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Department of Rail & Public Transportation
attn. Director Jennifer Mitchell
600 East Main Street, Suite 2102
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Dear Director Mitchell:

At the last Citizen Council meeting to do with the potential for High Speed Rail in the Ashland area one of the presenters talked about the modeling software that he used and its application to the 20 year plan. Although he did not say so, every statement that he made was based on the following premise.

The future is a linear continuation of the present.

When considering planning issues to do with the next few months, or even the next few years, this assumption may have some validity. Hence the models that the DRPT are using may be reasonably accurate in the short term. (Although, speaking as an engineer who has worked with technical models of all types for many years I have learned to be deeply cautious, even skeptical, about the value of such models. All too often they assume that an interpolation can also be a successful extrapolation.) But when looking at a projection of *20 years* the assumption of linearity is profoundly flawed. Hence the conclusions presented at that meeting are, at best, misleading.

Moreover, the transportation business is currently going through enormous disruptive changes (Black Swans). These changes include:

- Driverless trucks that will upend the road transportation business.
- Driverless trains.
- Mag-lev trains in vacuum tunnels (hyperloop).
- Great improvements to train management with the use of modern scheduling software and signaling systems.
- Uber-like systems for both freight and passengers.

Before forging ahead with a plan that is, in my opinion, deeply flawed, I urge the DRPT to develop a plan that incorporates modern technology.

Yours truly,

Ian Sutton