



Attendance at the CAC Meeting #3 included:

Community Advisory Committee Members

- Tim Austin, Mid-Continent Airport Board
- Doug Arvidson, Flood Control/Stormwater Supervisor, City of Wichita
- Doug Warren, Area Business (A&K Tire)
- Steve Fox, Bombardier Aerospace
- Miles Capps, Westar
- Bob Wine, Orchard Park Neighborhood Association
- Lt. Phil Bostian, Kansas Highway Patrol
- Bob Aldrich, DAB #4
- John Marker, DAB #5
- Bob Schreck, DAB #6
- Scott Knebel, City of Wichita

Project Team:

- Thomas Dow, Kansas Department of Transportation
- Mike Moriarty, Kansas Department of Transportation
- Tom Hein, Kansas Department of Transportation
- Graham Smith, Gould Evans (Consultant)
- Steve Schmidt, TranSystems Project Manager
- Steve Lackey, TranSystems
- Mark Kenneally, TranSystems
- Heidi Thummel, TranSystems

Introductions

- **The Study Team**

- KDOT
- Study Partners
 - City of Wichita
 - Sedgwick County
 - WAMPO
- Consultants



- **CAC members**

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Overview

- **Today's Agenda**

- Study Status
- Review of Design Concepts
- Further Refinement

- **Process Reminders**

- Concepts
 - Level of detail
- Schedule
 - Overall
 - CAC Meetings
 - Public Meeting



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Study Schedule

Quarters	2006				2007	
	1st	2nd	3rd	4th	1st	2nd
Existing and Projected Conditions						
Regional Context						
Existing Transportation						
Projected Transportation						
Design Concepts						
Operations						
Layouts						
Assessment						
Recommendations						
Refinements						
Phasing Plan						
Report						
Public Engagement Activities						
Community Advisory Committee	# 1	#2		# 3	# 4	# 5
En Banc	# 1			# 2		# 3
WAMPO	# 1			# 2		# 3
DAB	x x x					
Public Meeting			# 1	# 2	# 3	
Website Updates	# 1	# 2	# 3	# 4 & 5	# 6	# 7 & 8

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Community Advisory Committee

- **Meeting Topics**

1. *Guiding Principles (3/30/06)*
2. *Review of Existing Conditions (6/22/06)*
3. **Design Concept Review/Refinement (11/16/06)** → Today's Meeting
4. Recommendations – preliminary (2/22/07) → Workshop
5. Recommendations (to be scheduled)

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Public Engagement

- **Public Meetings**

- Number 1 – July 20, 2006
 - Background
 - Existing Conditions
 - Under Consideration
- Number 2 – October 24, 2006
 - Projected Traffic
 - Design Concepts
 - Further Refinement



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What We've Heard

- **Public Input**

- Public Meeting #1
 - Comments
 - Key comments
- Public Meeting #2
 - Comments (general)
 - Questions
 - Comment cards
 - Overheard
 - Webpage
- 2nd Opinion Survey

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Design Concepts

- **Concept Development**

- Process Overview
 - **Concept (we are here)**
 - Funding and Programming
 - Design Improvements
 - Build Improvements
- Goals
 - Develop a **concept** that
 - Addresses design issues
 - Provides adequate service for future traffic volumes
 - Is supported by the study partners and has the informed consent of the public

- **Projected Conditions**

- Traffic volumes
- Traffic operations

- **Concepts**

- I-235 widening
- I-235 and Central Avenue Interchange
- I-235 and US-54/400 (Kellogg Ave.) Interchange

- **Discussion**

- Refinement

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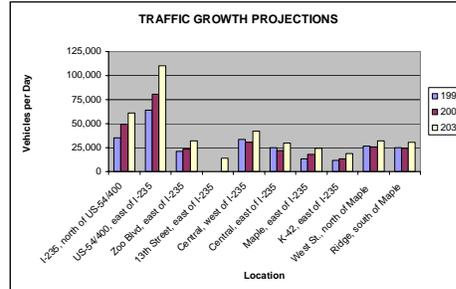


Projected Traffic Volumes

• Methodology

– Utilize WAMPO's 2030 Travel Demand Model

- Adopted land use forecasts as well as committed and proposed transportation projects identified in LRTP
- Growth percentages
 - 1.5% per year e/w
 - 1.0% per year n/s



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Projected Traffic Operations

- **Future “No-Build” capacity analysis**
 - Segments, weaves, and intersections
- **By 2030, if nothing is done**
 - Increased congestion, extensive queues and delays
- **Assists in developing design concepts**
 - Adding auxiliary lanes, removing weaving sections, and adding capacity

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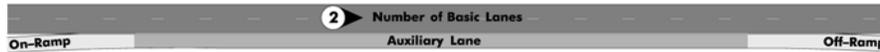
I-235 Widening

- **Traffic volume forecasts (I-235)**

- 49,000 vpd to 61,500 vpd
 - 4-lane capacity is approximately 85,000 vpd
- Peak hour traffic volumes
 - Spacing of interchange ramps
 - Require auxiliary lane

- **Auxiliary Lane**

- An “auxiliary” lane is an extra lane serving as an adjunct to the highway traveled way.
 - Associated with on- and off-ramps
 - Located on the outside

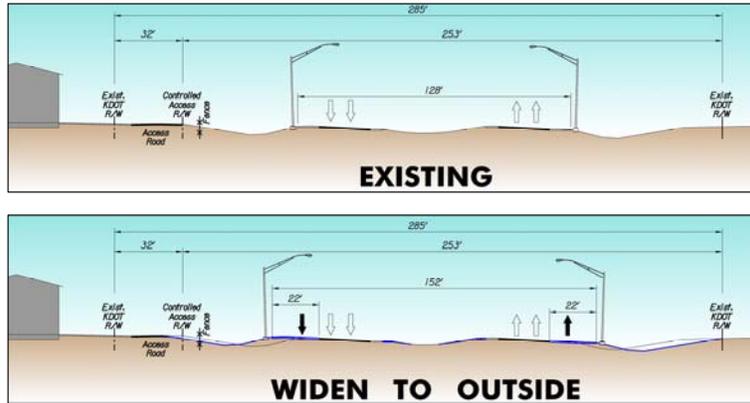


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Concept Development

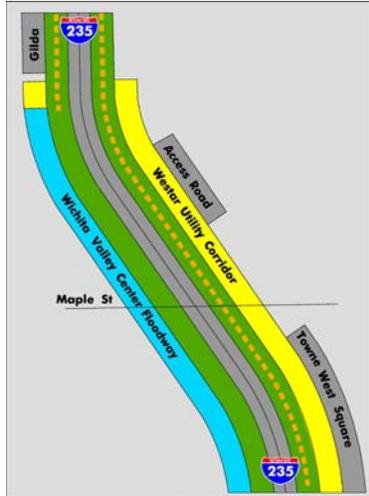
- Highway Widening (schematic)



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I-235 Widening



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- **Concept Description**

- Includes improvements to curves on I-235

- **Requires**

- Coordination with
 - Wichita Valley Center Floodway property/levee
 - Westar Utility line and substation
- Further investigation on
 - Maple Street bridges
 - Adjacent access roads
 - Drainage
 - Property impacts



I-235 Widening

- **Public Comment(s)**

- Need a median barrier to prevent crossover head on collisions
 - **To date cross over crashes are NOT a prevalent occurrence**
- Please make I-235 at least three lanes from north of Central to south of Kellogg
- I-235 should be widened all the way, but the section from Kellogg to Central is a good start
- It's OK, but this issue isn't as important to me as others



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I-235 Widening Discussion



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4 235 · KELLOGG · CENTRAL
...A FRESH LOOK

- Accidents are caused by improper u-turns more often than actually crossing over head-on.
- How do you justify what is a prevalent occurrence? Review of the statistics have not revealed many crossover accidents.
- If you don't build a barrier people will still crossover in the graveled area.
- The use of an auxiliary lane may address the issue of capacity and back-up at the interchanges based on future traffic volumes. There is a heavy northbound exit at central and the auxiliary lanes would address that in the future.
- One thing that adds to some of the confusion for drivers, most of the crossovers are not posted as a "No U-Turn" area so drivers think it is okay, even though it is posted at the ramp.
- In the event that a barrier system is feasible, you still need to consider access for emergency vehicles.
- At this time, the median in place meets the design requirements. As such, a barrier system is not a primary consideration unless we widen to the inside, which would impact drainage.
- Widening may impact the Westar Utility Corridor and this may require the use of walls or major utility relocations, which will impact costs significantly. Discussions with Westar need to be arranged to determine needs.
- A Westar line that crosses over the highway went down in April 2006 and traffic was shut down for miles.
- Are you evaluating the pros and cons of widening to the inside vs. outside and trade-offs between outside impacts and costs. Yes, both options are being considered. At this time we are not seeing projections that require 235 to be widened to six lanes all the way so the expansion may not make sense for the long-term. Yet this could be a good transition area for changing 4-6 lanes in the future.

Interchange Concept Design

- **Concept Process**
 - Develop concepts to consider
 - Narrow the options
 - Compare the refined concepts
 - Select recommended concept
- **Comparison**
 - Financial
 - Environment
 - Implementation process

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I-235 and Central Avenue

- **Issues**

- Neighborhood circulation
- Access management
- Property impacts

- **Developed**

- Single Point Urban Interchange (SPUI)
- Tight Diamond
 - Without and with transfer ramp
- Access management options

- **Assessment**

- Probable cost and impact differences



Existing Conditions

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I-235 and Central Avenue



Single Point Urban Interchange (SPUI)

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I-235 and Central Avenue



Tight Diamond



Tight Diamond with Transfer Ramp

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I-235 and Central Avenue

- **Public Comment(s)**

- Please choose solution with single light under I-235
- I will vote for city proposal if city widened Gilda St. for a safer right hand turn
- Why not build a right turn lane on eastbound Central for southbound I-235 traffic right now?
- The raised median needs to go, it won't allow for growth



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I-235 and Central Avenue

- **Public Comment(s)**

- *SPUI concept seems the most viable, except I think there is a need for Texas u-turns*
- *Prefer raised islands! Need to eliminate as many left turns as possible*
- *Do not like cul de sac idea, don't like being shut off*
- *The diamond interchange is better*
- *As long as there are stoplights the bottlenecks will be there*



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I-235 and Central Avenue Discussion



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...A FRESH LOOK

- On both concepts, do you allow for the possibility of future expansion of the lanes, to perhaps seven lanes all the way through on Central? Yes.
- The City is also going to have a problem with the Big Ditch crossing and that needs to be considered.
- Are there differences in capacity for the SPUI vs. the tight diamond? Signal timing makes a difference between the two options.
- The SPUI is not easily expandable, so we need to look far into the future to determine long-term needs. This will mean more costs upfront, but will be more practical for the future.
- Does the SPUI concept allow for transfer ramps as part of that concept? No. You then have to go to an added phase because you would have through traffic on the transfer ramps and signals would not work effectively. These are some of the subtle differences that are being considered.
- Note that on the SPUI the signal is under the bridge, therefore the bridge will have to be raised to allow for clearance of the signals poles.
- The tight diamond with the transfer ramps, were the neighborhoods in consensus for a preferred plan? There was not a consensus and residents on the north and south feel differently about this option and having to go out of the way to access Central.
- There was some dissension as to red/orange impacts and some residents wanted to be bought out, but technically they aren't directly impacted.
- Emergency access to the Sandpiper facility is also a concern.
- All of the options impact the Orchard Park Neighborhood because you take away access at Hoover and put a median in the middle and some of the roads between are paved.
- Is the signal at Boyd warranted or is it just for convenience? The turns to QuikTrip will drive this and although it may just be a convenience, it could ultimately improve flow.
- West of 235 the traffic is significantly greater in the peak hours and many of those movements are left turns.

I-235 and US-54/400 (Kellogg Ave.)

- **Issues**

- High speed ramps for system interchange design
- West Street interchange spacing
- Big Ditch crossings
- Electrical utility corridor

- **Developed**

- Fully Directional Cross
- Directional with Two Loops
- Braided ramp with Kellogg/West

- **Assessment**

- Operations
- Detailed design

Existing Conditions



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I-235 and US-54/400 (Kellogg Ave.)



Directional Cross with Two Loops

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I-235 and US-54/400 (Kellogg Ave.)

- **Public Comment(s)**

- *Spend the money and do it right the first time*
- *Concept looks good, it removes the merging dangers*
- *Prefer version without cloverleaf/loops*
- *High speed interchange would encourage me to go downtown to the new arena – of course the arena will collapse and be torn down before this is ever completed and I'll be long dead!*



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I-235 and US-54/400 (Kellogg Ave.) Discussion



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- For all of these plans and concepts that are being developed, have you considered maintenance and the long-term costs of maintaining the new structures and roadways? KDOT spends the majority of their budget on maintenance. The current structures are nearing the need for maintenance and this project could address those issues.
- Do the power lines need to be relocated in all scenarios? Yes, they are an issue and will be coordinated with improvements. Westar can use the Big Ditch area if needed. It's too early to determine what will need to be done.
- Can westbound traffic from West Street access Kellogg? Yes. The braided configuration removes all weaves.
- Is there a way to keep shoppers from Town West off Kellogg by using transfer ramps to Dugan?
- Could Taft be used as an access route as part of this plan? So far this has not been considered and would need to be researched.
- Every option includes acquiring property, yet building and improvements to property are happening yet today. What is being done to stop construction in the area? Isn't this going to add cost to the project? Without a final plan or design in place, the City can't buy property now.

Further Refinement

- **Design Refinement**

- Continuous operational review
- Coordination

- **Prioritization**

- Possible scenarios
 - Physical
 - Operational
 - Capacity
 - Safety

- **Phasing**

- Utilization of \$16 million earmarked funds
- Incremental implementation
 - Lead towards ultimate solution

- **Central Avenue Interchange**



Existing Conditions



Proposed widening and lengthening of turn bays

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• Will this solution be part of the ultimate solution or will it need to be torn out? At this point, these improvements are not part of the ultimate improvement. However, it could provide relief of congestion for perhaps the next 10 years.