

**Fourth Statement to Sound Transit Board of Directors on the
Safety of the Seattle Link Light Rail Initial Segment
by John Niles
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Mr. Chairman, I come before you and your Board colleagues for the fourth time on the issue of Link Light Rail Safety. I appreciate and thank Sound Transit for the information that has been brought out in Board presentations in response to my previous comments and my requests for information under the Public Disclosure Act. I believe we are now conducting a good process of education in the community. I have also engaged in direct communication with some of you, which has been helpful to the education of me and other CETA members.

This time, I am simply going to highlight for the Board some differences between conclusions on available information reached by Sound Transit and those reached by CETA the Coalition for Effective Transportation Alternatives.

Sound Transit with the concurrence of City of Seattle, King County, and the Federal Transit Administration, intends to build in the Rainier Valley a four mile segment of double track that is set to experience a published schedule of 272 trains per weekday, with a frequency of one train in each direction every six minutes during morning and evening peak periods that cover six hours of the daily weekday schedule. The trains will initially consist of two cars, 180 feet long, with an intent to run four car, 360 foot trains at some later date. The trains will reach a speed of 35 miles per hour in between four station stops. On this segment of track there are 18 signalized grade level crossing for motor vehicles and an additional 10 track crossings for pedestrians. There will be many other places where there are no physical barriers for people or vehicles crossing the tracks.

Martin Luther King Jr Way is designated State Route 900. I am unclear whether the State Department of Transportation has formally approved the final configuration of grade crossings and signals, or even if they are required to do so.

I want to highlight three points where Sound Transit and CETA disagree in their interpretation of facts about light rail safety:

First, the Record of Decision from the Federal Transit Administration states in Section 2.1.1:

"The Central Link project has segments that will operate at-grade (on the surface), on elevated tracks, or in tunnels due to varied conditions along the project corridor. The factors that govern the choice of an appropriate operational profile throughout the Central Link project are: (1) topography, (2) physical barriers, (3) available surface right-of-way, (4) train frequency, (5) density, and (6) cost."

Human life safety is not one of the explicitly listed six items, despite the USDOT general policy of safety first at all times. CETA believes that skipping safety as an alignment design choice factor is a public policy error and possibly a legal error, given Federal Hazard Analysis Guidelines.

Second, Sound Transit further makes the claim that running Link Light Rail on a street median along MLK Way will make that corridor safer than without the trains. The argument for this claim is that vehicle traffic will be calmed and there will be fewer accidents involving vehicles or pedestrians that do not involve trains.

CETA disagrees with this claim in three ways: First, the Hazard Analysis Guidelines from FTA do not accommodate this kind of tradeoff, even if you think they should.

Second, the claim begs the question of whether safety improvements along MLK could be made by City of Seattle that do not include building train tracks and grade crossings.

Third, the numbers in the environmental record and in other Federal research, plus common sense about vehicle physics, indicate that the fatality rates in new intermodal collisions involving trains project do not provide a good trade for the approximately 15 percent reduction in motor-vehicle only accidents projected to result in the MLK corridor as a result of the traffic calming road geometry changes that come along with light rail construction.

A last area of disagreement stems from the statement made by Sound Transit staff on March 27 following professional hazard analysis of light rail in Seattle: "the probability of a single system failure resulting in a critical **chargeable** accident is once in 131 to 13,000 years."

CETA takes this statement and other evidence to mean that the Sound Transit safety manager is following the hazard analysis processes described by the Federal Transit Administration, which is reassuring. However, with FTA concurring, per the Record of Decision language already quoted, Sound Transit has taken the fundamental design decision to implement grade-level crossings off the table in safety consideration. To Sound Transit, making Link safe enough means making the grade crossings as safe as possible with warning signs, warning lights, warning sounds, and teaching people to be careful. In other words, as long as the red, yellow, and green traffic signals at those 18 crossings work for 131 years, and as long as people understand from their driver training that they should look both ways and not try to beat the train at a crossing, then anything that happens at the new track crossings won't be Sound Transit's fault.

Because of the documented record of exceptionally high rates of fatalities involving train collisions with other modes despite warning and educational measures in the other light rail systems around America, CETA coalition members intend to keep challenging these conclusions and judgment in all venues available before construction of the chosen Link Initial Segment design is authorized by the FTA later this year.

As testified previously, I urge that the Board take immediate action to **stop work on the implementation of the present light rail design**. I further urge that the Board immediately order a complete **light rail hazard analysis from an objective party** such as Volpe National Transportation Systems Center.

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