Presented at May 2022 public meetings

City of Dallas Transportation and Infrastructure Committee Briefing

I-345 Feasibility Study

From I-30 to Woodall Rodgers Freeway (Spur 366)

June 2022

Dallas County, Texas

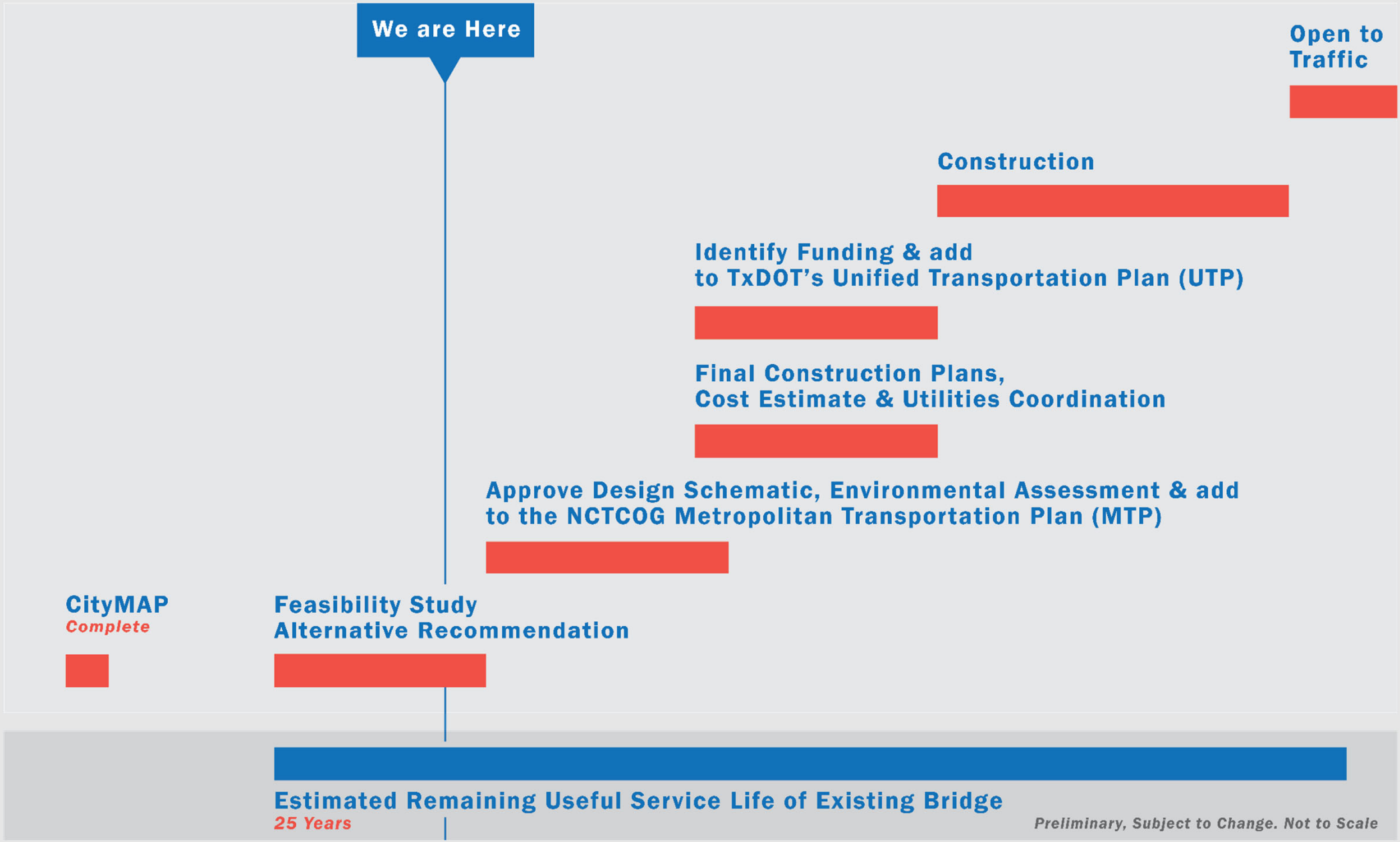
Study Location

Presented at May 2022 public meetings

From I-30 to Woodall Rodgers Freeway (Spur 366)

Overall Timeline

Presented at May
2022 public meetings



CityMAP Goals, I-345 Feasibility Study Goals, and Why Study I-345?

CityMAP Goals

Presented at May 2022 public meetings

- Mobility
- Connectivity
- Sustainability
- Economic Development

I-345 Feasibility Study Goals

- Carry forward CityMAP Goals of Mobility, Connectivity, Sustainability and Economic Development
- Have an inclusive, transparent and collaborative public involvement process
- Work collaboratively with stakeholders
- Review recommendations from previous studies
- Provide the best solution that maintains safety, mobility and operability
- Defendable results
- Incorporate TxDOT and community goals
- Work towards recommended alternative

Why Study I-345?

As Dallas County population continues to grow and I-345 reaches its estimated remaining useful service life, it is necessary to plan for the future of the roadway. This study will help to determine the future of I-345.

Previous Public Involvement, December 2019 Public Meetings Summary

Presented at May
2022 public meetings

PUBLIC MEETING ATTENDANCE

DECEMBER 2

206 people
in attendance at St. Philip's School and Community Center

DECEMBER 3

178 people
in attendance at CityPlace Conference Center

DECEMBER 5

302 people
in attendance at the Sheraton Hotel

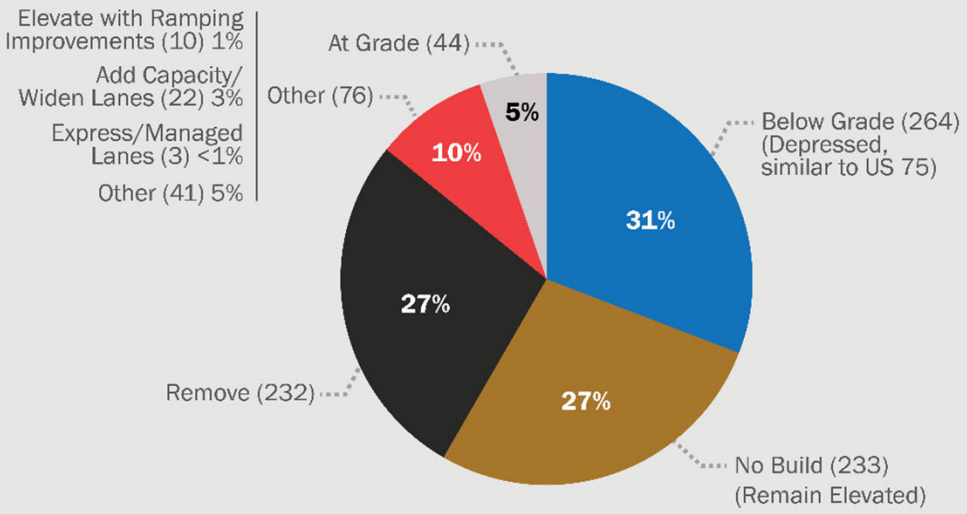
PUBLIC MEETING SERIES 1

1362 # of surveys received

130 # of written comments received

15 # of verbal comments received

PREFERRED ALTERNATIVES



Total Responses: 849

KEY TAKEAWAY

There was a pretty even three-way split for public preference on alternatives to evaluate in the feasibility study. More than 70% of respondents suggested further analysis of the alternatives presented in the 2016 CityMAP Study.

Previous Public Involvement, June 2021 Public Meetings Summary

KEY TAKEAWAY

More than 65% of respondents stated that they preferred a highway alternative versus a removal alternative. Of those that preferred a highway alternative, over 50% of respondents stated that they preferred a below grade (depressed/hybrid) alternative.

POSITION LETTERS

4

Deep Ellum Foundation - Hybrid Alternative
Greater Dallas Planning Council - Hybrid Alternative
Southeast Dallas Now - Hybrid Alternative
Downtown Dallas Inc. - Items for further consideration

PUBLIC MEETING ATTENDANCE

7,400 views online
(includes TxDOT Public Meeting Webpage view, Keepitmovingdallas.com Webpage Views and YouTube Presentation views)

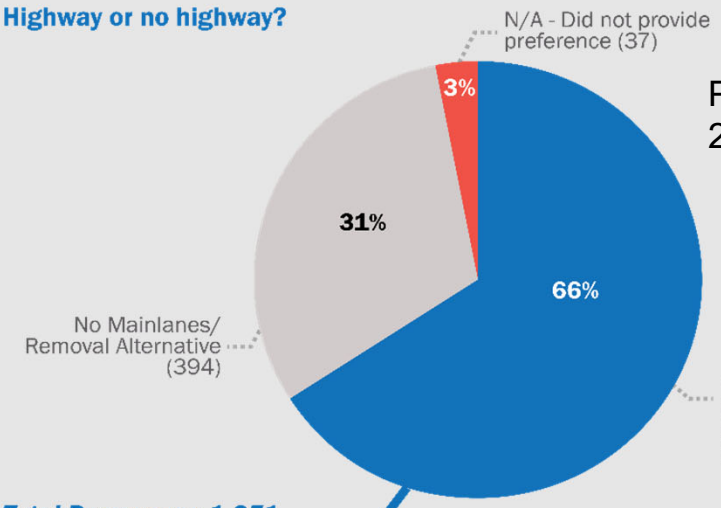
140 total people
in attendance at the Shed at Dallas Farmers Market and at the St. Philips School and Community Center

PUBLIC MEETING SERIES 2

1023	175	47	6
# of surveys received	# of comments received via comment form	# of voicemail comments received	# of email comments received

INPUT RECEIVED FROM SURVEY ON ALTERNATIVES*

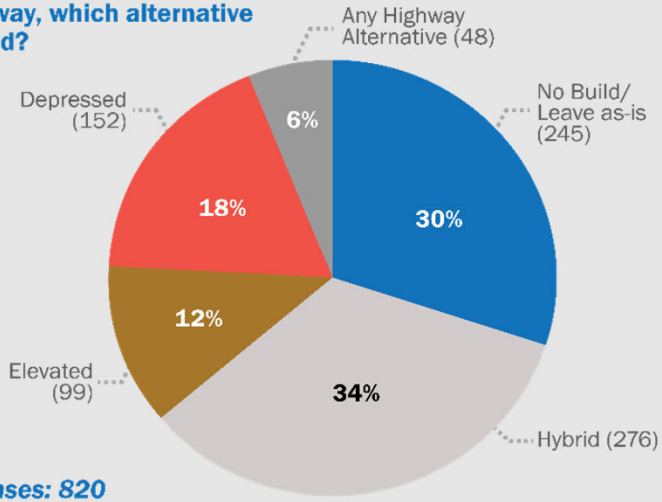
Highway or no highway?



Presented at May 2022 public meetings

Total Responses: 1,251

Out of the 66% (820) above that want a highway, which alternative was preferred?



Total Responses: 820

**Includes input received through the SCOUT survey, comment form, online comment form (surveymonkey.com), email, and verbal comments*

What We Heard from You

Presented at May 2022 public meetings

Conceptual Alternatives Previously Considered

Presented at May 2022 public meetings

The five alternatives that were previously considered at our previous public meetings were:

NB	**No Build/ Leave I-345 As-Is**	No additional improvements would occur to the existing I-345 other than maintenance.
D	**Depressed Alternative**	Similar to US 75, mainlanes are low with discontinuous frontage roads along either side and cross streets over the top. The city street grid is enhanced and includes pedestrian and bicycle facilities along the frontage roads and local streets.
R	**Removal Alternative**	The existing mainlanes would be removed and the city street grid is enhanced. This alternative includes pedestrian and bicycle facilities.
El	**Elevated Alternative**	Similar to what exists now, with a smaller footprint of an elevated highway with aesthetic improvements, revised access and signage for drivers, enhanced city street grid, and pedestrian and bicycle facilities under the highway.
H	**Hybrid Alternative**	Similar to US 75 and the proposed depressed alternative, where mainlanes are low. There is limited access from the mainlanes to the local streets that are reconnected over the top. No proposed frontage roads. Access to the area is from local streets, I-30 or Woodall Rodgers Freeway. The city street grid is enhanced and includes pedestrian and bicycle facilities.

Alternative Evaluation Matrix

Presented at May 2022 public meetings

***Note: No new ROW would be required with any of the proposed alternatives. This includes no impacts to natural resources (wetlands, streams, farmland, wooded areas or floodplains) or cemeteries.**

****N/A = Not applicable**

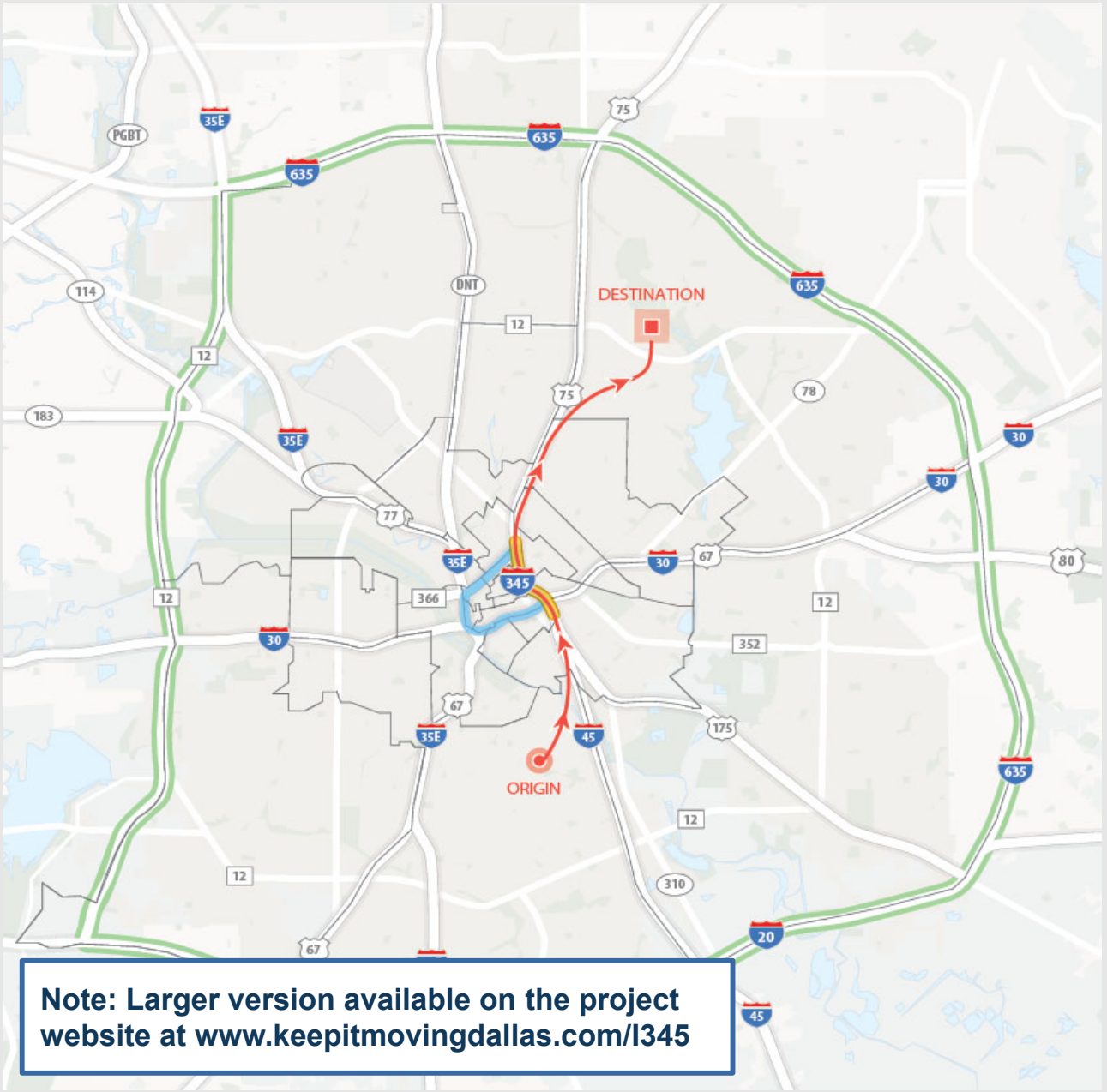
Criteria Rating Scale in comparison to the No Build/Leave I-345 As-is				
Does not achieve criteria	Sometimes meets criteria	Neutral/No Change	Mostly meets criteria	Highly meets criteria
○	◔	◑	◕	●

Criterion		Objective	No Build/ Leave I-345 As-Is	Depressed	Removal	Elevated	Hybrid	Key Takeaway
Mobility	Vehicles	Minimize impacts to corridor mobility on the freeways and local roads	◑	◑	○	◑	◑	Due to the changes in access with each proposed build alternative, traffic patterns will change traffic volumes on various freeways and local roads.
	Bicycle/Pedestrian	Improve bicycle/pedestrian mobility	◑	●	●	◕	●	All proposed build alternatives would improve bicycle and pedestrian mobility.
	Transit	Accomodate existing transit facilities and known future proposed transit projects	●	●	◔	●	●	All proposed build alternatives would accommodate existing transit and the proposed DART D2 alignment. The Removal alternative would have an at-grade crossing with the existing transit facility because of the increased traffic on local roads. With the Removal alternative, DART might have to consider grade separations to improve transit and vehicle operations and safety.
Connectivity	Access between freeways	Freeway to freeway connections	◑	◑	○	◑	◑	The Depressed, Elevated and Hybrid alternatives maintain the I-345 freeway system between I-30 and Woodall Rodgers Freeway (Spur 366). The Removal alternative severs the freeway connection.
	Access between freeways and local roads	Freeway to local road connections	◑	◑	○	◔	◔	I-345 has 16 existing access points (ramps). The Depressed alternative maintains 13 of the 16 access points. The Removal alternative severs the connection of I-345 to local roads. The Elevated alternative maintains 7 and the Hybrid alternative maintains 9 of the 16 access points.
	Access between local roads	Local road connections	◑	○	◕	◑	◑	In all proposed build alternatives, no new connections are proposed, however, the Taylor Street connection is severed. The Depressed alternative, in addition to Taylor Street, severs Canton Street and Good Latimer Expressway. The Removal alternative, in addition to Taylor Street, severs Canton Street.
	Bicycle/Pedestrian	Improve bicycle/pedestrian facility connections	◑	◑	●	●	●	All proposed build alternatives improve bicycle and pedestrian connections along proposed cross streets or frontage roads where applicable. The Depressed alternative does not maintain a connection across Good Latimer Expressway on the southern end of the study limits.
Sustainability	Agency Coordination	Respond to City of Dallas design guidance and DART D2 future plans	◑	◕	◕	◑	●	The alternatives were coordinated with the City of Dallas, NCTCOG and DART. The Hybrid alternative is the only proposed build alternative that meets all of the criteria received to date.
	Right of Way (ROW)*	Avoid additional ROW* and displacements	N/A**	●	●	●	●	All proposed build alternatives avoid additional ROW and would not result in any displacements.
	Parks outside State ROW	Avoid impacts to parks, recreational areas, and public usage facilities like parking, including existing and future amenities, outside existing State ROW	N/A	●	●	●	●	No additional ROW would be required and there would be no impacts to parks or recreational areas located outside of State ROW.
	Parks and public usage inside State ROW	Avoid impacts to parks, recreational areas, and public usage facilities like parking, including existing and future amenities within existing State ROW	N/A	○	○	●	○	The Elevated alternative would not result in permanent impacts to the existing public facilities within State ROW. The Depressed, Removal and Hybrid alternatives would result in permanent impacts to public facilities within the State ROW, including Julius Schepps Park, Bark Park Central, and Carpenter Park extension and existing parking lots.
	Communities	Minimize impacts to existing adjacent communities (Downtown/Deep Ellum)	○	◕	●	◔	◕	The No Build/Leave I-345 As-Is alternative is perceived as a barrier between Downtown and Deep Ellum. The Depressed and Hybrid alternatives would depress the mainlanes and improve the local road connections at grade, including adjacent bicycle and pedestrian accommodations. The Removal alternative replaces the existing highway with local streets, including adjacent bicycle and pedestrian accommodations. The Elevated alternative would be similar to the No Build/Leave I-345 As-Is alternative, but when reconstructed would allow for better connectivity under the mainlanes, including bicycle and pedestrian accommodations.
		Minimize impacts to existing communities beyond downtown	◑	◑	○	◑	◑	The No Build/Leave I-345 As-Is, Depressed, Elevated and Hybrid alternatives maintain the connection from South Dallas to North Dallas. The Removal alternative removes the connection and the communities would have to adjust travel patterns to alternate routes.
	Sustainable Design	Minimize maintenance costs through sustainable design elements	○	◔	◑	◔	◔	The No Build/Leave I-345 As-Is alternative requires significant maintenance to extend the life of the existing structure. The Removal alternative would have the least maintenance costs being an at-grade solution but will increase maintenance on local roads due to the increase in traffic volumes on the local roads. The Elevated alternative would have maintenance costs to inspect and repair any structural deficiencies over time. The Depressed and Hybrid alternatives could have significant maintenance costs to accommodate current DART D2, which requires storm water detention and a pump station. Any potential capping could also add maintenance costs dependent on the type of proposed amenities (TBD).
	Potential Surplus ROW	Amount of potential surplus ROW that could result in development (to be determined) (in acres)	N/A	◕	●	◕	◕	All of the proposed build alternatives have potential for surplus ROW.
Economic Development	Property Values Impacts	Property values at buildout due to potential for economic development (2020 dollars)	◑	●	●	◕	●	All of the proposed build alternatives have potential to increase property values at buildout; however, increased property values could result in higher property taxes which may negatively affect some residents and businesses.
	Property Tax Revenue Impacts	Annual incremental property tax revenue at buildout (2020 dollars)	◑	●	●	◕	●	All of the proposed build alternatives have potential to result in annual incremental property tax revenue at buildout; however increased property taxes could negatively affect some residents and businesses.
	Potential Cap Locations	Provides opportunity for potential development of capping over freeway	○	●	○	○	●	Ratings include both surplus ROW and potential development on top of the freeway.
Construction Cost	Cost ($)	Preliminary, approximate construction cost (2020 dollars)	N/A	$$$	$	$$	$$$	It is estimated that the cost of the alternatives would be approximately: depressed, $1B; elevated $650M; removal, $400M; and hybrid, $1B. There is significant cost associated with the Depressed and Hybrid alternatives. The higher cost is associated with depressing the highway and relocation of existing utilities.

Note: Larger version available on the project website at www.keepitmovingdallas.com/I345

Traffic Introduction – Origin and Destination

- Approximately 175,000 vehicles use I-345 daily
- Origin and destination data represents movement through a geographic space, from an origin to a destination
- Origin-Destination data was collected over a six-month period from fall 2017 to spring 2018.
- A key to evaluating the alternatives is to understand the travel patterns of current users of I-345 within the study area, and into and out of the study area.
- The information is not limited to the I-345 study limits.
- The three origin-destination examples and various travel time exhibits are available for review on the project website.



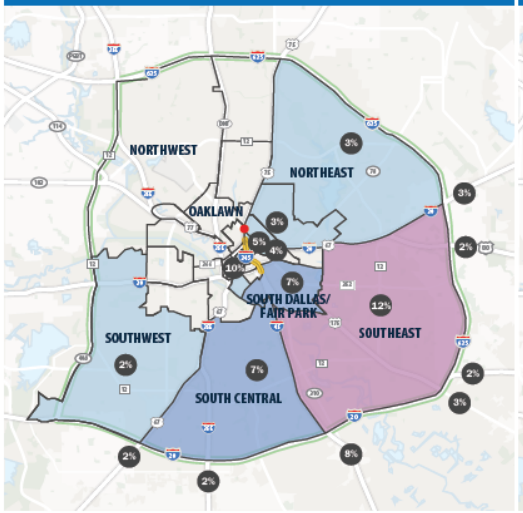
Note: Larger version available on the project website at www.keepitmovingdallas.com/I345

Developing Travel Time Exhibits

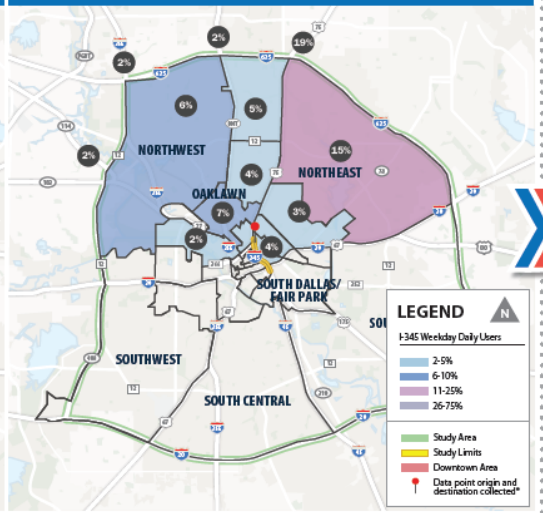
- The representative travel time percent change shown on the following exhibits was developed using the 2045 calibrated subarea regional model*. It is an average percent change of 2045 projected travel times when compared to the No Build/Leave I-345 As-Is Alternative.
- Below is an example of origin destination data (left image) used to identify zones to develop the representative travel time exhibits (right image).

Origin & Destination Disribution of Thru Traffic Northbound on I-345

ORIGIN MAP

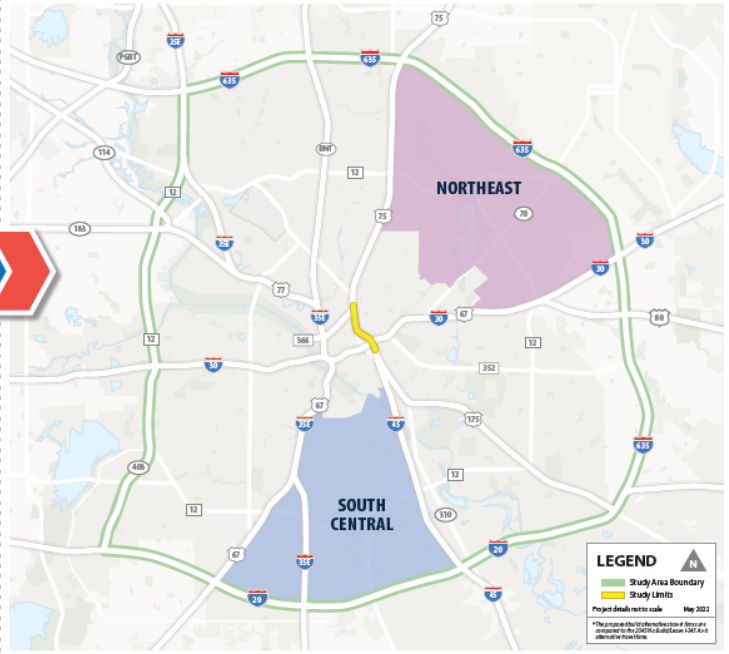


DESTINATION MAP



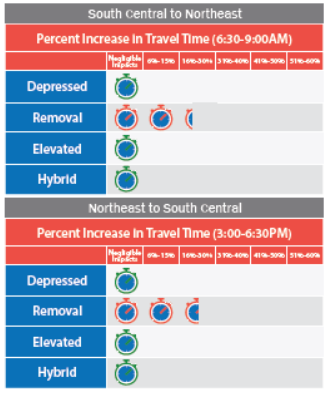
*The 2045 calibrated subarea model is based on of the 2045 NCTCOG regional traffic model to include study area traffic counts and adjacent projects. Adjacent project updates included the Horseshoe project, I-35E Lowest Stemmons, I-30 Canyon, I-30 East Corridor, and SM Wright (PH 1 and PH 2) as of latest plans available (May 2021).

Round Trip between South Central and Northeast 2045 Travel Times



KEY TAKEAWAY

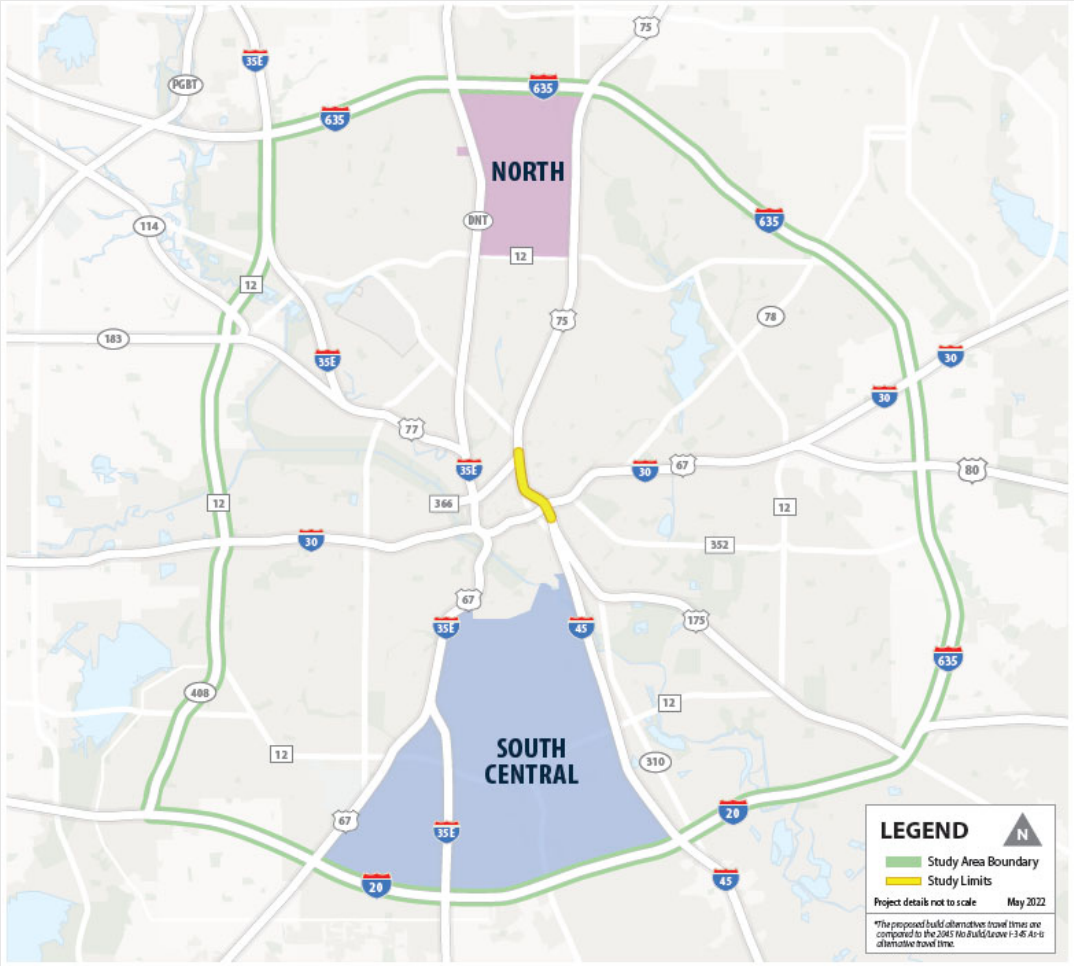
The Depressed, Elevated and Hybrid alternatives have negligible impacts to travel times between the south central and northeast zones. Impacts to 2045 travel times between the south central and northeast zones are significantly impacted with the Removal alternative.



Round Trip between South Central and North 2045 Travel Times

- Adjacent is a representative 2045 travel time exhibit showing the round-trip travel time between the South Central and North zones.
- Several other round trip travel time exhibits are available on the study website between zones.
- In summary, all 2045 travel times are significantly impacted with the Removal alternative.

Presented at May 2022 public meetings



KEY TAKEAWAY

The Depressed, Elevated and Hybrid alternatives have negligible impacts to travel times between the south central and north zones. Impacts to 2045 travel times between the south central and north zones are significantly impacted with the Removal alternative.

South Central to North

Percent Increase in Travel Time (6:30-9:00AM)

	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed	●					
Removal	●	●	●	●		
Elevated	●					
Hybrid	●					

North to South Central

Percent Increase in Travel Time (3:00-6:30PM)

	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed	●					
Removal	●	●	●	●	●	
Elevated	●					
Hybrid	●					

How Did We Get Down to One Alternative?

Presented at May 2022 public meetings

NB	**No Build/ Leave I-345 As-Is**	The existing bridge can only be maintained for so long to stay safe and operational. The cost to maintain the existing bridge will continue to increase over time. Eventually it will become too costly to maintain and replacement will be needed.
D	**Depressed Alternative**	Severing Good Latimer Expressway and Canton Street does not meet the City of Dallas Design Guidelines and is not favorable by the position papers received from stakeholders.
R	**Removal Alternative**	The impacts to regional traffic with the removal alternative are significant. Based on public feedback, this option was eliminated to continue to provide a connection of mainlanes between south and southern Dallas and north Dallas.
El	**Elevated Alternative**	The existing elevated highway is perceived as a barrier between communities. While the proposed elevated has a smaller footprint and could be built back different, the alternative has been eliminated to provide better community cohesion.
H	**Hybrid Alternative**	This alternative is the best compromise to combine elements from the other alternatives based on public feedback. Based on input, changes have been made to the hybrid alternative to develop refinements to what is now the “recommended alternative”.

Hybrid Alternative

Presented at May 2022 public meetings

Allows for strategic decking/air-right development opportunities in a below grade/trench configuration, consistent with the City of Dallas Design Guidelines

Provides 10' shared use paths for pedestrian/ bicycle access/with safety lighting

Maintains Good Latimer Expy. and Canton St.

66% of survey participants want some type of highway for I-345

Provides mainlanes to connect South and Southern Dallas and North Dallas

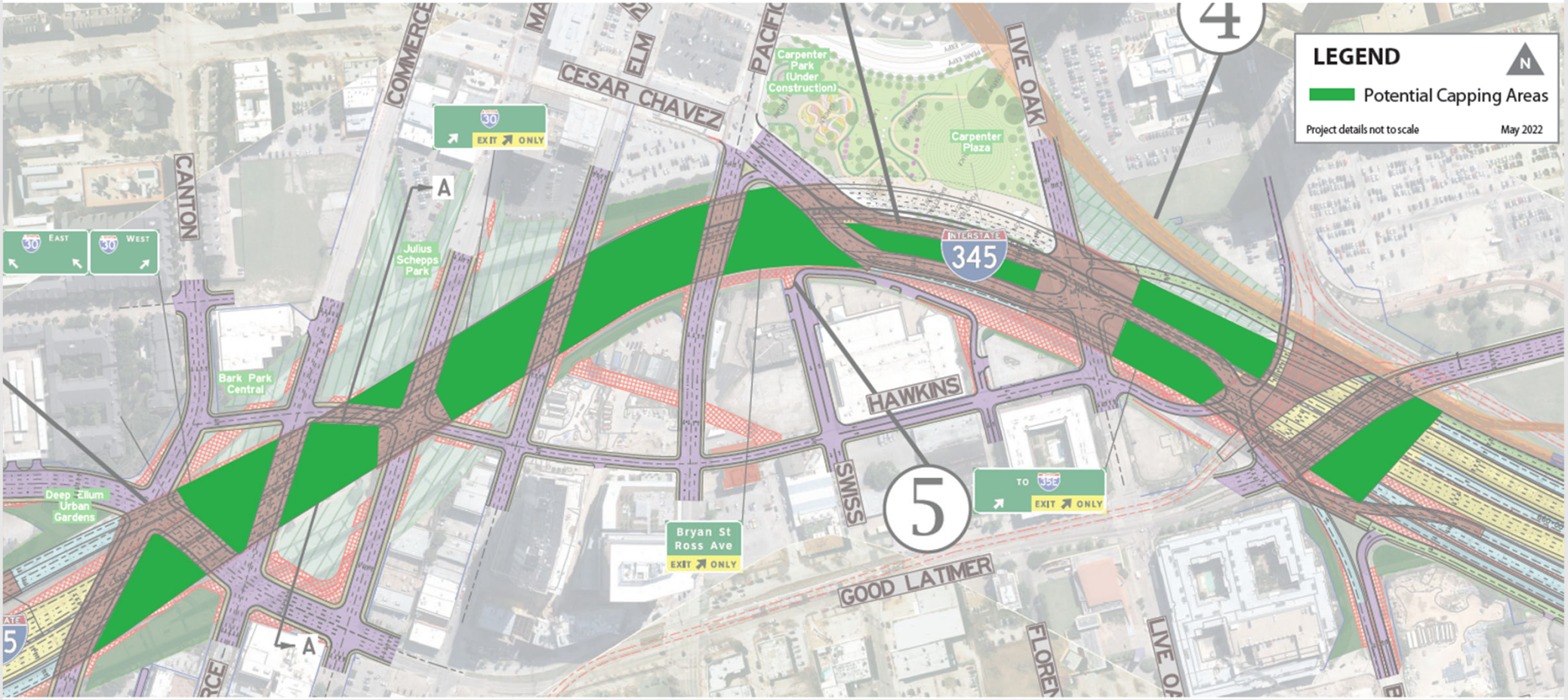
Negligible impacts to regional mobility

Preliminary, subject to change. This is a representative rendering that was shown at the June 2021 public meetings and is included in the evaluation matrix.

Potential Capping Areas

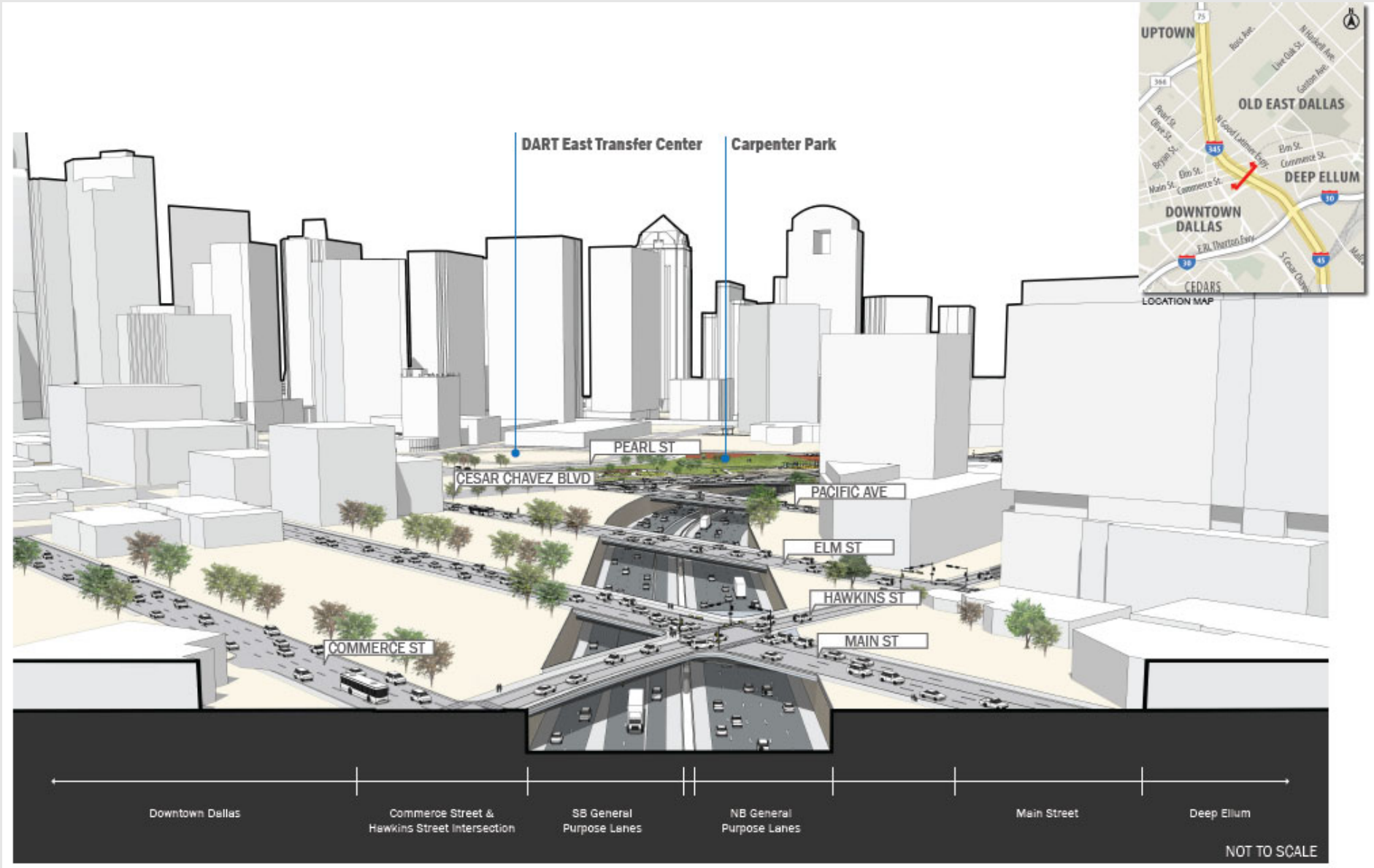
Presented at May 2022 public meetings

There are many areas for potential capping over the recommended alternative. They could be used for deck plazas or potential for development, including buildings, as the City identifies funding and priority locations.



Recommended Alternative 3D Rendering

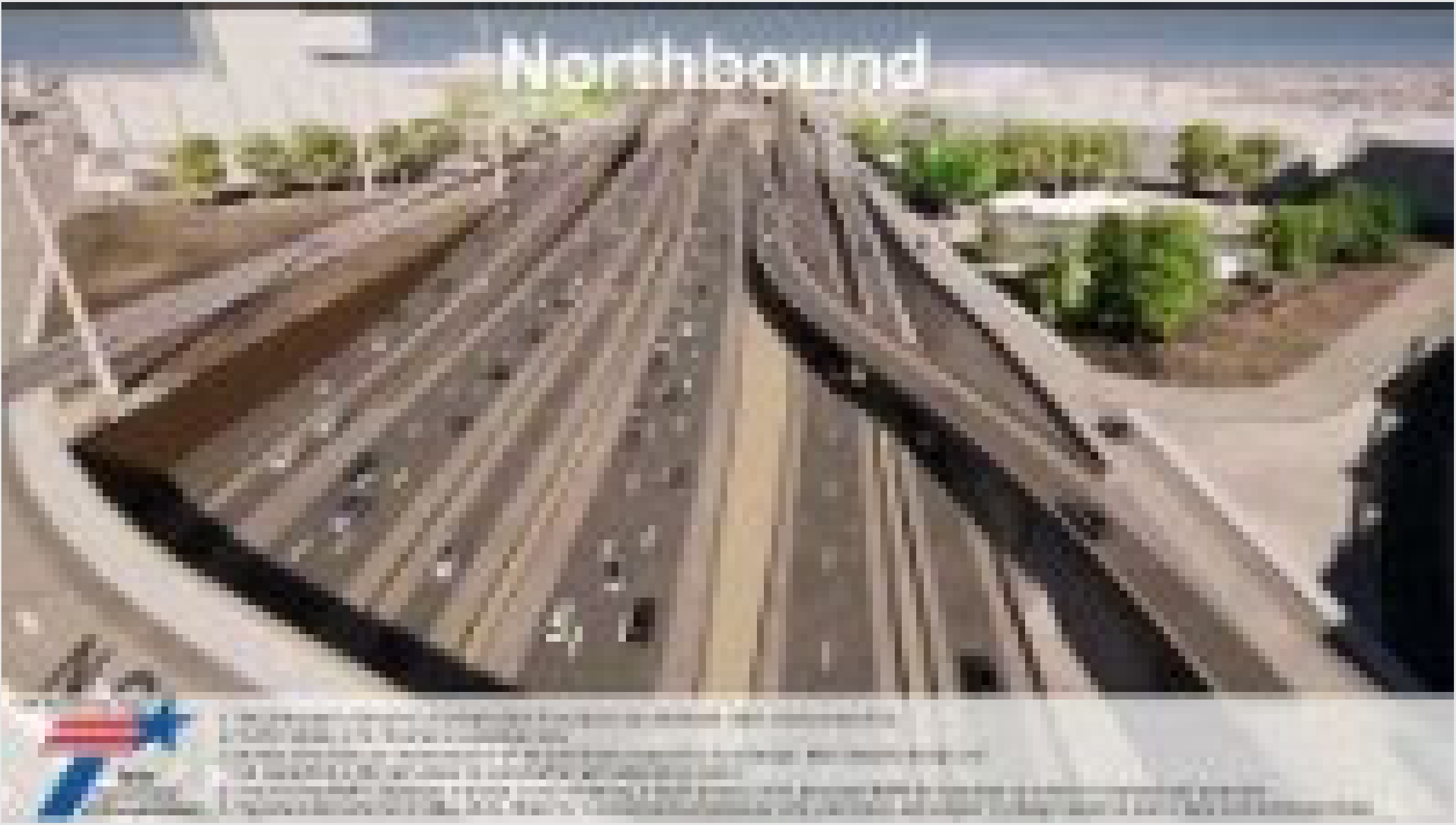
Presented at May 2022 public meetings



1. Recommended alternative alignment does not require any additional right of way acquisition.
2. Traffic shown is for illustrative purposes only.
3. Bridge structures are representative of the preliminary feasibility level design. More detailed design will be completed in the next phase in coordination with adjacent projects.
4. The existing DART alignment is shown in the rendering. A small portion of the proposed DART D2 alignment is noted for informational purposes.
5. Recommended Alternative (May 2022). Model for representational purposes only. Preliminary and subject to change based on public input and technical review.

Recommended Alternative 3D Rendering

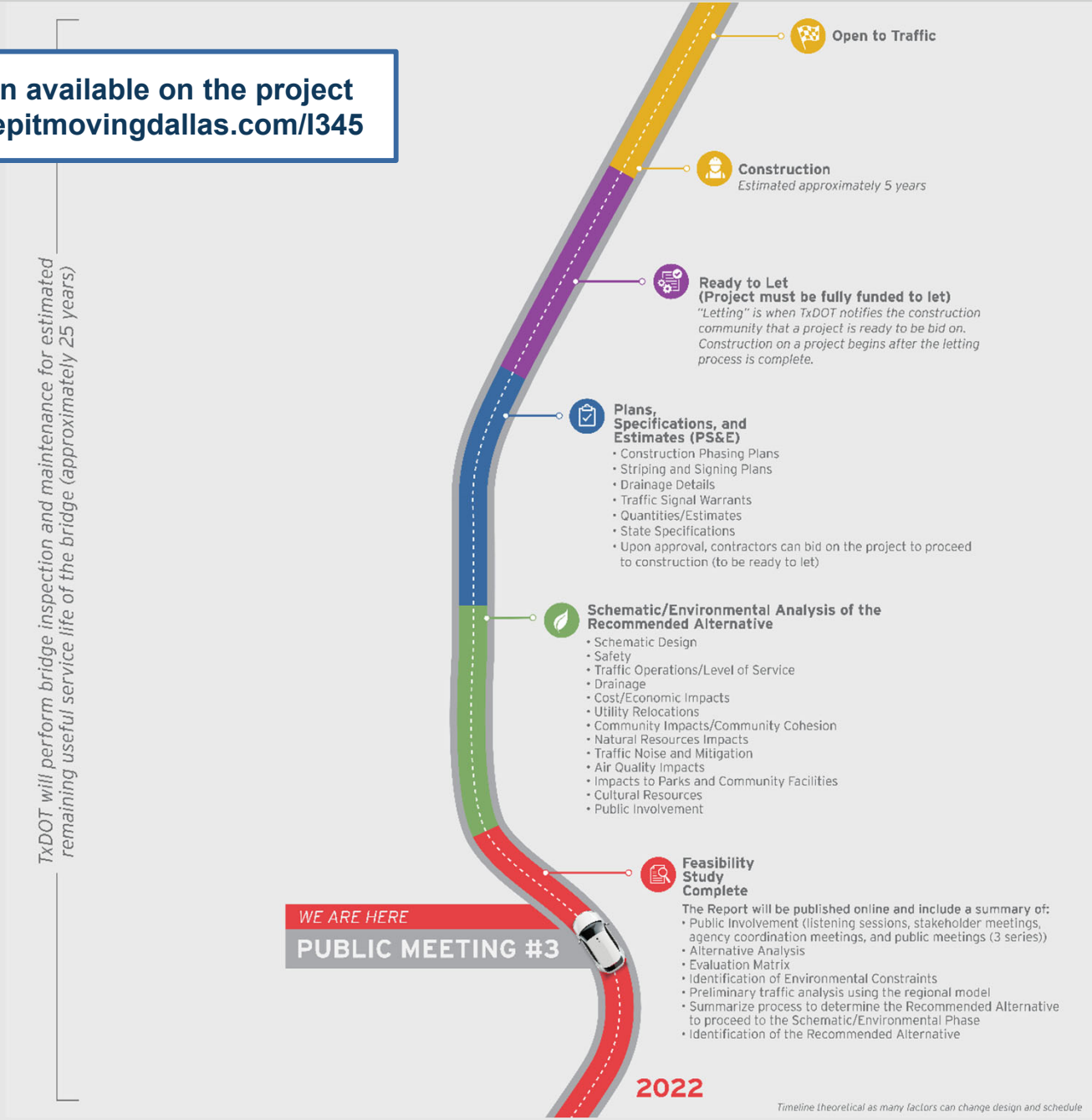
Presented at May 2022 public meetings



Just Getting Started

Presented at May 2022 public meetings

Note: Larger version available on the project website at www.keepitmovingdallas.com/I345



345 Feasibility Study

Comments/Stay Connected

Please submit your comments regarding this Public Meeting using any of the four methods below.

Comments must be received or postmarked on or before Monday, June 27, 2022 to be included in the Public Meeting Summary.

For general questions about the presentation of the study, please contact TxDOT Project Manager, Grace Lo at 345study@txdot.gov

Comment Online
Click the provided link on the website at www.keepitmovingdallas.com/I345

Email Us
345study@txdot.gov

Mail-In Comments
Texas Department of Transportation
Grace Lo, P.E.
4777 E. Highway 80
Mesquite, TX 75150

Leave a Voicemail
(833) 933-0439

Thank You!

This concludes the presentation.