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Sent VIA Email to: [Info@30Crossing.com](mailto:Info@30Crossing.com)

RE: I-30 Crossing Public Meeting #6  
Comments  
Submitted Via Email

Dear Mr. Browning:

These comments are submitted in three parts. Part I pertains to comments made on the I-30 Crossing Public Meeting #6 and Technical Working Group (TWG) Meeting #6. Also included for the record are written versions of oral comments made at Partners and Stakeholders meetings by Mr. McKenzie or myself. Part II contains a link to the comments received by Metroplan on the recently adopted Plan Amendment 1 that should be included in the record for the 30 Crossing project. Finally, in Part III, I have included for the record our comments on the FAQ answers pertaining to or referencing Metroplan that we believe to be misleading, incorrect or incomplete.

## **PART I - Comments on Public Meeting #6 and TWG Meeting #6**

### **Consistent Treatment of Corridor Bottlenecks (North Interchange vs. I-30 Widening to 65<sup>th</sup> Street)**

The I-30 study team correctly identified two primary bottlenecks impacting traffic exiting the I-30 corridor: (1) the two lane ramp from I-30 Eastbound to I-40 Eastbound and (2) the merge of I-30, I-440, and I-530 west of and outside of the study corridor. However,

the two bottlenecks were treated very differently. The bottleneck within the study corridor was ignored in the 8 lane alternative, and the bottleneck outside the study corridor was widened. It should not be acceptable to refuse to fix an identified bottleneck completely within the study corridor (two lane ramp as part of the eight lane alternative) but at the same time fix a bottleneck on I-30 outside the study corridor for which there is no identified funding and which has not been subjected to environmental review. It is even more unacceptable to compare alternatives as if it were an apple to apple comparison. Until an eight lane option is presented that fixes the two lane ramp bottleneck, the results are incomplete and insufficient for consideration.

To present a complete picture of alternatives and their impacts, the Department should do the following:

- (1) for the bottleneck in the PM peak under the eight lane alternative, add one additional lane north and east bound from Broadway onto 67/167 (as included in the ten lane alternative); then rerun the simulations, and
- (2) Rerun the simulations of all alternatives without assuming the widening of I-30 to 8 lanes from the South Terminal to 65<sup>th</sup> Street, and
- (3) Compare the performance of the alternatives as altered above and make the results of those runs available to the public, and
- (4) Make available to the public the AM Simulation and 3D models of the Alternatives presented at the Public Hearing and both the AM and PM peak model runs for the variations identified above.

Then the public and decision-makers will have a full range of possibilities to consider.

## **Schematic Review**

### **Design Considerations/Urban Context**

The section of I-30 from I-40 to I-530 is primarily used by intraregional and local traffic accessing businesses within the downtowns of Little Rock and North Little Rock and along I-630. To that extent the roadway should be designed within the urban context of its surroundings and to balance traffic flow with the capacity of the receiving streets. The following design refinements are strongly recommended.

### **Collector/Distributor Lanes**

The Collector Distributor lanes should be designed in such a way that they convey to the driver that he or she is leaving a freeway environment and entering a pedestrian zone in a downtown environment. As currently shown, the C/D lanes have ten foot shoulders and twelve foot lanes – a freeway design standard. In such an environment the driver will

mimic the speed of the adjacent freeway lanes regardless of signage. To counter that natural tendency, the shoulders and travel lanes should be tapered to 11 foot lanes and a 3-4 foot shoulder by the time the Broadway auxiliary lane joins the C/D lanes and should be consistent with a 35 mph design speed of an urban arterial. If possible, the exterior crash barrier should be an open barrier similar to that used on the Broadway Bridge.

### **Frontage Roads**

The frontage roads should be designed as if they were a local boulevard with 11 foot lanes, downtown typical curb radii to reinforce a welcoming pedestrian environment, which should also include buffered sidewalk set backs or 8 foot sidewalks and street trees.

Removing grass slopes in favor of vertical retaining walls in the depressed section of freeway is a positive design step that will (1) visually narrow the freeway and its intrusiveness and (2) provide a design that facilitates ultimately decking over the freeway. This applies in particular to the double free rights at Capitol Avenue which are downright hostile to pedestrians. A single lane right-in, right-out with much tighter curb radii is more appropriate for that location.

### **The La Harpe/Cumberland/Markham/Clinton Intersection**

This intersection has a high pedestrian accident rate and has been mentioned as critical to the City and the health of the River Market. None of the alternatives has yet proposed an acceptable solution to this problem.

To insure pedestrian safety, options should be considered that decrease through vehicle traffic at this intersection, eliminate pedestrian and vehicle conflicts, and incorporate a pedestrian all-walk phase into the signal timing. If projected traffic volumes will not allow time for such an all-walk phase, then the intersection and adjacent roadways should be physically narrowed, thereby forcing traffic to seek other routes on the grid. For example, the 100 block of Cumberland and La Harpe to Chester could be reduced to one lane in each direction.

### **Connecting the Full Grid**

The urban grid works best in diffusing and distributing traffic when the number of connections to the grid is maximized. The current design of the split diamond focuses traffic on a few roads which reduces the effectiveness of the grid. Consequently, 2<sup>nd</sup> Street should be connected under the freeway to Mahlon Martin and the north bound side of the Texas turnaround that ends at 3<sup>rd</sup> Street in the current design should be extended northward to intersect with 2<sup>nd</sup> and with President Clinton Avenue.

As equally important, our modeling shows 4<sup>th</sup> Street collecting an overwhelming amount of traffic in the PM commute. At major cross streets the potential for significant conflicts exist. Once again, the utility of a new bridge over the river at Chester Street and providing additional options for traffic leaving downtown becomes evident. Providing

another connection over the river west of Broadway diverts traffic from the west side of downtown off of Broadway and Main Street Bridges and will allow 4<sup>th</sup> Street to perform much more efficiently in connecting to the I-30 Bridge.

### Multi-Lane Weaves and Safety Analysis

Improved safety, specifically the elimination of major weave movements, is a benefit of this project. The study team has designed the corridor to eliminate the major weave on I-40 between Hwy 67/167 and I-30 and relocated the North Hills ramp to increase weave distance. Nonetheless, Metroplan remains concerned that there are several movements within the corridor that will require multiple lane changes within a short distance. Given the estimate of travel speed, particularly with the 6+4 alternative, this may negatively impact safety within the corridor and should be accounted for in the safety analysis.

Locations identified include:

- North Hills entry to westbound I-40,
- I-40 eastbound exit to North Hills,
- Westbound collector-distributor across the Arkansas River,
- Westbound I-30 exit to Roosevelt,
- Eastbound I-30 exit to Roosevelt, and
- Roosevelt entry to I-440 and I-530.

### Microsimulation Review

Reviews of the microsimulation results depict a level of congestion that is unfathomable for the No-Build and 8-lane alternatives and an unrealistic lack of congestion for the 6+4 collector distributor alternative. The deviation of the results from a reasonable expectation of traffic flow makes the results suspect for decision-making in their current state. The team should review the simulations and confirm with others that they represent a realistic expectation of the future before accepting the results and presenting them to the public. The following are specific issues to review:

### Traffic Projections/Alternative Modifications

The traffic forecast used for microsimulation models shown at Public Meeting #6 were rooted in the broad forecast assumptions made as part of the PEL. Now that specific alternatives have been developed, forecasts should be developed for each specific alternative reflecting interchange location, ramp design, and main lane configurations. The growth in daily corridor VMT, 2010 to 2040, for each of the alternatives shown at Public Meeting #6 (from CARTS Travel Demand Model) is:

- No-Build +13%
- 8 General Purpose Lane SPUI +22%
- 8 General Purpose Lane Split Diamond +20%
- 6+4 Lane SPUI +32%

- 6+4 Lane Split Diamond +29%

Based on main lanes, collector distributor roads, ramps, and frontage roads.

### Peak Hour Traffic Modifications

AHTD has yet to document adjustments made to peak hour traffic. It is reasonable to expect that capacity constraint outside the corridor and the level of congestion both within and outside the corridor would impact the amount of daily traffic using the corridor during the peak hour. The 6+4 collector distributor would result in a concentration of peak period traffic while the 8 lane (based on current congestion forecast) and no-build would result in peak spreading, people seeking alternative routes to avoid congestion, and more efficient use of the entire transportation network.

**Assumptions regarding peak hour traffic and any variations between alternatives should be thoroughly documented and revised as necessary.**

### Traffic Pattern Modifications

At the request of Garver Engineers, Metroplan staff provided the I-30 Crossing team with runs from the CARTS Travel Demand Model reflecting the revised SPUI and Split Diamond alternatives on May 27, 2016. These runs reflect significant changes to travel patterns associated with each interchange alternative and how areas within downtown Little Rock and North Little Rock are accessed. **Microsimulation models should be modified to reflect broad changes in traffic patterns for accessing downtown with differing interchange alternatives.**

Furthermore, dynamic traffic assignment (system level) or visual inspection should be used to further refine traffic patterns and forecasts. It makes no sense, for example, for the freeway to be shown at a standstill while frontage roads and parallel arterials have little to no congestion. I-440 also appears to be underutilized as a way to travel to Jacksonville and Cabot from I-630 when I-30 is backed up.

### Gridlocked Network

For the No-Build and 8-lane alternatives, gridlock or near gridlocked conditions are observed on the network. Those conditions that might be reasonable for downtowns of much larger metropolitan areas (i.e., lower Manhattan) but not one with the population of central Arkansas. This gridlock in turn amplifies congestion within the network, impacts travel in all directions (see PM traffic exiting to downtown in the split diamond alternative), and produces an excessive estimate of congestion. Gridlock conditions are caused by the overestimation of peak traffic volumes, lack of traffic diversion, and network anomalies. In the No-Build alternative, for example, gridlock is partially the result of traffic exiting to Broadway and backing onto the freeway because of a signal timing issue on Broadway. The result is an unrealistic depiction of congestion on the

freeway. These types of anomalies in the model runs should be systematically identified and corrected.

## **PART II - Public Comments On Plan Amendment #1**

Metroplan received a total of 196 comments on Plan Amendment #1 to the *Imagine Central Arkansas* Plan. The vast majority of those comments referenced the 30 Crossing project. Those comments may be read and downloaded from <http://metroplanrpc.org/>.

## **PART III – Setting the FAQ Straight**

We recognize that the FAQ is a marketing tool and, as such, is designed to show the 30 Crossing Project in the best light. And we also realize that different people can see the same situation from separate points of view. Having said that, there are several glaring examples in the FAQ that are attributed to Metroplan where we believe the answers are incorrect, misleading or incomplete. Comments on those are submitted for the record in the form of alternative answers.

### **WILL WIDENING I-30 REQUIRE ALL CONNECTING FREEWAYS TO BE RECONSTRUCTED AT AN ESTIMATED COST OF \$4 BILLION?**

The \$4 billion estimate was produced by Metroplan as part of its preliminary Systems Impact Analysis and was based on a specific set of assumptions. If the underlying assumptions change the results will change. So to understand the result, one should understand the assumptions upon which the estimate is based.

First, the freeway system in the metropolitan area operates as a dynamic system. Changes, especially significant changes, in one part of the system will result in impacts to the rest of the system. The 30 Crossing corridor is the backbone of the area's freeway system, and one of its primary regulating valves. Congestion in this corridor meters traffic as it moves onto the Little Rock and North Little Rock downtown grids in the morning and out to the remainder of the freeway system in the evening.

Second, Metroplan initially assumed that any proposed freeway system improvements would be based on Level of Service (LOS) D, the de facto standard AHTD uses for urban freeways. That assumption is based on the fact that LOS D was used by the Department in: 1) meeting the Purpose and Need Statement of the 30 Crossing alternative in the PEL, (2) conducting the 2003 Areawide Freeway Study (the last comprehensive regional study of the freeway network), and (3) conducting multiple corridor studies since the completion of the Areawide Freeway Study. If a higher level of congestion in the 30

Crossing corridor is acceptable, i.e. a lower Level of Service, the consequences for the rest of the system will change.

Third, Metroplan assumed a ten lane I-30 cross section in the 30 Crossing corridor since that was the original preferred alternative selected by the PEL process.

Fourth, Metroplan ran the model with the LOS D standard in place for 2040. When the system reached equilibrium again (at least LOS D on all of the links), it resulted in an assumed freeway network that ranged from 8-14 lanes wide. Metroplan assumed that was totally unrealistic from a financial standpoint and reran the model for a LOS E level of congestion. That model run resulted in an assumed freeway network of 8-12 lanes in most corridors.

Fifth, it is on the LOS E system model that Metroplan made planning level cost estimates using per mile construction cost estimates. The price tag in current dollars is \$3.1 billion. Metroplan then made assumptions about when, over the next twenty years, those widenings would occur and adjusted the cost estimate for inflation appropriately. This is how the \$4.2-4.5 billion cost estimate was derived. AHTD staff then reviewed the cost estimate and determined current dollar costs of \$2.3 billion. Inflated over time, the AHTD estimate translates to \$3.3 billion. All estimates include the I-30 Crossing project in the total cost.

In conclusion, yes, there will absolutely be impacts on the freeway system outside the 30 Crossing Corridor. All modeling done to date, whether by Metroplan, AHTD or consultants indicate such. How significant those impacts will be cannot be determined until it is decided what will be built in the 30 Crossing corridor. A final Systems Impact Analysis will be conducted and a new cost estimate developed by Metroplan once AHTD completes the Draft Environmental Assessment for the 30 Crossing project. The results of that analysis will very likely be different than the preliminary analysis that resulted in the \$4+ billion cost estimate.

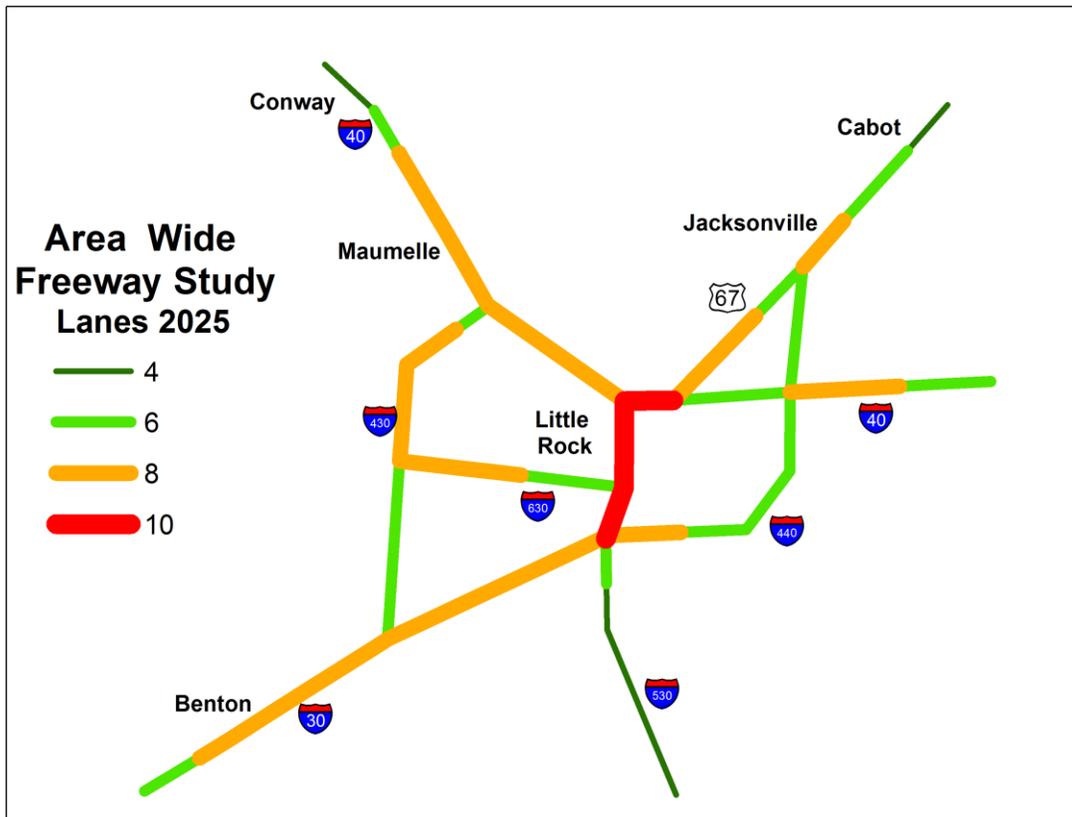
### **HAVE OTHER STUDIES BEEN CONDUCTED REGARDING THE NEED FOR WIDENING I-30?**

Yes, in 2003 AHTD and Metroplan jointly funded the two-phase Areawide Freeway Study. Phase I of the study looked at the river bridges, including the long-identified Mid-Town crossing at Pike Avenue. Phase II of the study looked at the remainder of the metro freeway system.

Phase I of the study recommended a combination of improvements as having the highest cost-benefit ratio. That combination included a new crossing at Pike Avenue to Cantrell Road, replacing the Broadway Bridge and widening the I-30 bridge to 8 lanes first, then ultimately to 10 lanes.

Phase II of the study, predicated on the LOS D performance standard, recommended a series of phased widenings by 2025 that would expand the regional freeway network to 8-10 lanes (see map below).

**Area Wide Freeway Study – 2025 Time Horizon (LOS D achieved for all freeways but I-630)**



While the recommendations of the Areawide Freeway Study were never adopted as policy by either Metroplan or the Highway Commission, Metroplan did study the affordability of the recommendations during its METRO 2030 plan update. The conclusion was that the price tag for the recommended improvements was simply unaffordable and, therefore, Metroplan reiterated the region’s strategic goal of building a balanced transportation system.

Metroplan also, pursuant to federal requirements, operates a Congestion Management System (CMS) designed to identify system bottlenecks and choke points early. Metroplan purposely set its congestion thresholds low by national comparison. For example, what might be ranked as “extreme” congestion in Metroplan’s CMS may be

classified by drivers in Atlanta or Dallas or Austin as a pretty light traffic day. Additionally, the CARTS CMS is not time sensitive and assumes that higher levels of congestion will be accepted for short periods during the day.

The CMS also identified bottlenecks at most freeway to freeway interchanges in the metro area where adding capacity to interchange ramps and merging capacity at the interchange can improve system operations without having to add more main lane capacity. In the 30 Crossing corridor, the many freeway to freeway interchanges are so close together that fixing the capacity and merging issues at the interchanges looks a lot like main lane widening.

### **WILL WIDENING THE INTERSTATE NECESSITATE ADDITIONAL HIGHWAY WIDENING, URBAN SPRAWL, AND INNER CITY JOB LOSS?**

Yes, major widening in the 30 Crossing corridor will necessitate widening other highways in the region – to what extent has not yet been determined. To the extent that virtually the entire urban freeway network is widened as recommended in the Areawide Freeway Study, it will be a major contributing factor to continued urban sprawl. The question of inner city job loss is a much more complex one. To the extent that it contributes to urban sprawl, it is quite likely that the inner city's share of jobs in the metro will continue to decrease, even if they increase in absolute number. The preferences of the Millennial generation and the fundamental change in work brought on by new technologies and off-shoring of jobs will play much larger roles.

It is clear from looking at cities such as Austin, Texas, that severe congestion is a symptom of robust economic and population growth and has not proven to be a major obstacle in downtown vitality. Severe congestion in the I-30 corridor could lead some businesses to relocate out of the traditional CBDs, although much of that has already happened in previous decades, but it could also incentivize workers to live closer to the jobs and stimulate downtown housing development as it has in other metro areas. For most workers, the 30 Crossing corridor is only one part of their journey to work. If that segment is improved but simply moves the bottlenecks to other parts of the system, total trip time is unlikely to improve significantly for the average suburban commuter. To get significant trip reduction, or to maintain the overall level of mobility that we enjoy today, most of the freeway system would need to be widened.

### **WILL CORRECTING THE BOTTLENECKS IN THE CORRIDOR SIMPLY MOVE THE EXISTING BOTTLE NECKS ELSEWHERE?**

Yes. AHTD will then decide on a segment by segment basis whether to address those new/worsened bottlenecks by additional freeway widening as congestion demands and funding allows.

## **IF VEHICLE MILES TRAVELED DECLINES, WILL I-30 STILL REQUIRE IMPROVED CAPACITY?**

Nothing requires the freeway to be widened to meet projected future demand. I-30 is congested today, and without capacity improvements, will get more congested in the future. Even if VMT increases, there is no requirement that roadways be expanded to meet the demand of every driver to be able to drive the speed limit in the busiest 15 minutes of the day (LOS D). If I-30 is not widened, congestion will increase to the point where traffic will divert to other routes, will divert to other times of the day or locational decisions for housing and businesses will be made.

But more directly to the question on VMT, there are two statistics of which one should be aware. The first is VMT per capita and the other is total VMT. There is ample evidence that VMT per capita has peaked. In the United States we have more registered vehicles than registered drivers. Total VMT, however, is still growing as population grows. While it fluctuates up and down with economic conditions and the price of petroleum, it is generally on a growth trend that parallels growth in total population.

Metroplan estimates that between 2010 and 2040 regional population will increase by 40% while regional VMT will increase 32-37%. VMT growth will be highest in areas of greatest population growth. But that does not mean that VMT growth in the 30 Crossing corridor will increase by that much.

### **End Comments.**

Thank you for the opportunity to comment. We look forward to seeing continued refinements in the project as a result of this and other input.

Sincerely,



Casey R. Covington, P.E., AICP  
CARTS Study Director

Copy: Jim McKenzie, Executive Director  
Mayor Gary Fletcher – Metroplan Board President  
Mayor Mark Stodola - City of Little Rock  
Mayor Joe Smith – City of North Little Rock  
Judge Barry Hyde – Pulaski County