

## Meeting Summary

# IMPROVE I-70 ADVISORY GROUP

## 4<sup>th</sup> Meeting

Daniel Boone Regional Library  
Friends Room  
100 West Broadway  
Columbia, Missouri

January 30, 2003

This is a summary of the fourth meeting of the Improve I-70 Advisory Group. It summarizes key informational and action items from the meeting.

### GENERAL

#### Members Present

Members of the Advisory Group attending the meeting: Bernie Andrews, Jeff Barrow, Elaine Blodgett, Susan Clark, Chip Cooper, Roy Dudark, Dave Griggs, Chris Janku, Kory Kaufman, David Mink, Larry Moore, Tom Moran, Mike Morgan, Justin Perry, Pat Smith, Garry Taylor, and Bob Walters.

Dennis Donald and John Huyler of The Osprey Group facilitated the meeting.

#### Materials Available at the Meeting

Materials available for discussion at the meeting, in addition to the agenda, included:

- Questions and Responses from MoDOT
- Traffic Forecasts and Sensitivity Analysis
- Next Steps in the Planning Process

In addition, other graphic representations of the traffic modeling results were available at the meeting.

#### Meeting Goals

The meeting fundamentally continued the focus on the alternative interstate corridors. In the Advisory Group's 3<sup>rd</sup> meeting, it was determined that the Far North had little merit and the focus of the 4<sup>th</sup> meeting should be on having a clearer understanding of the degree to which either the existing I-70 corridor or the Near North corridor would meet the interstate traffic and safety objectives. More specific goals for this meeting included:

1. Review how I-70 problems are being addressed in a systematic and coordinated manner with local jurisdictions;
2. Examine traffic forecasts and sensitivity analysis results and discuss implications;
3. Clarify next steps in the planning process.

## SUMMARY OF ISSUES AND ADVISORY GROUP INPUT

### Coordinated Approach to Planning I-70

Mr. Buddy Desai from CH2M Hill provided opening comments about how the I-70 planning effort is coordinating with local governments and other entities.

He started with an overview about how traffic modeling had been developed in coordination with CATSO and the City of Columbia specifically. He noted that the Tier 1 study relied on a statewide traffic model, which by its nature was general. The Tier 2 effort provides the opportunity to add locally-specific information. Thus Columbia land use, population and economic growth trends are now incorporated into a Columbia-specific traffic model.

As the study progresses, Mr. Desai noted, the consultants will be examining a full range of improvements (e.g., overpasses, intersecting roadways, interchanges, parallel roadways) to I-70. During this process, the consultants will be meeting frequently with City and County staff and others to gather data and insights about the nature and magnitude of impacts.

Mr. Dudark reinforced the comments about the traffic modeling. He noted that the City has provided data by traffic zone to the modelers and worked with the modeling effort to ensure that the model is calibrated and valid. He thinks the City and the consultants now have a model that provides representative forecasts of traffic 20 or 30 years into the future. It is a reasonable basis on which to make decisions.

### Traffic Forecasts and Sensitivity Analysis

The bulk of the meeting focused on presentation of and discussion about the traffic forecasts and the more detailed sensitivity analyses. Mr. Steve Wells provided the initial perspective and Mr. Buddy Desai followed up with a review of the variables modified in each of the scenarios and additional interpretation of the results. The focus for the presentation was on the scenarios or sensitivity analyses related to the Near North and the existing I-70 corridors.

Some of the highlights from the presentation included:

- The traffic model forecasts 8,000 to 10,000 vehicles per day on the Far North alternative.
- The model shows 15,000 to 25,000 vehicles per day on the Near North.
- The model shows 80,000 to 100,000 vehicles per day remaining on the existing I-70 corridor.
- There needs to be significant improvements made to I-70 in its existing location and, once those improvements are made, most traffic remains on the existing highway, which continues to be the straightest and shortest distance.

- When the existing I-70 does become congested, travelers will seek an alternative route. People will choose a longer route if it is perceived to be quicker. This occurs when I-70 is constrained to four lanes.
- The more you improve the existing I-70, the more the benefit of either the Near North or the Far North is reduced.
- In some scenarios, the traffic volumes vary considerably. It was explained that when an alternative, such as the Near North, serves as an arterial road, it will attract many short trips near development, but will not necessarily pull much through traffic from the interstate.

The discussion that followed initially focused on modeling and methodological issues. This included questions about which roads and intersections were assumed to be in existence in the future (e.g., an extension of Stadium Boulevard is assumed, but an interchange west of Stadium is not included since it is not part of the CATSO plan), variations in time-of-day traffic flow, the fact that the model as configured does not assume any preferential design to encourage traffic to move to one alternative over another, and how might the business loop be designed to better accommodate local east-west traffic (this was an issue that would be addressed as specific alignments are being reviewed). It was followed by more discussion about the implications of the modeling results.

The Advisory Group considered whether its input to MoDOT should focus exclusively on the existing I-70 corridor or examine the existing corridor plus the Near North.

Cost. An initial point made was that the cost of widening the existing corridor was projected to be \$50 million more than the Near North alternative. It was suggested that this was for eight lanes on the existing, but that was to be checked. There was also some discussion about the validity of the cost estimates in any event given the passage of time and the changes in patterns of development. Mr. Desai reinforced that the design of the highway including associated facilities such as interchanges would be the next step in this process and this would yield more precise cost estimates. The expectation is that the revised cost estimates developed as part of the Tier 2 study will likely be significantly different from the original estimates generated as part of the Tier 1 study. Mr. Desai suggested that, if anything, the costs for the Near North would rise more dramatically than the costs for the existing corridor.

Rate of growth in northern Columbia. It was noted that the rate of growth north of the existing interstate is faster than most are anticipating. More growth is expected and a significant highway in this area would further stimulate growth and, therefore, the volume of traffic projected for the Near North would be higher than the model estimates. Mr. Wells discussed the background assumptions that drive the model. He mentioned that they had coordinated with the City to determine the most likely development patterns over the next 30 years. The model therefore incorporates not perfect information, but the best educated guesses that can be developed based upon current knowledge. Mr. Wells indicated that many of the development trends being identified by the Group are reflected in the model. Mr. Dudark also noted that the model assumes 60,000 additional people in Columbia and this incremental population is distributed in several of the more rapidly growing parts of the community including the north.

Road network. The existing model is also based on the current transportation plan. This assumes a number of new roads, but there may be other roads constructed that are not reflected in the current planning documents.

Construction strategy. A point was raised that it might be more prudent to construct the Near North alternative first before improving the existing I-70 because this would provide an alternative path for travel. Without having a Near North alternative, the construction involved on the existing I-70 would severely impact the community. Moreover, if people were to get used to using the Near North, their travel preferences might change. Later in the discussion it was noted that this is frequently the challenge in improving interstate systems within urban areas. While it is a challenge, it is one that is frequently addressed.

The southern orientation of many trips. Many of the local travelers along I-70 have trip destinations that are somewhere south of the interstate. With this in mind, it was reinforced that most people will choose the shorter alternative to get across town. Thus, the preference will continue to be to use the existing corridor for most trips. As one Advisory Group member stated, “. . . I think you’ve got to look at those origin and destination studies . . . it’s going to be awfully difficult to move them to the north to choose to drive across town.”

The Near North as a negative. One individual stated that “I guess the first thing that comes to my mind with a Near Loop or Far Loop is basically a negative. I mean, for the City of Columbia, those things are a negative, basically, because they create an island of ground in between that’s going to be real difficult to develop. . . . It’s an environmental negative. It’s a developmental negative. It’s a negative for the City of Columbia basically any way you look at it unless it does a great deal to help I-70.” There was some discussion about this assessment – i.e., does having an interstate such as the Near North alternative create a negative for the ground in between the Near North and the existing I-70? Mr. Wells commented that based on his experience there are examples of areas that have eroded economically and there are some that have very attractive neighborhoods adjacent to interstate facilities. At the same time, he noted that there is a tendency to move from residential to commercial and industrial zoning closer to interstates.

A bottom-line assessment. There were several who thought the data presented demonstrate that the Near North is not a strong enough alternative to warrant continued investigation. “. . . If I-70 doesn’t come to a standstill half the time, which none of us wants, then nobody is going to use the Near Loop anyway. . . . So the bottom line is we don’t want to create a situation where I-70 doesn’t function right for us. None of us do . . . and yet when we look at this Near North alternative, there’s really nothing that we can do to make that work on its own. We’ve still got to build I-70 up to a greater level, so I guess I’m ready to stop talking about the Near North because I don’t see any positives for it and only negatives.” The Group was asked to react to this assessment and, while many concurred, there were a few who believed it was premature to give up on a northern alternative.

An arterial to the north. In discussing the community’s transportation plan, it was mentioned that without a Near North alternative, the concept would be to create an arterial, similar to Stadium Boulevard, on the north side of the community to meet local traffic needs. Mr. Desai noted that this is an example of a transportation planning decision that is complementary to the planning for the improvement of I-70; that is, it might do little to address the fundamental problems on the existing I-70, but be a very good idea for the community.

A systemic solution. It was noted that the combination of having a Stadium-like loop to the north along with an improved I-70 would be a systemic solution for the state and the community. “It helps move local traffic off I-70 and might actually diminish the overall cost.” Question: can the funds used to address the interstate problems be deployed to other needs that might help address the problem, but not necessarily by expanding an interstate? Mr. Desai indicated that his understanding is the money can be used as long as it's directly related to improving operations on I-70. The challenge at this point is to seek the best solution and not get tangled in a concern over whether the funds are federal, state or city dollars. This, of course, recognizes that any design will be developed in a world of financial constraints.

Alternative scenarios. Some saw the data as presenting an apparently strong case for improving the existing I-70, but were not convinced there might not be some northern scenarios that would fare better. One Group member asked if there might be an opportunity to run other sensitivity analyses. For example, he thought that having only one run where the existing I-70 is maintained at four lanes biases the results toward the existing interstate. He thought the presentation was attempting to lead the Group to a certain conclusion. Mr. Wells noted that any concepts that have merit will be examined. These concepts can come from the Advisory Group, one of the local governments, or any member of the public. At the end of the meeting, Mr. Desai wrote up his email address so that any suggestions for alternative scenarios could be sent to him as soon as possible. At the same time, Mr. Wells stressed the importance of remembering that the challenge is to address I-70 traffic and safety concerns and while there is not a bias against the northern alternatives, there is not a bias for them either. He concluded, “What we want to stress is that we're not here to make a Near North or Far North alternative work. What we're here to do is try to solve the problems on I-70, and based on what we have today, we're having a hard time doing that with either one of these two [northern alternatives].”

Maintaining the northern loop for flexibility. There was some concern that total elimination of the Near North at this time might unduly constrain the options for MoDOT and the community. Some, advocating this view – even though they believed it appropriate to focus on the existing corridor -- thought there continue to be too many unknowns, including the availability of funds for local roads and the nature and magnitude of economic impacts, and that the prudent thing would be to preserve the Near North option. This would be done, recognizing the data do not suggest it is a preferred alternative, but that it might provide a fallback.

### Next Steps in the Planning Process

Mr. Desai spent a few moments outlining the next steps in the process and encouraging everyone to continue to be involved. As the specific alignments are identified, a major challenge will be to assess the social, economic and environmental impacts. Local knowledge will help greatly.

One item that will be incorporated into the analysis is to integrate the traffic projections developed through the modeling and compare the results with the criteria and thresholds that were developed and discussed at earlier meetings. This will be another effort to calibrate the viability of each of the corridors using information such as travel time and accident rates.

For each corridor judged to reasonably address the I-70 traffic and safety problems, specific alignments will then be developed. Mr. Desai mentioned that if, after concluding with the analytical portion of the corridor assessment, it “appears that Near North doesn't make a whole lot of sense, we'll certainly gather that information, summarize it, present it to the Group, and continue to concentrate just on existing I-70 for addressing the issues that are at hand, all the while leaving open a variety of other options. . . . So, whereas we may eliminate a corridor, it doesn't mean we may not have to go back in there and make some minor improvements to impact further improvements on to existing I-70.”

Once the alignments are identified, the consultants will examine the socioeconomic and environmental impacts for each of the alternatives. The alignments will reduce what had been a mile-wide corridor down to a 500 foot alignment. So, the future analysis will be much more detailed.

The Advisory Group will not be meeting as frequently during the coming year. This is largely due to the engineering and impact analysis work that must be completed.

Some next steps in the planning process include:

- February – Develop final recommendations for the corridor screening and selection.
- March – Preview corridor screening decision with the Advisory Group and begin to discuss impacts associated with alignment alternatives.
- April – Hold general public meeting in Columbia to review corridor selection and, hopefully, set forth initial set of alignment alternatives.
- July and November – Tentative schedule for future Advisory Group meetings to hear interim findings.

#### SUMMARY AND NEXT STEPS

The next step in the process will be to define more specific alignments within corridors that meet the traffic objectives of I-70 and then, once these are established, a primary focus will be on the range of social, economic and environmental impacts associated with each alignment. It was also mentioned that part of the alignment definition will include a more detailed examination of intersections, interchanges and other structural variables that will impact traffic flow and safety.

Two major tasks are scheduled for the March meeting. One will be to hear how the traffic projections dovetail with the criteria and thresholds (such as travel time and level of service), which were discussed at the second and third Advisory Group meetings. The other significant task for the March meeting will be for the Advisory Group to offer its thoughts about the impacts for alignments that will be preliminarily identified. This will be done on maps in smaller groups and then shared and discussed with the larger Group.

The next meeting is scheduled for Thursday, March 13<sup>th</sup>. It cannot be at the library so other possibilities will be explored. Notification of the location will be sent to the Advisory Group and others on the email list at least a week prior to the meeting.

Upcoming Advisory Group Meeting

Thursday, March 13<sup>th</sup>

Agenda

**IMPROVE I-70 ADVISORY GROUP**

Meeting 4  
4:00-6:30 p.m.  
January 30, 2003

Daniel Boone Regional Library  
100 W. Broadway  
Friends Room  
Columbia, Missouri

Meeting Goals: 1) Review how I-70 problems are being addressed in a systematic and coordinated manner with local jurisdictions; 2) Examine traffic forecasts and sensitivity analysis results and discuss implications; 3) Clarify next steps in the planning process.

- 4:00 Convene Meeting**  
*Dennis Donald and John Huyler, The Osprey Group*
- 4:10 Relevant Updates and Outstanding Questions**  
*Dennis Donald and John Huyler, The Osprey Group*
- 4:30 A Coordinated Approach to I-70 Planning**  
*Buddy Desai, CH2M Hill*
- 5:00 Traffic Forecasts and Sensitivity Analysis**  
*Steve Wells, Wilbur Smith*
- 6:00 Review Next Steps in the Planning Process**  
*Buddy Desai, CH2M Hill*
- 6:20 Closing**  
*Dennis Donald and John Huyler, The Osprey Group*
- 6:30 Adjourn**



## **Questions and Answers**

### **Why should Advisory Group members stay involved after corridor screening?**

Now is the time to be involved in shaping the future of I-70 in Columbia, because this study sets the course for that future. This study will identify right of way impacts and determine design concepts that will be implemented when construction funding becomes available and the actual design of improvements can begin.

As this study progresses, we need to make decisions on what is best for Columbia. Your input is crucial to the development and evaluation of alignments within the proposed corridors, as described in the Jan. 30 Next Steps handout. There are also numerous options along the existing corridor that need to be considered as the study moves forward.

All improvement options assume basic improvements to the existing I-70. Any improvement or change to existing I-70 will greatly impact people who use and depend on it. Improvements to the existing corridor must consider major changes to the interchanges, including the possibility of closing some. For instance, engineers can develop numerous options for the Stadium Boulevard interchange and the system of frontage roads that converge at that point, but we will need input from members of the community who actually use the interchange and can personalize the possible impacts.

Other decisions that we need to make: Should frontage roads be one-way or two-way roads? Should Business Loop 70 be extended east and north to connect to Clark Lane? Where do bicycle/pedestrian facilities need to be integrated with the proposed changes?

Looking past the geometry of the road, there will be tough decisions to make on where impacts should occur. For example, the First Tier Study suggested that the majority of land acquisition would be on the south, but that has a significant impact on the commercial strip adjacent to I-70 and the residential homes just south of the commercial area.

### **Can we speed up the process?**

The current timeline for this study, with a scheduled conclusion of August 2005, was primarily driven by available funding. If additional funds become available to this study, we could speed up the process by about a year -- returning to our original and very ambitious schedule that called for completion by fall of 2004. It is very unlikely, however, that the process could be accelerated any more than that.

Environmental studies are highly regulated and involve pre-determined timeframes for review by numerous federal and state agencies and by the public. The detail of the

analysis alone takes considerable time. As the engineering part of the environmental study concludes, the environmental and cultural resource analysis is just beginning.

Architectural history, as an example, requires documentation by photograph and description of every structure within 100 feet of the proposed roadway. Any structure (a structure can be almost anything – a gate, barn, sign, etc.) that is or will be 50 years old by the year 2010 needs additional extensive information that is presented to the Missouri Department of Natural Resources to determine if it is eligible for the National Register of Historic Places. The time involved for this one activity can be months in research and then months in its document preparation and reviews.

Similar effort is exerted for every element under consideration in this document: social and economic characteristics, air quality, noise, parkland impacts, prime farmland soils, water quality, terrestrial and aquatic communities, archeological resources, hazardous waste sites and visual quality. We also examine and evaluate the secondary impacts to these resources from construction of a new or widened I-70. For example, if by reconstructing an interchange we must buy out a gas station, will that gas station relocate in the vicinity and buy out residential property to do so?

### **What will development in the Near North corridor do to estimates/impacts?**

Development in any of the corridors will impact our estimates. We do the best we can to anticipate development and include it in that amount as part of our evaluation. Even along the existing corridor, development continues to occur. An example is when residential houses are bought and replaced with developments of higher value, such as a motel or a restaurant. Specifically, an Extended StayAmerica hotel is now under construction near the Stadium/I-70 interchange at the location of what formerly was a salvage yard.

Once the final environmental document – the product of this study -- is approved, MoDOT will work with the appropriate agencies, the City of Columbia and Boone County, to do everything possible to preserve the corridor. In the end, if the local entity does not preserve the corridor, development will continue and the right of way cost for any of the options will be higher than our current estimate. How much higher will largely depend on when we get funding to move forward with design, right of way acquisition and construction.

If funding were imminent, in certain instances we could start purchasing right of way as soon as the environmental documents are completed. Environmental documents have a shelf life, however, and if funding does not come in the near future, the document would be subject to re-evaluation to determine if its assumptions and conclusions are still valid. In a worst-case scenario, development in the selected corridor might require initiation of a new study. Normally we are very successful working with cities and counties to preserve the corridor.

It is a long and sometimes difficult journey to reach these decisions but once made and supported, it is in the best interest of all parties to work together to ensure that the selected corridor is there when the money for construction is available.

## **Traffic Forecasting: Sensitivity Analysis Results**

*In order to make an informed choice between the corridor options, it is critical that each corridor be given the best chance for attracting interstate motorists, and therefore provide the most relief to existing I-70. To that end, the additional scenarios below were tested to determine what effect they have to traffic traveling on existing I-70. This "sensitivity analysis" ensures that each corridor is given the best opportunity for success before we determine which corridors will receive further consideration.*

### **Far North Sensitivity Alternatives**

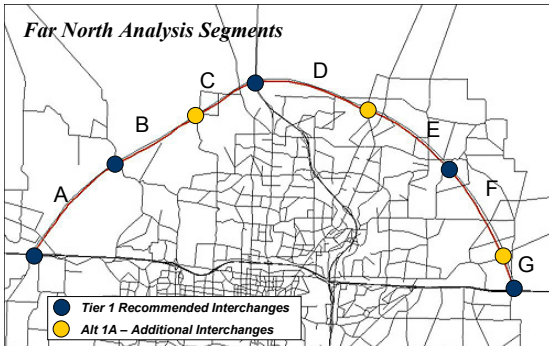
Three sensitivity alternatives were evaluated along the Far North Corridor. The sensitivity runs were intended to quantify the impact of either adding additional interchanges or reducing the number of interchanges along a proposed alignment. Based on the preliminary traffic results, all three sensitivity runs also provided additional capacity to existing I-70.

- **Far North Tier 1 Alternative** – A four-lane interstate type facility within the Far North Corridor. Interchanges were located at Route E, U.S. 63, Route PP and at either end where it would tie back into existing I-70. No improvements were incorporated along the existing I-70 corridor.
- **Alternative 1A** – Additional interchanges along a proposed Far North alignment, as well as the likely improvements that would be necessary along existing I-70 through Columbia. New interchanges were added at Creasy Springs Road, Oakland Church Road, Route B and Route Z. Additional capacity was added to existing I-70 by adding one additional lane in each direction, making it a six-lane facility.
- **Alternative 1B** – The same interchange configuration as Alternative 1A, with additional capacity along existing I-70. Existing I-70 was assumed to be an eight-lane facility.
- **Alternative 2** – Fewer interchanges along the proposed Far North alternative, with interchanges located at Route 63, Route B and Route PP. Six lanes along existing I-70 were also assumed.

### *Traffic Changes along Proposed Far North Alignment*

The first question to be answered for each sensitivity test relates to how much traffic would be using a new Far North alignment. The CATSO traffic model was used to forecast the number of average daily vehicles that would likely use the new alignment in the year 2030. The results of that modeling exercise are presented in the table below.

To aid in the understanding of the table, note that the Far North alignment has been divided into seven segments labeled A through G (see the map on the right). The letter designations on the map correspond to the letter designations in the table.

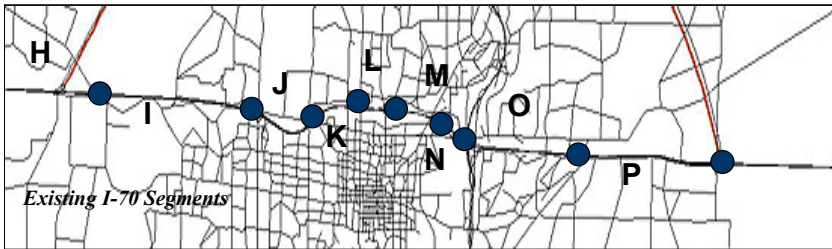


Alternative	Average Daily Traffic Per Segment (2030)							Segment Average	Percent Change
	A	B	C	D	E	F	G		
Tier 1	12,390	9,530	9,530	4,880	4,880	6,800	6,800	7,830	
1A	10,430	8,230	6,520	7,560	1,340	4,040	5,780	6,270	-19.9%
1B	10,420	8,220	6,520	7,560	1,330	4,050	5,780	6,270	-19.9%
2	5,550	5,550	5,550	7,140	1,150	3,130	3,130	4,460	-43.0%

*Traffic Changes along Existing I-70*

The second question to be addressed is how traffic along existing I-70 will be impacted by each of the proposed alternatives. Again, existing I-70 was divided into segments – nine, labeled H through P, for evaluation purposes.

All three sensitivity runs resulted in fewer vehicles being diverted from existing I-70, primarily because of the additional capacity provided along existing I-70 with the assumed minimum improvements. The table below summarizes the year 2030 traffic forecast along existing I-70 for each sensitivity run.



Alternative	Average Daily Traffic Per Segment (2030)									Segment Average	Percent Change
	H	I	J	K	L	M	N	O	P		
Tier 1	81,230	81,800	101,510	99,860	103,130	91,170	106,270	69,120	41,280	86,150	
1A	82,620	83,640	104,890	103,600	107,140	94,010	109,500	70,430	41,790	88,620	2.9%
1B	82,620	83,670	105,210	103,720	107,420	94,370	109,740	70,510	41,790	88,780	3.1%
2	85,930	86,420	106,530	105,210	108,710	94,860	110,180	70,620	41,720	90,020	4.5%

### *General Conclusions of Far North Sensitivity Analysis*

The original Tier 1 traffic forecast for the Far North indicated that 80,000-100,000 vehicles would remain on existing I-70. That volume would require additional capacity on existing I-70 to provide an adequate level of service. The sensitivity runs for the Far North Corridor indicate that when the additional capacity is provided along existing I-70, less traffic is diverted to the Far North alignment from existing I-70. Depending on the interchange configuration, the Far North alignment loses 20-45 percent of the traffic originally forecasted.

### **Near North Sensitivity Alternatives**

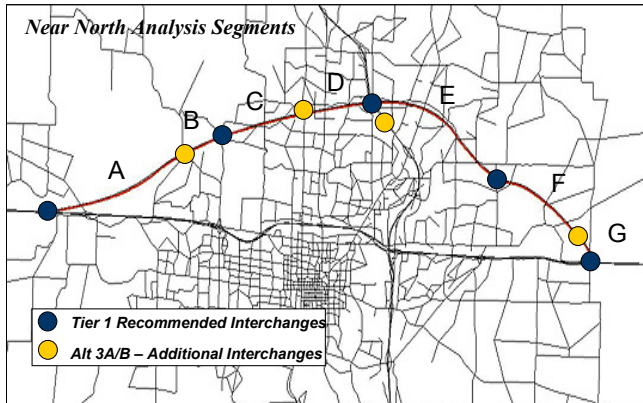
Seven sensitivity alternatives were evaluated along the Near North Corridor. Similar to the Far North, the sensitivity analysis evaluated adding additional interchanges, reducing the number of interchanges, and adding capacity to existing I-70. Additional sensitivity runs included evaluating a northwestern-only leg of the new alignment between I-70 west of Columbia ending at Route 63 north of Columbia; as well as a new alignment as a principle arterial instead of a freeway type facility.

- **Near North Tier 1 Alternative** - Included a new Near North alignment built to freeway facility standards with interchanges at either end with I-70, Blackfoot Road, U.S. 63, and Route PP. The existing I-70 alignment was modeled with four basic lanes.
- **Alternative 3A** - Included the Near North Tier 1 freeway-standard alternative with interchanges at Route E, Creasy Springs Road, U.S. 63, Route PP, Route Z, and either end with I-70. In addition, an interchange located at U.S. 63 and Brown School Road was added. The existing I-70 alignment was modeled with six lanes through Columbia.
- **Alternative 3B** - Differs from 3A in that the existing I-70 alignment through Columbia was modeled with eight lanes rather than six.
- **Alternative 4** - Modeled with the Near North Tier 1 Alternative, but with fewer interchanges than Alternatives 3A/B. Interchanges were located at either end with I-70, Route E, U.S. 63, and Route PP. The existing I-70 route through Columbia was modeled with six lanes.
- **Alternative 5** - Modeled with the western half of the Near North Tier 1 Alternative, beginning at I-70 near the existing U.S. 40/I-70 interchange and terminating at U.S. 63. Interchanges at I-70, Route E, and U.S. 63 were modeled. The existing I-70 alignment through Columbia was modeled with six lanes.
- **Alternative 6A** - Used the same Tier 1 Near North Alternative modeled as a primary arterial rather than a freeway facility. At-grade intersections were added with every crossroad with a functional classification of collector or higher. Grade-separated interchanges were provided at both I-70 locations and U.S. 63. The existing I-70 alignment was modeled with six lanes through Columbia.

- **Alternative 6B** - Same as Alternative 6A, with the exception that the existing I-70 alignment through Columbia was modeled with eight lanes rather than six.

*Traffic Changes along New Near North Alignment*

The CATSO traffic model was used to forecast the number of average daily vehicles that would likely use a new Near North alignment in the year 2030. The results of that modeling exercise are presented in the table below.

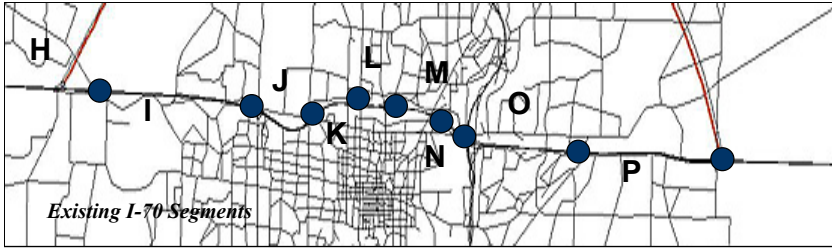


Alternative	Average Daily Traffic Per Segment (2030)							Segment Average	Percent Change
	A	B	C	D	E	F	G		
Tier 1	31,350	31,350	31,450	31,450	20,990	19,890	19,890	26,620	
3A	12,480	12,730	12,730	16,020	6,940	6,910	8,500	10,900	-59.1%
3B	12,360	12,600	12,600	15,880	6,900	6,870	8,470	10,810	-59.4%
4	10,130	7,720	7,710	7,710	6,130	3,800	3,800	6,710	-74.8%
5	10,580	8,030	8,030	8,030	-	-	-	8,670	-72.4%
6A	1,990	15,800	2,850	36,360	13,080	2,530	11,920	12,080	-54.6%
6B	1,990	15,780	2,830	36,330	13,050	2,530	11,980	12,070	-54.7%

*Traffic Changes along Existing I-70*

The CATSO traffic model was also used to forecast the changes in daily volumes along the existing I-70 alignment through Columbia in 2030. The table below summarizes the year 2030 traffic forecast along existing I-70 for each sensitivity run.

All six of these sensitivity runs resulted in less traffic being diverted from existing I-70, primarily because of the additional capacity provided along existing I-70 through the assumed minimum improvements. As the table indicates, traffic on existing I-70 increases by 26-36 percent.



Alternative	Average Daily Traffic Per Segment (2030)									Segment Average	Percent Change
	H	I	J	K	L	M	N	O	P		
Tier 1	62,090	61,040	81,740	79,580	84,070	76,230	91,450	51,580	23,160	67,882	
3A	80,000	79,870	101,730	99,400	103,690	91,840	107,320	66,770	37,820	85,380	25.8%
3B	80,110	80,070	102,060	99,730	104,090	92,190	107,750	66,990	37,860	85,650	26.2%
4	81,230	82,530	105,570	103,200	106,930	93,220	108,690	67,420	38,170	87,440	28.8%
5	80,670	82,070	104,940	102,600	106,160	93,650	109,160	71,300	41,560	88,010	29.7%
6A	86,510	90,140	110,800	108,180	109,920	94,410	109,470	73,560	46,290	92,140	35.7%
6B	86,510	90,250	110,730	107,490	110,370	94,730	109,980	73,680	46,350	92,230	35.9%

*General Conclusions of the Near North Sensitivity Analysis*

The original Tier 1 traffic forecast for the Near North indicated that 75,000-90,000 vehicles would remain on existing I-70. That volume would require additional capacity on existing to provide an adequate level of service. The sensitivity runs for the Near North Corridor indicate that when the additional capacity is provided along existing I-70, less existing I-70 traffic is diverted to the Near North alignment. Depending on the interchange configuration, the Near North alignment loses 55-75 percent of the traffic originally forecasted.

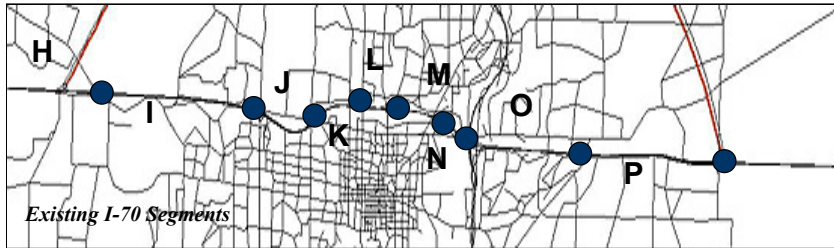
**Existing I-70 Sensitivity Alternatives**

Three sensitivity alternatives were evaluated for the existing I-70 alignment. The sensitivity runs were intended to quantify the impact of adding additional lanes to the existing I-70 alignment and making improvements to the I-70 Business Loop through the City of Columbia.

- **Tier 1 Alternative/Alternative 7** – The Tier 1 Alternative and Alternative 7 are identical alternatives, and were separated for modeling purposes. The Tier 1 Alternative added 2 additional lanes to I-70, raising the total four to six lanes. No additional interchanges were added to I-70.
- **Alternative 8** – The second existing I-70 alternative increased the number of lanes from six to eight to provide additional capacity along existing I-70.
- **Alternative 9** – Modeled with improvements to Business Loop 70 through Columbia in an attempt draw vehicles off the parallel interstate facility. For this model run, Business Loop 70 was widened to six lanes with a new arterial-to-arterial interchange with Route 163. Route PP was also extended to connect with the Business Loop. The existing I-70 freeway facility maintained six travel lanes.

*Traffic Changes along existing I-70*

The CATSO traffic model forecasted the number of average daily vehicles that would likely use the existing alignment in the year 2030, depending on the lane configuration. The results of that modeling exercise are presented in the table below.



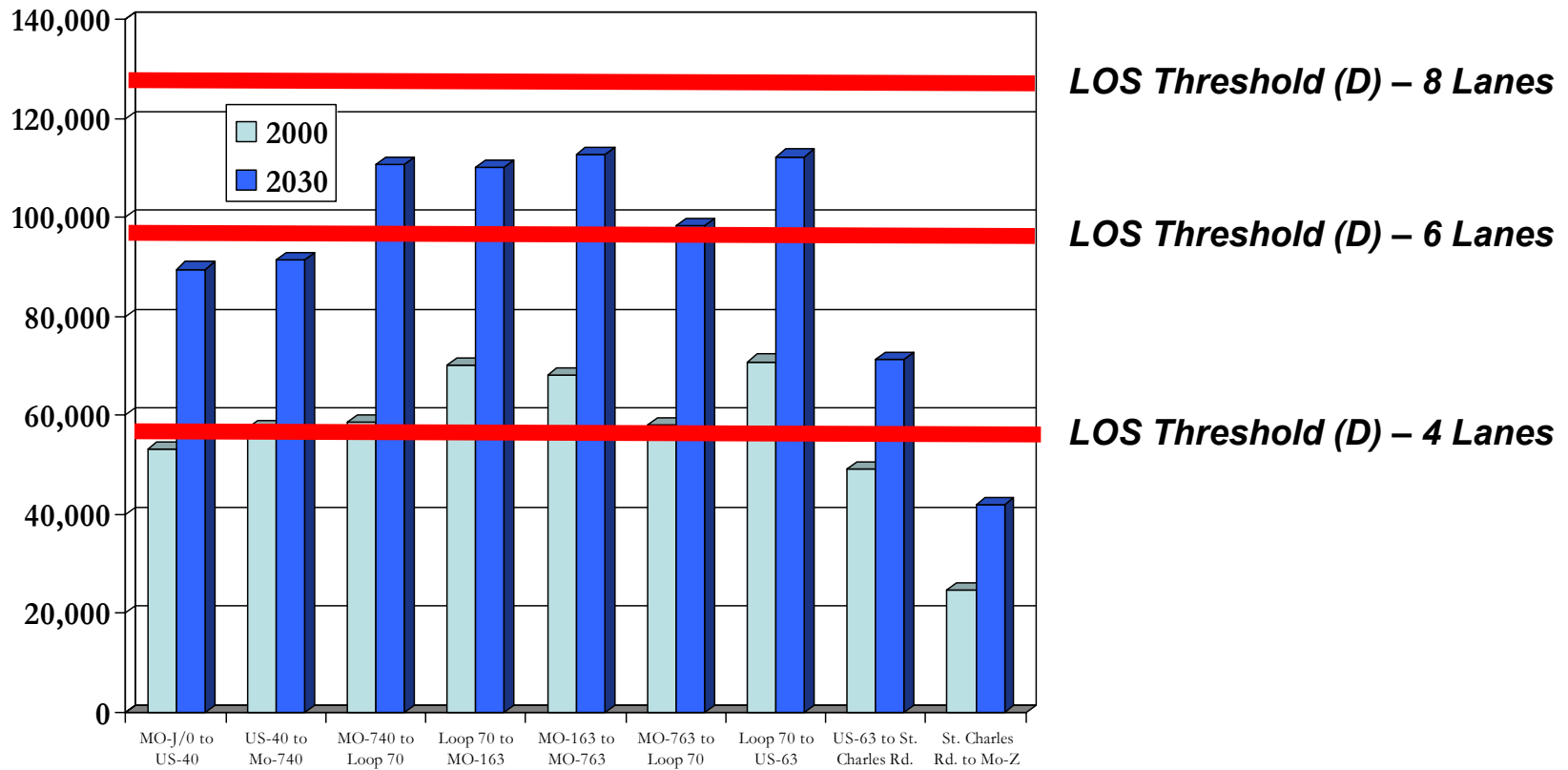
Alternative	Average Daily Traffic Per Segment (2030)									Segment Average	Percent Change
	H	I	J	K	L	M	N	O	P		
Tier 1	89,570	91,520	110,740	110,100	112,620	97,320	112,260	71,270	42,050	93,050	
7	89,570	91,520	110,740	110,100	112,620	97,320	112,260	71,270	42,050	93,050	0.0%
8	89,570	91,550	111,200	110,150	112,870	96,300	113,850	71,700	42,050	93,250	0.2%
9	89,570	91,520	111,400	111,800	112,840	94,330	114,820	71,840	42,100	93,360	0.3%

*General Conclusions of the Existing I-70 Sensitivity Analysis*

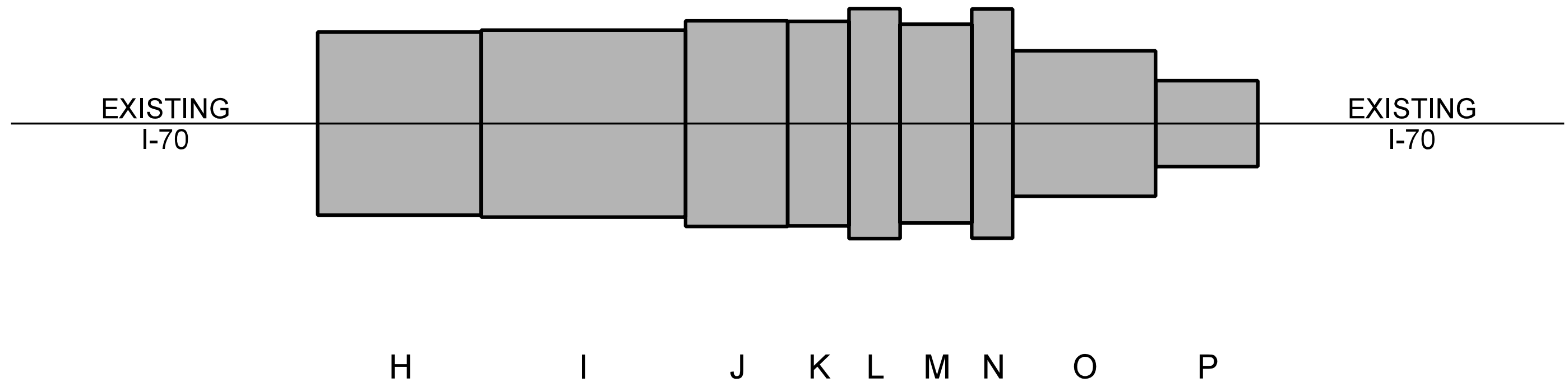
The addition of two travel lanes to existing I-70 (from six to eight lanes) and improvements to Business Loop 70 both slightly increase the overall number of trips on I-70. The change in the daily trip percentage is nearly negligible. Overall, it can be said that the addition of two lanes slightly increases total daily trips. However this would likely improve travel conditions because the additional lanes could reduce congestion. Improvements to Business Loop 70 likely would have little to no effect upon the existing six lanes of the I-70 alignment.



# No-Build Traffic on I-70



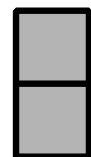
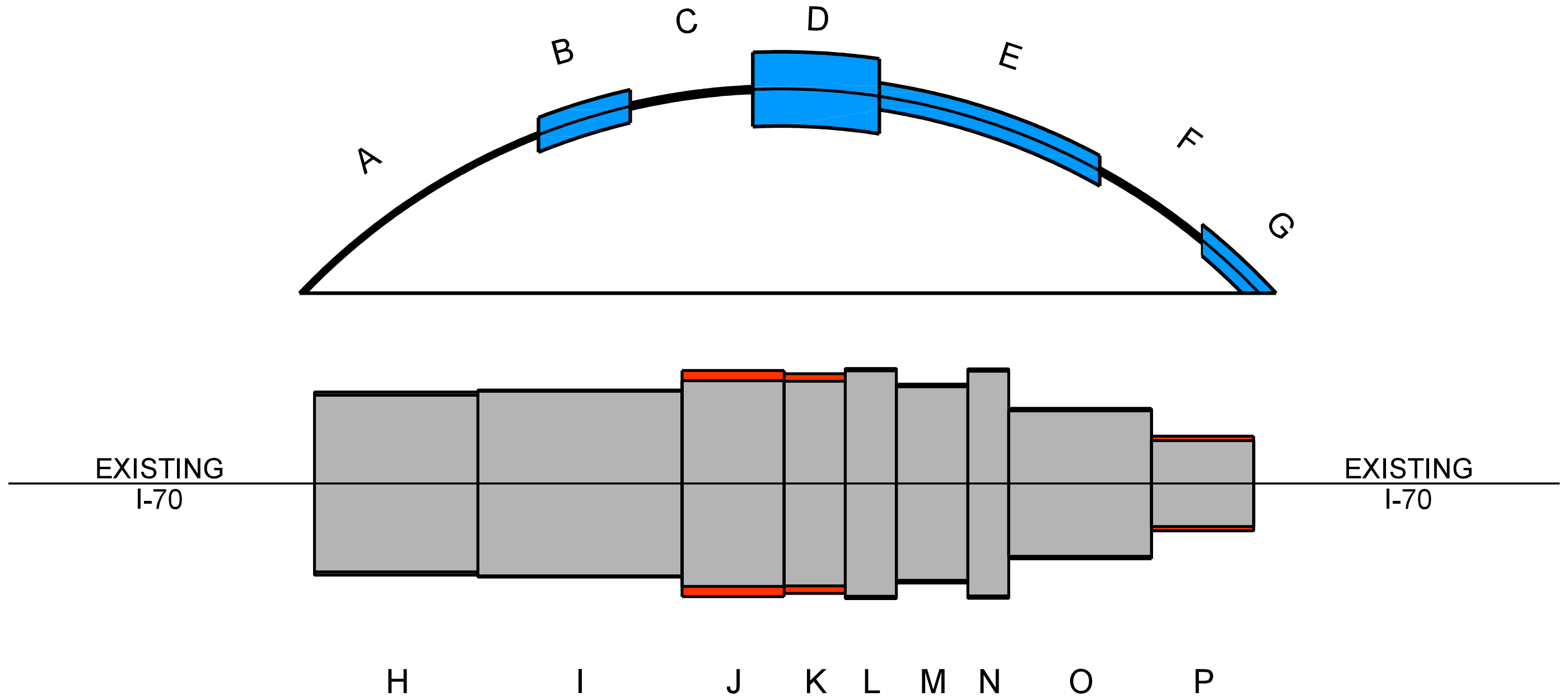
# AVERAGE DAILY TRAFFIC PER SEGMENT



PROJECTED TRAFFIC VOLUMES  
ON EXISTING I-70 IN 2030  
(1" = 20,000 VPD)



# AVERAGE DAILY TRAFFIC PER SEGMENT NEAR NORTH ALTERNATIVE



PROJECTED TRAFFIC VOLUMES  
ON EXISTING I-70 IN 2030  
( 1" = 20,000 VPD )



IMPACT TO EXISTING I-70 TRAFFIC DUE  
TO NEAR NORTH ALTERNATIVE IN 2030  
( 1" = 20,000 VPD )

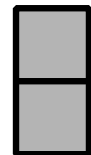
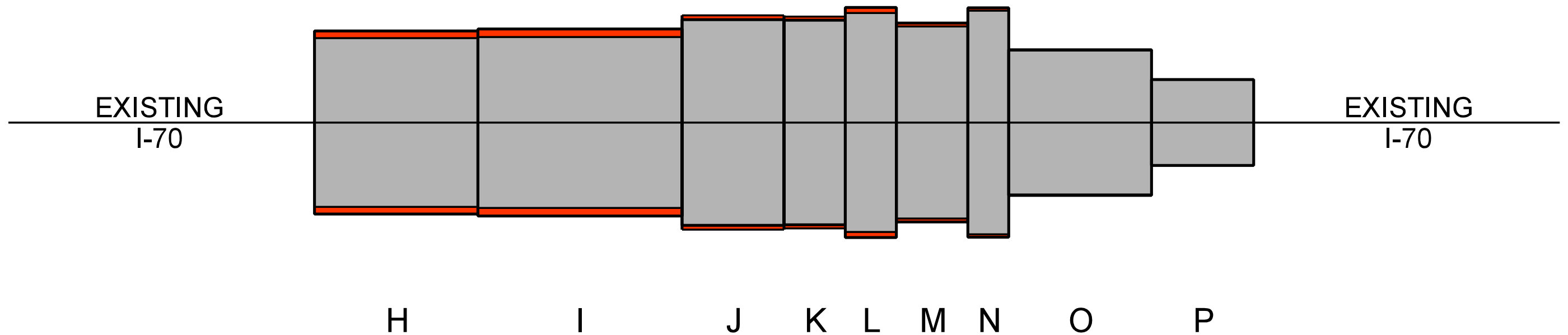
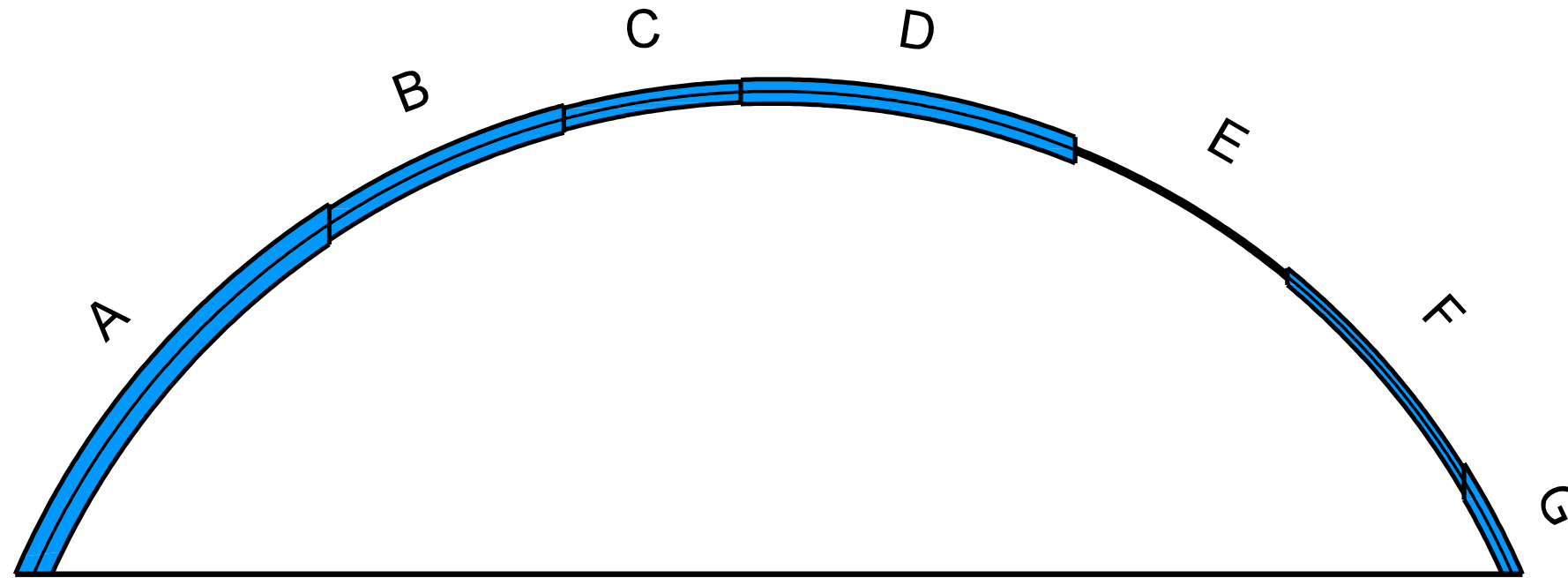


PROJECTED TRAFFIC VOLUMES ON  
THE NEAR NORTH ALTERNATIVE IN 2030  
( 1" = 20,000 VPD )





# AVERAGE DAILY TRAFFIC PER SEGMENT FAR NORTH ALTERNATIVE



PROJECTED TRAFFIC VOLUMES  
ON EXISTING I-70 IN 2030  
( 1" = 20,000 VPD )



IMPACT TO EXISTING I-70 TRAFFIC DUE  
TO NEAR NORTH ALTERNATIVE IN 2030  
( 1" = 20,000 VPD )



PROJECTED TRAFFIC VOLUMES ON  
THE FAR NORTH ALTERNATIVE IN 2030  
( 1" = 20,000 VPD )



## **Next Steps: From Wide Corridors to Narrow Alignments**

Specific environmental and socio-economic impacts will come into focus over the next several months as the study team moves from screening corridors to developing various alignment alternatives. Once alignments are developed, we'll be able to determine how and which neighborhoods, businesses, waterways and other natural and socio-economic features and interests could be affected.

Alignment alternatives – represented by 500-foot bands -- will be developed within corridors found to be reasonable for further study. The sensitivity analyses now under way will aid in determining whether the Near North and/or Far North corridors are reasonable for further study. Should neither northern corridor be deemed reasonable for further study, no alignments would be developed within them. Based on traffic modeling, input from the Advisory Group, and early sensitivity analysis, it appears that the Far North Corridor will not be considered a reasonable corridor. On the Existing Corridor, which is considered a reasonable corridor, the team will look at how the additional lanes and new interchanges could fit into the corridor's highly developed area.

**The study team needs your continued input** as it begins developing a wide range of alternatives in March. Knowing the impacts of several alignments will enable the team to make the most informed decisions. Once the team has developed this wide range of alternatives and collected initial data, it will share them with you at a meeting tentatively scheduled for July 2003. Your input during alternatives development, impact quantification, and alternatives refinement is crucial to helping the team determine the best solutions for I-70 through Columbia.

By November 2003, the team will have begun alternatives screening, share its initial findings with the Advisory Group, and seek input on final screening. At the end of the alternatives screening process, the **wide range** of alternatives will be narrowed to a **reasonable range** of alternatives that will move forward for the highly detailed analysis to follow in 2004.

Turn over this sheet for a tentative schedule of these important next steps.

## Tentative Schedule of Next Steps

<b>FEBRUARY</b>	Study team recommends reasonable corridor(s)
<b>MARCH</b>	<p><b>Advisory Group Meeting 5:</b></p> <ul style="list-style-type: none"> <li>▪ Preview corridor screening findings and public meeting information</li> <li>▪ Provide initial input on alignment alternatives development within recommended corridor(s)</li> </ul>
<b>APRIL</b>	<p><b>Public Meeting 1:</b> Describe corridor screening process and findings</p> <p>Study team develops alignment alternatives</p>
<b>MAY-JUNE</b>	Study team develops alignment alternatives
<b>JULY</b>	<b>Advisory Group Meeting 6:</b> Provide feedback on alignment alternatives
<b>AUGUST-OCTOBER</b>	Study team refines alignment alternatives
<b>NOVEMBER</b>	<p><b>Advisory Group Meeting 7:</b></p> <ul style="list-style-type: none"> <li>▪ Provide input on alternatives screening</li> <li>▪ Preview public meeting information</li> </ul> <p><b>Public Meeting 2:</b> Display and garner input on alternative alignments</p>
<b>DECEMBER</b>	Screen wide range of alternatives down to reasonable range of alternatives that will be studied in detail and presented in the Draft Environmental Impact Statement.
<b>2004</b>	<p>Detailed environmental documentation</p> <p><b>Draft Environmental Impact Statement</b> with recommended alignment</p>
<b>2005</b>	<p>Public Review of DEIS</p> <p>Revise DEIS based on public review</p> <p><b>Final Environmental Impact Statement</b></p>