris.
A. Okay. And in that report --
Q. And I believe, if I can just stop you just for one second, I believe that is actually the attached to Exhibit 11.
MR. STIER: First of all, I stand corrected, it's Exhibit 12, and yeah, it's attached.
MR. CUMMINGS: That's what I thought, thank you.
A. In that, there was, to address some of the issues that we brought up further about the future

traffic generation of the area based upon the land use plans, there are some issues related to that, and some of those have been talked about in testimony previous to mine about alternatives to the proposed closing of 156th Street. Particularly we saw alternatives of the relocation of the siding to the north, which has been talked about. Other considerations are grade separation. And particularly as we have gone through and looked at the DOT design manual, there is an area dealing with guidelines for railroad protection based upon what's called an exposure factor, which is the ADT or daily traffic times the number of trains.

BY MR. CUMMINGS:

Q. Okay. And could I have you turn to Exhibit 44.

A. Okay.

Q. Now is that the Washington Department of Transportation railroad grade crossing information you were just referring to?

A. Yes.

Q. Okay. And you were saying that as a result of this standard, you were talking about grade separation?

A. Well, that was one of the alternatives that we were looking at for consideration that could be

considered. Based upon this matrix contained in this figure 930-2 for crossings with an exposure factor of over 50,000 or the daily traffic times the number of trains, grade separation would be appropriate. And if you take the volume on 172nd Street times the number of trains, we're in excess of 150,000, so it seems three times the amount of that threshold there.

Q. So in terms of looking at alternatives to say the closure of 156th in conjunction with some other consolidation of rail services, you were discussing about grade separation of 172nd to alleviate the impacts of the traffic being diverted from 156th?

A. Well, I was looking at it as an alternative to the closing of 156th. And really, if we're looking at these sort of exposure factors, the volume, the volume times the trains on 156th Street would suggest according to these guidelines that you could have gates and lights there, which, in fact, is what exists at 156th Street. What these guidelines are saying is you need to consider more protection at 172nd Street.

Q. Okay. What other concerns did you identify with the addendum to the traffic report?

A. Well, I had a concern about the trip generation estimates for the future land use. Now there is a combination of residential and commercial land use

identified for the area. It looked to me that the residential trip generation estimates for the future were appropriate. The commercial tended to give me a concern in, first of all, that acres were used as the variable for the estimate of trip generation. I mean that's -- it's fine to use that. It's probably the weakest variable we have for trip generation estimates. Others that we may use are employees or gross square footage, something like that. But you can use the acres.

What concerned me about it though was that, I can't remember the exact phrase, it was a land utilization factor was thrown into this of saying only 30% of the identified commercial area would be developed, or I'm not sure exactly how that was applied except it reduced everything down to the 30% level and then applied the trip generation rates. When you use acres as the trip generation rate, you apply that to the entire acreage, so it tended to underestimate the trip generation for the future conditions.

Q. Okay.

A. And another issue that I had with this is within the addendum, it makes a statement that level of service doesn't change or congestion doesn't change with or without the closing of 156th Street in the future.

And the level of service under -- with the -- without the closure, this level of service F at these various locations and with the closure this level of service F simply because there isn't a level of service G or H or I.

Q. Okay. Well, let's talk about level of service. Explain for everyone present, if you could, what you mean by level of service F.

A. Okay. Level of service is a way to express operations. It's graded from A through F, A being good, F being bad, simply like being in high school, and it's based upon delay for vehicles. So we have a condition and specifically at 172nd Street, and, well, hang on just a minute, 172nd Street and 27th Avenue is 132% worse under unsignalized conditions and 69% worse under signalized condition if the closure were in place. Yet like I said, the report says there is no change in conditions with or without the closure. And we find similar results at the I-5 ramps with 172nd Street. They degrade and relative to the same proportions. So under the conditions of with the closure, conditions are worse.

Q. Okay. And specifically for those numbers, you're referring to, and I will pull out the exhibit again, page three of the addendum, and that would be

table two; is that correct?
A. That's correct.
Q. Okay. Did you have concerns regarding the traffic analysis response to County concerns of a cataclysmic event?
A. Well, they did respond to that. They gave some alternatives for consideration, and one of them was that 156th Street could be opened up in the event of some sort of cataclysmic event. What was of concern there was if we have a train that's on the siding, opening up gates is not going to provide us any benefit, because the train is in the way, so that doesn't really respond to that sort of situation.
There was some talk about providing a direct access from Twin Lakes Road onto Interstate 5. Now that's going to involve a whole different agency. You know, typically you have to petition the federal government Department of Transportation for connections to interstate freeways, and they're going to look at spacing issues very closely, and I would believe that spacing with 172nd Street to the north is going to be a problem. And if I'm thinking about where to put one, probably using 136th Street overpass as an interchange would make more sense, you know, from that perspective.
There was also some talk about providing some

direct access from 172nd Street northeast through an existing mobile home park, but that's sort of impractical for this -- the County to administer some emergency access on private property, so.

Q. And is this a road that presently exists?

A. I'm not sure if it does or not.

Q. If it did exist as a County road, we would know about it?

A. If it was a County road, certainly we would know about it.

Q. Does the map seem to indicate that there is another frontage to 172nd?

A. It doesn't.

MR. CUMMINGS: Thank you, Mr. Bloodgood, I have no further questions.

JUDGE SCHAER: Mr. Walkley, did you have any questions?

MR. WALKLEY: Yes.

JUDGE SCHAER: Go ahead, please.

MR. WALKLEY: Although I think Mr. Stier and I agreed that he would go first.

JUDGE SCHAER: All right, Mr. Stier.

MR. STIER: Thank you.

C R O S S - E X A M I N A T I O N

BY MR. STIER:

Q. Unfortunately, you covered a lot of territory, so -- okay, so you're talking about -- by the way, my name is Jeff Stier, and I'm the Assistant Attorney General that's representing the Department of Transportation.

And, sir, you're talking about the report from Struthers that Mr. Norris was involved in?

A. Yes.

Q. And were you involved in formulating the original questions that were addressed in that report, the questions from the County that he addressed in his conclusion section in the original report?

A. I don't know if I was or not. I can't simply recall.

Q. Those questions are on page 23 of the report. Do you have it there?

A. It seems to me my first -- my first reading of this report was after it was already prepared.

Q. I see. So you weren't really involved in this matter until you received the report?

A. That's my recollection.

Q. Okay. How long have you been working in Snohomish County?

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A. Eight years.
Q. Eight years. So who from your department was working on this?
A. I believe this report just came in, and we got it to review.
Q. So there were these questions were raised by Snohomish County without any traffic engineering input?
A. They were probably anticipated to be issues, but I don't recall doing this.
Q. Okay. So it's your testimony that the traffic engineering department for Snohomish County had no material involvement in this matter until this report came in?
A. That's my recollection, yes.
Q. Okay. Is that a little unusual if the County had so many concerns?
A. We have lots of traffic impact reports prepared by new development or proposals that come forward, and they don't all get prescoped before they come or are submitted.
Q. So do you have any idea who came up with these questions from the County?
A. I don't.
Q. Okay. All right, so having reviewed the report.

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A. Yes.
Q. Do you have any problem with the data?
A. In terms of the information?
Q. Do you think it's inaccurate?
A. In the areas where, you know, the analysis --
Q. I'm not asking about analysis.
A. Okay.
Q. I'm asking for the underlying data in the appendix.
A. In terms of these work sheets is what you're talking about?
Q. Yeah, the data.
A. I have no reason to conclude that they're in error.
Q. Okay.
A. I did not go through each and every one of these, no, but I have no reason to suggest that they're in error.
Q. So you think -- so your testimony is that the technical appendix data in the report in the addendum to your knowledge is accurate; the problem are the conclusions reached using that data?
A. That's correct, yes.
Q. All right. So because you thought the data was correct, you didn't go out and do your own study,

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correct?
A. I did not do my own study.
Q. So did you interview emergency people like the fire department or the sheriff's department, or did you interview school people?
A. You know, if I can go back to your previous question, you sparked my memory there. I mean we did have some premeetings with the railroad that included many of the players, the school district, the fire district, the sheriff, myself. And so these conclusions that we talk about at the end of this report could come from those sorts of meetings.
Q. I see. So now you're saying that you were involved earlier?
A. Yes.
Q. You just forgot that?
A. I just forgot that.
Q. Okay. So when did you get -- do you remember when those meetings were?
A. I don't remember the dates, no.
Q. Okay. So I guess we can just forget everything we just talked about for the last ten minutes, because you were involved now, and you were involved in the formulation of the questions?
A. I was involved in the meetings where these

sorts of questions were brought up, yes.
Q. And those meetings were -- and you say that the fire people were there?
A. I can't be -- I think fire was there. I'm very certain that the sheriff was there.
Q. Do you remember who was there from fire?
A. No, I don't.
Q. Do you remember what was said by fire?
A. My recollection is that they were concerned about the crossing. No, I can't say that the fire was there. I can't say specifically that the fire district was there.
Q. Was this one meeting or more than one meeting?
A. I believe there were two meetings, one or two. I can't recall for sure.
Q. So you have no recollection whatsoever that fire had any complaints, correct?
A. I don't recall the fire.
Q. Okay. But you do have a recollection of the sheriff being there?
A. Absolutely.
Q. And who was that?
A. My recollection was it was Deputy Bill Stoops.

Q. And do you have a recollection of what Deputy Stoops said?
A. Well, he expressed concern that that is a crossing that the sheriff's department uses quite frequently as they're dealing with emergencies in the area.
Q. Do you have any more details than that?
A. That's just my recollection from that meeting, and I did have conversations with him on the telephone about that and, you know, let him know that this potential closure was coming up. He expressed his concern and was sure that the sheriff's office would be concerned about this as well.
Q. Okay. So now not only were you involved in meetings, but you were also involved in telephone interviews contrary to your earlier testimony, right?
A. Yes.
Q. Okay. So tell me about these interviews, who else did you interview besides Deputy Stoops on the phone?
A. Well, internally I think we talked amongst the public works staff.
Q. I'm talking about emergency people, that was my question.
A. Oh, okay.

Q. Who did you interview besides Deputy Stoops on the phone?
A. I think that's the only person I talked with.
Q. You --
A. Because Deputy Stoops is really within the traffic operations budget.
Q. For the County sheriff?
A. Yeah, it's a strange relationship, but yes.
Q. Okay. So how many interviews of him on the phone did you have?
A. I think only one, maybe two.
Q. And what led to that?
A. Well, this proposed closure.
Q. This was the -- but before the report?
A. I believe it was before the report, yes.
Q. Okay. And so -- so you say you had input from the deputy at the meeting with BN, and you had input based on an interview?
A. Yeah, I think it was prior to the meeting. I think I was inviting him to the meeting.
Q. Okay. And can you tell me specifically what he said in the telephone call?
A. That they were concerned about this closure because they used that crossing.
Q. Okay. And did he tell you what the nature of

the concern was other than the fact that they use it?
A. Well, that it would limit their access. I mean they use it when that 172nd Street is closed down as they're doing their switching and moving the trains around, and that would really be something that --
Q. He specifically said that to you?
A. I can't recall what he specifically verbatim said.
Q. So you're speculating as to his concern, correct?
A. I'm speculating on that.
Q. I would prefer you don't speculate.
A. Okay, I will not.
Q. I would like you to tell me what he told you.
A. Okay.
Q. And he told you that he had concerns, but your testimony is you don't really remember the basis for that, correct?
A. I don't remember verbatim what was said.
Q. Do you remember what was said at all, whether or not it was verbatim?
MR. CUMMINGS: Your Honor, this has been asked and answered.
MR. STIER: Well, I don't -- I'm very confused. I mean first of all we kind of reversed a lot

of things started at the beginning, and now I don't understand, he's speculating about this reason, he has testified that there wasn't, that he didn't have a specific reason, then he says there's a reason, then he says he's speculating, and I'm very unclear as to what the man told him.

JUDGE SCHAER: Well, I think he has told you, Mr. Stier, that he doesn't have any specific recollection, so let's move on, please.

BY MR. STIER:

Q. Does that apply as well to the meeting with BN?

A. With BN, could you be more specific?

Q. The meeting you just testified about where all you folks all met with BN and talked about the closure.

A. We talked about the closure. Do I remember?

Q. Did Deputy Stoops make any comments there as to his concerns?

A. I believe he did.

Q. And do you remember what they were?

A. Again, I can not, it would be speculation as to the exact verbiage, but my recollection --

Q. He had a concern?

A. He had a concern.

Q. And the concern was he's concerned because they're closing it?
A. That's correct.
Q. Because they use it?
A. That's correct.
Q. Did he indicate at any time, have you ever gotten any information from the sheriff's department regarding the number of calls that they respond over a period of time going across 156th?
A. No, I haven't.
Q. Do you have any information from the sheriff or fire department as you sit here today regarding the response durations and the paths of access available to them into that area?
A. No, I don't.
Q. So all you know is that the fire or the sheriff expressed a concern, but you don't know the basis for it?
A. I don't know what that is. That would be something for them to respond.
Q. Okay. Now you talk about the schools on the west side of the tracks.
A. Yes.
Q. And you talked about them in a couple of ways. Now according, I believe according to Mr. Norris,

he indicates that when he interviewed them, they said they weren't using that crossing. Is that your understanding?
A. That's correct, that's what's presented in the report.
Q. Do you know one way or the other other than that statement?
A. Well, according to the exhibit that we referred to, they say they do use the crossing.
Q. This year?
A. This year. I'm assuming that they use it in -- well, I won't assume.
Q. So you don't know, but you do know they're using it this year because they said so?
A. They said so.
Q. But you don't know if they were using it last year or before?
A. I don't know that.
Q. And I take it they're using it because there's kids in that triangle?
A. I would take that as well.
Q. And they're going to the west side there?
A. Correct.
Q. And tell me exactly if assuming, because Mr. Norris says that's what they told him, they weren't

using it before, that apparently they were coming in through 172nd, would that be a fair statement if they're going in?
A. If they're going in, that's the only other way to get in there.
Q. Okay. And so isn't this then, doesn't this relate more to the routing convenience of the school district depending on, you know, where they start, where they end, where they pick up kids; that's what really guides their decision making as to which way to go into the triangle, right?
A. Well, I would leave that to the transportation people at the school district for that.
Q. Now you talked about this road proposal west of the tracks.
A. Right.
Q. And I believe you said between 172nd and 136th. Correct me if I'm wrong.
A. Yeah, south of 172nd Street.
Q. Okay. And you're saying that somebody says that they want to have a westbound road in that vicinity?
A. No, no, what I was saying was that as part of the school proposal, there was a suggestion that a public road be constructed south of 172nd Street between

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11th Avenue Northeast and 16th Avenue Northeast.
Q. And who made this proposal?
A. It was from WSDOT.
Q. Can you show me where that is on the map?
A. Certainly.
Q. Because I don't have a real feel for that.
A. You see the area where the schools are, these red areas?
Q. Yeah.
A. It was basically between this area from I guess that's 16th Avenue Northeast to 11th Avenue Northeast.
Q. And the heavy line you're looking at right there is what?
A. Right here?
Q. Yeah.
A. That's 172nd Street.
Q. So just a block or two south of there they want a road?
A. That was the suggestion.
Q. DOT says that?
A. Yes.
Q. And you got this information from whom?
A. From our land development analyst.
Q. And your land development analyst says that

DOT wanted a road, wanted the County to build a road two blocks south of 172nd?
A. They wanted the school district to make that a public road as part of their development proposal.
Q. Oh, I see. Do you know whatever transpired with regard to that?
A. I don't. I think the development application is still pending.
Q. Do you know what -- did your planning people tell you what the purpose of that road is?
A. My understanding was that there were issues related to operations on 172nd Street and that this parallel public road was to help address those circular operations issues.
Q. Now can you please tell me what that has to do with 156th?
A. Well, what I was pointing out in this report was we have on the one hand saying it's okay to close a road that provides circulation to a much broader area that has in my opinion more influence and benefit to 172nd Street, yet over here they said we need another public road in order to mitigate conditions on 172nd Street.
Q. So you're --
A. So I saw it as contradictory.

Q. So you say there's a parallel between closing a road that crosses a railroad track and opening a road that has nothing to do with the railroad track, and you see some parallel there?

A. I certainly do.

Q. Okay. Why don't you try explaining to me, because I don't see one.

A. Okay. I see that this area, this railroad crossing at 156th Street provides a much broader area of influence than a road that simply connects 11th Avenue Northeast and 16th Avenue Northeast. The conclusion of the report is this has no impact. The conclusion of the recommendation over here is we need to have this to reduce impacts. When I see something broader being said there is no impact and something narrower saying we need it to reduce impacts, to me it's contradictory.

Q. Okay. But you don't know, you have not seen any studies or reviewed the matter to see how many trips it's going to take this 119th I think, what is this street?

A. 19th Avenue or 16th Avenue, sorry.

Q. If 16th is opened up, you don't have any idea how many trips it would take off 172nd, correct?

A. I believe that that was studied as part of the analysis for the school, and I can't tell you

exactly what the number is, but I think that's information that --

Q. Isn't that significant when you want to compare two different streets?

A. Oh, I think I'm looking at this as a much more system situation than isolating it down to those numbers and looking at this future trip generation of the area and this area shaded in gray as sort of the area of influence of crossing in here, so.

Q. Mm-hm.

A. No, I don't think I need to have those specific numbers.

Q. So you're saying if let's say the 16th would take 1,000 a trips a day off and 156th having it open would take 300 trips a day off, you don't think that's relevant?

A. Today?

Q. I'm just speculating, I'm just saying, I don't know the numbers either, but I do know that neither of us know what it could be, and 16th could be a lot more than 156th perhaps. And if that was true, you don't think that has any relevance?

A. It may have that sort of tipping of the scales under current conditions if those numbers are as you say. But in the future, the scale will go much more

to the other side as this triangular area develops.
Q. So it's very important to your analysis of the situation that the triangular area is going to develop?
A. Well, it's going to develop. It's been identified for development by the County.
Q. And you disagree, you quibble, I guess I have to use that term, with the quantification of the development used by Mr. Norris?
A. Well, yeah, I disagreed with the way that was applied, yes.
Q. You say not for residential but for commercial?
A. Yes.
Q. So the way I understand your testimony, it sounds to me like that he's underestimated the trips out of that area in the buildout situation?
A. That's correct.
Q. So you think there will be even more trips than he says?
A. Yes.
Q. Okay. And so do you have any expertise in railroad crossing safety?
A. I would not call that my area of expertise.
Q. Okay. Do you know that -- you're aware that

there have been two accidents there since '90, correct?
A. I'm not sure of the exact dates. I believe that there were two accidents. I don't know that there have been any since the protection went in.
Q. But you also in your experience, I'm sure, have seen accidents in areas where there is protection, correct?
A. Sure.
Q. And you have seen deaths?
A. Sure.
Q. And is it in your experience and expertise, the more use there is of an at grade rail crossing, the more use there is, the more dead people there are going to be?
A. I think that in any situation, the more traffic you have, the higher the probability the two objects might occupy the same space at the same time.
Q. So it's likely as the use of that area goes up and intensified, the deadly nature of that intersection is also going to increase, correct?
A. The probability increases.
Q. Okay. So how has the County addressed that problem, if you see that as a problem?
A. Well, you know, nobody wants to suggest that we're promoting any sort of deadly situation, and we

look at how can we make crossings as safe as we can. And that's part of the reason that I was bringing up that if we're looking at safety, if that's the issue, then should we be focusing at 172nd Street. That was -- I'm not -- I'm probably not answering your question.

Q. I don't quite understand your point.

A. Well, the point is if we're talking about as the area develops or as the conditions exist today and what do we do to address safety of the railroad crossing, does it make sense to focus our efforts on 156th Street or maybe on 172nd Street.

Q. So suddenly we're making a jump. I thought we were talking about 156th.

A. Well, we were talking about safety. I thought that was the issue.

Q. Well, we're talking about an inadequate rail at grade crossing in a total buildout situation. That's what you're talking about.

A. Well, I don't know that it's inadequate.

Q. So you don't know it's inadequate in a buildout situation?

A. I'm not sure of what the exposure factor is going to be, if that's going to require us to look at an alternative type of protection at that location at that time. I didn't do that analysis.

Q. Okay. So you don't have any opinion on that subject?
A. Not at this time, no.
Q. Okay. So but you have acknowledged that the more use of an intersection of an at grade rail crossing, the more danger there is; you have acknowledged that?
A. No, what I say is the more probability of two objects occupying the same space at the same time. We do that with intersections. Many people will say, hey, you've got this sort of intersection is a dangerous condition because you have had so many accidents. Well, if you look at it on a rate basis, rate being the amount of cars using that intersection and the number of accidents that you have had by comparison to all other locations, it may not be very high.
Q. But you don't have any information one way or the other?
A. I don't.
Q. Okay.
A. I'm just trying to make that comparison.
Q. So has the County made any plans to study that issue at all, or are they just going to proceed to development in that area and they just want to keep 156th open?

A. I know of no plans to study that at this time.
Q. Do you know of any applications for development in that area that are pending at this time?
A. No, I don't.
Q. But you're pretty convinced it is going to develop because it's got such great circulation at this point?
A. Well, and it's identified in the comprehensive plan.
Q. Mm-hm.
A. I mean and that's, you know, obviously the circulation was an issue relating to the designation in the comprehensive plan.
Q. Mm-hm. So you talk about a cul-de-sac issue.
A. Yes.
Q. And as I -- could you briefly tell me the rule, the 250 trips per day rule?
A. Yeah.
Q. What is that again?
A. Well, there is a provision in the engineering and development standards, engineering and design development standards for Snohomish County that talks about cul-de-sac lengths of, I can't remember exactly, maybe 1,000 feet and not in excess of 250 vehicles. And

again, that report says, well, there will only be about 120 vehicles on 156th Street to the west of Twin Lakes Road. And what I'm saying is that's not how we would measure a cul-de-sac lane.

Q. And that's because of what factor?

A. That there is only one way in and one way out of the area south of 172nd Street and east of the tracks.

Q. And you, based on the existing use information, you think then there's going to be 3,000, if that was a cul-de-sac, there would be 3,000 trips per day going into that cul-de-sac?

A. That's correct.

Q. That's your testimony?

A. That's correct.

Q. You also recognize the fact that a lot of people are using this route as a shortcut to get around the blockage or whatever on 172nd?

A. Well, I simply took the information from the report in the after condition. I said what does that become in terms of a daily traffic number.

Q. Well, I know what you did, you know, you took the information from the report. But I'm asking you to reconsider the use of transitory, including transitory traffic that, of course, wouldn't be transitory if the

crossing was closed.
A. Well, what I'm saying is in the after conditions with the crossing closed, that's my estimate, 3,000 vehicles a day.
Q. Based on what?
A. Based upon this report.
Q. But that's the totals, isn't it?
A. No.
Q. That's the existing totals? You have come down --
A. No, what I said is there's an after condition, what's the traffic circulation after the closure is in place. So I took that information. I said there's the 3,000 vehicles a day.
Q. Okay. That information in the report is based on existing utilization levels though?
A. Yes.
Q. But it also is based on Mr. Norris's findings what would happen --
A. Right.
Q. -- whether it would be --
A. He has redistributed the traffic.
Q. Okay. Now when you say cul-de-sac, aren't you making an assumption they're all going to the end of the road?

A. No. What I'm saying is that there is one way in and one way -- well, for the length, yes, I am. I'm saying that length is 8,500 feet.

Q. Well, they wouldn't be going to the end of the road, I would suspect?

A. Unless there was --

Q. Hardly anybody is going to the end of the road, right?

A. Probably very few people are going to the end of the road.

Q. So it may not be quite as long a cul-de-sac as you're saying?

A. That's correct. Well, it is a cul-de-sac of that length, of 8,500 feet.

JUDGE SCHAER: Mr. Stier, is this a good place to ask you how much more.

MR. STIER: I'm almost done.

JUDGE SCHAER: Almost, okay.

BY MR. STIER:

Q. Now what -- I just -- on Exhibit 44 on the DOT design manual, you were saying --

A. Yes.

Q. -- something there dictated grade separation on 172nd?

A. No, I said it was a guideline. It didn't

dictate.
Q. Could you point that to me?
A. On Exhibit 44?
Q. Mm-hm, yeah.
A. Oh, I thought you --
Q. Where is it?
A. Okay.
Q. I want you to tell me about it.
A. Okay, type of highway, two lane highway, so --
Q. This is page what here?
A. Page 930-5, Figure 930-2.
Q. And what does this tell us?
A. This is talking about the exposure factor that I was referencing earlier, the number of trains times the average daily traffic.
Q. Okay.
A. So it talks about across the top you have columns of type of highway, exposure factor, and type of railroad facility. So I was simply looking at we have a two lane road with an ADT of around 15,000, 16,000 vehicles a day, we have -- and I estimated 10 trains a day going across 172nd Street, and that would tell me for a single main line that, in fact, for all of the different categories, for non-main line, for single main

line, for double track or high speed single main line, grade separation is at the 50,000 exposure level.
Q. So you say an ADT is what is that again?
A. Average daily traffic, vehicular traffic. I don't want to confuse it with train traffic.
Q. So you're saying it's over 50,000 in the existing condition?
A. Not the ADT. I'm saying the exposure factor, just multiplying the ADT times the number of trains.
Q. Oh, okay. So do you disagree with Mr. Norris's conclusion in his initial report on table 4 that those are the key impact intersections, those four intersections? I believe that's page 18. I could be wrong on that.
A. Yeah, that's reasonable, yes.
Q. You agree those are the primary --
A. Those are the primary intersections, sure.
Q. Do you agree with his conclusion in table 4 that the level of service in those intersections is not appreciably degraded by closure of 156?
A. I would have to look in more detail to the 27th and 172nd Street intersection, but considering the amount of traffic being diverted, I have no reason to disagree. It's not a lot of traffic at this point.
Q. Okay. So if what he's saying here, correct

me if I'm wrong, but what I take it he's saying here that the level of service will not degrade, in fact, might even improve if you look at these numbers in parens?

A. Yes.

Q. With relation -- if all the traffic that would have normally gone through 156th now goes up to 172nd into the existing condition, that's what he's saying, right?

A. That's what this is saying, yes.

Q. And you're saying you disagree with that, correct?

A. I don't think it would degrade significantly. You know, we're talking about really splitting hairs at this point, because this is looking at a peak hour, we've got a crossing that maybe carries 100 cars during the peak hour at this time. You change movements around, you can see these sorts of conditions occur.

Q. So I think are you saying then under the existing scenario, then there's not a lot of pressure on 156th? I think that's what I just heard you say.

A. There's not a lot of pressure on 156th from purely traffic numbers.

Q. Okay. And, in fact, there's so little pressure that if all of that traffic went a different

direction up to 172nd, it wouldn't degrade the level of service up there under existing conditions?
A. Under existing conditions.
Q. Okay.
A. Now this deals only I should emphasize with the p.m. peak hour. We did not have an analysis of the a.m., so I would limit my response to that period.
Q. Well, isn't the p.m. peak hour the worst case scenario?
A. In some cases, it is. In some cases, it isn't.
Q. Well, you're the traffic engineer in that city; what do you think it is?
A. I wouldn't know until I saw the data, but I just wanted to say I'm limiting that response to that peak hour. We have conditions around the County where the a.m. is the worst peak hour.
Q. Mm-hm, okay. Now go to addendum 1. We will wrap up here. Now you have already testified that you think that at the buildout, the 20 year buildout, that the traffic is going to be worse than Mr. Norris thinks.
A. More traffic, yes.
Q. Okay, more traffic. Whether that's worse or not, I don't know. To a traffic engineer, that's probably better, right?

A. Job security.
Q. So according to this based on less traffic, he says that those same intersections would all degrade to an F level or near F level.
A. Yes.
Q. You disagree with that?
A. I have no reason to disagree with that.
Q. Okay. So that means at buildout, we basically have system collapse in that area unless something is done?
A. Certainly looks like that from this.
Q. And that also has without closure and closure. In his conclusion as without closure, you still have system collapse at buildout?
A. Yes, that's correct, that is -- and that's an area of disagreement. I mean --
Q. Oh, now you disagree?
A. Not disagreeing that it's system collapse, but the conclusion drawn in the report is, well, it's bad with the crossing and it's bad without the crossing, so therefore there's no difference.
Q. Well --
A. But if you look at these numbers in parentheses, you see significant differences, significant increases in delay under the closure as

compared to without the closure.
Q. Yeah, but that's like horrible versus terrible, right?
A. Okay.
Q. Okay, would you agree with that?
A. Yes.
Q. Okay.
A. It's --
Q. So it's F is F?
A. F is the worst that you can get, but I disagree with his conclusion. It is the worst --
Q. But I'm not asking you about the conclusion.
A. Okay.
Q. I'm asking you about do you disagree that these, without closure in the buildout situation which you say is going to even be worse than he says in terms of traffic.
A. Yes.
Q. That the existing infrastructure at these intersections will all deteriorate to an F or a near F condition?
A. Yes.
Q. Okay. So what is the County going to do about that?
A. Well, I think we would have to bring the DOT

into this as well, since these intersections are State highways, so I don't --
Q. All of them?
A. Well, 172nd and 27th, 172nd and I-5, 172nd, yep, all of these are State intersections.
Q. Okay, so you -- so this is without closure you say the DOT's problem?
A. It's part of DOT's problem.
Q. Well, isn't this problem directly related to the growth in that area?
A. Yes, and DOT collects development fees from that growth.
Q. We do?
A. Yes.
Q. I didn't know, we assess impact fees?
A. Yes.
Q. We do?
A. Yes, absolutely.
Q. We assess impact fees?
A. Yes.
Q. Isn't it true that the County assesses impact fees?
A. We assess impact fees, and the DOT assesses impact fees. We collect them for them, and we give them to you.

Q. Oh, you collect them for them?
A. Yeah, and give them to you.
Q. That isn't assessing.
A. No, that's not, that's --
MR. CUMMINGS: Your Honor, can we get beyond the badgering here.
JUDGE SCHAER: Mr. Stier, I --
MR. STIER: No further questions.
JUDGE SCHAER: We are at a point we didn't want to be at, but we are going to need to break. I have to be at a public hearing. I have been told that we should plan on at least an hour's trip to get there. I am not willing to risk being late to a public hearing, so I am planning some extra slack into the time I am planning for us to get there, so we're going to need to figure out either trying to finish with you tonight after the public hearing or having you miss part of your commitment tomorrow morning. What do you think we should do?
MR. CUMMINGS: I guess I would ask Mr. Walkley if he has any additional questions.
MR. WALKLEY: I have very, very short stuff. We can get it done in five minutes.
JUDGE SCHAER: I'm sorry, we can't. We had that commitment already and we are now 15 minutes beyond

where we were supposed to be. I'm not willing to extend this time. I am willing to have this witness come to the public hearing if that would work for you and to allow you to conclude there, but we are going to need to break now. So would you like to have him come tonight, or would you like to have him first thing tomorrow?

THE WITNESS: I have a commitment this evening.

MR. CUMMINGS: So would you rather come back tomorrow morning first thing?

THE WITNESS: I guess that's the only alternative. What time is it in the morning?

MR. CUMMINGS: 9:00.

JUDGE SCHAER: That's the other thing we need to talk about. Do we want to start at 9:00, or do we want to try to start at 8:30?

MR. CUMMINGS: 8:30 is fine.

MR. WALKLEY: Before we drop him, does anybody else have anything further for him?

MR. THOMPSON: I don't.

MR. CUMMINGS: Your Honor?

MR. WALKLEY: Well, if it would help, I will just drop the questions I have and let him go.

JUDGE SCHAER: If you're willing to do that, you don't have to do that, of course.

MR. WALKLEY: If we want to get started early, so.

JUDGE SCHAER: We can do both.

MR. WALKLEY: As long as we don't go late tonight, we have no idea, do we, as to how long it's going to be tonight?

JUDGE SCHAER: We do not know how long it will be tonight.

Okay, so do you want to meet tomorrow morning starting at 8:30 or at 9:00?

MR. CUMMINGS: 8:30 is fine for the County.

JUDGE SCHAER: I'm going to adjourn then this portion of the hearing, and we will reconvene tomorrow morning at 8:30.

MR. CUMMINGS: Is Mr. Bloodgood excused at this point then?

JUDGE SCHAER: I'm getting there.

MR. CUMMINGS: Okay, I'm sorry.

JUDGE SCHAER: We will reconvene the public hearing at 6:30 this evening in Silvana. You may look at the map that's on the board to see where Larson Road is. I'm told that the intersection of Pioneer Highway and Larson Road is the approximate location of the church, and you take Exit 208 off of I-5 to get there.

And having heard that no one else has

questions for your witness, do you have any redirect, Mr. Cummings?

MR. CUMMINGS: I have no redirect.

JUDGE SCHAER: Then this witness may be excused. Thank you for your testimony.

(Hearing adjourned at 4:15 p.m.)