Brian Isaacson, AICP Transportation Planning Director Metro District, MNDOT

There are a lot of benefits to using some of the traffic analysis tools. Now I work in traffic forecasting. We use the forecast model to test scenarios; we use the forecast model to look at various travel patterns; we use the forecast model to evaluate... scopes of projects and try to give some sense of magnitude of change. We look at model output for things like bridge closures and we've even been using it to confirm some operational observations and things of that nature relative to our recent bridge collapse.

We'd been using the regional model to help support our operations folks in the interim projects that we've been developing.

It's been very useful for looking at traffic patterns without that piece of the system in place; and that's actually helped direct some of the project development efforts and helped us support our local partners and looking at improvements on their system as well.

With these tools you're attempting to predict human behaviour out to some point in the future; and you're attempting to say that based on a set of demographic assumptions and a set of system assumptions that these kinds of patterns will result. And sometimes it's really good at giving us a sense of where traffic will be sometimes in a more mature network in a more mature area or where a capacity becomes a constraint -- they do have some limitations in terms of routing traffic and helping to understand how people really do move through a network in that kind of constrained or constricted environment.

But I think that they do have value in that they provide us that baseline of here's a number to start from based on a set of assumptions, and then you can discuss whether those assumptions are the right assumptions; and a lot of times that discussion is not only internal but it's also

external in terms of looking to a city or a county and saying: we've been working from this set of assumptions -- do you agree or disagree with these. And then you can either move forward based on the assumptions that you've been making or you can adjust those assumptions and get a different answer.

I think the tools have the most benefit at a regional level -- and they have the most benefit at a daily volume kind of level where you're looking at overall patterns, you're looking at order of magnitude, differences and trying to assess how a particular investment would change patterns. And that's typically where we're using it. Certainly we use it at a project level.

And, again, because it's on my mind -- the bridge collapse -- I felt like using the forecast model to assess the potential changes and patterns when you take an integral part of that system out of the mix has been very helpful, not only from the perspective of supporting our operational folks and the projects that they've been developing, but it's also been helpful in answering some of the questions that have come up relative to suggested operational changes that are coming from outside the department. It's helped us to be a part of that dialogue and have data to support it.

The Twin Cities area has a long history of using the regional model to look at things and we do have some history in terms of having done long-range planning using tools like a regional model. But I think one of the benefits of that culture has been because we value the model, we also value getting good data for it. And so right now we have the benefit of a system that provides a lot of data at a very fine grain.

So when we do go to the place where we refine the model to a sub-area and we're doing that kind of specific project level analysis, not only do we have the tools to -- in terms of the data -- we have the ability to populate that model with good, sound information, but we also have some history in terms of that data so we can look back a few years and sort of double check if we've done a model projection and we are looking at that and we have some questions about the

validity of that, we can try to get at it from a couple of different perspectives using trends or using the model and kind of, like I say, double check to make sure that we're comfortable with that.

There are places where you make decisions based on policy, you make decisions based on money -- but I think that -- like I say -- the benefit of any of these traffic analysis tools is that they give you some gauge against what you can look at it and critically review your scope.