I-35 Capital Express Central

Prior Direction from Council

- City staff to engage with TxDOT in developing recommendation(s) to Council
- Assist TxDOT in amplifying public engagement efforts
- Engage with Downtown Austin Alliance (DAA) & other stakeholders to explore lidding opportunities

I-35 Information – Carver Library
Source: ATD I-35 Public Engagement
A Limited Access Freeway is Critical to Local/Regional Economy

• Existing I-35 Corridor is Strategically Important to Central Texas (ATX)
  • City of Austin has been an early investor in the My-35 Corridor Planning effort
  • Existing Corridor is vital to the economic stability of ATX Region
  • Maintaining a limited access freeway within corridor is critical for connectivity to raw materials, international ports and gateways, employment based up and down the corridor

• Eliminating I-35 as a freeway is not viable

I-35 Serves as a Major Freight Route for all of Central Texas
Source: NearMap
Existing Design is No Longer Sustainable

- Existing I-35 Design is Obsolete
  - Safety – 40 pedestrians and cyclists killed in past 5-year period trying to cross main lanes or frontage roads of I-35 (additional 20 serious injured)
  - Mobility – I-35 remains one of the most congested freeways in Texas, largely due to substandard design
  - Barrier – I-35 creates a barrier to east/west connectivity

- A No-Build option is not sustainable

Crashes Close I-35 on Regular Basis
Source: KXAN May 30, 2021 / 06:52 AM CDT
Considering Build Alternatives

SAME CAPACITY REGARDLESS OF DESIGN ALTERNATIVE

• Current build alternatives represent one operational concept with three design variations
• Deep tunnels are determined to not be feasible, remaining build options result in similar impacts
• Impacts are significant 142 to 147 displacements estimated just in central Austin
• City Staff and community are seeking design modifications that better meet City of Austin policies and needs

Managed lanes in deep tunnel w/ lowered freeway above

Managed lanes & freeway at same lower level, frontage roads outside of cut
  • Under Woodland/Airport Blvd.
  • Over Woodland/Airport Blvd.
Staff Recommendation to Council:

SAME CAPACITY REGARDLESS OF DESIGN ALTERNATIVE

Staff Proposal

Managed lanes in deep tunnel w/ lowered freeway above

Managed lanes & freeway at same lower level, frontage roads outside of cut
- Under Woodland/Airport Blvd.
- Over Woodland/Airport Blvd.

Managed lanes & freeway at same lower level, frontage roads cantilevered over freeway with possible operational efficiencies
- Under Woodland/Airport Blvd.
- Over Woodland/Airport Blvd.

Design modifications that better meet City Policies & Needs
National Standards and Technology

• Future I-35 Designs Should Include:
  • Latest national geometric design standards, focused on safety (AASHTO/NACTO)
    • Separation by lane purpose
    • Minimize impacts to adjacent land uses
  • Operationally informed design solutions
    • HOV
    • HOV/Toll or HOT Lane design
    • Transit
    • Circulation and Distribution (CD) lanes and ramping
  • Technology that allows for real-time facility management
    • Vehicle demand
    • Ability to adjust speeds
    • Incentivize use of higher occupancy vehicles and transit

Interchange Design, I-35 Frontage Rd at 51st St. Austin, TX
Source: NearMap
Separation by Lane Purpose & Minimize Footprint

• Separation by purpose
  • Through travel (main lanes)
  • Access to central employment centers (Circulation and Distribution – CD lanes)
  • Access to local land use (surface boulevard)
    • Design surface lanes as urban arterial
    • Signalization
    • Pedestrian activity
    • Streetscape
    • On-street parking

• Minimize impacts on adjacent land uses by narrowing design
  • Cantilever frontage roads over freeway below
  • Consider portal ramps and single-point intersections
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Operationally Informed Design

- **HOV**
  - Occupancy restriction
  - 2-lanes or 4-lanes
  - Preferential transit access
- **HOV/Toll (HOT)**
  - 4-lanes
  - Combined transit access
- **Circulation & Distribution (CD)**
- **Transit Incentives**
  - Ramping
  - Parking facilities
- **Surface arterial design**
  - Boulevard characteristics
  - Signalization controls speed
  - Pedestrian infrastructure
  - Possible on-street parking

HOV 2+ Toll Management, Dallas, TX
Source: NearMap
Incorporate Management Technologies, Plan for New Modes

• Technology that allows for real-time management of facility
  • Vehicle demand management
  • Variable Speeds
  • Active congestion management
  • Incentivize use of higher occupancy vehicles and transit

• Emerging technology incentives
  • Low emission vehicles
  • Automation
  • Rubber tired high-capacity transit

Real-time Speed Management, I-5 WA State.
Source: NearMap
Incorporate Ability to Support Community Driven Urban Design Goals

- Crossing structures to promote E/W connectivity
  - Wide bridges/lids as part of base design
  - Enhanced Pedestrian/bicycle crossings

- Acknowledge role of freeway in creating division

- Corridor aesthetics program
  - Corridor theme
  - Community engaged design opportunities
    - Art as functional element of design
    - Art in public places

Example Freeway Lid with Pedestrian Crossing, SR 520 WA State. Source: NearMap
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Community Art Program, I-35 San Antonio, Tx.
Source: Perceptivetravel.com
Staff Recommendation

• City Staff have been early participants in shaping I-35:
  • 2012 Bond for I-35 Corridor Development Funds
  • 51st Street Interchange
  • Regional STPMM Funding ($1B in local funds)
  • Downtown “Rib” lighting installation
  • On-going participation as local agency

• Staff believe freeway replacement is needed
• Staff are working with TxDOT to make sure build alternatives reflect City goals & policies

• Request to Council:
  • Request further modification of alternatives being carried forward based on staff & community recommendations
  • Remain engaged as a partner through design process, advocate for design modifications based on operations and advanced design considerations
  • Politically engage at regional and state levels to preserve preferred outcomes