Alternatives to the AHTD I-30 Crossing Plan

Overview:

Little Rock has worked hard to grow a vibrant downtown. The highway department has proposed expanding a section of I-30 that travels through the downtown area, which would substantially slow urban development. The Arkansas Boulevard is a volunteer led response to AHTD’s proposal showing that there are other alternatives to expanding the freeway.

Project Statement:

The downtown area of Little Rock Arkansas has worked hard over the last few decades to become a strong, urban core for the city despite having Interstate 30 run directly through it. The Arkansas Highway and Transportation Department (AHTD) released a problem statement claiming several issues with I-30. These issues mainly include congestion during peak hours and safety due to this congestion. Their proposed solution is to expand I-30 to 10 lanes plus ramps. This proposed expansion would be detrimental to the future growth of downtown Little Rock and amplify the division of the adjacent neighborhoods.

Not only is the proposed expansion a threat to downtown, it also will do little to solve the problems stated by AHTD. Numerous precedent studies have shown that expansion does not solve urban congestion because induced travel follows roadway expansion. The concept of “if you build it, they will come” is very appropriate when describing highway expansion. Other studies specific to I-30 have estimated that the expanded freeway will save only a few minutes of time from a commuters trip. The time and money needed for the expansion does not seem justified by giving people who choose to live outside of the city five less minutes of commute time, if it worked at all.

Although we feel no action is a viable solution, we decided to explore other alternatives to solve the “problems” listed by AHTD. Our goal as a volunteer effort was to explore many possibilities that would address the congestion issues while enhancing Little Rock’s growth and development. The evolution of the Arkansas Boulevard is a direct response to AHTD’s proposed expansion of Interstate 30.

There is no single answer, but there are a combination of intelligent solutions that would be more effective, less costly, and ultimately more beneficial for downtown, commuters, and our community as a whole. The Arkansas Boulevard plan proposes to use the existing infrastructure of I-430 and I-440 for the majority of through traffic which goes around downtown, thereby lessening the need for a large highway directly through the heart of the city. The boulevard plan would be on-grade, allow for bike and bus lanes and provide opportunities for commercial and residential development. This approach de-emphasizes freeways in the city center, making it a more urban, walkable and desirable place to live. The plan also addresses commuters by taking advantage of the existing infrastructure and adding key links for traffic options, shortening commute times and increasing safety by diverting commuter traffic to the newer and safer I-440. The vision is that in 20 years Little Rock will have a first class downtown that is easily accessible, pedestrian and bicycle friendly, and environmentally sustainable; competing with other cities across the country for businesses and visitors. The final solution to the current traffic
issues does not have to be decided overnight, however The Arkansas Boulevard Plan shows there are other options than just adding more lanes.

AHTD’s Plan
What is the “problem”?

The following were stated by AHTD:

- There is traffic congestion in the I-30 Corridor, especially during rush hour
- Most of the traffic, according to AHTD, is local
- VMT (Vehicle Miles Traveled) will increase at 1% a year
- The exits and ramps in the downtown area are inadequate for freeway speeds
- There are safety concerns because of the congestion
- The I-30 Bridge needs to be replaced due to age and inadequate pier spacing, a safety concern for river navigation

Arkansas Highway Transportation Department’s Solution:

The AHTD’s solution is to increase the lanes in the I-30 corridor to 10 lanes plus exit ramps and re-work the interchanges in order to move traffic more effectively and increase safety. They would also replace the river bridge to address the pier problem.

Issues with AHTD’s solution:

- The effect of the 10 lanes will be the induced traffic load on other sections of the metropolitan system, requiring widening and construction. The plan only focuses on one area and does not take into account the surrounding street grid.
- Downtown development will be degraded due to a bigger barrier between neighborhoods on either side of I-30, wide underpasses beneath the freeway, and increased vehicular loading in a heavy pedestrian zone
- This plan encourages people to move out of the city because commute times will seem more manageable rather than encourage people to live in Little Rock.
- This would make the I-30 bridge the 3rd widest bridge in the United States.
Compromise - The Convertible Plan
Our first response: The Convertible Plan

After AHTD’s plan became public, there seemed to be very little community discussion about it. With the potential negative impact the proposed plan would have to downtown Little Rock, our firm decided to come forward with a volunteer effort to explore other possibilities. The Convertible Plan was our first response. This plan provides a through freeway similar to what is proposed by AHTD; but make it an underpass. I-30 remains as a 6 lane freeway but is flanked by boulevard lanes on each side that handles local traffic through downtown. Access to the boulevard from the freeway is before and after the downtown area.

Key Aspects:

A. Clinton Avenue is under the freeway. There would also be a pedestrian/park underpass.
B. Bridge over the freeway accommodating the trolley. Each side (or shoulder) of the bridge would have green deck buffers.
C. Bridge over 4th street with green band buffers. The boulevard lanes would border the freeway with vertical retaining walls to save space. A north/south green band buffer would cantilever over the freeway on each side.
D. Bridge similar to the one at 4th street
E. Bridge with green band buffer on one side. The freeway has vertical retaining wall and decking begins at 6th street
F. The area from 6th street to 9th street would be decked to create an urban park with open space, playground and spray park. There is easy access from other downtown attractions, trails and MacArthur Park. The adjacent hotels would look out over green space instead of the freeway.
Everybody benefits from the convertible plan because of limited access through the freeway, excellent connectivity to downtown, abundant new parks and exciting development opportunities.
One positive aspect of the Convertible Plan is the possibilities for future growth. This image shows 20-30 years down the road with more commercial and residential opportunities and added green space above Interstate-30.

**Concerns:**

- This plan still has through highway traffic going directly through the heart of a downtown urban core
- This plan mainly addresses one area and does not take into account the surrounding areas.
- Creates bottlenecks at the transition points from the freeway to downtown grid.
AHTD’s lack of a large enough Study Area

- Does not account for diversion
- Does not consider impacts of induced travel outside study area
- Does not consider impacts on downtown Little Rock
After the AHTD plan and our Convertible Plan were proposed, Smart Mobility, an Independent Planner, was hired by the Arkansas Public Policy to analyze the area and make recommendations on what would be the best plan of action. They modeled their research on three possible scenarios:

- No action, leave as is
- AHTD highway expansion
- A through Boulevard

Smart Mobility based their study on general traffic and economic outcomes that Little Rock should strive to meet, listed below:

- To the extent possible, traffic not headed to central Little Rock should be using 1-430 and I-440
- Downtown traffic should be spread across the street grid
- Adding an additional bridge across the river with a connection to I-40.
- Sufficient funding for AHTD to maintain state-owned city streets and reconstruct them when needed
- Increasing tax base and jobs in the corridor

Below is the Smart Mobility’s analysis of the AHTD’s plan based on the criteria listed above:

- It would divert additional traffic to Central Little Rock and create new bottlenecks downtown
- Expense would be great enough to potentially keep funding from other projects, including maintaining existing streets
- It would lock up a huge amount of land off the tax rolls and suppress the value of adjacent land
- Increase traffic bottlenecks outside the edges of the study area
- There would be no improvement in regional congestion compared to the No Build plan

Below is Smart Mobility’s analysis of converting the existing I-30 to an on-grade boulevard, adding an additional bridge crossing the river and diverting highway traffic to I-430 and I-440 based on the same criteria:

- Would result in non-downtown traffic by encouraging through traffic to go around
- Much cheaper and lower maintenance costs than AHTD’s plan
- Increase tax base and downtown employment

General findings from Smart Mobility’s report:

- Urban freeway congestion cannot be solved through expansion because induced travel follows roadway expansion
- Increasing I-30 traffic would have serious impacts on downtown Little Rock traffic, especially during peak hours
Our Second Response: Arkansas Boulevard

After analyzing Smart Mobility’s report we evolved our solution into an on-grade boulevard as suggestion by Smart Mobility. The focus of this plan is to divert through traffic around downtown using the existing infrastructure of I-430 and I-440, which opens up several potential opportunities for downtown growth.
Boulevard Plan - Downtown
Boulevard Plan – 630 Interchange
Creating connections between the boulevard and existing highways is an important aspect to this plan. This plan provides safer access and travel times for commuters by providing better connections from I-630 East to the existing I-440 and I-30 West routes to Bryant, Benton, Jacksonville and Cabot.

These improved connections and an additional bridge crossing to connect La Harpe to Pike Ave and I-40 west for Mayflower and Conway commuters, allow for the possibility of an urban boulevard through downtown Little Rock.

An additional river crossing would also minimize the amount of traffic eastbound on Highway 10 (Cantrell) and I-630, from entering the downtown grid.
Boulevard looking North

There is a huge economic windfall in the boulevard approach for the continued expansion of downtown and revival of the east Little Rock neighborhoods that are currently cut off by the freeway. There will be over 30 acres of land freed up for new development by narrowing the freeway and adding usable land on frontage roads.
Typical Block Redevelopment

The boulevard is comprised of 4 lanes each way divided by a green space median. During rush hour all lanes would be utilized, but during off hours and evenings the outside lane in each direction would be used for on street parking. Speed would be kept to normal city street standards. This is a safe speed that allows many more vehicles per mile to use the boulevard as the cars are much closer together than at freeway speeds. This offsets the advantage of the freeway.

East/west connectivity is the best of any approach due to level crossings at every downtown street. No ramps, bridges, or overpasses also reduces the cost considerably.

Traffic signaling can control and spread traffic out and allow special use lanes, rush hour lane controls, and improved mobility through the downtown area.
The economic future of the boulevard, compared to the freeway is the most telling. Expanded freeways depress urban property value while urban boulevards increase value. The value per square foot of a multistory urban building on a major city street is many times that of a typical big box suburban building at a fraction of the infrastructure cost. The potential development of vacant property east of downtown is huge if the freeway is removed and it becomes accessible.

The boulevard is less expensive, works better at handling all types of traffic, is safer, and will increase economic development.

The boulevard helps bring an alternative solution to the original problems stated by AHTD while adding value to downtown Little Rock.