

have. This may require you to amend the design concept in your original plan a little. Depending on the magnitude of that change, you may have to go back into conformity and redo your conformity analysis, but that may be easier than having to find more money.

The major investment study and the regional transportation plan are inextricably linked in a way that makes them almost seamless. You have allowed the community to achieve what it wanted—and that is to eventually construct a project that meets its needs—and you have satisfied your financial constraints by staging development in a way that meets the needs of elected officials and of your financial constraints.

This is an integrated process where one piece cannot stand alone. Major investment studies and regional transportation plans are linked together, and you just cannot separate them. If you try to do so, I think you end up with a lot of problems.

MIS: Key Planning Context Issues

Neil J. Pederson, Maryland State Highway Administration

I am going to use somewhat the same format as in my earlier presentation. Therefore, once again, I will pose 15 questions. Let me run through these very quickly, and then we will discuss each briefly.

1. How do major investment studies relate to the long-range plan process?
2. How do major investment studies relate to congestion management systems?
3. What is the relationship of major investment studies to conformity?
4. How do we integrate land use issues into major investment studies?
5. What changes have occurred in the MPO planning process as a result of MIS requirements?
6. Have we been able to successfully integrate MIS and NEPA requirements?
7. Can environmental issues be adequately addressed to make corridor-level decisions?
8. How have environmental agencies reacted to MIS requirements?
9. How do we get other agencies involved that do not have adequate staff resources and the desire to become involved?
10. How do we effectively engage the public in the MIS process?

11. Have we created duplicative processes?
12. What has been the experience with retrofit projects to date?
13. Are we missing an opportunity to use major investment studies as means to enable corridor preservation actions? It is a little bit off the subject, but it is important.
14. What requirements are being imposed that do not make sense?
15. What changes should be made to MIS, NEPA/404, metropolitan planning, the congestion management system, conformity, or public involvement requirements to address problems experienced to date?

1. How do major investment studies relate to the long-range plan process?

Beginning with the relationship to the long-range plan process, major investment studies should come out of the long-range plan process—theoretically, at least. It would be interesting to know how many truly did come out of the long-range plan process and how many were projects already identified that we are now trying to retrofit with a new requirement.

What we have discovered in both of our major metropolitan areas is that we use MIS as a basis for identifying the mode and design concepts for major improvements to be included in the long-range plan. Where it is not obvious what the major concept is, we show it in the long-range plan as a study corridor. That may be the most effective way of keeping some of the bias out of the long-range plan in terms of what the solution is going to be until the MIS has actually taken place.

Because it costs so much to make amendments to the long-range plan, particularly in terms of conformity requirements, we may be in such a position that we have no choice but to make certain assumptions in the long-range plan, particularly each time we do a new conformity analysis.

A major point is that after considering the long-range plan, financial constraint discourages completion of an MIS when funding has not been identified. Yet, project development needs to be well along in order to secure funding. Our experience with our General Assembly has been that we really cannot raise the revenues we need until projects are well into the project development process. Elected officials in our State are elected for four-year terms, and they are not about to vote for something that is a long time out in the future, particularly if they have to raise revenues for it. They

want something that can be delivered within a year or two. This means we need to be pretty far along in the project development process before they are willing to take the risk of raising revenues.

This creates a dilemma, particularly from a financial constraint standpoint. How far do we need to be bringing projects along in the process before we can actually identify the revenues?

2. How do major investment studies relate to congestion management systems?

Our experience in Maryland has been that a lot of the same types of studies and issues are being addressed by our congestion management system and by our major investment studies. And although the NHS bill made management systems optional, not everyone realizes that within non-attainment TMAs you are still required to have a congestion management system, notwithstanding NHS legislation, unless there has been a liberalized interpretation I am not aware of at this point.

We are proceeding forward and trying to integrate our congestion management system with major investment studies as much as possible. In fact, we use our major investment studies as the basis for making congestion management system decisions within many of the corridors where we have major investment studies underway.

3. What is the relationship of major investment studies to conformity?

An MIS must determine a project's design concept and scope in sufficient detail to meet the requirements of the conformity regulation. Conformity requires a discipline within the planning community in terms of being pretty specific as to what the concept and scope of project is going to be. To a certain extent, conformity, where it is an issue, has almost forced us to have a greater level of rigor and detail in our major investment studies than we might have done otherwise.

The selected strategy must be included in a conforming plan and TIP before a final environmental document can be completed. In order to be able to get NEPA approval, you have to have conformity and be within financial constraints. In order to have conformity, you are supposed to have a financially constrained network on which to do the conforming analysis. Yet we usually have to get through the NEPA process before we consider raising the revenues to be able to fund the projects.

This creates, to a certain extent, a catch-22.

4. How do we integrate land use issues into major investment studies?

This has been probably the biggest challenge we have had in the largest MIS studies underway. The U.S. 301 study has progressed furthest in considering this issue.

In most of the United States, with the notable exception of Oregon, land use decisions are the responsibility of local government and not usually under the control of agencies responsible for major investment studies even if they are the implementing agencies or MPOs.

In order to successfully address land use issues, local jurisdictions that have land use control must be partners in the MIS study. We have certainly learned that as we have tried to address land use issues in our MIS studies.

There are two sides to the land use issue: We need to look at what effect changes in land use might have on the various transportation options. And we need to look at what effect the various transportation options may have on changes in land use. You really are not adequately addressing the land use issue unless you look at both sides. We came to realize that particularly within the U.S. 301 corridor study. It ended up effectively doubling the amount of work we had to do in order to address the land use issue, however.

The other thing we discovered was that land use models are not really the best way in many cases to try to get at this issue. What we did in the U.S. 301 study was put together a panel of experts in real estate and land development within the Washington metropolitan area. They served as an expert panel to advise us, based upon their knowledge of the real estate market within the area, on what we could realistically expect to result from transportation options that were being considered.

We made some pretty bold assumptions in terms of changes in land use, particularly in terms of concentrating development around certain growth nodes. We then tried to determine how this would affect the transportation options we were considering. We gave our expert panel a set of ground rules we wanted them to follow. The very first thing they said to us was that they could not follow the ground rule of starting from the MPO land use numbers.

Land use numbers from the MPO called for fairly significant growth within the Washington, D.C., urban

core. They said that was not going to happen, and we would have to use different land use numbers for our forecasts. We found that the use of expert panels gave us insights that we might not have gotten by using our traditional process.

5. What changes have occurred in the MPO planning process as a result of MIS requirements?

Clearly there is more engagement on the part of the implementing agencies in the MPO process. This is true with both the highway and the transit agencies. There has also been more engagement by the MPO in some types of issues that previously had been the domain of NEPA studies. Linkage between NEPA and the MPO planning process really is occurring much more significantly than it had previously.

6. Have we been able to successfully integrate MIS and NEPA requirements?

In Maryland, we do not really look at MIS Option One versus Option Two. I think it is a mistake to do an MIS that is separate from the NEPA process. If we do that, we will almost guarantee that we will have to go back and revisit the issues.

We have to have an integrated process. In Maryland, we have tried to address as many MIS issues as possible during the first half of the NEPA process and narrow down the range of options and alternatives. We try to get the buy-in of the agencies that we deal with through the NEPA 404 process on such issues as sign-off on need and sign-off on the narrowing of the alternatives. Only if we successfully do that can we avoid the problem of having to revisit all those issues again in the detailed NEPA documents.

7. Can environmental issues be adequately addressed to make corridor-level decisions?

This is one of the tough issues the environmental agencies have to deal with. Some environmental impact issues really only can be dealt with in very detailed studies. A few of them are archaeology, new waves analysis, water quality and, to a certain extent, wetlands. The environmental agencies have a very, very tough time dealing with the broader level of detail that we use in MIS. This is particularly true for single-functional agencies that have those disciplines that really only can

be dealt with at a greater level of detail.

Within the 50-mile-long U.S. 301 corridor study, the Maryland state historic preservation agency is having a very tough time with the fact that we can't afford to get into a 50-mile-long, five-mile wide, detailed archaeology analysis for six different alternatives. They expect archaeology to be an issue.

That is a particularly tough problem in those single-functional agencies. We have to try to do as good a job as we can to develop macro-level environmental impact measures that are appropriate and that will be acceptable to those agencies.

8. How have environmental agencies reacted to MIS requirements?

Getting the engagement and commitment of the environmental agencies is the biggest challenge we have faced thus far in major investment studies. These agencies wait until the NEPA study to become engaged in MIS studies, because they are afraid they will have to sign off and make commitments they are not willing to make without that greater level of detail.

9. How do we get other agencies involved that do not have adequate staff resources but still desire to become involved?

Many agencies, particularly the environmental resource agencies, local governments, and other State agencies, are downsizing now. Staff resources are spread extremely thin, and to ask these agencies to become more committed and more involved in a process when they are having staff reductions becomes very difficult. We have to be innovative in terms of how we manage that.

Within Maryland, we hold monthly interagency meetings where all of the agencies that we deal with on any of the transportation studies all come together in a single, day-long meeting. We have actually used that meeting both for MIS purposes and NEPA purposes, and the MPOs participate through those meetings, because we cannot get the environmental agencies to come to meetings at the MPO itself.

I think there is a particular obligation on the part of FHWA and FTA to both educate and engage other Federal agencies. I particularly emphasize education so that the management level as well as the field staff level within those agencies have an understanding of what

MIS is all about and are committed to the concept.

10. How do we effectively engage the public in MIS projects?

We have perhaps the greatest opportunity to be innovative in the public participation process. Public involvement is one of the biggest changes happening within the transportation planning profession, and it ultimately could be one of the absolute keys to the success of major investment studies. We must have the public involved throughout the process, helping us define it and being committed to it, as opposed to reacting to something that comes out at the end of it. You almost always guarantee a higher likelihood of negative reaction if people have to react to something as opposed to being engaged with the process of developing it. But such participation requires unbelievable resources and commitment on the part of the agencies sponsoring an MIS study.

Our U.S. 301 corridor study is a \$4 million study. Probably between \$1 million to \$1.5 million of that has been spent on public involvement alone.

11. Have we created duplicative processes?

If we have, we may end up dooming the MIS process. We must figure out how we are going to integrate a congestion management system and NEPA/404 requirements with our major investment studies.

12. What has been the experience with retrofit projects to date?

I have been very discouraged that we have not had the flexibility I really expected, based upon what first came out about retrofit projects.

13. Are we missing an opportunity to use major investment studies as a means to enable corridor preservation actions to occur?

One of the hallmarks of good planning is that we end up making decisions that will preserve rights-of-way that are available for public works improvements that will be made in the future. However, under current Federal regulations you need NEPA approval to expend Federal funds for rights-of-way. There are certain exceptions pretty far along in the NEPA process for protective

buying and for hardship buying of rights-of-way.

I would like to see changes in FIIWA and FTA regulations that would permit us to use MIS as the basis for protective buying of right-of-way.

14. What requirements are being imposed that do not make sense?

One of the questions I ask myself is whether I am being asked by our Federal partners to do things I don't really view as adding value to the process. Are these activities being done just because of bureaucratic requirements? I hope all of us, both those of us in sponsoring agencies and their Federal partners, will ask ourselves as we make decisions associated with major investment studies: Are those activities really adding value? If they are not, then we should not be doing them.

15. What changes should be made to MIS/NEPA 404, metropolitan planning, congestion management systems, conformity, and public involvement requirements in order to address problems experienced to date?

First, Federal agencies should be required to accept decisions made in the MIS process without being able to require their being revisited in subsequent NEPA 404 studies. If a product comes out of an MIS, it should be able to obtain conformity and NEPA 404 approval, even if funding is not identified. I recognize that there are a lot of people in this room who don't share the same views towards fiscal constraint as we do in Maryland. We believe that we need to be able to move projects through the planning process and through the project development process before we try to secure the financial resources we need for the projects.

Use of Federal funds for right-of-way preservation should be permitted based on an alternative being selected in a major investment study.

Finally, we need to revisit the issue of the threshold and characteristics of a project that is subject to MIS requirements. Is an MIS needed for a two-lane bypass project that is 1.1 miles long, around a small, historic hamlet by the name of Brookeville? Its claim to fame was that it was the capital of the U.S. for a day during the War of 1812 when James Madison had to escape the burning of Washington. It is on a principal arterial and has 8,000 ADT a day going the center of this

hamlet. That amount of traffic has an impact on it.

We are not going to increase the capacity of the corridor. It will be two-lane construction that will tie into two lanes both north and south. It is being done purely for quality of life reasons within that historic hamlet. However, we have not yet been able to successfully convince FHWA and FTA that we should not be subject to MIS requirements. That type of project really is not what MIS is all about, and we really ought to be focusing our efforts and resources rather than having to document to FHWA and FTA to why we should not have to do an MIS for that type of study.

Collaborative Planning in the Griffin Line Corridor MIS

David J. Vozzolo, Greater Hartford Transit District

The Griffin Line Corridor MIS has been the subject of numerous papers and presentations for TRB, APTA, and APA, primarily focusing on the innovative approach taken in coordinating transit, land use, economic and community development planning. This presentation focuses on the overall planning context of the Griffin Line MIS. Since its inception, long before the initiation of the MIS, the Griffin Line has been part of a locally driven collaborative planning process.

The Greater Hartford Transit District (GHTD) has been lead agency on the Griffin Line project, representing the City of Hartford, other member municipalities, and the business community. GHTD is not the transit operating agency in the Hartford region. It is an umbrella agency with policy oversight and project development responsibilities, which also operates paratransit, privatized commuter bus operations, and other services in the region. GHTD has absolutely no funding or taxing authority on its own. It is my understanding that the Griffin Line MIS is the first time in Connecticut that an independent entity other than ConnDOT has been lead agency in a major corridor investment analysis.

Project Background

Hartford is a region of approximately one million people, located midway between New York and Boston. Like most cities, there is a network of old, mostly abandoned rail freight lines that radiate from downtown to suburban areas throughout the region. Eight to ten years ago, the Capitol Region Council of Governments

(CRCOG) and GHTD conducted a series of feasibility studies to identify those corridors that might be converted to transitways or fixed guideway systems. The Griffin Line corridor was selected as the first corridor to be extensively studied. In some ways, the Griffin Line MIS runs counter to the FTA/FHWA preferred model in which a problem is identified and alternatives are evaluated to address the problem. The Griffin Line corridor was identified as a desired "transit project" well before initiation of the MIS process.

The Griffin Line Corridor (see Figure 1) extends approximately 15 miles from Downtown Hartford to Bradley International Airport, and includes the municipalities of Hartford, Bloomfield, Windsor, East Granby and Windsor Locks, Connecticut. The initial 9-mile segment from Union Station in Hartford to the Griffin Center Office Park includes 8.5 miles of abandoned rail right-of-way already owned by the State of Connecticut. The Griffin Line serves several major residential, employment, educational, health care, cultural, and institutional centers.

Figure 1

